# ANNUAL MUNICIPAL SEPARATE STORM SEWER SYSTEM (MS4) STATUS REPORT

# FOR THE PERIOD May 1, 2017 TO JUNE 30, 2018

		GENER	AL INFO	RM/	ATION			
Permittee Name:	West Earl	Fownship		NPE	DES Permit No.:	PAG13	3535	
Mailing Address:	PO Box 78	7		Effe	ctive Date:	March 1	16, 2018	
City, State, Zip:	Brownstow	n, PA 17508		Exp	iration Date:	March 1	15, 2023	
MS4 Contact Person:	Candie Joh	inson		Ren	ewal Due Date:	Septem	ber 30, 2022	2
Title:	Township N	Manager		Mur	nicipality:	West Ea	arl Township	
Phone:	717-859-32	201		Cou	inty:	Lancast	ter	
Email:	cjohnson@	westearltwp.org						
Co-Permittees (if applica	ıble):							
Appendix(ces) that perm	ittee is subjec	t to (select all that	apply):					
	х А 🛛 Арре	endix B 🗌 Apper	ndix C 🛛	Арр	endix D 🛛 Appe	ndix E	Appendix F	-
		WATER QU	JALITY II	NFO	RMATION			
Are there any discharges	s to waters wit	hin the Chesapeał	ke Bay Wa	tersh	ed? 🛛 Yes	🗌 No		
Identify all surface water (see instructions).	s that receive	stormwater discha	arges from	the p	permittee's MS4 an	d provide	the requeste	d information
Receiving Water	Name	Ch. 93 Class.	Impaire	d?	Cause(s)		TMDL?	WLA?
Conestoga Ri	ver	WWF, MF	Yes		Pathogens, Nut Siltation	rients,	No	No
Cocalico Cre	ek	WWF, MF	Yes		Nutrients, Silta	ation	No	No
Groff Creek	ζ	WWF, MF	Yes		Nutrients, Siltation		No	No

GENERAL MINIMUM CONTROL MEASURE (MCM) INFORMATION							
Have you completed all MCM activities required by the permit for this reporting period?							
List the current entity responsible for implementing each MCM of your SWMP, along with contact name and phone number.							
	МСМ	Entity Responsible	Contact Name	Phone			
#1	Public Education and Outreach on Storm Water Impacts	West Earl Twp Stormwater Coordinator	Sara Service	717-859- 3201			
#2	#2 Public Involvement/Participation same as above same as above same						
#3	#3 Illicit Discharge Detection and Elimination (IDD&E) same as above same as above same						
#4	Construction Site Storm Water Runoff Control	same as above	same as above	same			
#5	Post-Construction Storm Water Management in New Development and Redevelopment	same as above	same as above	same			
#6	Pollution Prevention / Good Housekeeping	West Earl Twp Roadmaster	Ashley Martin	same			
	MCM #1 – PUBLIC EDUCATION AND O	UTREACH ON STORM	WATER IMPACTS	;			
BN	IP #1: Develop, implement and maintain a written Public	c Education and Outreach P	rogram.				
1.	For new permittees only, has the written PEOP been deve	eloped and implemented within	n the first year of perr	nit coverage?			
	☐ Yes ☐ No						
2.	2. Date of latest annual review of PEOP: April 23, 2018 Were updates made? Xes I No						
3.	3. What were the plans and goals for public education and outreach for the reporting period?						
	The plans for public education were to update the target audience list, more frequently, add information to the Township website and Facebook page, distribute more educational information such as special mailings to specific groups and to continue to publish newsletters. The goals were to accomplish these tasks within the permit year.						
4. Did the MS4 achieve its goal(s) for the PEOP during the reporting period?							
5. Identify specific plans and goals for public education and outreach for the upcoming year:							
	Continue updating the website, publishing newsletter and distributing information as in the previous years. The Township plans to utilize additional resources available through the Cocalico Creek Watershed Association, the Lancaster County Clean Water Consortium and the Lancaster County Conservancy. In past years the Township has focused mainly on the residents of the Township for this MCM. In the coming reporting year while still focusing on the residents of the Township, we would like to place additional focus on educating the owners of businesses in the Township						
BN	/IP #2: Develop and maintain lists of target audience gro	oups present within the area	s served by your M	S4.			
1.	For new permittees only, have the target audience lists coverage?	been developed and impleme	ented within the first	year of permit			
	Yes No						
2.	Date of latest annual review of target audience lists: May	22, 2018 Were update	s made? 🛛 🛛 Yes	🗌 No			
BN	IP #3: Annually publish at least one educational item or	n your Stormwater Managen	nent Program.				
1.	For new permittees only, were stormwater educational a the Internet within the first year of permit coverage?	nd informational items produc	ced and published in	print and/or on			

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	🗌 Yes 🔲 No		
2.	Date of latest annual review of educational materials: April 23, 2018	Were updates made?	🛛 Yes 🗌 No
3.	Do you have a municipal website? Xes No (URL: www. westearltwp.org)		

If Yes, what MS4-related material does it contain?

Links to articles about general stormwater pollution prevention, rain barrell construction, illicit discharge education, links to various state and national websites such as PA DEP, EPA, National Resource Recovery Center, Pennsylvania Watersheds, Lancaster Clean Water Consortium, Chesapeake Stormwater Network, etc.

- 4. Describe any other method(s) used during the reporting period to provide information on stormwater to the public: Special mailings to construction companies, distribute education material to elementary school, post articles on Facebook, distribute education material to attendees of a compost workshop at the Township building, publish articles in the Township newsletter.
- 5. Identify specific plans for the publication of stormwater materials for the upcoming year: Continue to post new articles on the website and facebook, provide relevant articles in each edition of the Township's newsletters which are published quarterly, provide educational materials via special mailings. Focus on educating residents and particuarly business owners on pollution and erosion control.

#### BMP #4: Distribute stormwater educational materials to the target audiences.

Identify the two additional methods of distributing stormwater educational materials during the previous reporting period (e.g., displays, posters, signs, pamphlets, booklets, brochures, radio, local cable TV, newspaper articles, other advertisements, bill stuffers, posters, presentations, conferences, meetings, fact sheets, giveaways, or storm drain stenciling).

The Township provides stormwater related brochures in the municipal office lobby. The Township updates the website and facebook page at least quarterly to meet the requirements of BMP #4. Construction site specific stormwater pollution information was mailed to local businesses. A stormwater activity/sticker booklet was distributed to kindergarten through third grade students at Brownstown Elementary School.

MCM #1 Comments:

# MCM #2 – PUBLIC INVOLVEMENT/PARTICIPATION

## BMP #1: Develop, implement and maintain a written Public Involvement and Participation Program (PIPP)

- 1. For new permittees only, was the PIPP developed and implemented within one year of permit coverage?
  - 🗌 Yes 🗌 No
- 2. Date of latest annual review of PIPP: April 16, 2018

Were updates made? X

🖾 Yes 🗌 No

BMP #2: Advertise to the public and solicit public input on ordinances, SOPs, Pollutant Reduction Plans (PRPs) (if applicable) and TMDL Plans (if applicable), including modifications thereto, prior to adoption or submission to DEP:

1. Was an MS4-related ordinance, SOP, PRP or TMDL Plan developed during the reporting period? Xes I No

2. If Yes, describe how you advertised the draft document(s) and how you provided opportunities for public review, input and feedback:

The Township drafted its Pollutant Reduction Plan during the 2017/2018 MS4 reporting period. A copy of the draft PRP was released via public notice on June 19th, 2017 to the LNP newspaper. The notice ran for one day. The public was given 30 days to provide commentary on the contents of the PRP. No written comments were received regarding the PRP. West Earl Township held a public meeting on July 10, 2017 to receive verbal commentary on the contents of the PRP. No comments were received at the July 10 meeting. No details were changed from the draft PRP to the final PRP due to the fact that no public comments were received on the draft plan.

3. If an ordinance, SOP or plan was developed or amended during the reporting period, provide the following information:

Ordinance / SOP / Plan Name	Date of Public Notice	Date of Public Hearing	Date Enacted or Submitted to DEP	
West Earl Township Pollutant Reduction Plan	June 19, 2017	July 10, 2017	July 24, 2017	

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BN dis	<i>IP</i> #3: Regularly solicit public involvement and participation from the target audience groups using available stribution and outreach methods.
1.	At least one public meeting or other MS4 event must be held during the 5-year permit coverage period to solicit participation and feedback from target audience groups. Was this meeting or event held during the reporting period?
	Yes Do If Yes, Date of Meeting or Event: June 25, 2018
2.	Report instances of cooperation and participation in MS4 activities; presentations the permittee made to local watershed and conservation organizations; and similar instances of participation or coordination with organizations in the community.
	The Township held a public meeting on May 23, 2017 with the Supervisors to discuss the draft Pollutant Reduction Plan. No members of the public attended the meeting to offer comment. On June 25, 2018 the public was updated on the Township's MS4 program during the regularly scheduled Board of Supervisors meeting. There were no comments or questions from any of the attendees.
3.	Report activities in which members of the public assisted or participated in the meetings and in the implementation of the SWMP, including education activities or efforts such as cleanups, monitoring, storm drain stenciling, or others.
	The Lititz Area Mennonite School had their annual TRASH-A-THON on October 18, 2017. 20 students picked up trash from 16 roads in West Earl Township. Leola elementary school students and Conestoga Valley High School freshwater biology students cleaned up the parks in West Earl Township for an Earth Day event on April 19, 2018. Lunch and drinks for the students were provided by local businesses Benchmark Construction and Crystal Springs water. The Township partnered with the Lancaster County Conservancy for Lancaster Water Week. On June 9, 2018 a group of volunteers cleaned up the Conestoga River at the Lions' Park and Sylvan B. Fisher Park.
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M	CM #2 Comments: MCM #3 – ILLICIT DISCHARGE DETECTION AND ELIMINATION (IDD&E)
M(	CM #2 Comments:         MCM #3 – ILLICIT DISCHARGE DETECTION AND ELIMINATION (IDD&E)         IP #1: Develop and implement a written program for the detection, elimination, and prevention of illicit discharges o the regulated small MS4.
BN int 1.	CM #2 Comments:         MCM #3 – ILLICIT DISCHARGE DETECTION AND ELIMINATION (IDD&E)         AP #1: Develop and implement a written program for the detection, elimination, and prevention of illicit discharges o the regulated small MS4.         For new permittees only, was the written IDD&E program developed within one year of permit coverage?
BN int	MCM #3 – ILLICIT DISCHARGE DETECTION AND ELIMINATION (IDD&E)         MP #1: Develop and implement a written program for the detection, elimination, and prevention of illicit discharges o the regulated small MS4.         For new permittees only, was the written IDD&E program developed within one year of permit coverage?         Yes       No
BN int 1. 2.	MCM #3 – ILLICIT DISCHARGE DETECTION AND ELIMINATION (IDD&E)         MP #1: Develop and implement a written program for the detection, elimination, and prevention of illicit discharges o the regulated small MS4.         For new permittees only, was the written IDD&E program developed within one year of permit coverage?         Yes       No         Date of latest annual review of IDD&E program: June 8, 2018       Were updates made?       Yes       No
BM int 1. 2. BM an the	MCM #3 – ILLICIT DISCHARGE DETECTION AND ELIMINATION (IDD&E)         MP #1: Develop and implement a written program for the detection, elimination, and prevention of illicit discharges o the regulated small MS4.         For new permittees only, was the written IDD&E program developed within one year of permit coverage?         □ Yes       No         Date of latest annual review of IDD&E program: June 8, 2018       Were updates made?       Yes       No         MP #2: Develop and maintain map(s) that show permittee and urbanized area boundaries, the location of all outfalls d, if applicable, observation points, and the locations and names of all surface waters that receive discharges from ose outfalls. Outfalls and observation points shall be numbered on the map(s).
BM int 1. 2. BM an the 1.	M#2 Comments:         MCM #3 – ILLICIT DISCHARGE DETECTION AND ELIMINATION (IDD&E)         MP #1: Develop and implement a written program for the detection, elimination, and prevention of illicit discharges o the regulated small MS4.         For new permittees only, was the written IDD&E program developed within one year of permit coverage?         Yes       No         Date of latest annual review of IDD&E program: June 8, 2018       Were updates made?       Yes       No         MP #2: Develop and maintain map(s) that show permittee and urbanized area boundaries, the location of all outfalls d, if applicable, observation points, and the locations and names of all surface waters that receive discharges from see outfalls. Outfalls and observation points shall be numbered on the map(s).         Have you completed a map(s) that includes all components of BMP #2?       Yes       No
BM int 1. 2. BM an the 1.	M#2 Comments:         MCM #3 – ILLICIT DISCHARGE DETECTION AND ELIMINATION (IDD&E)         MP #1: Develop and implement a written program for the detection, elimination, and prevention of illicit discharges o the regulated small MS4.         For new permittees only, was the written IDD&E program developed within one year of permit coverage?         Yes       No         Date of latest annual review of IDD&E program: June 8, 2018       Were updates made?       Yes       No         MP #2: Develop and maintain map(s) that show permittee and urbanized area boundaries, the location of all outfalls d, if applicable, observation points, and the locations and names of all surface waters that receive discharges from ose outfalls. Outfalls and observation points shall be numbered on the map(s).         Have you completed a map(s) that includes all components of BMP #2?       Yes       No         If Yes and you are a new permittee and have not submitted the map(s) previously, attach the map(s) to this report.
BM int 1. 2. BM an the 1.	CM #2 Comments:         MCM #3 – ILLICIT DISCHARGE DETECTION AND ELIMINATION (IDD&E)         MP #1: Develop and implement a written program for the detection, elimination, and prevention of illicit discharges o the regulated small MS4.         For new permittees only, was the written IDD&E program developed within one year of permit coverage?         Yes       No         Date of latest annual review of IDD&E program: June 8, 2018       Were updates made?       Yes       No         MP #2: Develop and maintain map(s) that show permittee and urbanized area boundaries, the location of all outfalls d, if applicable, observation points, and the locations and names of all surface waters that receive discharges from see outfalls. Outfalls and observation points shall be numbered on the map(s).         Have you completed a map(s) that includes all components of BMP #2?       Yes       No         If Yes and you are a new permittee and have not submitted the map(s) previously, attach the map(s) to this report.       If No, date by which permittee expects map(s) to be completed:
MC BM int 1. 2. BM an the 1. 2.	M#2 Comments:         MCM #3 – ILLICIT DISCHARGE DETECTION AND ELIMINATION (IDD&E)         MP #1: Develop and implement a written program for the detection, elimination, and prevention of illicit discharges o the regulated small MS4.         For new permittees only, was the written IDD&E program developed within one year of permit coverage?         Yes       No         Date of latest annual review of IDD&E program: June 8, 2018       Were updates made?       Yes       No         MP #2: Develop and maintain map(s) that show permittee and urbanized area boundaries, the location of all outfalls d, if applicable, observation points, and the locations and names of all surface waters that receive discharges from see outfalls. Outfalls and observation points shall be numbered on the map(s).         Have you completed a map(s) that includes all components of BMP #2?       Yes       No         If Yes and you are a new permittee and have not submitted the map(s) previously, attach the map(s) to this report.       If No, date by which permittee expects map(s) to be completed:         Date of last update or revision to map(s):       October 31, 2017
MC BM int 1. 2. BM an the 1. 2. 3.	MCM #3 – ILLICIT DISCHARGE DETECTION AND ELIMINATION (IDD&E)         MP #1: Develop and implement a written program for the detection, elimination, and prevention of illicit discharges or the regulated small MS4.         For new permittees only, was the written IDD&E program developed within one year of permit coverage?         Yes       No         Date of latest annual review of IDD&E program: June 8, 2018       Were updates made?       Yes       No         MP #2: Develop and maintain map(s) that show permittee and urbanized area boundaries, the location of all outfalls d, if applicable, observation points, and the locations and names of all surface waters that receive discharges from ose outfalls. Outfalls and observation points shall be numbered on the map(s).         Have you completed a map(s) that includes all components of BMP #2?       Yes       No         If Yes and you are a new permittee and have not submitted the map(s) previously, attach the map(s) to this report.       If No, date by which permittee expects map(s) to be completed:         Date of last update or revision to map(s):       October 31, 2017       Total No. of Outfalls in MS4:       31

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5. During the reporting period, have you identified any existing outfalls that have not been previously reported to DEP in an NOI, application or annual report, or are any new MS4 outfalls proposed for the next reporting period?

☐ Yes ⊠ No If Yes, select: ☐ Existing Outfall(s) Identified ☐ New Outfall(s) Proposed

BM per juri cha the pul	BMP #3: In conjunction with the map(s) created under BMP #2 (either on the same map or on a different map), the permittee shall develop and maintain map(s) that show the entire storm sewer collection system within the permittee's jurisdiction that are owned or operated by the permittee (including roads, inlets, piping, swales, catch basins, channels, and any other components of the storm sewer collection system), including privately-owned components of the collection system where conveyances or BMPs on private property receive stormwater flows from upstream publicly-owned components.						
1.	Have you completed a map(s) that includes all components of BMP #3? 🔀 Yes 🔲 No						
	If Yes and you are a new permittee and have not submitted the map(s) previously, attach the map(s) to this report.						
	If No, date by which permittee expects map(s) to be completed:						
2.	If Yes to #1, is the map(s) on the same map(s) as for outfalls and receiving waters? 🛛 Yes 🗌 No						
3.	Date of last update or revision to map(s): October 31, 2017						
BMP #4: Conduct dry weather screenings of MS4 outfalls to evaluate the presence of illicit discharges. If any illicit discharges are present, the permittee shall identify the source(s) and take appropriate actions to remove or correct any illicit discharges. The permittee shall also respond to reports received from the public or other agencies of suspected or confirmed illicit discharges associated with the storm sewer system, as well as take enforcement action as necessary. The permittee shall immediately report to DEP illicit discharges that would endanger users downstream from the discharge, or would otherwise result in pollution or create a danger of pollution or would damage property.							
For twic obs are mu	new permittees, all identified outfalls (and if applicable observation points) must be screened during dry weather at least ce within the 5-year period following permit coverage. For existing permittees, all identified outfalls (and if applicable servation points) must be screen during dry weather at least once within the 5-year period following permit coverage and, for as where past problems have been reported or known sources of dry weather flows occur on a continual basis, outfalls at be screened annually during each year of permit coverage.						
1.	How many unique outfalls (and if applicable observation points) were screened during the reporting period? 0						
2.	Indicate the percentage of all outfalls screened in the past five years. 100%						
3.	Indicate the percent of outfalls screened during the reporting period that revealed dry weather flows: 3%						
4.	Did any dry weather flows reveal color, turbidity, sheen, odor, floating or submerged solids? 🗌 Yes 🛛 No						
5.	If Yes for #4, attach all sample results to this report with a map identifying the sample location. Explain the corrective action(s) taken in the attachment.						
6.	Do you use the MS4 Outfall Field Screening Report form (3800-FM-BCW0521) provided in the permit?						
	Yes D No						
	If No, attach a copy of your screening report form.						
BM pro	P #5: Enact a Stormwater Management Ordinance or SOP to implement and enforce a stormwater management gram that includes prohibition of non-stormwater discharges to the regulated small MS4.						
1.	Do you have an ordinance (municipal) or SOP or other mechanism (non-municipal) that prohibits non-stormwater discharges?						
	If Yes, indicate the date of the ordinance or SOP: June 9, 2014						
2.	If Yes to #1, is the ordinance or SOP consistent with DEP's 2022 Model Stormwater Management Ordinance (3800-PM-BCW0100j) with respect to authorized non-stormwater discharges? Yes X						
	If Yes to #2 and the ordinance or SOP has not been submitted to DEP previously, attach the ordinance or SOP.						

3. Were there any violations of the ordinance or SOP during the reporting period? Xes D No							
If Yes to #3, complete the table below (attach additional sheets as necessary).							
Violation Date         Nature of Violation         Responsible Party         Enforcement Taken							
May 11, 2017	Grass clippings dumped at creekside	Homeowner	NOV letter sent 5/12/18. Homeowner cleaned up site.				
May 11, 2017	Drywall materials left out in rain. Rain washed drywall material down the driveway directly into stormdrain	Homeowner	NOV letter sent 5/12/18. Homeowner moved materials				
4. Did you appro provisions of a	ove any waiver or variance during the reporting an ordinance or SOP?	g period that allowed ar	n exception to non-stormwater discharge				
If Yes to #4, io	dentify the entity that received the waiver or va	ariance and the type of	non-stormwater discharge approved.				
BMP #6: Provide general public ar	e educational outreach to public employee ad elected officials (i.e., target audiences) a	es, business owners a bout the program to c	and employees, property owners, the detect and eliminate illicit discharges.				
1. Was IDD&E-related information distributed to public employees, businesses, and the general public during the reporting period? 🛛 Yes 🗌 No							
If Yes, what was distributed? Water cycle activity booklets for children, Stormwater pollution prevention brochure mailed to businesses, general stormwater articles distributed to residents via newsletter 4 times during permit year.							
2. Is there a well-publicized method for employees, businesses and the public to report stormwater pollution incidents?							
🖾 Yes 🔲 No							
3. Do you maintain documentation of all responses, action taken, and the time required to take action? 🛛 Yes 🗌 No							
MCM #3 Commer	nts:						
BMP #3, Question 1 - Outfalls, the Township MS4 system and most private property BMPs have been mapped but other pre 2003 private property BMPs and/or pipe systems (i.e. PennDOT, industrial areas, residential, etc.) are being identified as older BMPs are located and O&M responsibilities enforced. The Township will continue to update mapping as older BMPs and pipe systems are identified.							
	MCM #4 – CONSTRUCTION SITE S	TORMWATER RUN	IOFF CONTROL				
Are you relying on	PA's statewide program for stormwater asso	ciated with construction	activities to satisfy this MCM?				
🛛 Yes 🗌 No							
(If Yes, respond t section)	o questions for BMP Nos. 1, 2 and 3 only in	n this section. If No, re	espond to questions for all BMPs in this				
BMP #1: The per earth disturbanc NPDES Permit co	mittee may not issue a building or other e activities requiring an NPDES permit un overage (i.e., not expired) under 25 Pa. Cod	permit or final approv nless the party propo le Chapter 102.	val to those proposing or conducting sing the earth disturbance has valid				

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During the reporting period, did you comply with 25 Pa. Code § 102.43 (relating to withholding building or other permits or approvals until DEP or a county conservation district (CCD) has approved NPDES permit coverage)?

Yes Do Not Applicable (no building permit applications received)

F

BMP #2: A municipality or county which issues building or other permits shall notify DEP or the applicable CCD within 5 days of the receipt of an application for a permit involving an earth disturbance activity consisting of one acre or more, in accordance with 25 Pa. Code § 102.42.
During the reporting period, did you comply with 25 Pa. Code § 102.42 (relating to notifying DEP/CCD within 5 days of receiving an application involving an earth disturbance activity of one acre or more)?
Yes D No D Not Applicable (no building permit applications received)
BMP #3: Enact, implement and enforce an ordinance or SOP to require the implementation and maintenance of E&S control BMPs, including sanctions for non-compliance, as applicable.
<ol> <li>Do you have an ordinance (municipal) or SOP or other mechanism (non-municipal) that requires implementation and maintenance of E&amp;S control BMPs? X Yes No</li> </ol>
If Yes, indicate the date of the ordinance or SOP: June 9, 2014
2. If Yes to #1, is the ordinance or SOP consistent with DEP's 2022 Model Stormwater Management Ordinance (3800-PM- BCW0100j)? ☐ Yes ⊠ No
3. If Yes to #2 and the ordinance or SOP has not been submitted previously, attach a copy of the ordinance or SOP.
BMP #4: Review Erosion and Sediment (E&S) control plans to ensure that such plans adequately consider water quality impacts and meet regulatory requirements.
Specify the number of E&S Plans you reviewed during the reporting period:
BMP #5: Conduct inspections regarding installation and maintenance of E&S control measures during earth disturbance activities. Maintain records of site inspections, including dates and inspection results, in accordance with the record retention requirements in this permit.
Specify the number of E&S inspections you completed during the reporting period:
BMP #6: Conduct enforcement when installation and maintenance of E&S control measures during earth disturbance activities does not comply with permit and/or regulatory requirements.
Specify the number of enforcement actions you took during the reporting period for improper E&S:
BMP #7: Develop and implement requirements for construction site operators to control waste at construction sites that may cause adverse impacts to water quality. The permittee shall provide education on these requirements to construction site operators.
Specify the method(s) by which you are educating construction site operators on controlling waste at construction sites:
<ul> <li>BMP #8: 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.</li> <li>1. A tracking system has been established for receipt of public inquiries and complaints.  Yes No</li> <li>2. Specify the number of inquiries and complaints received during the reporting period:</li> </ul>
MCM #4 Comments:

MCM #5 – POST-CONSTRUCTION STORM WATER MANAGEMENT IN NEW DEVELOPMENT AND REDEVELOPMENT				
BN fro	IP #1: Enact, implement and enforce an ordinance or SOP to require post-construction stormwater management m new development and redevelopment projects, including sanctions for non-compliance.			
1.	Do you have an ordinance (municipal) or SOP or other mechanism (non-municipal) that requires implementation and maintenance of post-construction stormwater management (PCSM) BMPs? 🛛 Yes 🗌 No			
	If Yes, indicate the date of the ordinance or SOP: June 9, 2014			
2.	If Yes to #1, is the ordinance or SOP consistent with DEP's 2022 Model Stormwater Management Ordinance (3800-PM-BCW0100j)?  Yes X No			
3.	If Yes to #2 and the ordinance or SOP has not been submitted previously, attach a copy of the ordinance or SOP.			
BN nev dev pra	IP #2: Develop and implement measures to encourage and expand the use of Low Impact Development (LID) in w development and redevelopment. Measures should also be included to encourage retrofitting LID into existing velopment. Enact ordinances consistent with LID practices and repeal sections of ordinances that conflict with LID actices.			
1.	Do you have an ordinance (municipal) or SOP or other mechanism (non-municipal) that encourages and expands the use of LID in new development and redevelopment? 🛛 Yes 🗌 No			
	If Yes, indicate the date of the ordinance or SOP: June 9, 2014			
2.	If Yes to #1, is the ordinance or SOP consistent with DEP's 2022 Model Stormwater Management Ordinance (3800-PM- BCW0100j)? ☐ Yes  ☐ No			
3.	If Yes to #2 and the ordinance or SOP has not been submitted previously, attach a copy of the ordinance or SOP.			
BN de on	IP #3: Ensure adequate O&M of all post-construction stormwater management BMPs that have been installed at velopment or redevelopment projects that disturb greater than or equal to one acre, including projects less than e acre that are part of a larger common plan of development or sale.			
BN dev on 1.	IP #3: Ensure adequate O&M of all post-construction stormwater management BMPs that have been installed at velopment or redevelopment projects that disturb greater than or equal to one acre, including projects less than e acre that are part of a larger common plan of development or sale. Do you have an inventory of all PCSM BMPs that were installed to meet requirements in NPDES Permits for Stormwater Discharges Associated with Construction Activities approved since March 10, 2003? ∑ Yes □ No			
BN de on 1.	IP #3: Ensure adequate O&M of all post-construction stormwater management BMPs that have been installed at velopment or redevelopment projects that disturb greater than or equal to one acre, including projects less than e acre that are part of a larger common plan of development or sale. Do you have an inventory of all PCSM BMPs that were installed to meet requirements in NPDES Permits for Stormwater Discharges Associated with Construction Activities approved since March 10, 2003? ☑ Yes □ No If Yes to #1, complete Table 1 on the next page.			
BM dev on 1.	IP #3: Ensure adequate O&M of all post-construction stormwater management BMPs that have been installed at velopment or redevelopment projects that disturb greater than or equal to one acre, including projects less than a care that are part of a larger common plan of development or sale. Do you have an inventory of all PCSM BMPs that were installed to meet requirements in NPDES Permits for Stormwater Discharges Associated with Construction Activities approved since March 10, 2003? ☑ Yes □ No If Yes to #1, complete Table 1 on the next page. Has proper O&M occurred during the reporting period for all PCSM BMPs? □ Yes ☑ No			
BN dev on 1. 2. 3.	IP #3: Ensure adequate O&M of all post-construction stormwater management BMPs that have been installed at velopment or redevelopment projects that disturb greater than or equal to one acre, including projects less than a care that are part of a larger common plan of development or sale. Do you have an inventory of all PCSM BMPs that were installed to meet requirements in NPDES Permits for Stormwater Discharges Associated with Construction Activities approved since March 10, 2003? ☑ Yes □ No If Yes to #1, complete Table 1 on the next page. Has proper O&M occurred during the reporting period for all PCSM BMPs? □ Yes ☑ No If No to #2, explain what action(s) the permittee has taken or plans to take to ensure proper O&M.			
BN de on 1. 2. 3.	<ul> <li>IP #3: Ensure adequate O&amp;M of all post-construction stormwater management BMPs that have been installed at velopment or redevelopment projects that disturb greater than or equal to one acre, including projects less than e acre that are part of a larger common plan of development or sale.</li> <li>Do you have an inventory of all PCSM BMPs that were installed to meet requirements in NPDES Permits for Stormwater Discharges Associated with Construction Activities approved since March 10, 2003? ∑ Yes ☐ No</li> <li>If Yes to #1, complete Table 1 on the next page.</li> <li>Has proper O&amp;M occurred during the reporting period for all PCSM BMPs? ☐ Yes ∑ No</li> <li>If No to #2, explain what action(s) the permittee has taken or plans to take to ensure proper O&amp;M.</li> <li>Actions we plan to take include meeting with the owners of private stormater management facilities to educate them on the need for regular inspections and maintenance of the facilities. The recently developed booklet "Homeowners' Guide to BMP Maintenance" developed by the Lancaster County Clean Water Consortium in 2017, will assist with this. West Earl has begun creating a tracking program to ensure that stormwater management facilities are maintained properly.</li> </ul>			
BW de on 1. 2. 3. <i>If y</i>	IP #3: Ensure adequate O&M of all post-construction stormwater management BMPs that have been installed at velopment or redevelopment projects that disturb greater than or equal to one acre, including projects less than e acre that are part of a larger common plan of development or sale. Do you have an inventory of all PCSM BMPs that were installed to meet requirements in NPDES Permits for Stormwater Discharges Associated with Construction Activities approved since March 10, 2003? ∑ Yes ☐ No If Yes to #1, complete Table 1 on the next page. Has proper O&M occurred during the reporting period for all PCSM BMPs? ☐ Yes ∑ No If No to #2, explain what action(s) the permittee has taken or plans to take to ensure proper O&M. Actions we plan to take include meeting with the owners of private stormater management facilities to educate them on the need for regular inspections and maintenance of the facilities. The recently developed booklet "Homeowners' Guide to BMP Maintenance" developed by the Lancaster County Clean Water Consortium in 2017, will assist with this. West Earl has begun creating a tracking program to ensure that stormwater management facilities are maintained properly.			
BN dev on 1. 2. 3. 3. <i>If y</i> oth <b>BN</b> the con	<ul> <li>IP #3: Ensure adequate O&amp;M of all post-construction stormwater management BMPs that have been installed at velopment or redevelopment projects that disturb greater than or equal to one acre, including projects less than e acre that are part of a larger common plan of development or sale.</li> <li>Do you have an inventory of all PCSM BMPs that were installed to meet requirements in NPDES Permits for Stormwater Discharges Associated with Construction Activities approved since March 10, 2003? ∑ Yes _ No</li> <li>If Yes to #1, complete Table 1 on the next page.</li> <li>Has proper O&amp;M occurred during the reporting period for all PCSM BMPs? _ Yes ∑ No</li> <li>If No to #2, explain what action(s) the permittee has taken or plans to take to ensure proper O&amp;M.</li> <li>Actions we plan to take include meeting with the owners of private stormater management facilities to educate them on the need for regular inspections and maintenance of the facilities. The recently developed booklet "Homeowners' Guide to BMP Maintenance" developed by the Lancaster County Clean Water Consortium in 2017, will assist with this. West Earl has begun creating a tracking program to ensure that stormwater management facilities are maintained properly.</li> <li>Prov are relying on PA's statewide program for stormwater associated with construction activities, you may skip to MCM #6, ierwise complete all questions for BMPs #4 - #6 in this section.</li> <li>Pr #4: Require the implementation of a combination of structural and/or non-structural BMPs that are appropriate to elocal community, that minimize water quality impacts, and that are designed to maintain pre-development runoff nditions.</li> </ul>			

2. Has a tracking system been established and maintained to record qualifying projects and their associated BMPs?



🗌 Yes 🗌 No

## PCSM BMP INVENTORY

**Table 1**. To complete the information needed for MCM #5, BMP #3, list all <u>existing structural BMPs</u> that discharge stormwater to the permittee's MS4 that were installed to satisfy PCSM requirements for earth disturbance activities under Chapter 102, and provide the requested information (see instructions).

BMP No.	BMP Name	DA (ac)	Entity Responsible for O&M	Latitude	Longitude	Date Installed	O&M Requirements	NPDES Permit No.
1				0 1 11	o , "			
2				o , "	o , "			
3				0 , "	o , "			
4				0 , ,,	o , ",			
5				0 , "	o , ",			
6				0 , ,,	o , ",			
7				• * **	O 3 33			
8				• * **	O 3 33			
9				• • •	O 3 33			
10				• • "	0 3 33			
11				• * **	O 3 33			
12				• * **	O 3 33			
13				• • "	0 3 33			
14				• • • •	• * **			
15				• * **	0 1 11			
16				0 , ,,	o , "			

BMP #5: Ensure that controls are installed that shall prevent or minimize water quality impacts. The permittee shall inspect all qualifying development or redevelopment projects 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).
<ol> <li>During the reporting period have you inspected all qualifying development and redevelopment projects during the construction phase to ensure proper installation of approved structural BMPs?</li> </ol>
Yes No Not Applicable (no qualifying projects during reporting period)
2. Has a tracking system been established and maintained to record results of inspections?
🗌 Yes 🔲 No
BMP #6: Develop a written procedure that describes how the permittee shall address all required components of this MCM.
Have you developed a written plan that addresses: 1) minimum requirements for use of structural and/or non-structural BMPs in plans for development and redevelopment; 2) criteria for selecting and standards for sizing stormwater BMPs; and 3) implementation of an inspection program to ensure that BMPs are properly installed? Xes I No
MCM #5 Comments:
MCM #6 – POLLUTION PREVENTION / GOOD HOUSEKEEPING
BMP #1: Identify and document all operations that are owned or operated by the permittee and have the potential for generating pollution in stormwater runoff to the MS4. This includes activities conducted by contractors for the permittee.
<ol> <li>Have you identified all facilities and activities owned and operated by the permitee that have the potential to generate stormwater runoff into the MS4? Xes No</li> </ol>
2. When was the inventory last reviewed? May 18, 2018
3. When was it last updated? May 18, 2018
BMP #2: Develop, implement and maintain a written O&M program for all operations that could contribute to the discharge of pollutants from the MS4, as identified under BMP #1. This program shall address stormwater collection or conveyance systems within the regulated MS4.
1. Have you developed a written O&M program for the operations identified in BMP #1? 🛛 Yes 🗌 No
2. Date of last review or update to written O&M program: May 18, 2018
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 operations to the regulated small MS4. All relevant employees and contractors shall receive training.
1. Have you developed an employee training program? 🛛 Yes 🗌 No
0 Detection in an detect to training and an end of 0040 Detection in March 5,0040

- 3. Training topics covered:
  - a. Stormwater Pollution Prevention Plan March 5, 2018
  - b. Inspecting and Maintaining Your BMPs October 19, 2017
  - c. Lehigh Valley Watershed Conference MS4 technical track October 17, 2017
  - d. PABCO Conference MS4 plenary session October 4, 2017
  - e. Certified Stormwater Inspector June 5 & 6, 2017

4. Name(s) of training presenter(s):

- a. American Training Resources training video
- b. Lancaster County Clean Water consortium, David Wood, Tom Schueler, CSN.

c. Charlotte Katzenmoyer, City of Lancaster, Adrianne Vicari, HRG, Rebecca Kennedy, Pennvest, Mike Hickman, Center for watershed protection.

- d. Nick Johnson, Great Valley Associates
- e. Paul E. Davis, National Stormwater Center

### 5. Names of training attendees:

a. Sara Service, Ashley Martin, Candie Johnson, Sylvan Fisher, Rick Haverstick, Jerry Howe, Jordan Levering, Robert Buckwalter, Teresa Beever, Missy Wallace and Amy Carter.

- b. Sara Service & Ashley Martin
- c. Sara Service
- d. Sara Service
- e. Sara Service

#### MCM #6 Comments:

# POLLUTANT CONTROL MEASURES (PCMs)

Indicate the status of implementing PCMs in Appendices A, B and/or C by completing the table below. Skip this section if PCMs are not applicable.

Task	Date Completed	Attached	Anticipated Completion Date
Storm Sewershed Map(s)			8/31/2019
Source Inventory			9/30/2020
Investigation of Suspected Sources			9/30/2020
Ordinance/SOP for Controlling Animal Wastes	5/4/2012	$\boxtimes$	

#### **PCM Comments:**

Ordinance for controlling animal wastes is Chapter 56 - Animals, of the Code of West Earl Township.

## POLLUTANT REDUCTION PLANS (PRPs) AND TMDL PLANS

1. Complete this section if the development and submission of a PRP and/or TMDL Plan was required as an attachment to the latest NOI or application or was required by the permit, regardless of whether DEP has approved the plan(s).

#### 3800-FM-BCW0491 9/2017 Annual MS4 Status Report

	Type of Plan	Submission Date	DEP Approva Date	1	Surface Waters	Addressed by Plan	
	Chesapeake Bay PRP (Appendix D)			Chesapeake Bay			
	Impaired Waters PRP (Appendix E)						
	TMDL Plan (Appendix F)						
	Combined Chesapeake Bay / Impaired Waters PRP	9/3/2017	9/3/2017 6/22/2018 Chesapeake Bay, Cocalico Creek, Gr Creek, Conestoga River, unamed tribut				
	Combined PRP / TMDL Plan						
	Joint Plan (if checked, list the name of th	ne MS4 group or	names of all	entities	s participating in the	e joint plan below)	
	Joint Plan Participants:						
2.	Identify the pollutants of concern and pol	lutant load reduc	ction requirer	nents u	Inder the permit (see	e instructions).	
	Type of Plan	TSS Load Re (Ibs/y	eduction r)	TP L	.oad Reduction (Ibs/yr)	TN Load Reduction (Ibs/yr)	
	Chesapeake Bay PRP (Appendix D)						
	Impaired Waters PRP (Appendix E)						
	TMDL Plan (Appendix F)						
	Combined Chesapeake Bay / Impaired Waters PRP	81,901			4,027	104	
	Combined PRP / TMDL Plan						
3. 4.	Date Final Report Demonstrating Achiev Have any modifications to the plan(s) occ	ement of Polluta curred since DEI	nt Load Red P approval?	uctions	Due: June 30, : Yes ⊠ No	2023	
	If Yes to #4, was the updated plan(s) sub	mitted to DEP?	🗌 Yes	🗌 No	)		
	If Yes to #4 did you comply with the pub	lic participation r	equirements	of the	applicable appendix		
			oquironionio				
	If Yes to #4, describe the plan modification	ons.					
5.	Summary of progress achieved during re	porting period.					
	The Pollutant Reduction Plan was deve Designed plans prepared for permitting Plans submitted to PA DEP for permitt the Pollutant Reduction Plan). Coordination with the West Metzler Ro	eloped and sub y & construction ing for the West ad property own	mitted to PA for PRP8 t Metzler Ro ner.	DEP o	during the reporting nnel stabilization p	g period. roject (labeled PRP8 in	
6.	Anticipated activities for next reporting pe	eriod.					

The Township began implementation of the PRP and is in the planning stages of PRP8 West Metzler Road Channel Stabilization Project. The permit for this project will be obtained in October 2018 and construction will begin in the fall of 2018. A grant of \$7,000 has been received from the Lancaster County Clean Water Consortium to help fund the project.

**PRP/TMDL Plan Comments:** 

## NEW BMPs FOR PRP/TMDL PLAN IMPLEMENTATION

**Table 2**. List all <u>new structural BMPs</u> installed and <u>ongoing non-structural BMPs</u> implemented <u>during the reporting period</u> that are being used toward achieving load reductions in the permittee's PRP and/or TMDL Plan (see instructions).

BMP No.	BMP Name	DA (ac)	% Imp.	BMP Extent	Units	Latitude	Longitude	Date Installed or Implemented	Planning Area?	Ch. 102?	Annual Sediment Load Reduction (Ibs/yr)
						0 3 33	O 3 33				
						0 3 33	O 3 33				
						0 3 33	O 3 33				
						O 3 33	O 3 33				
						O 3 33	O 3 33				

## BMP INVENTORY FOR PRP/TMDL PLAN IMPLEMENTATION

**Table 3**. List all <u>existing structural BMPs</u> that have been installed in <u>prior reporting periods</u> and are eligible to use toward achieving load reductions in the permittee's PRP and/or TMDL Plan (see instructions).

BMP No.	BMP Name	DA (ac)	% Imp.	BMP Extent	Units	Latitude	Longitude	Date Installed	Annual Sediment Load Reduction (Ibs/yr)	Date of Latest Inspect -ion	Satis- factory?
						O 3 33	O 3 33				
						O 3 33	O 3 33				
						o , "	o , ,,				
						o , "	o , ,,				
						0 1 11	0				
						o , "	0				

## CERTIFICATION

For PAG-13 Permittees: I have read the latest PAG-13 General Permit issued by DEP and agree and certify that (1) the permittee continues to be eligible for coverage under the PAG-13 General Permit and (2) the permittee will continue to comply with the conditions of that permit, including any modifications thereto. I understand that if I do not agree to the terms and conditions of the PAG-13 General Permit, I will apply for an individual permit within 90 days of publication of the General Permit. I also acknowledge that any facility construction needed to comply with the General Permit requirements shall be designed, built, operated, and maintained in accordance with operative laws and regulations.

For All Permittees: I certify under penalty of law that this report 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. See 18 Pa. C.S. § 4904 (relating to unsworn falsification).

A

Candie L. Johnson, Manager	Candre Hol-
Name of Responsible Official	Signature
717-859-3201	9/25/2018
Telephone No.	Date

## WEST EARL TOWNSHIP PCSM BMP INVENTORY

#### MS4 NPDES Permit No. PAG 133535

#### Prepared by: Cory Rathman, PE, Becker Engineering

Date Updated: September 20, 2018

Structural BMP	Location (CSDatum BMP ID Number)	Latitude & Longitude	Drainage Area	Year Installed/ LCCD Prmt Issue Date	Inspection/ Maintenance Frequency	Responsible Person or Organization	NPDES Permit
REID WISSLER SUBDIVISION	#001		0	01/31/2003	Owner O&M	Private Property Owner	PAG2003603009
PLEASANT VALLEY MENNONITE SCHOOL	#002	40° 9' 40.3", -76° 9' 18.2"	5.43	02/05/2003	Owner O&M	Private Property Owner	PAG2003603010
EAGLEVIEW ESTATES (FORMERLY TOBACCO ROAD PHASE 1) REV.	#003	40° 8' 50.7", -76° 11' 57"	71.87	04/24/2003	Owner O&M	Private Property Owner	PAR100303-R
JOHN M STOLTZFUS	#004		0	06/25/2003	Owner O&M	Private Property Owner	PAG2003603065
LEOLA PRODUCE AUCTION	#005	40° 6' 7.2", -76° 10' 12.6"	0	04/01/2004	Owner O&M	Private Property Owner	PAG2003604028
FAIRMOUNT HOMES - EAST CAMPUS	#006	40° 8' 0.6", -76° 8' 46"	0	04/01/2004	Owner O&M	Private Property Owner	PAG2003604027
CLOVERBROOK	#007	40° 8' 19.3", -76° 13' 16.1"	30.91	04/12/2004	Owner O&M	Private Property Owner	PAG2003604034
ANGLESEA (WENGER PROPERTY)	#008	40° 6' 1.2", -76° 9' 36.2"	54.858	04/26/2004	Owner O&M	Private Property Owner	PAG2003604037
MILLWAY ACRES COMMERCIAL SUBD	#009	40° 8' 41.9", -76° 12' 48.8"	13.27	09/02/2004	Owner O&M	Private Property Owner	PAG2003604089
VICTOR S MARTIN	#010		0	12/17/2004	Owner O&M	Private Property Owner	PAG2003604115
CLEVELAND BROTHERS - Basin A	#011A	40° 8' 3.9", -76° 12' 43.4"	0	04/26/2005	Owner O&M	Private Property Owner	PAG2003605036
CLEVELAND BROTHERS - Basin B	#011B	40° 8' 10.6", -76° 12' 34.4"	0	04/26/2005	Owner O&M	Private Property Owner	
DS WATERS - Basin A1	#012A	40° 8' 3.9", -76° 13' 6.7"	1.48	08/02/2005	Owner O&M	Private Property Owner	PAG2003605101
DS WATERS - Basin A2	#012B	40° 8' 7.8", -76° 13' 7.9"	1.55	08/02/2005	Owner O&M	Private Property Owner	
SONIC DRIVE-IN	#013	40° 8' 0.6", -76° 12' 56.6"	0	08/10/2005	Owner O&M	Private Property Owner	PAG2003605094
BROWNSTOWN COMMONS	#014	40°07'43.5"N 76°13'08.9"W	5.97	01/24/2006	Owner O&M	Private Property Owner	PAG2003606013
ESTHER HOOVER SUBDIVISION	#015		0	06/07/2006	Owner O&M	Private Property Owner	PAG2003606067
FRANK H HOOVER	#016		0	06/28/2006	Owner O&M	Private Property Owner	PAG2003606054
JOHN J SHEAFFER II	#017		0	08/18/2006	Owner O&M	Private Property Owner	PAG2003606094
LLOYD F WEAVER POULTRY OPERATION	#019A	40° 7' 6.3", -76° 9' 32.8"	0	08/20/2007	Owner O&M	Private Property Owner	PAG2003607060
LLOYD F WEAVER POULTRY OPERATION	#019B	40° 7' 6.8", -76° 9' 34.9"	0	2017	Owner O&M	Private Property Owner	
WARREN H NOLT	#020		0	01/08/2009	Owner O&M	Private Property Owner	PAG2003608088
LCCTC BROWNSTOWN CAMPUS - Infiltration & Extended Detention Basin	#021	40° 8' 1.2", -76° 11' 24.9"	5.43	04/25/2012	Owner O&M	Private Property Owner	PAG02003612026
CREEK HILL - Extended Detention-Constructed Wetland Basin	#022	40° 7' 21.7", -76° 14' 5.8"	18.5	2017	Owner O&M	Private Property Owner	
MIKE GROSS - DIAMOND STATION RD - Infiltration Basin	#023	40° 9' 12.3", -76° 10' 10.4"	2.59	2015	Owner O&M	Private Property Owner	
LAMAR WEAVER SUBDIVISION - Infiltration & Extended Detention Basin	#024	40° 6' 41.8", -76° 8' 22.4"	0.775	2015	Owner O&M	Private Property Owner	
ELI LANTZ - Cistern	#025	40° 7' 11.2", -76° 13' 38.4"	0.055	2015	Owner O&M	Private Property Owner	
EARL MARTIN - Infiltration & Extended Detention Basin	#026	40° 8' 51.9", -76° 9' 4.9"	2.96	2015	Owner O&M	Private Property Owner	
DAVID LAPP - Infiltration & Extended Detention Basin	#027	40° 8' 27.1", -76° 9' 11.1"	0	2016	Owner O&M	Private Property Owner	
FAIRMOUNT HOMES - COUNTRY VIEW DR - Infiltration & Extended Detention Basin	#028	40° 7' 54.6", -76° 8' 49.9"	0	2016	Owner O&M	Private Property Owner	PAG02003615035
TIM WEIST - Infiltration Bed	#029	40° 9' 41.1", -76° 9' 25.7"	0.1148	2016	Owner O&M	Private Property Owner	
SENSENIG REPAIR - Infiltration Bed & Cistern	#030	40° 7' 52.7", -76° 8' 56.6"	0.19	2016	Owner O&M	Private Property Owner	NA

### WEST EARL TOWNSHIP PCSM BMP INVENTORY

#### MS4 NPDES Permit No. PAG 133535

Prepared by: Cory Rathman, PE, Becker Engineering

Date Updated: September 20, 2018

Structural BMP	Location (CSDatum BMP ID Number)	Latitude & Longitude	Drainage Area	Year Installed/ LCCD Prmt Issue Date	Inspection/ Maintenance Frequency	Responsible Person or Organization	NPDES Permit
WILMER HOOVER - Cistern	#031	40° 8' 24", -76° 10' 36.5"	0.23	2016	Owner O&M	Private Property Owner	NA
BUCH POULTRY BARN - Infiltration & Extended Detention Basin	#032	40° 8' 47.3", -76° 11' 32.8"	0	2016	Owner O&M	Private Property Owner	PAG02003615137
ELAM HORNING POULTRY BARN - Infiltration & Extended Detention Basin 1	#033A	40° 6' 0.6", -76° 9' 5.6"	0.94	2016	Owner O&M	Private Property Owner	PAG02003616004
ELAM HORNING POULTRY BARN - Infiltration & Extended Detention Basin 2	#033B	40° 5' 58.7", -76° 9' 4.1"	1.02	2016	Owner O&M	Private Property Owner	PAG02003616004
JAMES ZIMMERMAN - Infiltration Bed	#034	40° 9' 20.3", -76° 8' 33.8"	0.07	2016	Owner O&M	Private Property Owner	NA
MILLER/GRUBE - Infiltration Bed - Front Yard (Proj name - Grube)	#035A	40° 8' 59", -76° 13' 2.9"	0.07	2016	Owner O&M	Private Property Owner	NA
MILLER/GRUBE - Infiltration Bed - Back Yard (Proj name - Grube)	#035B	40° 8' 58.9", -76° 13' 2.3"	0.05	2016	Owner O&M	Private Property Owner	NA
LANCASTER HOME BLDRS-Mary Ann CAPIZZI - Infiltration Bed	#036	40° 7' 18.7", -76° 12' 26.7"	0.08	2016	Owner O&M	Private Property Owner	NA
SCHOOL LANE FARMS - Extended Detention Basin	#037	40° 7' 22.8", -76° 12' 22.1"	0	Pre 2003	Owner O&M	Private Property Owner	
EMM Sales - Infiltration Bed	#038	40°07'54.7"N 76°13'18.0"W	0.07	2016	Owner O&M	Private Property Owner	NA
JOHN STOLTZFUS - Infiltration Bed	#039	40°06'15.0"N 76°08'44.1"W	0	2016	Owner O&M	Private Property Owner	NA
AARON ZIMMERMAN SUBDIV - Infiltration Bed	#040	40°07'01.9"N 76°11'18.0"W	0	2017	Owner O&M	Private Property Owner	NA
JOHN LEID - Infiltration & Extended Detention Basin	#041	40°07'57.6"N 76°10'54.0"W	0	2017	Owner O&M	Private Property Owner	PAC360071
MARTIN APPLICANCE - Infiltration Bed	#042	40°07'53.1"N 76°12'56.3"W	1.35	2017	Owner O&M	Private Property Owner	NA
JERRE MARTIN - Infiltration Bed	#043	40°08'38.3"N 76°10'58.9"W	0.58	2017	Owner O&M	Private Property Owner	NA
ISAAC NOLT - Infiltration Bed	#044	40°06'50.9"N 76°11'12.4"W	0.47	2018	Owner O&M	Private Property Owner	NA
EARL SHIRK - Infiltration Bed	#045	40°05'39.1"N 76°08'11.5"W	0.1	2018	Owner O&M	Private Property Owner	NA
FAIRMOUNT HOMES - Infiltration & Extended Detention Basin A	#046A	40°07'54.8"N 76°08'56.6"W	8.66	Under Construction	Owner O&M	Private Property Owner	NA
FAIRMOUNT HOMES - Extended Detention Basin B	#046B	40°07'56.0"N 76°09'08.4"W	3.16	Pre 2003	Owner O&M	Private Property Owner	NA
FAIRMOUNT HOMES - Infiltration & Extended Detention Basin C	#046C	40°07'57.5"N 76°09'05.7"W	1.38	Under Construction	Owner O&M	Private Property Owner	NA
NATHAN MARTIN - Infiltration Bed	#047	40°09'00.2"N 76°13'02.2"W	0.36	2018	Owner O&M	Private Property Owner	NA

G:\BEng-Data\Projects\12-213-08 (NPDES MS4)\BMP Inventory\West Earl BMP Inventory 2018-09-20

## Chapter 56

## ANIMALS

ARTICLE I Nuisance Animals	§ 56-4. Unlawful for owner to permit animal to defile public and/or private property.
§ 56-1. Short title.	§ 56-5. Dogs running at large.
§ 56-2. Definitions and word usage.	§ 56-6. Maintenance of animals.
§ 56-3. Animal noise declared public	§ 56-7. Enforcement.
nuisance.	§ 56-8. Violations and penalties.
	§ 56-9. Abatement of nuisance.

[HISTORY: Adopted by the Board of Supervisors of the Township of West Earl as indicated in article histories. Amendments noted where applicable.]

GENERAL REFERENCES

Nuisances — See Ch. 124.

Zoning — See Ch. 184.

## ARTICLE I Nuisance Animals [Adopted 5-14-2012 by Ord. No. 219<sup>1</sup>]

#### § 56-1. Short title.

This article shall be known and may be cited as the "West Earl Township Animal Nuisance Ordinance."

#### § 56-2. Definitions and word usage.

The following words, terms and phrases, when used in this article, shall have the meanings ascribed to them in this section, except where the context clearly indicates a different meaning:

ANIMAL — Except as otherwise specifically provided herein, animal shall include any creature (other than human) of any type, including but not limited to dogs, cats, fowl, horses and other animals. It shall not include horses while being used for transportation and animals being raised for food as part of a farming operation in a zoning district where farming is permitted.

BOARD OF SUPERVISORS — The governing body of the Township.

<sup>1.</sup> Editor's Note: This ordinance also repealed former Art. I, Dogs, adopted 4-27-1992 by Ord. No. 92, as amended.

OWNER — Any person who owns, keeps, maintains, handles, harbors, possesses or controls an animal or who has a possessory interest in an animal.

PERSON — Any individual, association, partnership, corporation, or other legal entity. Whenever used in any clause proscribing and imposing a penalty, person includes the individual members, partners, officers, and managers, or any of them, of such partnerships, associations, corporations, or other legal entities.

POLICE DEPARTMENT — Any municipal or multimunicipal police department having jurisdiction within the corporate boundaries of the Township.

TOWNSHIP — The Township of West Earl, Lancaster County, Pennsylvania.

#### § 56-3. Animal noise declared public nuisance.

No owner shall possess, harbor, or control any animal which howls, barks, meows, squawks or makes any other sound continuously and/or incessantly that can be heard outside the structure in which it is normally housed for a period of 10 consecutive minutes or makes such noise recurrently for 1/2 or more at any time of the day or night, regardless of whether the animal is situate in or upon private property; provided, however, that the time such animal is making such noise, no person is trespassing or threatening to trespass upon private property upon which the animal is situated or that no other legitimate cause such as teasing or provoking the animal exists.

### § 56-4. Unlawful for owner to permit animal to defile public and/or private property.

It shall be unlawful for the owner of any animal to allow such animal under his or her control to defile or defecate on any sidewalk, walkway or property of another. It shall be the duty of the person in control of an animal which defecates on any sidewalk, walkway or property of another to promptly clean up and remove all feces discharged and to dispose of such feces in a lawful and sanitary manner.

#### § 56-5. Dogs running at large.

- A. It shall be unlawful for the owner or keeper of any dog to fail to keep at all times such dog either:
  - (1) Confined within the premises of the owner.
  - (2) Firmly secured by means of a collar and chain or other device so that it cannot stray beyond the premises on which the animal is secured; or
  - (3) Under the reasonable control by some person when engaged in lawful hunting, exhibition or field training.
- B. It shall be the duty of the owner of any dog, and the duty of the parent or guardian of any minor owner of any such dog, to keep any dog securely tied or penned in an enclosure in such a manner that the dog cannot break loose and run at large over the streets, alleys, or public grounds of the Township, or upon the property of anyone other

than the owner of such dog or of one from whom specified permission of the owner thereof has been secured.

C. Any police officer or individual duly appointed by the Township is hereby authorized to seize and impound any dog found running at large unattended in the Township and dispose of the same pursuant to applicable statutes. The owner of any dog seized and impounded shall be liable to the Township for the cost thereof. The Supervisors will set the rates of impounding by resolution.

#### § 56-6. Maintenance of animals.

It shall be unlawful for any owner to harbor, care for, shelter or maintain any breed of animal in other than a sanitary condition, free of offensive, obnoxious or foul odors. All animal feces shall be removed and disposed of in a sanitary manner as frequently as necessary so that odors therefrom do not permeate to neighboring properties.

#### § 56-7. Enforcement.

The Police Department shall be charged with the responsibility to enforce the provisions under this article and shall perform all other duties which may be prescribed by the Board of Supervisors.

#### § 56-8. Violations and penalties.

Any person who shall violate any provision of this article shall, upon conviction thereof, be sentenced to pay a fine not exceeding \$1,000 and costs and, in default of payment thereof, shall be subject to imprisonment for a term not to exceed 30 days. Each day that a violation of this article continues shall constitute a separate offense.

#### § 56-9. Abatement of nuisance.

In addition to any other remedies provided in this article, any violations of the provisions of this article shall constitute a nuisance and may be abated by the Township by seeking equitable relief from a court of competent jurisdiction.



## September 27,2018

Dear Customer:

The following is the proof-of-delivery for tracking number 773330670226.

Delivery Information:			
Status:	Delivered	Delivered to:	Receptionist/Front Desk
Signed for by:	E.BUTLER	Delivery location:	909 ELMERTON AVE. HARRISBURG, PA 17110
Service type: Special Handling:	FedEx Priority Overnight Deliver Weekday	Delivery date:	Sep 27, 2018 09:41



Shipping Information:			
Tracking number:	773330670226	Ship date: Weight:	Sep 26, 2018 0.5 lbs/0.2 kg
<b>Recipient:</b> NPDES MS4 Permit Coo PA Dept of environmenta	ordinator al Protection	<b>Shipper:</b> Sara Service West Earl Township	

Southcentral Regional Office 909 Elmerton Avenue HARRISBURG, PA 17110 US Reference

157 W Metzler Road Ephrata, PA 17522 US

MS4 annual report

Thank you for choosing FedEx.



## September 27,2018

Dear Customer:

The following is the proof-of-delivery for tracking number 773330732813.

Delivery Information:			
Status:	Delivered	Delivered to:	Shipping/Receiving
Signed for by:	T.TRITCH	Delivery location:	SCAN CENTER HARRISBURG, PA 17105
Service type: Special Handling:	FedEx Priority Overnight Deliver Weekday	Delivery date:	Sep 27, 2018 10:08
	Direct Signature Required		



Shipping Information:								
Tracking number:	773330732813	Ship date:	Sep 26, 2018					
		Weight:	0.5 lbs/0.2 kg					
Recipient:		Shipper:						
Bureau of Clean Water		Sara Service						
PA DEP		West Earl Township	West Earl Township					
Rachel Carson State O	ffice Building	157 W Metzler Road						
400 Market Street, PO	Box 8466	Ephrata, PA 17522 US						
HARRISBURG, PA 171	105 US							

Thank you for choosing FedEx.

# Commonwealth of Pennsylvania MS4 Annual Report

May 1, 2017 - June 30, 2018

**Prepared For** 



West Earl Township, Lancaster County



Prepared By **CSDatum** 

# MCM #1 Appendix

- MCM #1 Project Plan
- BMP 1.1 Attachments

   PublicEducation-OutreachPlan-2017-2018.pdf
- BMP 1.2 Attachments
  - Target Audience-updatedmay2018.pdf

# • BMP 1.3 Attachments

- West Earl Township-homepage.pdf
- Conestoga-river-cleanup2018.pdf
- LancasterWaterWeek-2018\_brochure.pdf
- StormwaterEducation-TwpWebsite.pdf
- PointSource-NonPointSource-pollution.pdf
- STORMWATER-BMPs.pdf
- Edu-ChesapeakeBay2012.pdf
- SW\_Booklet\_2017.pdf
- IllicitDischargesandConnections-TwpWebsite.pdf
- Adopt-a-Drain-TwpWebsite.pdf
- farm-conservation-brochure.pdf
- Fence-em-out-Brochures.pdf
- Facebook\_posts-ms4.pdf

# • BMP 1.4 Attachments

- Newsletter-Winter2017.pdf
- Newsletter-Spring2018.pdf
- Newsletter-2017-1.pdf
- contractors-MS4\_education.pdf
- ActivityBook-BrownstownElementary.pdf
- CompostWorkshop-attendees.pdf

# MCM #1 Project Plan

# • BMP 1.1

# Description:

Develop, implement and maintain a written Public Education and Outreach Program Measurable Goal:

- 1. For new permittees, a written Public Education and Outreach Program (PEOP) shall be developed and implemented within one year following approval of coverage under this General Permit, and shall be re-evaluated each year thereafter and revised as needed.
- 2. For existing permittees, the existing PEOP shall be reviewed annually 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.

# Action Plan:

The Public Education & Outreach Plan (PEOP) will be evaluated and amended as necessary during each year of the Permit and will be completed by June 30 of each year. Implementation of the plan will be ongoing. As part of the evaluation, the target audiences, information distributed and the method of distribution will be reviewed annually to determine their appropriateness and effectiveness.

• BMP 1.2

# Description:

Develop and maintain lists of target audience groups present within the areas served by your MS4 Measurable Goal:

- 1. For new permittees, the lis
  - 1. For new permittees, the lists shall be developed within one year following approval of coverage under this General Permit, and reviewed and updated as necessary every year thereafter.
  - 2. For existing permittees, the lists shall continue to be reviewed and updated annually.

# Action Plan:

The Township will update its list of property owners within the Urbanized Area annually using Lancaster County GIS data and the Urbanized Area boundary. The list will also include various groups and organizations along with contact information. The Target Audience List is located on the following pages (or attachments). Each subsequent year, the Target Audience List will be reviewed and revised as necessary.

>>Updated target audience list to include Homeowner's Associations (Eagleview, Country View and Anglesea) 2/7/2017

>>Updated contractor's list April 2018

• BMP 1.3

# Description:

Annually publish at least one educational item on your Stormwater Management Program Measurable Goal:

1. 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.

2. In subsequent years, and for existing permittees, the list of items published and the content in these items shall be reviewed, updated, and maintained annually.

The permittee's publications shall contain stormwater educational information that addresses one or more of the six MCMs.

## Action Plan:

The Township maintains a website and also publishes a semi-annual newsletter. The website currently includes links to various web pages related to stormwater information and education. The Township newsletter will include information related to the Township's stormwater management program or general stormwater information. Website and newsletter information will be detailed in the annual reports.

Website address: http://westearltwp.org/

o Quarterly the Township will update the website to include new stormwater management information.

>>Website updated to include additional stormwater links July, October & December of 2017 and May 2018.

o The Township newsletter will be published semi-annually and include information related to stormwater management.

>>Newsletters published in June 2017, Fall/Winter 2018, Spring 2018.

• BMP 1.4

# Description:

Distribute stormwater educational materials to target audiences

# Measurable Goal:

All permittees shall select and utilize at least two distribution methods annually. These are in addition to BMP #3, above.

# Action Plan:

Stormwater educational information will continue to be made available to the public in the Township Office lobby. Additionally, information is planned to be distributed with building permit, subdivision & land development and stormwater management plan applications moving forward. The information distributed will be detailed in each year's annual report.

o Each subsequent year, the information distributed by the Township will be reviewed and updated as necessary.

>> Materials added to lobby in July 2017 and May 2018.

>> 350 activity booklets distributed to K-3rd grade at Brownstown Elementary in April 2018.

>> 13 activity booklets distributed to attendees of the Home Composting Workshop held at the Township Building on May 19,

2018.

>> Stormwater educational materials mailed to local contractors and builders in March 2018.

# Public Education & Outreach Plan Updated 2017/2018 Permit year

## BMP 1: Public Education & Outreach Plan

The Public Education & Outreach Plan (PEOP) will be evaluated and amended as necessary during each year of the Permit and will be completed by June 30 of each year. Implementation of the plan will be ongoing.

As part of the evaluation, the target audiences, information distributed and the method of distribution will be reviewed to determine their appropriateness and effectiveness.

## BMP 2: Develop Target Audience List

The Township will update its list of property owners within the Urbanized Area annually using Lancaster County GIS data and the Urbanized Area boundary. The list will also include various groups and organizations along with contact information. The Target Audience List is located on the following pages.

• Each subsequent year, the Target Audience List will be reviewed and revised as necessary.

## BMP 3: Publish/Mail newsletter, flyer or website

The Township maintains a website and also publishes a semi-annual newsletter. The website currently includes links to various web pages related to stormwater information and education. The Township newsletter will include information related to the Township's stormwater management program or general stormwater information. Stormwater articles will be posted to Facebook several times per year. Website, Facebook and newsletter information will be detailed in the annual reports.

Website address: <a href="http://westearltwp.org/">http://westearltwp.org/</a>

- At least quarterly the Township will update the website and Facebook to include new stormwater management information.
- The Township newsletter will be published semi-annually and include information related to stormwater management.

## BMP 4: Distribute stormwater educational information to the target audience

Stormwater educational information will continue to be made available to the public in the Township Office lobby. Additionally, information will be distributed with building permits, subdivision & land development and stormwater management plan applications moving forward. Educational materials will be periodically provided to the students at the Brownstown Elementary School. The information distributed will be detailed in each year's annual report.

• Each subsequent year, the information distributed by the Township will be reviewed and updated as necessary.

# **Target Audience List**

West Earl Township Residents

West Earl Lions Club Rick Crouse, President

Cocalico Creek Watershed Association P.O. Box 121 Reinholds, PA 17569 Ed Ostrowski, President - (717) 665-9000 or Jay Snyder, Past President - (717) 738-9282

Brownstown Elementary School 51 School Lane Brownstown, PA 17508 <u>Teresa Burkhart@conestogavalley.org</u>

West Earl Fire Company 14 School Lane Ave Brownstown, PA 17508 Non-Emergency: 717-656-6791

Farmersville Fire Company 74 E Farmersville Rd Ephrata, PA 17522 (717) 354-5841 firechief@farmersvillefire.com

Boy Scouts

**Girl Scouts** 

Eagleview HOA Anglesea HOA Country Circle HOA – Bill Howard, 66 Batten's Circle, Leola, PA 17540 Creek Hill HOA

CONTRACTORS/DEVELOPERS - updated 2/23/2018									
NAME	ADDR1	ADDR2	CITY	STATE	ZIP				
ADVANCED INTERIORS INC	PO BOX 43		BROWNSTOWN	PA	17508				
BLM CONSTRUCTION & REMODELING, LLC	2711 GOLF DRIVE		YORK	PA	17408				
BOTTOM LINE CONTRACTING	918 RABBIT HILL ROAD		LITITZ	PA	17543				
CONCRETE AUTHORITY	599 AIRPORT ROAD		LITITZ	PA	17543				
COUNTRYSIDE BUILDERS	540 COUNTRYSIDE LANE		NEW HOLLAND	PA	17557				
CREEKVIEW BUILDERS	29 E BURKHOLDER DRIVE		LITITZ	PA	17543				
EARTH TURF & WOOD	196 N REAMSTOWN ROAD		DENVER	PA	17517				
EBY EXTERIORS	127 N 7TH STREET		AKRON	PA	17501				
ELDEN E. WEAVER BUILDING & REMODELING	245 KEENER ROAD		LITITZ	PA	17543				
FARMERSVILLE CONSTRUCTION LLC	355 E FARMERSVILLE ROAD		EPHRATA	PA	17522				
HECK CONSTRUCTION	143 MAIN STREET		DENVER	PA	17517				
HIGHMARK CONSTRUCTION LLC	478 E MAIN		LEOLA	PA	17540				
INNOVATIVE BUILDING & REMODELING	330 POWELL DRIVE		LANCASTER	PA	17601				
JOHN REIFF BUILDER	371 N HERSHEY AVENUE		LEOLA	PA	17540				
KEYSTONE CUSTOM HOMES	227 GRANITE RUN DRIVE	#100	LANCASTER	PA	17601				
KEYSTONE CONSTRUCTION	236 WILLOW RIDGE		NEW HOLLAND	PA	17557				
KITCHEN ENCOUNTERS	2603 LITITZ PIKE		LANCASTER	PA	17601				
LONG BUILDERS	5334 S VIEW DRIVE		NEW HOLLAND	PA	17557				
MKS CONSTRUCTION LLC	360 W MT AIRY ROAD		STEVENS	PA	17578				
MORGAN RUN BUILDERS	143 NEWPORT ROAD		LEOLA	PA	17540				
PINNACLE BUILDING	2475 NEW HOLLAND PIKE		LANCASTER	PA	17602				
PINETREE BUILDERS	96A GLENBROOK ROAD		LEOLA	PA	17540				
R&R BUILDER	101 DURLACH ROAD		EPHRATA	PA	17522				
RB HESS CONSTRUCTION	1379 WOODLAND CIRCLE		DENVER	PA	17540				
SERVE-PRO OF LANCASTER EAST	3 FALCON LANE		LITITZ	PA	17543				
STUMPS QUALITY DECKS & PORCHES	2458 DIVISION HWY		EPHRATA	PA	17522				
SUMMIT LAND HOLDINGS, LLC	320 GRANITE RUN DRIVE		LANCASTER	PA	17601				
TRADEMARK CONTRACTORS	114 CIERA DRIVE		LITITZ	PA	17543				
TRIANGLE HEATING & AIR CONDITIONING	3200 OREGON PIKE		LEOLA	PA	17540				
RIDGE BUILDERS	32 MIDDLE CREEK ROAD		EPHRATA	PA	17522				
HOOVER EXCAVATING LLC	186 W METZLER ROAD		EPHRATA	PA	17522				

West Earl Township







# ANNOUNCEMENTS

#### Adopt-a-Drain Program

Mulch Loading Day at the Compost SiteVolunteers Needed! - Conestoga Valley RiverCleanup2018 Lancaster Water WeekPENNVEST Homeowner Septic ProgramN. Farmersville Bridge project update-APRIL2018Important Information for TaxpayersDEP Press Release - High Radon Levels

As of June 2016 the Township will no longer accept used motor oil for recycling. West Earl residents do have other options for recycling used motor oil however. Please visit <u>www.Earth911.com</u> to find a recycling location near you.



# **Quick Links:**

- Tax Collector
- MS4 Program
- 2016 Water Quality Report
- <u>Illicit Discharge Complaint Form</u>
- <u>Sidewalks</u>
- <u>Right to Know Requests</u>
- <u>ACT 44 Disclosure form</u>
- <u>Recycling Guidelines</u>
- <u>Property Maintenance Ordinance</u>
- <u>Floodplain Ordinance</u>
- <u>Noise Ordinance</u>
- <u>Stormwater Runoff Resources</u>
- <u>2018 Meeting Schedule</u>
- Pay Utility Bills Online
- <u>Compost Facility</u>
- <u>Fee Schedule</u>
- Most Recent Newsletter
- <u>West Earl Fire Company</u>
- <u>Farmersville Fire Company</u>
- West Earl Lions' Club
- Leola Public Library
- Lancaster County Government Home
- <u>Conestoga Valley School District</u>
- Brownstown Elementary School
- <u>Senator Ryan Aument</u>
- <u>Representative Keith J. Greiner</u>

## **Monthly Meetings**

Board of Supervisors 2nd and 4th Monday of every month at 7:00 p.m. Sewer Authority 2nd Wednesday of every month at 7:00 p.m. Water Authority 1st Monday of every month at 7:00 p.m. Planning Commission

# Volunteers Needed - Conestoga River Clean-Up Comes to the Conestoga Valley - June 9, 9AM -11:30 AM (Free picnic for all volunteers 12-1pm)

Join us at one of three sites in the municipalities in the Conestoga Valley (East Lampeter Township, West Earl Township, and Upper Leacock Township) to clean-up litter in and along the Conestoga River. We will be volunteering in the Conestoga Valley at the same time that other partners will be working elsewhere along the Conestoga River, all part of the Lancaster Water Week Conestoga Clean-up. Families, clubs, businesses, and individuals are all encouraged to come out and be part of this important event for our community!

Register in advance, and select the site you will join us at, by visiting: <u>https://www.eventbrite.com/e/conestoga-clean-up-lancaster-water-week-tickets-45006874774</u>. You will receive more specific details on where to meet and how to prepare after you register.

\*\*Following the clean-up, all volunteers from across the entire clean-up will meet at noon for a FREE pizza and ice cream lunch at Lancaster County Park, celebrating the day! Check out the other Lancaster Water Week events at <u>https://www.lancasterwaterweek.org/events</u>.


## WHAT IS WATER WEEK?

Leading the way to clean water by protecting over 6,000 acres of wild lands, the Lancaster County Conservancy has created Lancaster Water Week to connect us all to clean water. Lancaster's 1.500 miles of streams and rivers drive local economic and agricultural growth. They are a place of recreation and the source of our drinking water. Water Connects Us All!

We strive for streams and rivers that are fishable, swimmable, and drinkable. We need your help.

**CELEBRATE** the unique waterways of Lancaster County

**EDUCATE** yourself about the challenges we face and opportunities we can create

**ACTIVATE** your community and get involved in our many Water Week events



# Lancaster County Conservancy

**WOULD LIKE TO THANK OUR 2018 SPONSORS** 





**OCTORARC** 

B

LANCASTER June 1-9, 2018

Lancaster County <u>Conservancy</u> SAVING NATÜRE





Dip your toes in one or commit to all three! Here are our three action steps you can take to help our waterways.



Creating native habitat is critical to pollinators (birds, CREATE HABITA bees, and other insects). You can start by planting several native species each year, pulling out invasive plants, and strategically placing a tree in order to capture water.

We know that water is essential to our life. We essential to our life. How is it unique? What type of fish are native to this area? What else lives in or near the water? What are some simple steps to protection

EXPLORE OUTDOORS Spending as little as 20 minutes outdoors daily can have a dramatic impact on your health. Imagine a therapy that is free, has no side effects, and increases your mental, emotional, and physical well being. Lancaster County Conservancy offers 45 unique nature preserves throughout the county. Get outside and explore!

Share your love of nature with us! #lancasterconservancy #lancasterwaterweek



## Friday, June 1

First Friday in Downtown Lancaster - 6-10pm Join us in Downtown Lancaster for First Friday as we kick-off Lancaster Water Week.

## Saturday, June 2

#### Lancaster Farmland Trust Pedal to Preserve **Bicycle Ride** – 8am

Celebrate farmland preservation with the Lancaster Farmland Trust by riding in our Pedal to Preserve 2018. Ride route lengths are 6, 20, and 51 miles.

#### Stream Health and Science – 9am-12pm

Hands on workshop that will explore insects and habitats that have a positive impact on the health of 11" x 17" Accordion Fold

Friends of Fishing Creek at Guarryville Library -

#### 10-11:30am

Kick off your summer reading program with activities centered around the water cycle and water conservation and middle school kids.

## RIVERLANDS TRAIL FESTIVAL AT 95

#### **Riverlands Trail Festival** – 10am-3pm

Organized hikes, canoe race, live music, food, and more along the Susquehanna River.

#### **Riverlands Trail Festival: Wilton Meadow Hike** 9:30am-3pm

Hike a 3-mile section of the Mason Dixon Trail from High Point through Wilton Meadows Nature Preserve to John Wright Restaurant. Please reserve your tickets for the shuttle service.

#### **Riverlands Trail Festival After Party** – 3-5pm

Live music at the John Wright Restaurant from Vinegar Creek Constituency. Stop in for dinner and Water Week beer from Fetish\* Brewing.

#### A Day On Lititz Run – 2-5pm

Visit three restored sites including the Millport Conservancy. Lititz Wastewater Treatment Facility, and the Rock Lititz Campus. Fly casting, stream studies, interaction with the birds and bees, a trout hatchery, and more.

#### Celebration at Rock Lititz with Fetish\* Brewing Co. - 5-8pm

Food. Water Week beer, live music, and information about the restoration of Lititz Run.

## Sunday, June 3

#### The North Museum - 12-5pm



Family fun filled with water themed activities. Demonstrations about rain gardens and stormwater management. Movies in the SciDome Theater titled. "Habitat Earth" and "Dynamic Earth."

## Monday, June 4

#### 4th Annual Clear Waters Golf Tournament – 1-5pm

Crisscross the Little Conestoga River and view several restoration projects while enjoying a beautiful afternoon on the links.

#### **Rain Garden Design and Installation Workshop** – 6-8:30pm

Join the Little Conestoga Watershed Alliance in planting a rain garden while learning some tips on how to design and install one at

home! 11" x 17" Accordion Fold

#### Inside Middle) Zoetropolis Movie Night – 6-9pm

A reception and evening of film that focuses on the impact of Habitat on our local environment. The evening will include the preview of a new short film focused on the advantages of no till and cover crop farming. \$15 includes movie, food, and beverages. Tickets are limited.

## **Tuesday, June 5**

The Power of Water: Safe Harbor Dam Tour - 9 & 10am Hanessing the power of water into clean renewable energy is just

part of what you will learn on your tour of the Safe Harbor Dam.

#### Clean Streams Farm Tour - 5-8 pm

Take a ride throughout Oregon Dairy's agricultural operation to learn how they take care of the stream flowing through their property. End your evening with a BBQ picnic dinner as the sun sets over the farm

## Wednesday, June 6

#### **Chiques Watershed Expo** – 6-8pm

Held at the Manheim Farm Show Complex, this expo is family-friendly event full of education and fun!

> Please visit our website for more details and to pre-register for all events: lancasterwaterweek.org/events

#### Native Plant Conference – June 6 through June 9

Includes inspirational field trips, educational workshops, engaging topics of concern, native plant and book sale, and native plant merchandise. Special discount for Lancaster Water Week; use code "WW2018" to receive 10% off Thursday and/or Friday registration costs. More information at www.millersvillenativeplants.org

## Thursday, June 7

#### Kellvs Run Nature Hike - 10am

Join the Lancaster County Conservancy's Director of Stewardship, Brandon Tennis, for a guided tour of this beautiful Riverlands preserve.

#### **Green Infrastructure Bike Tour** – 5-7pm

The City of Lancaster is transforming its streets, parks, commercial, and private properties to capture stormwater. The tour ends at The Fridge to enjoy our Water Week beer.

#### Propagating Native Plants at Home – 6:30-8:30pm

Mike Van Clef will discuss basic techniques to propagate a variety of native species at home including seed collection, cleaning, storage, sowing, and germination/growth. \$30 per person.

#### Eshelman Run Tree Planting - 6-8pm

Volunteers will be planting around 175 native trees and shrubs adjacent to a tributary to Exheman Ruesion Fold

(Inside Middle)

## Friday, June 8

Native Plant Sale - Friday, 6:30 - 9:30pm/Saturday, 8am - 12pm Offering native trees, shrups, and perennials.

#### Lecture: "Perennial Gardening: The Know Maintenance

#### Approach"-7-8pm

Understanding best gardening practices that accompany the plants to maturity as well as to the continued health, beauty, and well-being of the plant community.

## Saturday, June 9

#### Lecture "Native Wild Edibles of PA" - 9-10am

Wild plant expert, nutritionist, and forager Debbie Naha will discuss native wild plants of our area.

#### Lecture "Butterflies and Moths as Pollinators" 10:15-11:15am

Learn about connecting native plants with butterflies and moths that we want to attract.

#### **Conestoga Clean Up** – 9am-1pm

Join us at one of seven locations to help us work towards a cleaner, safer, and more beautiful Conestoga River.





Please visit our website for more details and to pre-register for all events: lancasterwaterweek.org/events



#### MS4 PROGRAM STORMWATER MANAGEMENT RESOURCES

Below are several links to educational brochures and websites where you can find useful information about stormwater management and the Township's MS4 program.

Adopt-a-Drain Program ADDED 5/1/18

Illicit Discharges and Connections ADDED 6/1/17 Illicit Discharge Complaint Form MS4 Program Annual Report 2016/2017 MS4 Program Annual Report 2016/2017 - with all supporting documents MS4 Program Annual Report 2015/2016 MS4 Program Update May 1, 2016 - April 30, 2017 Earth Day Clean-up - CV students

WEBSITES

National Resources Conservation Center Pennsylvania Watersheds Lancaster County Clean Water Consortium Lancaster County Watersheds Lancaster County Conservancy United States Environmental Protection Agency Chesapeake Stormwater Network Create a Rain Garden

**BROCHURES AND ARTICLES** 

Point Source and Non-Point Source Pollution...What's the difference? ADDED 5/1/18 Stormwater BMPs - What are they & what do they do? ADDED 12/28/17 The Chesapeake Bay in Lancaster County ADDED 10/5/17 Homeowner's Guide to Stormwater BMP Maintenance ADDED 7/11/17 Backyard Conservation Make Your Property Bay Friendly The Drop You Drink is More Thank You Think Fence 'Em Out Build Your Own Rain Barrel After the Storm Lancaster County Watershed Basics Solution to Pollution Homeowner's Guide to Stormwater

Lancaster County Conservancy - rain barrel assessment & order forms <u>Rain Barrel Registration & Assessment Form</u> <u>Rain Barrel Maintenance</u> <u>Rain Barrel DIY pictures</u>

> West Earl Township 157 W. Metzler Road P.O. Box 787 Brownstown, PA 17508 <u>datadept@westearltwp.org</u> Phone: 717-859-3201 Fax: 717-859-3499

> > Š 2018 West Earl Township

### Point Source and Non-Point Source Pollution..... What's the Difference?

Point Source Pollution is water pollution that typically comes from wastewater discharge pipes at factories, power plants and sewage treatment plants. Point Source Pollution is regulated by state and federal laws and agencies. Non-Point Source Pollution (NPS) is water pollution that comes from many different sources—like roads, highways, sidewalks, parking lots, lawns, gardens, farm fields and leaking septic systems. NPS is triggered when rainwater washes road salts, vehicle fluids, fertilizer, herbicides, pesticides, manure, litter and soil off the land and into waterways. As surface runoff moves over land, it picks up and moves these pollutants into our streams, rivers, lakes and wetlands—and even into our reservoirs and groundwater drinking supplies. *NPS is the biggest source of pollution to our streams and rivers.* 

Because there are so many sources of NPS, it's difficult to regulate. Therefore, it's up to each of us to do our part to keep our water clean for our use, as well as for the plants and animals that also depend on water for their survival. Drinking water, whether from private wells or municipal water supplies, comes from the rain that falls on our watersheds. What happens to this rainwater from the time it hits the ground to the time it's poured into a glass, is mostly up to each of us as individuals. We all contribute to Non-Point Source Pollution in our daily lives. But there are ways we can make changes to reduce our impacts to our water resources, and minimize our contributions to Non-Point Source Pollution.

Consider adopting a 30-day trial of "green" habits that will help protect our water. Select some habits from this list. You'll find that in addition to protecting our water, they also save you time and money.

#### Inside your home

- Avoid using your garbage disposal. It adds potentially damaging grease and solids to your plumbing and septic system. Instead, make or buy a compost bin to dispose of food scraps and let nature recycle it into soil for you (West Earl Township is holding a free home composting workshop on May 11, 2018. Call 717-859-3201 to register).
- 2. Avoid using chemical-based cleaning products. They can kill essential bacteria in your septic system and are difficult to remove in wastewater treatment plants. Instead, consider using chemical-free products for house cleaning.
- 3. Buy laundry and dishwashing detergents that are phosphorous-free. Phosphorous is a nutrient that can cause excessive algae blooms that suck oxygen out of the water and cause toxins to be released into streams and lakes, putting fish at risk.
- 4. Reduce the amount of water you use. No need to keep the spigot running the whole time you're washing your fruits and vegetables, or brushing your teeth.

#### Outside your home

- 1. Avoid using fertilizers, herbicides and pesticides on your lawn. Instead, leave grass clippings on your lawn to allow nutrients to cycle into the soil
- 2. Harvest rainwater using rain barrels and rain gardens for watering plants. You can visit the Township's website at <u>www.westearltwp.org</u> and click on the MS4 link for more information about rain barrels.
- 3. Plant native trees, shrubs and wildflowers. The roots of plants absorb and remove pollutants from water and bind soil together to keep it from washing off the land when it rains.

### **STORMWATER BMPs**

#### What are they & what do they do?

BMP stands for <u>Best Management Practice</u>, and includes designed stormwater management facilities (such as detention basins), as well as non-engineered approaches like protecting open space to manage stormwater.

The goal of BMPs is to reduce the impact of development on downstream bodies of water (streams, lakes, etc.) by:

- Minimizing the amount of stormwater runoff
- Slowing down the runoff
- Infiltrating runoff
- Evapotranspiring\* runoff
- ➢ Filtering runoff

Many BMPs will use vegetation for their ability to use water, put water back into the atmosphere, or help it infiltrate into the ground, rather than allow it to become runoff.

If you've ever walked through a meadow or shaken a tree branch after a rain, you got wet with intercepted water. When it rains, some of the water is trapped on plants. This "intercepted" water never even makes it to the ground where it could be infiltrated. Plants also use water as part of the photosynthesis process where they use the sun's energy to create their own food. This water used by plants is called evapotranspiration. Larger plants with broader leaves and deeper roots like trees, shrubs, or decorative grasses will intercept and evapotranspire more water than a grass lawn.

**Communities are designed with stormwater management in mind.** There are many different BMPs spread throughout our community. Stormwater flows downstream, and the homeowners must do their part on their own property to protect the streams for everyone. You and all of your neighbors each plan an important role in the health of downstream waters.

Some BMPs are landscaped and others are buried so you might not see anything at the surface. Even though it might just look like some plants or gravel, the BMP is still performing a very important function. Disturbing the vegetation or compacting the soil can ruin that BMP and have a negative impact downstreams.

#### What's the Homeowner's Legal Responsibility?

If your home was constructed after 2010, and your property contains any Post Construction Stormwater Management BMPs, the developer will have recorded details about them with your property's deed. State regulation requires that the information recorded with the deed identifies the BMP, provides for access to the BMPs for maintenance and inspection purposes, and provides notice that the responsibility for long-term operation and maintenance of the BMP is a legal requirement that runs with the property. You can view your property records at the Recorder of Deeds office at the Lancaster County Courthouse, or visit their website at lancasterdeeds.com, to determine if you are responsible for the maintenance of any BMPs.

**If you are the person designated as the responsible-party for operation and maintenance,** you must ensure that the BMPs continue to function properly and follow the maintenance schedule provided by the developer and recorded with your deed. The responsibility to maintain the BMP includes the cost of plants or material for upkeep or replacement. You should have been provided a maintenance plan by the developer if you're the first owner of the home. If your home was constructed after 2010, you may need to check the property records for information if you're not the first owner and didn't receive the maintenance plan at the time of purchase.

**If you're not doing the necessary maintenance and required documentation,** you may be billed by your municipality for the cost of having someone else do the work. Or you could face a summary offense and daily fine until the maintenance is complete.

**If responsibility has been transferred to someone else,** you need to provide access for maintenance and inspection. You also must leave any BMPs in place. For example, you can't remove the vegetation of a rain garden, level it, and plant lawn grass.

For more information about stormwater BMPs or stormwater management in general please visit <u>http://www.westearltwp.org/pages/stormwater\_education.html</u>.

<sup>\*&</sup>lt;u>Evapotranspiration</u> (ET) is a term used to describe the water consumed by plants over a period of time. Evapotranspiration is the water loss occurring from the processes of evaporation and transpiration. Evaporation occurs when water changes to vapor on either soil or plant surfaces. Transpiration refers to the water lost through the leaves of plants.

## THE CHESAPEAKE BAY IN LANCASTER COUNTY

### Why is the Chesapeake Bay Watershed Special?

The Chesapeake Bay was formed about 12,000 years ago as glaciers melted and flooded the vast Susquehanna River Valley. At approximately 200 miles long, and an average depth of 21 ft (175 ft at its deepest part) the Chesapeake Bay is North America's largest estuary and the world's third largest. The Bay's drainage area (64,000 square miles) encompasses parts of six states; Delaware, Maryland, New York, Pennsylvania, Virginia, and West Virginia as well as Washington D.C. There are more than 100,000 streams, creeks, or rivers in the watershed, including 150 major rivers. With 17 million residents (and growing)

living in the Chesapeake Bay watershed, one can reach a Bay tributary in less than 15 minutes.

> The word "Chesapeake" derives from the Native American culture and loosely translates into "great shellfish bay." This makes sense since the Bay provides more blue crabs than anywhere in the world. In fact, more than 500 million pounds of seafood is harvested from



Overview of the Chesapeake Bay Watershed

the Bay every year. The Bay also supports 3,600 species of plant and animal life, including more than 348 fish species, 173 species of shellfish, and 2,700 plant species. Finally, the Chesapeake Bay is home to 29 species of waterfowl and is a resting area for birds along the Atlantic Migratory Bird Flyway. Every year, one million waterfowl winter in the Bay's basin.

Chesapeake Bay blue crabs are valuable commodity

### I live in Lancaster County, why should I care about the Bay?



Chesapeake Bay Threats: Sediment and Nutrient Pollution



**Streambank Erosion** 

Since colonial times, the Bay has lost half of its forested shorelines, over half of its wetlands, nearly 90 percent of its underwater grasses, and more than 98 percent of its oysters. During the 350 years between 1600 and 1950, approximately 1.7 million acres of the Bay watershed were developed. During the 30 years between 1950 and 1980, the Bay watershed lost an additional 2.7 million acres to development. All of this development creates water quality threats to the Bay.

The leading threat to the health of the Chesapeake Bay is excess nitrogen and phosphorous pollution that destroys habitat and causes fish kills. Top sources of these pollutants include agriculture, sewage treatment plants, runoff from urban and suburban areas, and air pollution from automobiles, factories, and power plants.

Other threats to the Bay's health include sprawl, toxic pollution, and poor fishery management. So in the big picture we are all responsible for the health of the Chesapeake Bay. Whatever we do in our little portion of the Bay watershed will affect the overall water quality of our natural treasure. Remember **WE ALL LIVE DOWNSTREAM** so what we do "up" here will affect our neighbors downstream in the Chesapeake Bay.



Chesapeake Bay Threats: Suburban Sprawl



**Stormwater Pollution** 



#### What can I do in Lancaster County to Protect the Bay? Native Plants

Instead of turf grass try planting more native grasses, ground covers, shrubs, and trees. Native species are more tolerant of our local growing conditions. In addition these native varieties usually require less water and handle drought conditions better then non-native species. Native plant species will not only enhance your property value but will also reduce surface runoff from your property. In the process, these native trees and shrubs will filter pollutants before they enter groundwater reserves. This will reduce the amount of nutrients reaching the Chesapeake

Bay and reduce the nutrients entering our local streams and creeks.

#### **Streambank Fencing**

If you own or operate a farm, strongly consider the benefits of fencing livestock out of the stream. Fenced streams provide streambank stabilization, improved wildlife value, aesthetic appreciation, increased property values, and overall better water quality. In addition, streambank fencing provides healthier livestock, lower veterinarian visits, and higher commodity prices because of a healthier herd. If a native riparian buffer is planted inside the fencing this adds to the overall water quality benefits for the stream and the Bay.

### **Did You Know..**

Chesapeake Bay holds more than 18 trillion gallons of water.





#### **Riparian Buffers**

A "buffer" by definition is a person or thing that shields and protects against annoyance, harm, hostile, forces, etc. Connect this term with riparian which means relating to or living or located on the bank of a natural watercourse (as a river) and you get the true meaning of riparian buffers; native trees and shrubs planted along a water body in order to protect that watercourse. Riparian buffer protection and benefits come in many ways; food and cover for wildlife, streambank and in-stream structure, slowing stormwater runoff, groundwater recharge, shade and temperature control for a stream, trapping and filtering runoff, and taking up excess nutrients. Studies have shown that a stream with a mature riparian buffer has a 10 degree temperature difference from an unshaded stream. This is important because cooler water holds more oxygen then warmer water which helps aquatic life in the stream. All of these factors are why riparian buffers are so important not only for water quality but for the entire stream ecosystem.

Mowing next to a stream provides no water quality benefits only additional work and money while riparian buffers create less maintenance but provide so much more water quality benefits



Streambank fencing benefits can be seen in these before and after pictures

#### What can I do in Lancaster County to Protect the Bay? Agricultural Best Management Practices

Once again if you own or operate a farm in Lancaster County, the soil you farm and the nutrients you put on the ground are very important to you; protecting your investment is critical to your livelihood. One way to protect your soil is by implementing agricultural best management practices (BMP's) on your farm. These BMP's make sure the soil and nutrients stay on the field to benefit your operation. Loss of soil and nutrients is a financial loss to your pocket; it is in your best interest to protect your natural resources. In the process of implementing these BMP's you are also helping the Chesapeake Bay by improving water quality in your local watershed. Some common agricultural BMP's implemented in Lancaster County include; contour farming, no-till, manure management systems, barnyard controls, waterways, diversions, terraces, watering systems, and cover crops.

> Examples of agricultural BMP's to improve water quality; contour farming and a manure management system

### **Did You Know...**

The Chesapeake Bay has over 11,600 miles of shoreline. (the same distance from New York to Los Angeles and back to New York)

#### Low Impact Development

Recently, we have heard the term smart growth when talking about new residential developments throughout the county. Lancaster County is growing and this growth is pushing us to develop more areas around the county. In order to lessen the impact on our natural resources, ideas like Low Impact Development (LID) have been brought to the forefront. LID is just a different way to develop land that puts more residents on less land while preserving open space and protecting natural features. In essence, LID is a less intrusive way of developing a site while controlling suburban sprawl issues in the process. Is this the answer for every site? Perhaps not but, LID does give our planners and developers another tool to use that lessen our impact on the land and the Chesapeake Bay Watershed. Less development disturbance and more people on less land can only improve the Bay in the long term.



Traditional development site(right) built next to a Low Impact Development site(left)

Example of a LID designed community in Maryland

**Did You Know...** 90% of the Bay's freshwater comes from 10 major river systems, and 50% of it comes from the Susquehanna River. (19 million gallons of water per minute)







For more information check out; www.lancasterwatersheds.org

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Lancaster County Conservation District

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Stormwater is the water that runs off the land after precipitation, either rain or snowmelt. Rain or snow can drain down into the soil (called infiltration), evaporate back into the atmosphere, be used by plants, or flow into streams or water bodies. The water that runs off the land to streams or lakes is referred to as stormwater runoff.

Stormwater runoff happens in natural, undeveloped areas, but typically only for larger storms. For most areas in Pennsylvania that are wooded or natural meadows, it takes about an inch or more of rain to produce runoff.

After development, the natural wooded or meadow areas are replaced with roofs, driveways, sidewalks, and streets. These hard surfaces are called impervious surfaces, and they do not allow water to drain through them, unlike how rain can drain into soil (which is called a pervious surface). When rain falls on impervious surfaces, it runs off rather than infiltrating into the soil or being taken up by vegetation.



When it rains on an undeveloped piece of property, much of the rainwater infiltrates into the soil or is evapotranspired back into the atmosphere. When vegetation is replaced with streets, driveways, sidewalks, houses, and lawns, less rainwater is able to infiltrate or return to the atmosphere, and more of the rain turns into runoff.

## Why should you care about Stormwater Management?

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Rainwater that falls on your house, yard, or driveway, may run to the street and into the storm drains. These pipes carry the stormwater runoff and all the pollutants that it has picked up to streams. Even if you can't see a stream or lake from your house, stormwater runoff from your house is still draining to these waters.

## Negative impacts of

stormwater runoff can

include flooding, erosion of streams, sediment build up in lakes, and pollution of streams and lakes.

Stormwater flows much faster along a road than it does in the woods. The faster moving water is able to pick up more pollutants like sediment, fertilizers, pesticides, bacteria (from pet waste), and other contaminants, and carry the pollutants to streams and lakes.

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An increase in the amount of water that runs off after development and how quickly it runs off can cause erosion and instability in streams. Stormwater runoff can cause streams to become wider, deeper, and straighter, losing their natural bends (or meanders) and decreasing habitat for fish and other animals that live in streams. Stormwater from developed areas can also be hotter than natural stream sources. Warmer water holds less dissolved oxygen so stormwater can be harmful to fish like trout that need more oxygen.

It's easy to notice the flooding impacts of large rain storms, but over time, smaller storms can have an impact on streams, too. Across the state, about 95% of the rainfall volume occurs in small events (less than 2.4 to 3.2 inches depending on your location.)

## BMPs: what are they, & what do they do?

BMP stands for Best Management Practice, and includes designed "things" like detention basins, as well as nonengineered approaches like protecting open space to manage stormwater. SCMs are Stormwater Control Measures, which are engineered facilities that are designed and constructed to manage stormwater. For the most part, the terms BMP and SCM can be used interchangeably.

The goal of BMPs or SCMs is to reduce the impact of development on downstream streams and lakes by:

- **b** minimizing the amount of runoff,
- **b** slowing down the runoff,
- **b** infiltrating runoff,
- **b** evapotranspiring runoff, or
- **b** filtering runoff.

Many BMPs or SCMs will use vegetation for their ability to use water, put water back into the atmosphere, or help it infiltrate into the ground, rather than allow it to become runoff.

If you've ever walked through a meadow or shaken a tree branch after a rain, you got wet with intercepted water. When it rains, some of the water is trapped on plants. This "intercepted" water never even makes it to the ground where it could be infiltrated. Plants also use water as part of the photosynthesis process where they use the sun's energy to create their own food. This water used by plants is called evapotranspiration. Larger plants with broader leaves and deeper roots like trees, shrubs, or decorative grasses will intercept and evapotranspire more water than a grass lawn. Your whole community has been designed with stormwater management in mind. There are many different BMPs spread throughout the development. Stormwater flows downstream, and the homeowners must do their part on their own property to protect the streams for everyone. You and all of your neighbors each play an important role in the health of downstream waters.

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Some BMPs/SCMs are landscaped and others are buried so you might not see anything at the surface. Even though it might just look like some plants or gravel, the BMP is still performing a very important function. Disturbing the vegetation or compacting the soil can ruin that BMP and have a negative impact downstream.

Native vegetation is the best choice for BMPs because they're naturally adapted to the soils and climate. They require less fertilizer, pesticides, watering, and overall less maintenance.

All of the homes in your community drain to a stream or lake. All homeowners need to do their part to maintain stormwater BMPs in their own yard to protect streams and lakes for everyone.



When a property is developed, the developer must incorporate stormwater management facilities. He/she must design **Erosion and Sediment Control (E&S) BMPs** that are used during construction to prevent soil from running off the site and polluting downstream waters. When the construction period is over, **Post-Construction Stormwater Management (PCSM) BMPs** will have been constructed, and the developer must provide a way for these BMPs to be properly maintained over time.

When the developer finished the project, they will have turned over the maintenance responsibilities for the BMPs to someone else, which could be the property owner, a nonprofit organization, the local municipality, an authority, a private corporation, or another person. The developer will also have produced a plan that must include drawings, which show the location and dimensions of each PCSM BMP. Accompanying this PCSM Plan will be a long-term operation and maintenance schedule, which provides for inspection of PCSM BMPs, including the repair, replacement, or other routine maintenance of the PCSM BMPs to ensure proper function and operation. This maintenance program must describe how access to the PCSM BMPs will be achieved.

The developer will be following the rules of PA Code, Title 25, Chapter 102, which defines rules for both Erosion and Sediment Control, and Post Construction Stormwater Management. These regulations can be found by going to PA Code online at <u>www.</u> <u>pacode.com</u> and then browsing to Title 25, Chapter 102.

## What's the Homeowner's Legal Responsibility?

If your home was constructed after 2010, and your property contains any Post Construction Stormwater Management (PCSM) BMPs, the developer will have recorded details about them with your property's deed. State regulation requires that the information recorded with the deed identifies the PCSM BMP, provides for access to the BMPs for maintenance and inspection purposes, and provides notice that the responsibility for long-term operation and maintenance of the PCSM BMP is a legal requirement that runs with the property. You can view your property records at the Recorder of Deeds office at your county courthouse to determine if you are responsible for the maintenance of any BMPs.

If you are the person designated as the responsible-party for operation and maintenance, you must ensure that the BMPs continue to function properly and follow the maintenance schedule provided by the developer and recorded with your deed. The responsibility to maintain the BMPs includes the cost of plants or material for upkeep or replacement. You should have been provided a maintenance plan by the developer if you're the first owner of the home. If your home was constructed after 2010, you may need to check the property records for information if you're not the first owner and didn't receive the maintenance plan at the time of purchase.

If you're not doing the necessary maintenance and required documentation, you may be billed by your municipality for the cost of having someone else do the work, or you could face a summary offense and daily fine until the maintenance work is complete.

**If responsibility has been transferred to someone else**, you need to provide access for maintenance and inspection. You also must leave any BMPs in place. For example, you can't remove the vegetation of a rain garden, level it, and plant lawn grass.

## Downspout Disconnection

### What is it?

Traditionally, roof gutter downspouts were connected directly to underground storm drain pipes. Disconnecting the downspout allows the roof runoff to be managed right on your property, not allowing it to pick up any pollutants to carry downstream. Roof runoff can be directed to grassy lawn areas, to rain barrels and cisterns for reuse, or to an underground sump for infiltration.

Rain barrels and sumps are discussed separately. This section describes maintenance of roof runoff to a lawn area.

### How does it work?

When the gutter downspout is turned and allowed to drain into the yard, the stormwater can be filtered by the grass and infiltrated into the soil. Downspout disconnection reduces stormwater volume by allowing it to be used by plants (evapotranspiration) or infiltrated into the soil.

## How does a Homeowner maintain it?

#### **Regularly:**

- Maintenance for a downspout draining to a lawn area is generally part of the typical yard maintenance.
- Mow the lawn in this area at the same time interval that the rest of the yard is mowed.
- Check for bare spots and reseed if needed.

#### **Additional Information:**

- A splash guard or small pile of rocks may be needed at the location where the water leaves the drain to slow the water down and prevent erosion.
- The downspout could be directed to a rain garden rather than the lawn, in which case the Rain Garden maintenance (page 9) should be followed.

## Rain Gardens & Small Bioretention

### What is it?

A rain garden or bioretention area is a shallow depression that will hold runoff. It is planted with specially selected native vegetation that will filter and use runoff, as well as increase infiltration.

### How does it work?

Rain gardens reduce the amount of runoff and remove pollutants. As the water pools in the depression, it can infiltrate deeper into the soil, or be used by the vegetation through evapotranspiration. The deep and dense root system of perennial vegetation increases the amount of water that infiltrate as compared to the shallow roots of lawn grasses. Even in a larger event during which the rain garden may overflow, runoff is still filtered through the vegetation removing pollutants.



## How does a Homeowner maintain it?

#### Twice a year:

- Vegetation needs to be checked to make sure that it's healthy. Any bare spots need to be replanted.
- Check the inflow area to make sure that there isn't any sediment building up. Remove any accumulated sediment.
- Mulch should be re-spread when erosion is evident and be replenished as needed.

#### **Annually:**

• Perennial plants should be cut back if needed by species type and any dead vegetation should be removed at the end of the growing season.

#### **Every Three Years:**

• Apply mulch in the spring as needed to cover soil. Mulch should be 1-3 inches deep. Do not use mulch to "fill-in" the depression of the rain garden. That depression area is needed for stormwater management.

#### **Additional Information:**

- While vegetation is being established in the first few years, weeding may be required.
- If any plants die, they need to be replaced. Refer to the Post-Construction Stormwater Management Plan for what types of plants to use.
- During periods of extended drought, bioretention areas may require watering.
- A Rain gardens should be checked after large rain storms to make sure that they are draining within 72 hours. If water remains in the rain garden longer than 72 hours, you could have mosquito problems, and should contact your county conservation district for guidance on fixing or replacing your rain garden.

## Rain Barrels & Cisterns

### What is it?

Rain barrels and cisterns are a way to disconnect the downspout and save the stormwater for other uses. Rain barrels are typically connected to gutter downspouts and collect the runoff from roofs. Cisterns are larger containers than rain barrels but function the same way.

### How does it work?

Rain barrels and cisterns capture runoff, hold it for a period of time and allow the water to be used for different purposes.

The rain barrel or cistern will likely have an overflow for when the barrel fills up during heavy rainfall. There is typically a screen on the top of the barrel or cistern where the water enters the barrel to keep out leaves and other debris.

> The screen also limits mosquito activity in the rain barrel if it is not drained in three (3) days.

## How does a Homeowner maintain it?

#### After Rain Events:

- Clean the screen by removing any leaves that could block the flow of water into the barrel/cistern.
- Use the water in the barrel/cistern so that it's empty and ready to collect runoff from the next rain.

#### **Annually:**

• Clean gutters to remove leaf debris that could clog the barrel/cistern.

#### **Special Winter Needs:**

- In the fall, empty the rain barrel/cistern before the water could freeze.
- Rinse out the barrel/cistern to remove any accumulated sediment.
- Do not reconnect the barrel/cistern until spring. During the winter months, connect a piece of flexible gutter to the end of the downspout and direct the outlet to a grassy area of the yard.

### **Additional Information:**

- Rain barrels and cisterns are great (and economical!) water sources for watering plants. The spigot can fill a watering can or be connected to a standard garden or irrigation hose.
- Safety note! The water in a rain barrel or cistern is not safe for consumption without prior treatment.



## **Dry Well**

### What is it?

Roof runoff can be directed through the gutter downspout to an underground dry well to be infiltrated without taking up any surface yard space. Dry wells are also sometimes called sumped downspouts.

### How does it work?

Dry wells reduce stormwater volume by allowing it to be infiltrated into the soil. The water is held in the underground storage facility and then can drain slowly into the surrounding soil. The runoff drains from the gutter into either a gravel filled pit or a prefabricated plastic or concrete tank. There may be a sump, or smaller chamber, located before the gravel pit or tank. This sump collects leaves and other debris to prevent clogging of the dry well.



## How does a Homeowner maintain it?

### After storms with larger than 1 inch of rain:

- There is typically a screen where the downspout enters the dry well. Clean the screen by removing any leaves that could block the flow of water into the dry well.
- Inspect the sump for accumulation of sediment, trash, or any other material. Remove any material that is in the sump to prevent it from clogging the dry well.

#### **Quarterly:**

• There should be an above ground cap that allows access to the dry well. Four times a year, view down the access pipe to make sure that the dry well is not accumulating sediment, trash, or other material. Over time the accumulation of sediment or trash may be vacuumed or may require excavation. Contact your county conservation district for guidance on cleaning out your dry well.

#### **Annually:**

• Clean gutters to keep leave debris out of the sump and dry well.

#### **Additional Information:**

♦ After large rain events, check the access pipe to ensure that the dry well is draining within 72 hours. If the drain times are more than 72 hours, the dry well may need to be cleaned out or replaced. Contact your county conservation district for guidance on fixing or replacing your dry well.

## **Infiltration Trench**

### What is it?

Infiltration trenches are essentially leaky pipes in a stonefilled trench. Surface runoff or gutter downspouts can be directed to infiltration trenches.

### How does it work?

An infiltration trench contains a perforated pipe in a stone trench. It can be thought of as the opposite of a French drain. In a French drain, water flows from the soil into a perforated pipe and away from the wet spot. For an infiltration trench, stormwater runoff is directed into a perforated pipe that is surrounded by gravel. The water then drains out of the perforated pipe into the trench.

During small rain events with a small amount of runoff, stormwater flows out of the pipe through the perforations into the gravel and then into the soil. During larger storms that produce more runoff, some stormwater will be stored in the stone trench, but water will also flow through the pipe to a larger BMP or SCM. Runoff that moves into the soil can help recharge aquifers (ground water) and wells.

# How does a Homeowner maintain it?

#### **Protection:**

• You should be careful to not regularly drive over an infiltration trench so as to not cause compaction or crush the perforated pipe.

### **Annually:**

• If the trench has an access pipe, it should be checked annually to make sure that the trench isn't clogged.

### Additional Information:

Ponding of water on the surface over the trench indicates that there is a problem with the trench and you should contact your county conservation district for guidance on fixing or replacing the infiltration trench.



## **Pervious Pavements**

### What is it?

Pervious pavements are a modification to typical pavement that allow water to drain through the surface rather than run off it. Pervious pavements include porous asphalt or porous concrete which are poured over a gravel bed, or porous pavers on uncompacted soil.

### How does it work?

Stormwater drains through the pervious surface and is temporarily held in the voids spaces of the stone bed. The stormwater is then able to slowly drain into the underlying soil.

### How does a Homeowner maintain it?

#### **Protection:**

- The key to maintaining pervious pavements is to prevent the surface from getting clogged.
- Planted areas near the pervious pavement should be well maintained to prevent soil from washing into the pavement. If you see a bare spot or eroded area, it should be replanted to prevent soil wash off.
- If soil does wash onto the pavement, it should be immediately cleaned off before it gets ground into the surface.
- It is very important to <u>never apply a sealing coat</u>. A sealing coat over a pervious asphalt driveway or walkway will clog all the openings and prevent water from draining through it.

#### **Biannually:**

• The surface needs to be vacuumed twice a year with a commercial cleaning unit to remove fine particles from the surface.

#### **Special Winter Needs:**

- Sand or cinders should not be used with pervious pavement because the small particles will clog the surface.
- Snow shoveling and plowing is fine, but be careful not to scrape the surface.
- Salt can be used on pervious pavements, but nontoxic, organic deicers or magnesium chloride-based products are better than sodium chloride.



## **Vegetated Swale**

### What is it?

A vegetated swale is a wide, shallow channel, planted with grass or shrubs. A swale conveys runoff like a ditch, but a swale is much shallower and wider than a typical drainage ditch. If the swale is located on a steeper slope, rocks may be used to prevent erosion.

### How does it work?

The wide, shallow design of swales allows runoff to flow more slowly than it would in a narrow, deep ditch or in a pipe. Vegetated swales slow runoff, promote infiltration, and filter pollutants and sediment in the process of conveying runoff. They can be used instead of conventional curb and gutter.



# How does a Homeowner maintain it?

#### **Regularly:**

- If the vegetation in the swale is turf grass, mow the swale when mowing the rest of the yard. Mow only when swale is dry to avoid rutting.
- After rain events look for erosion, damage to vegetation, or sediment accumulation. Reseed bare areas and remove sediment.

#### Twice a Year:

- If the vegetation in the swale is larger perennial shrubs and bushes, check to make sure that it's healthy. Any bare spots need to be replanted.
- Look for any sediment build-up. Remove any accumulated sediment.

#### **Annually:**

• Perennial plants should be cut back if needed by species type, and any dead vegetation should be removed at the end of the growing season.

#### **Additional Information:**

- While vegetation is being established in the first few years, weeding may be required.
- Watering may be necessary during dry periods.

#### Special Winter Needs:

- After the spring melt, remove any accumulated antiskid material like sand. Replace any damaged vegetation.
- If driveway or sidewalk runoff is directed to the swale, use nontoxic, organic deicing agents or magnesium chloride-based liquid products (rather than sodium chloride-based salts).

## **Amended Soils**

### What is it?

Much of the management of stormwater relies on soil that can infiltrate runoff. Disturbed soils that have been compacted through construction activities or soils with poor organic content can be restored and amended through loosening the soil and adding material like compost.

### How does it work?

Little spaces between soil particles called pores or voids allow water to both be stored in the soil and move through the soil as infiltration. When the soil is compacted through the process of development, the pores or void spaces are reduced. Compaction of soil prevents water from infiltrating. Loosening the soil or tilling can reduce compaction and increase the soils ability to infiltrate runoff. Adding organic material like compost, sand, or manufactured soil media to the soil increases the pore spaces in the soil, which increases its ability to hold water.

## How does a Homeowner maintain it?

#### **Protection:**

- The key to maintaining amended soils is to protect and preserve them.
- Compaction of the soil should be avoided. Don't use as an extra parking area or storage for a recreational vehicle.
- Amended soils that are a BMP can't be removed. For example, the area cannot to be converted to a patio or other use that would prevent stormwater infiltration.



Regular Soil

Amended Soil

There needs to be air spaces in between soil particles for water to be infiltrated. Amended soils have increased air space, but these air spaces are lost if the soil is compacted by heavy equipment or vehicle parking.

#### **Funding Acknowledgements**

This publication was developed under Assistance Agreement No. CB-96317101-5 awarded by the U.S. Environmental Protection Agency. The views expressed in this document are solely those of the PaDEP and EPA does not endorse any products or commercial services mentioned in this publication.

#### **Contact Information**

#### **Department of Environmental Protection Headquarters**

Rachel Carson State Office Building 400 Market Street, Harrisburg, PA 17101 Phone: (717) 783-2300

#### Northeast Regional Office

2 Public Square, Wilkes-Barre, PA 18711-0790 24 Hour Emergency Number: (570) 826-2511

#### North-central Regional Office

208 West Third Street, Suite 10, Williamsport, PA 17701-6448 Main Number & 24 Hour Emergency Number: (570) 327-3636

#### Northwest Regional Office

230 Chestnut Street, Meadville, PA 16335 Business Hours: (814) 332-6945 After Hours: (800) 373-3398

#### Southeast Regional Office

2 East Main Street, Norristown, PA 19401 Main and 24 Hour Emergency Number: (484) 250-5900

#### South-central Regional Office

909 Elmerton Avenue, Harrisburg, PA 17110 Business Hours: (717) 705-4700 24 Hour Emergency Number: (866) 825-0208

#### Southwest Regional Office

400 Waterfront Drive, Pittsburgh, PA 15222-4745 24 Hour Emergency Number: (412) 442-4000

#### Additional Resources

- Landscaping with Native Plants. www.dcnr.state.pa.us/forestry/plants/nativeplants/
- A Stormwater Best Practices Manual (2006). www.elibrary.dep.state.pa.us/dsweb/View/Collection-8305



#### THIS PAGE ADDED TO WEBSITE 6/1/17

#### **ILLICIT DISCHARGES AND CONNECTIONS**

#### WHAT IS AN ILLICIT DISCHARGE?

An illicit discharge is defined as any discharge to an MS4 (Municipal Separate Storm Sewer System) that is not composed entirely of storm water (with some exceptions). Illicit discharges are considered "illicit" because MS4s are not designed to accept, process, or discharge such non-stormwater wastes. Sources of illicit discharges can include sanitary wastewater, effluent from septic tanks, improper oil disposal, laundry wastewater, spills from roadway accidents or improper disposal of auto and household toxics. Illicit discharges enter the system through either direct connections (e.g., wastewater piping either mistakenly or deliberately connected to the storm drains) or indirect connections (e.g., infiltration into the MS4 from cracked sanitary systems, spills collected by drain outlets, or paint or used oil dumped directly into a drain). The result is untreated discharges that contribute high levels of pollutants, including heavy metals, toxics, oil and grease, solvents, nutrients, viruses, and bacteria to receiving waterbodies. Pollutant levels from these illicit discharges have been shown in EPA studies to be high enough to significantly degrade receiving water quality and threaten aquatic, wildlife, and human health.

#### DO ALL ILLICIT DISCHARGES NEED TO BE ADDRESSED?

No. The following is a list of discharges that the Township may allow based on the findings that they do not significantly contribute to pollution to surface waters of the Commonwealth.

- Individual residential car washing
- Water line flushing
- Landscape irrigation
- Diverted stream flows
- Rising ground waters
- Uncontamminated ground water infiltration
- Uncomtaminated pumped ground water
- 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
- Discharges from potable water sources
- Foundation drains
- Air conditioning condensation
- Springs
- Water from crawl space pumps
- Footing drains
- Routine external building wash down (which does not use detergents or other compounds)
- Dechlorinated swimming pool discharges
- Flows from riparian habitats and wetlands

#### HOW TO REPORT AN ILLICIT DISCHARGE

To report an illicit discharge or connection please download and complete the illicit discharge report form below or call the Township office at 859-3201 or email <u>datadept@westearltwp.org</u>. All reports will be kept confidential.

Illicit Discharge Report Form

West Earl Township 157 W. Metzler Road P.O. Box 787 Brownstown, PA 17508 <u>datadept@westearltwp.org</u> Phone: 717-859-3201 Fax: 717-859-3499

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#### ADOPT-A-DRAIN PROGRAM Volunteers Needed!!

In an effort to work with our community and keep our storm drains and waterways clean, the Township has started an Adopt-a-Drain Program.



#### **Storms Drain and Water Pollution**

Storm drains are a huge source of water pollution in the United States. Some people may be unaware that washing dirt and pollutants off driveways, over-fertilizing their lawns, and dumping debris directly into storm drains helps to pollute local waterways.

Storm drains are found along urban and suburban streets at curbsides. They drain rainwater and snowmelt off the street to prevent flooding. Water entering storm drains is usually sent directly into the nearest waterway, untreated.

As rainwater flows off roofs, the ground, sidewalks, and streets to storm drains, it picks up pollutants such as street litter, yard waste, pet waste, automotive oil, antifreeze, and lawn and garden chemicals such as fertilizers and pesticides. Whereas household wastewater is typically sent to water treatment plants before being discharged into local waterways, rainwater, and the pollutants it picks up on its way to the storm drains, is dumped untreated, directly into the nearest stream, river, bay, or ocean.

#### Adopt-a-Drain

Fertilizers, pesticides, street litter, yard waste, sediment, automotive fluids, and pet waste can pollute water hundreds of miles downstream from their source. The drainage watershed of the Chesapeake Bay (in which West Earl is located), for example, covers 64,000 miles, and pollutants may travel to the Bay from as far away as Cooperstown, New York, or from farms in rural Pennsylvania.

The above information is courtesy of The Ocean Conservancy.



#### **Adopt-a-Drain Program**

As a result of stormwater runoff pollution, Pennsylvania has about 19,900 miles of impaired waterways according to the 2016 Pennsylvania Integrated Water Quality Monitoring and Assessment Report. Among the impaired waterways in Pennsylvania are the Cocalico Creek, Groff Creek, Conestoga River and unnamed tributaries located within West Earl Township.

The Adopt-a-Drain Program was implemented in an effort to help reduce the stormwater runoff pollution that enters our creeks and streams. As a volunteer in the Adopt-a-Drain Program you are partnering with us to reduce this pollution.

#### **Program Goals**

- Increase community awareness of stormwater runoff pollution
- Partner with community volunteers to reduce pollution
- Reduce the impacts of stormwater pollution in West Earl's waterways
- Keep storm drains pollution-free

If you would like to participate in the Adopt-a-Drain Program and partner with West Earl Township to reduce stormwater runoff pollution by keeping our storm drains litter-free please fill out the form below.

Full Name:	
Address:	
Email:	
Phone:	
Comments/Questions:	

Type comments here.

submit

<u>Storm Drain Cleaning Guidelines</u> <u>Sign-up Form and Maintenance Agreement</u> <u>Adopt-a-Drain Inspection Form</u>

> West Earl Township 157 W. Metzler Road P.O. Box 787 Brownstown, PA 17508 <u>datadept@westearltwp.org</u> Phone: 717-859-3201 Fax: 717-859-3499

> > © 2018 West Earl Township

### THE FOUNDATION OF ALL CORE CONSERVATION PRACTICES IS A CURRENT PLAN FOR YOUR FARM.

Pennsylvania farmers have long done their part to protect the environment while growing the food and fiber that supports our state, nation and world. With the recent passage of the 2008 Farm Bill, Pennsylvania has a unique opportunity to build upon existing efforts to protect the legacy of our farms for future generations.

This pamphlet provides information on a suite of core conservation practices that farmers can implement based on their specific needs. Used individually, these core practices can increase production, decrease fuel use, and protect your farm's resources – but when used together they function as key components of a whole-farm conservation planning system.

For more information on these core conservation practices, contact your county conservation district (listed on the back panel), any NRCS office, or your private sector agricultural consultant. As with many aspects of managing your farm, sound technical assistance and advice will prove to be invaluable.

## **Partner Organizations**

- Chesapeake Bay Commission
- Chesapeake Bay Foundation
- Environmental Defense Fund
- Farm Service Agency
- Natural Resources Conservation
  Service
- PennAg Industries Association
- Penn State Extension
- Pennsylvania Association of Conservation Districts, Inc
- Pennsylvania Department of Agriculture
- Pennsylvania Department of Conservation & Natural Resources
- Pennsylvania Department of Environmental Protection
- Pennsylvania Farm Bureau
- Pennsylvania No-Till Alliance
- Pennsylvania State Conservation Commission
- Pennsylvania State Grange



dams (717) 334-0636	Lancaster
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rmstrong (724) 545-3628	Lebanon (717) 272-3908, ext. 4
eaver	Lehigh
edford (814) 623-7900, ext. 4	Luzerne
erks	Lycoming(570) 433-3003
lair(814) 696-0877, ext. 5	McKean
radford (570) 265-5539, ext. 6	Mercer
ucks (215) 345-7577	Mifflin(717) 248-4695
utler(724) 284-5270	Monroe (570) 629-3060
ambria (814) 472-2120	Montgomery (610) 489-4506
ameron (814) 486-9302	Montour (570) 271-1140
arbon (610) 377-4894, ext. 4	Northampton (610) 746-1971
entre	Northumberland(570) 286-7114,
hester (610) 925-4920	ext. 4
larion (814) 226-4070, ext. 113	Perry(717) 582-8988, ext. 4
learfield	Pike(570) 226-8220
linton (570) 726-3798	Potter
olumbia(570) 784-1310, ext. 102	Schuylkill (570) 622-3742,
rawford (814) 763-5269	ext. 5
umberland(717) 240-7812	Snyder (570) 837-0007, ext. 5
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rie (814) 825-6403	Susquehanna (570) 278-4600,
k (814) 776-5373	ext. 280
ayette (724) 438-4497	Tioga(570) 724-1801, ext. 5
orest	Union (570) 524-3860
anklin(717) 264-5499	Venango (814) 676-2832
ulton(717) 485-3547	Warren(814) 563-3117
reene(724) 852-5278	Washington (724) 222-3060,
untingdon(814) 627-1627	ext. 105
idiana(724) 463-8547, ext. 4	Wayne(570) 253-0930
efferson	Westmoreland (724) 837-5271
ıniata(717) 436-8953, ext. 5	Wyoming(570) 836-2589
ackawanna (570) 281-9495	York(717) 840-7430

The 2008 Farm Bill has increased federal farm bill funding for important conservation efforts across the nation. Contact your County Conservation District if you would like to learn more about these core conservation practices and how to make them a part of your conservation plan, or for available funding for your farm.

### For more information, contact the Pennsylvania State Conservation Commission (717) 787-8821 • www.agriculture.state.pa.us/scc



# CORE CONSERVATION PRACTICES FOR YOUR FARM

Installing a system of conservation practices that will

- Improve production
- Decrease fuel use
- Protect your farm's resources







## Create a Nutrient Management Plan — And Follow It

Nutrient management is precisely that balancing the nutrient resources on your farm so they are not wasted and introduced into waterways. Developing and implementing a nutrient management plan for your farm provides a key tool to efficiently and effectively manage nutrients to enhance growing conditions and improve on-farm profitability. Managing nutrients in animal agriculture can include precision feeding, manure and fertilizer application on fields, barnyard management and manure storage. Correct implementation can save money and improve productivity while reducing the nutrient load that leaves the farm, improving the local and regional environment.

## **Plant Cover Crops**

Cover crops protect and even improve the soil in a cost effective and sustainable way. Keeping soil continuously covered reduces erosion from wind and rain. Growing and rotating a diversity of crops and leaving crop residues on the land improves soil qualities such as structure, moisture retention, and provides additional organic matter while reducing weeds. Cover crops can also be grown to retain or replenish nitrogen in the soil or to help reduce nitrate leaching into groundwater supplies.





## **Establish Streamside Buffers**

Keeping steam banks surrounded by permanent vegetation reduces non-point source pollution entering Pennsylvania's waterways from agriculture production. Grassed and forested stream buffers trap sediment, mitigate pesticides, filter out nutrients, and provide habitat and corridors for fish and wildlife. Fencing livestock out of waterways may also be a necessary part of establishing and maintaining stream buffers and protecting animal health. Streamside buffers also play an important role in reducing damage to property during flood events by absorbing some of the energy of floodwaters.

## Plant with No-Till or Low-Till

Healthy, productive soil is essential to a farmer's success. There are several crop residue management systems that can be used to keep your soils healthy and even improve them. No-Till planting is the most effective conservation tillage practice, but some farms have additional options available to address tillage needs, including mulch till and strip tillage systems.



Photos courtesy of www.nrcs.usda.gov

#### ADDED TO LOBBY 7/25/17

his effort by the Board of Directors of the Lancaster County Conservation District and the Lancaster County Farm Bureau to encourage every farmer to fence all livestock out of all streams in Lancaster County is a direct result of a very successful "flexible fencing" program in the Shenandoah Valley. Flexible or sometimes called adaptive means, since you are paying for the fencing you can determine the amount of set back from the streams top of bank. You have the liberty of determining the type of fencing and also how to best manage the fenced in area. Consider starting with a 15 foot set back. Then reconsider additional set backs in the future as you observe the positive changes in the stream quality.

The Lancaster County Conservation District Board of Directors, Associate Directors and staff along with the Lancaster County Farm Bureau encourage your positive consideration of this fencing initiative!



#### For More Information:

KEVIN SEIBERT Ag Program Manager Lancaster Co. Conservation District Room 200 1383 Arcadia Road Lancaster, PA 17601 717-299-5361 ext. 125

#### www.lancasterconservation.org



## Fence 'Em Out!

- It's good for your livestock!
- It's good for the local stream quality!
- It's not required by law or regulation!
- It's your choice now (maybe not in the future)!



#### GOOD Flexible set back—Fence 'em out!

No-Cost Share: 100% Landowner Expense

Your decision to fence your livestock out of the stream is a good benefit to the local stream quality. More importantly, fencing your dairy herd or other livestock out of the stream is also good for your herd health.

#### It is your decision...

- where to place the fence.
- what type of fence you choose.
- how to manage the buffer area within the fenced.

However.....you must remember!

- 1. Livestock cannot be fenced inside the buffer area for extended times but may "flash graze" the buffer area keeping a suggested minimum of 6 inches of grass.
- 2. No bare earth areas can be observed within the fenced out areas or muddy walkways leading to and from the stream.



### BETTER

10, 15, 35 ft set back Riparian Buffer

#### Partial-Cost Share: Limited Landowner Expense

**Your decision to fence** your livestock out of the stream with a 10, 15, or 35 feet setback is even a better benefit to the local stream quality. Better herd health too!

## The standards of the fencing program you select...

- will dictate the minimum set back for the fence.
- may also dictate what type of fence you choose.
- will determine how you manage the buffer area within the fenced out area.

However .....you must remember! Landowner must control the buffer area as prescribed by the funding agency or program.



#### BEST 35 ft + set back—Forested Riparian Buffer

Up to 100% Cost Share: Min. Landowner Expense

**Your decision to fence** your livestock out of the stream with a 35 -180 foot forested riparian buffer is the best benefit for your local stream quality.

You may gain financially by combining several fencing programs and initiatives. Consider the CREP and DEP fencing programs plus other grants or nutrient trading options.

## The standards of the multiple programs will dictate...

- where to place the fence.
- what type of fence you choose.
- how to manage the buffer area within the fenced out area.

However .....you must remember! Landowner must control the buffer area as prescribed by the funding agency or program.



FACEBOOK - MS4 POSTS 2017/2018 permit cycle		
Date	Post	
May 23, 2017	Earth Day Clean-Up Video	
July 11, 2017	"Homeowner's Guide to Stormwater BMP Maintenance" booklet	
August 4, 2017	"Reduce Runoff: Slow it down, spread it out, soak it in" US EPA video	
October 5, 2017	"The Chesapeake Bay in Lancaster County" booklet	
November 16, 2017	"Stormwater & Floodplains" booklet	
December 28, 2017	"Stormwater BMPs - What are they & what do they do?" Article from Lancaster Watersheds website	
April 2, 2018	"Clean Water: A Long Journey from the Source to Our Tap" Article from Stormwater PA website	
April 19, 2018	2018 Earth Day video - Lions' Park	
May 1, 2018	"Point Source & Non-Point Source PollutionWhat's the difference?" article from Lehigh Valley Watershed Conference	
May 3, 2018	Conestoga River Cleanup, June 9, 2018 - Volunteers Needed	
May 4, 2018	Lancaster Water Week June 1 - 9, 2018 - link to Water Week website	

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Leaves will be collected beginning Monday, October 16<sup>th</sup> and will continue through Thursday, December 7<sup>th</sup>.\*

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Determine where you would like to locate the compost pile. Make sure that it

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# West Earl Township

In honor of Earth Day, the Brownstown Elementary School kindergarten classes and West Earl Township employees took a field trip. They planted flowers, cleaned up the creek and had lunch at the park. Thank you to all of the children and volunteers for helping to keep West Earl beautiful.

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Law Enforcement Agency in Brownstown, Pennsylvania

5.0 ##### Open Now

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Volunteers Needed - Conestoga River Clean-Up Comes to the Conestoga Valley - June 9, 9AM -11:30 AM (Free picnic for all volunteers 12-1pm)

Join us at one of three sites in the municipalities in the Conestoga Valley (East Lampeter Township, West Earl Township, and Upper Leacock Township) to clean-up litter in and along the Conestoga River. We will be volunteering in the Conestoga Valley at the same time that other partners will be working elsewhere along the Conestoga River. ... See More

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## Conestoga Clean-up ~ Lancaster Water Week

What began in the City of Lancaster in 2017 is guickly expanding to incorporate multiple communites and locations along the Conestoga River. From 9am to 11:30am volunteers will be cleaning up debris in and along the river with a ...

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Lancaster County Conservancy presents Lancaster Water Week to celebrate the unique waterways of Lancaster County and isnpire action to protect and improve thsi essential, natural resource.

LANCASTERWATERWEEK.ORG

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West Earl Township

Yesterday at 9:23am - 🕹

erwaterweek.org

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157 W. Metzler Road PO Box 787 Brownstown, PA 17508

717-859-3201 (P) 717-859-3499 (F)

www.westearltwp.org

WINTER 2017-2018



## CHEMSWEEP Program To Provide 19 Counties With Safe Pesticide Disposal In 2018

Agricultural businesses and pesticide applicators in 19 counties across the state can dispose of unwanted pesticides safely and easily next year through the Department of Agriculture's <u>CHEMSWEEP Program</u>.

"When pesticides outlive their usefulness, they can become a problem," said Agriculture Secretary Russell Redding. "Rather than leaving them sitting in barns and back rooms as threats to human safety and our environment, we provide this service to each of Pennsylvania's counties every four years."

The program is offered in different counties each year. In 2018, it will be available in Adams, Allegheny, Beaver, Cameron, Carbon, Centre, Chester, Clearfield, Clinton, Elk, Franklin, Jefferson, <u>Lancaster</u>, Lehigh, Monroe, Northampton, Pike, Potter, and Washington counties.

More than 2.5 million pounds of unwanted or unusable pesticides have been properly destroyed through the program since it was established in 1993.

Every year, many pesticide products are discontinued, phased out or become unusable, leaving growers, commercial establishments, and professional applicators with potentially dangerous and toxic materials that cannot be placed in landfills.



The unwanted pesticides often become a safety hazard and an environmental concern through long-term storage in garages, barns, or other areas.

Licensed pesticide applicators, pesticide dealers and commercial pesticide application businesses from the designated counties are eligible to participate by completing the CHEMSWEEP registration and inventory form that will be mailed directly to eligible applicators, dealers, and businesses.

The registration period ends February 28.

CHEMSWEEP covers the disposal cost for the first 2,000 pounds per participant. Above that level, participants are billed at the agriculture department's contracted price.

The program is funded through annual registration fees paid by pesticide manufacturers and applicators.

For more information, visit Agriculture's CHEMSWEEP Program webpage.

## COMPOST SITE CHANGES

Beginning January 1, 2018 there were some changes made concerning the compost site.

TOWNSHIP RESIDENTS Township residents will now be charged \$1.00 per trip to the compost site. You may continue to use the free entries that you currently have on your card, but any additional trips will be \$1.00 each.

## **NON-TOWNSHIP RESIDENTS**

Residential users will still pay \$20 per entrance into the compost site. Commercial users will pay \$50 per entry.

Upper Leacock will no longer be selling compost cards. You will have to stop in at the West Earl Township building. We are open from 8 AM to 4 PM (Monday through Friday).

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## WINTER CAR CARE TIPS

Before the cold weather arrives, it's important to prepare your vehicle for the winter season!

This involves everything from thoroughly washing all exterior surfaces, to checking to see if there are any chips in the paint to even applying car wax and sealant.

**1. Replace carpet with rubber.** Many car owners also replace carpet floor mats with rubber floor mats over top of a thick towel to <u>avoid getting slushy, salty water on the carpet</u>. Not only will the salt cause unsightly stains on the carpet, but the salty water will soak through and rust and corrode the floor of the car. This is especially important on the driver's side since it is the most used.



Also, it's a good idea to switch to steel or alloy wheels for the winter, and <u>put winter or snow tires on your vehicle</u>, which can also benefit from a spray on protectant treatment. Preseason preparation of the vehicle can be done at home or by a professional detailing service center.

2. Where to park. Parking the vehicle in a heated garage may seem like a smart preventative measure. However, there's also the frozen salty slush melting to consider, since the moisture will react with the salt thereby speeding up corrosion. Vehicles that are parked outside do have the disadvantage of being exposed to the elements, but the ice, snow and salty slush is more likely to stay frozen, which slows down the corrosive nature of the salt. So there are pros and cons to both parking a vehicle inside a garage or left outside.

**3. Frequent washing.** Throughout the winter, it's a good idea to wash your vehicle every 10 days. It's best to wash the vehicle on days when the temperature is 40 degrees or more, and it's preferable to do so during the daylight hours so there's ample time for the vehicle to dry before the evening temperature drops.

Whether washing the vehicle at home or at a car wash, use fresh water and a high-pressure hose. If washing at home, add baking soda to the wash water in the winter o help dissolve dried salt on the vehicle's surface. Warm, soapy water (not dish detergent) and a sponge or wash-mitt can be used.

Shop rags can contain bits of metal, so these are not a good choice since the vehicle surface may get scratched. Be sure to wash behind the mud flaps, under the door handles and in all cracks and crevices of your car or truck.

## **Conestoga View Sanitary Sewer Extension**

The most recent West Earl Township's Act 537 Plan Update (2004) identified the Conestoga View area to be in need of sanitary sewers. The most cost-efficient alternative was determined to be a low-pressure sanitary sewer system (LPSS) similar to the sanitary sewers installed in the Village of Talmage and Oregon Pike areas. The "Conestoga View Sanitary Sewer Extension" consists of areas along Oregon Pike, North Conestoga View Drive, South Conestoga View Drive, White Street, Dogwood Drive, Millway Road, Old Akron Road and South 9<sup>th</sup> Street. All residential and commercial properties within 150 feet of the low-pressure main will be connected utilizing a grinder pumping station to convey sewage to the LPSS. The West Earl Sewer Authority (WESA) intends to install and operate the LPSS primarily within existing public rights-of-way. WESA also intends to install the grinder pumping stations, controls, and appurtenances, however these facilities will be owned and operated by the property owners upon completion of the project.

The length of LPSS proposed to be constructed is approximately 11,000 feet and requires 100 grinder pump units. An additional 5,000 feet of piping would also be installed to convey sewage from each grinder pumping station to the LPSS. WESA anticipates that this project will generate approximately 40,545 gallons per day (gpd) of wastewater. This flow will be conveyed through WESA's existing collection system to the Brownstown Wastewater Treatment Facility.

The contractor's most recent schedule is as follows:

Construction of sewer main, laterals and manholes:

1/15/18 to 2/15/18 - Millway, S. Conestoga, Dogwood, N. Conestoga, White Street

1/29/18 – 2/30/18 - W. Metzler Road, Lauber Road, Old Akron Road, Oregon Pike

Set Grinder Pumps:

2/26/18 - 4/13/18 - All areas

Project Substantial Completion: 4/30/18

Project Final Completion: 5/28/18

## **NEWS FROM LCSWMA**

## What can be taken to Lancaster County Solid Waste Management Authority?

Residual wastes are defined by PADEP as nonhazardous industrial waste. It includes waste material (solid, liquid or gas) produced by industrial, mining and agricultural operations. It excludes certain coal mining wastes and wastes from normal farming activities. Examples of the types of residual wastes accepted for combustion or landfilling including outdated, returned or offspec manufactured goods, pharmaceutical wastes, oily debris, ink wastes, plant trash, foundry sand, refractory material, DEA controlled substances, confidential materials and other non-hazardous industrial process residues.

## What happens to the residual waste once it is received?

LCSWMA's Integrated System allows for two methods of non-hazardous residual waste disposal, incineration and landfill. The Lancaster Waste-to-Energy (WTE) Facility and Susquehanna Resource Management Complex (SRMC) combust waste, reducing it to ash. The ash is then used as daily cover at the Frey Farm Landfill (FFLF), which also receives non-combustible, non-hazardous residual wastes for disposal.



# How can we safely dispose of household hazardous waste (HHW) products?

LCSWMA offers free and safe disposal of HHW to Lancaster County residents at our HHW Facility on Harrisburg Pike. Items accepted at the HHW Facility include: paint, cleaners, automotive fluids, cooking oils, pesticides, herbicides, computers, TV's, tablets, cell phones, fluorescent light bulbs, batteries and more.



## "Did you know we have a wonderful Community Pool right next door?

The Leola Community Pool is located at 23 E. Main St., Leola.

Please visit their website, <u>www.leolapool.com</u>, for 2018 rates and information."



Wes Refuse/Re	t Earl Towns cycling Collection 2018			
Trash/Recycling Trash/Re	cycling White Goods	Christmas Trees	SAVE THE DATE	
	maste		January 13 – Christmas Tree Pick-	Up
January 2018           S         M         T         W         T         F         S           1         2         3         4         5         6           7         8         9         10         11         12         13           14         15         16         17         18         19         20           21         22         23         24         25         26         27           28         29         30         31         1         15         16         17         18         19         20	February 2018           S         M         T         W         T         F         S           0         0         1         2         3         4         5         6         7         8         9         10           11         12         13         14         15         16         17           18         19         20         21         22         23         24           25         26         72         28         9         14	Warch 2018           S         M         T         W         T         F         S           4         5         6         7         8         9         10           11         12         13         14         15         16         17           18         19         20         21         22         32         24	April 3 – Yard Waste Pick-Up Begi April 14 – White Goods Pick-Up	ns
			September 18 – Last Day for Ya	rd Waste Pick-
April 2018         F         S           S         M         T         W         T         F         S           1         2         3         4         5         6         7           8         9         10         11         12         13         14           15         16         17         18         19         20         21           22         23         24         25         26         27         28           29         30	May 2018           Image: 1         2         3         4         5           6         7         8         9         10         11         12           13         14         15         16         17         18         19           20         21         22         23         24         25         26           27         28         29         30         31         Image: 10         Image: 10	Julie 2013           a         1         2           3         4         5         6         7         8         9           10         11         12         13         14         15         16           17         18         19         20         21         22         23           24         25         26         27         28         29         30	Op October 13 – White Goods Pick-U	р
July 2018           1         2         3         4         5         6         7           8         9         10         11         12         13         14           15         16         17         18         19         20         22         23         24         25         26         27         28           29         30         31         13         14         15         16         17         18         19         20         27         28         29         30         31         14         15         16         17         18         19         20         27         28         29         30         31         14         15         16         17         18         19         20         27         28         29         30         31         14         15         13         14         15         16         17         18         18         19         20         27         28         29         30         31         14         15         16         16         10         14         15         14         15         16         17         18         19         19	August 2018           6         7         8         9         10         11           12         13         14         15         16         11         12           19         20         21         22         23         24         25         26         27         28         29         0         31         14         15         16         17         18         26         27         28         29         0         31         14         25         27         24         25         26         27         28         29         0         31         14         15         16         17         18         14         15         16         17         18         15         16         17         18         14         15         16         17         18         14         15         16         17         18         16         17         18         16         17         18         16         17         18         16         16         16         14         15         16         17         18         18         16         17         18         16         16         16         16         16 </th <th>September         2018           2         3         4         5         6         7         8           9         10         11         12         13         14         15           16         17         18         19         20         21         22         23         24         25         26         27         28         29           30<th>You will need to stop in at the Tow pick up tags for white good items, and extra trash bags. We also have that may be purchased.</th><th>vnship Office to oversized trash yard waste bags</th></th>	September         2018           2         3         4         5         6         7         8           9         10         11         12         13         14         15           16         17         18         19         20         21         22         23         24         25         26         27         28         29           30 <th>You will need to stop in at the Tow pick up tags for white good items, and extra trash bags. We also have that may be purchased.</th> <th>vnship Office to oversized trash yard waste bags</th>	You will need to stop in at the Tow pick up tags for white good items, and extra trash bags. We also have that may be purchased.	vnship Office to oversized trash yard waste bags
Image: Constraint of the system         Image: Constand of the system         Image: Constando	November 2018           4         5         6         7         8         9         10           11         12         13         14         15         16         17           18         19         00         21         22         23         24           25         26         27         28         29         30	December 2018           Image: 1         Image: 2         Image: 2 <thimage: 2<="" th="">         Image: 2         <thimage: 2<="" th=""></thimage:></thimage:>	Yellow tags (for extra trash bags) Red tags (for oversized items) Orange tags (for tires) Blue tags (for white goods) Yard waste bags	\$ 1.25/ea \$ 4.00/ea \$ 2.00/ea \$12.00/ea \$ 1.00/ea

Please note: Monday holidays WILL affect your pickup day





## **STORMWATER BMPs**

## What are they & what do they do?

BMP stands for <u>Best Management Practice</u>, and includes designed stormwater management facilities (such as detention basins), as well as non-engineered approaches like protecting open space to manage stormwater.

# The goal of BMPs is to reduce the impact of development on downstream bodies of water (streams, lakes, etc.) by:

- Minimizing the amount of stormwater runoff
- Slowing down the runoff
- Infiltrating runoff
- > Evapotranspiring runoff
- ➢ Filtering runoff

Many BMPs will use vegetation for their ability to use water, put water back into the atmosphere, or help it infiltrate into the ground, rather than



allow it to become runoff. If you've ever walked through a meadow or shaken a tree branch after a rain, you got wet with intercepted water. When it rains, some of the water is trapped on plants. This "intercepted" water never even makes it to the ground where it could be infiltrated. Plants also use water as part of the photosynthesis process where they use the sun's energy to create their own food. This water used by plants is called evapotranspiration. Larger plants with broader leaves and deeper roots like trees, shrubs, or decorative grasses will intercept and evapotranspire more water than a grass lawn.

**Communities are designed with stormwater management in mind.** There are many different BMPs spread throughout our community. Stormwater flows downstream, and the homeowners must do their part on their own property to protect the streams for everyone. You and all of your neighbors each plan an important role in the health of downstream waters.

Some BMPs are landscaped and others are buried so you might not see anything at the surface. Even though it might just look like some plants or gravel, the BMP is still performing a very important function. Disturbing the vegetation or compacting the soil can ruin that BMP and have a negative impact downstreams.

 \*<u>Evapotranspiration</u> (ET) is a term used to describe the water consumed by plants over a period of time. Evapotranspiration is the water loss occurring from the processes of evaporation and transpiration. Evaporation occurs when water changes to vapor on either soil or plant surfaces. Transpiration refers to the water lost through the leaves of plants

You can find out even more about storm water and what your possible responsibilities are at: http://www.westearltwp.org/pages/stormwater\_education.html.

# <image><image><image><image><image><image>

## WINTER REMINDERS FOR TRASH & RECYCLING

White trash bags tend to blend in with the snow. If you have a darker colored trash bag that you could use or a trash can that you can place your bag in, it will make it easier to ensure that your trash is picked up.

Please make sure there is a clear, safe path to your trash and recycling.

Garbage and recycling may not be collected at the exact time that is usually is due to poor weather conditions or inaccessibility due to road conditions.

If you are behind a trash or recycling truck, please make sure you slow down before you go around. Check for traffic coming in the opposite direction before going around the truck and please watch for the trash haulers themselves. West Earl Township 157 W. Metzler Road PO Box 787 Brownstown, PA 17508

Monthly Meetings		
Board of Supervisors	Planning Commission	
2 <sup>nd</sup> & 4 <sup>th</sup> Monday of every month at 7 PM	3 <sup>rd</sup> Tuesday of every month at 7 PM	
Sewer Authority	Park & Recreation Board	
2 <sup>nd</sup> Wednesday of every month at 7 PM	3 <sup>rd</sup> Monday of the month (as needed) at 7 PM	
Water Authority	Zoning Hearing Board	
1 <sup>st</sup> Monday of every month at 7 PM	1 <sup>st</sup> Wednesday of the month (as needed) at 7	

## IMPORTANT PHONE NUMBERS

•	Municipal Office	717-859-3201
•	Municipal Fax	717-859-3499
•	Water & Sewer Dept. (after hours)	717-859-3725
•	Police Department	717-859-1411
•	Brownstown Fire Company	717-656-8431
•	Farmersville Fire Company	717-656-2508

Is there something you would like to see in the newsletter? Please feel free to let us know!

> Send your thoughts and ideas to -<u>mwallace@westearltwp.com</u>

157 W. Metzler Road PO Box 787 Brownstown, PA 17508

717-859-3201 (P) 717-859-3499 (F)

www.westearltwp.org

SPRING 2018



## **CENSUS 2020**

Every ten years the United States runs a census to count our national population. If you think your township is just a blip on the census map, think again. When it comes to ensuring that the commonwealth obtains the political clout and funding it deserves, getting an accurate count of every person in every political subdivision, including West Earl Township, is important.

For starters, a complete count makes a difference in the political influence Pennsylvania has in Washington. The mandatory nationwide headcount, conducted every 10 years since 1790, will determine how many U.S. representatives Pennsylvania has in Congress and how many Electoral College votes the state gets when electing a president. It will also help to decide how voting districts for both Congress and the state legislature will be drawn.

An accurate count also matters in the federal dollars the state and local governments receive. Data from the census is used to distribute money for grants, as well as various federal and state programs to townships.

Finally, accuracy matters when it comes to understanding the residents of Pennsylvania. Socioeconomics information collected through the census sheds light on who we are, where we live and how we are changing.

So, when you receive that census form in the mail or from the person knocking on your door, please take a moment to fill it out and return it. Your voice does matter.

## PPL and You GENERATOR SAFETY

This time of year, many people start thinking about possible power outages and portable generators. While generators come in handy, they must be used safely for both the home occupants and PPL Electric Utilities workers.

Generators need to be operated away from homes and away from spaces where deadly carbon monoxide fumes can enter your residence. Never operate your generator in a garage or other enclosed space.

For PPL worker safety, be sure you operate your generator in a way that prevents electricity produced by the generator from going back into the power line that feeds your home. This is called back-feed and occurs when an improperly connected generator begins feeding "back" through the power lines. This can seriously injure anyone near the lines, especially crews working to restore power.

Have a qualified electrician install a transfer switch. The transfer switch breaks the path of electricity between the power lines and your main electrical panel. This is the best way to protect you, your neighbors and repair crews from back-feed.

For more information, you can go to <u>www.esfi.org</u> or <u>www.pplelectric.com/safety</u>.

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## Save The Date!!! Saturday, April 14, 2018

<u>ATTN: All West Earl contract trash customers</u>!! White Goods will once again be picked up at your homes. This includes appliances of all shapes and sizes, old or not so old.

To participate, please stop in at the Township Office any week day between 8 AM and 4 PM. You will need one (1) blue tag for every piece that you wish to have picked up. The blue tags are only \$12.00 each. You must purchase your tickets no later than APRIL 12<sup>th</sup>.

Get that spring cleaning done right this year!



## Recycling Do's and Don'ts

DO put in the recycling bin

• Plastics, cartons (milk, juice and broth), clean/rinsed empty cans, paper, cardboard, glass (food & beverage containers)

DO NOT put in the recycling bin

• Medical waste, electronics, light bulbs, plastic bags, aluminum foil, scrap metal, clothes hangers, bubble wrap, diapers

## Spring Into Home Improvements

After a long, dark winter, spring's bright sun and warm winds are definitely a breath of fresh air. It's also a great time to start looking around your home to see what updates and repairs could be done.

- 1. Examine your roof shingles. Check to see if any are loose, cracked or buckled.
- 2. Check your gutters. Make sure they are cleaned out and fastened securely.
- 3. Examine the exterior or your chimney for signs of damage and have the flue cleaned & inspected.
- 4. Fill any cracks in your concrete with a filler or silicone caulk. Then power wash and seal the concrete.
- 5. Check your power equipment. Make sure lawn mowers are clean and all fluids are good. Sharpen cutting blades so that you're all ready to make yardwork that much easier.

## DID YOU KNOW?? - carbon monoxide detector

The Carbon Monoxide Alarm Standards Act (Act 121 of 2013) states that every multi-family dwelling (a building with two or more units) is required to have carbon monoxide alarms installed in every unit. The building owners must install, repair and maintain the detectors until a tenant occupies the unit, in which case the tenant is responsible for the upkeep of the alarm.

The alarm must be centrally located and near a unit's bedroom. The detectors should not be placed in front of anything that burns with flames (fireplace, oven or furnace for example).

Carbon monoxide detectors are battery-operated alarms that are designed to measure the accumulation of carbon monoxide over time and sound an alarm when levels markedly increase.





## PAVILION RENTAL

It's that time again – time to think about family reunions, cookouts and get-togethers with friends. What better way to do this than renting out the West Earl Lions pavilion? For only **\$50** you can book this well-equipped pavilion for your warm weather outing. Please call the Township Office at 717-859-3201 to book your date before all of the good ones are gone.





## HOME COMPOSTING WORKSHOP

Saturday, May 19<sup>th</sup> from 1 PM to 2:30 PM West Earl Township Building

Do you know what dried up leaves and foliage, coffee grounds, spent tea leaves and vegetable peels all have in common?

## YOU CAN COMPOST ALL OF THESE ITEMS!!

Join me for a fun and informative look at residential composting. Whether you are thinking of starting a vegetable garden or are just looking for better ways to recycle every day trash, this workshop is for you. PLUS – everyone that attends will receive a surprise gift and be in the running for a home compost bin courtesy of LCSWMA. This is just our way of saying thank you for doing your part in the battle against waste and landfills.

This is a <u>FREE</u> event but pre-registration is recommended. Please contact the township at 717-859-3201 or mwallace@westearltwp.com.



## EARTH DAY 2018 Sunday, April 22<sup>nd</sup>

This year's Earth Day theme is <u>END PLASTIC POLLUTION</u>. From poisoning and injuring marine life to disrupting human hormones, from littering our beaches and landscapes to clogging our waste streams and landfills, the exponential growth of plastics is now threatening the survival of our planet.

In response, Earth Day 2018 will focus on fundamentally changing human attitude and behavior about plastics and catalyzing a significant reduction in plastic pollution.

Currently about 300 million tons of plastic are produced each year to make bags, bottles, packages, and other commodities for people all over the world. Unfortunately, only about ten percent of this plastic is properly recycled and reused. The rest ends up as waste in landfills or as litter in our natural environment, where it leaches dangerous chemicals into the nearby soil and water, endangering humans and wildlife alike.

The problem has now grown completely out of control and threatens to affect millions of people and animals if we do not act soon.

Please remember to recycle your plastic properly. For more information and to see how else you can help, please visit <u>www.earthday.org</u>.

With tax time upon us, many people start to think about shredding documents that are no longer necessary to keep. The following are just a few of the Lancaster County locations that will shred items for you at no charge or a minimal charge.

- The UPS Store <u>https://www.theupsstore.com/store-services/shredding</u>
- Shred-It <u>https://www.shredit.com/en-us/paper-shredding-central-pa-lancaster</u>
- Staples
   <u>https://printingservices.staples.com/us/pa/lancaster</u>

# **Built to Achieve COmmunity**







Construction Management | Preconstruction Design-Build | General Construction

www.benchmarkgc.com



MARCH 1-MAY 31, 2018

Everyone wants to live, work, and play in a clean and green community ... and it's up to everyone to make it possible and improve the overall quality of life for us all.

Join Pennsylvanians across the state and Americans across the nation - for the Great American Cleanup. You can participate in the Great American Cleanup of PA by cleaning up litter and trash along our roadsides, streams, parks, forests beaches, and neighborhoods. Additional events include holding recycling events for hard-to-dispose of items like tires and appliances, creating or enhancing green areas by planting plants, bulbs, and trees, and other activities that help beautify your community.

To register a group or join one that is already established go to <u>www.gacofpa.org</u> West Earl will once again be collecting yard waste beginning on <u>APRIL 3, 2018</u>. We will take any yard waste that is collected and placed in the brown yard waste bags. Yard waste is items like grass clippings, shrubbery, twigs, sod, etc. We have the kraft bags for sale at the Township building. They are only \$1.00/each.

## <u>"ADOPT-A-DRAIN" Program</u>

.....

As part of the Township's MS4 Program (stormwater management) we are starting an "Adopt-a-Drain" program. We are asking residents of the Township to volunteer to "adopt" a storm drain near their home and to



On Monday, May 28<sup>th</sup>, the township office will be closed in observance of Memorial Day. We will reopen for our normal hours (8 AM-4 PM) on Tuesday, May 29<sup>th</sup>.

# COMMERCIAL CUSTOMER TIDBIT

Act 101 of 1988 requires institutional commercial. and municipal establishments located in Pennsylvania's mandated municipalities to recycle highgrade office paper, corrugated paper, aluminum and leaf waste. In addition, establishments must recycle any other materials included in the municipality's recycling ordinance or regulations, which may include glass, newsprint, plastics, and/or steel and bimetallic cans.

to keep it free of garbage and debris. Keeping storm drains free of debris helps to prevent flooding and prevents pollutants from entering the local waterways.

Details of the "Adopt-a-Drain" program have not yet been finalized; however, we do want to give residents an idea of what "Adopt-a-Drain" is about. Adopting a drain will include checking the storm drain periodically (once or twice per month) and/or prior to a forecasted rain event. It will also include cleaning up any garbage or debris (leaves, yard waste etc.) from the storm drain grate (surface only – not into the drain itself) and submitting the cleanup details to the Township. If you are interested in volunteering please email <u>sservice@westearltwp.org</u> or call 717-859-3201.

## Sylvan Fisher retires after 40 years at West Earl Township

Forty years seems like a long time when you're starting out on a journey, but when looking at those forty years at the completion of the journey, the perspective is a bit different. After a successful career, Sylvan Fisher will be retiring this spring. He has served West Earl Township in many capacities: employee, road master, supervisor and firefighter. From plowing snow to emptying the trash, Sylvan, the employee, has done it all.

As Road Master, Sylvan has seen growth in the land use and population of West Earl Township and endured the growing pains that accompanies these changes. Residential developments and commercial ventures present their unique challenges. In these instances, as with many others, trial and error has been a valuable teacher for him. Many bridges in the Township bear his name; many roads in the Township exhibit his skill and expertise.

Serving as a Township Supervisor is a rewarding, but often difficult task. During his time serving on the Board of Supervisors, Sylvan witnessed many changes in regulations and mandates, not all of them popular with the public, but necessary, nonetheless. His ability to connect with people and explain the reasons for such change is one of his many strengths.

Sylvan is still an active member of the West Earl Fire Company. Many times over the years, he has been called away from work and his personal time to assist the Fire Company, either to fight a fire, assist with an auto accident, or rescue baby ducks from a storm drain.

Condensing forty years of this man's service to our community into a short article is an arduous task that cannot possibly do justice to the man or the value of his contributions.

We all wish him the best in a well-deserved retirement.





## WATERSHED FRIENDLY SPRING CLEANING

Whether we like it or not, the spring means spring cleaning for many of us. Wherever you are doing your cleaning – inside the house, in the garage, out on the deck, or in the driveway – you can have an impact on your local waterways. Here are a couple simple steps for you to remember for keeping your waterways health and clean!

- Dispose of Household Hazardous Waste Property If you have old oil-based paint, solvents, dead batteries or other substances from your garage or home, remember to dispose of them properly. The Lancaster County Solid Waste Management Authority has a household hazardous waste facility located at 1299 Harrisburg Pike, Lancaster. They will accept your household hazardous waste free-of-charge.
- 2. Sweep instead of using a hose If you are cleaning your driveway or sidewalks, please remember to use a broom to sweep onto your lawn instead of a hose to remove dirt and debris. When you use a hose to remove the debris from your driveway or sidewalks, the runoff you create goes into the storm drains and out to the local creeks and streams.
- 3. Wash your car at a commercial car wash Winter leaves vehicles caked in dirt, grime, road salt, deicing chemicals and various other pollutants. If you wash your car in the driveway, you're likely sending all of it into the nearest waterbody via a storm drain. Instead of washing your car at home, take it to a car wash. Commercial car washes are required to dispose of their wastewater properly, ensuring that it's cleaned and treated. If you must wash your car at home, try to do it in an area where the water will soak into the ground instead of run into the street and dump your soapy bucket of water down your sink not the storm drain.
- 4. Use natural cleaning products If you plan to wash your outdoor furniture, windows, deck, etc. make sure the cleaning products you use are free of chemicals and phosphates and are water-based only. You can also look up a DIY recipe for natural cleaner. Don't do washing or rinsing on your driveway. Instead, do it on the grass and far from a storm drain or local waterway.

West Earl Township 157 W. Metzler Road PO Box 787 Brownstown, PA 17508

## Monthly Meetings

Board of Supervisors	Planning Commission
2 <sup>nd</sup> & 4 <sup>th</sup> Monday of every month at 7 PM	3 <sup>rd</sup> Tuesday of every month at 7 PM
Sewer Authority	Park & Recreation Board
2 <sup>nd</sup> Wednesday of every month at 7 PM	3 <sup>rd</sup> Monday of the month (as needed) at 7 PM
Water Authority	Zoning Hearing Board
1 <sup>st</sup> Monday of every month at 7 PM	1 <sup>st</sup> Wednesday of the month (as needed) at 7 PM

## **IMPORTANT PHONE NUMBERS**

•	Municipal Office	717-859-3201
•	Municipal Fax	717-859-3499
•	Police Department	717-859-1411
•	West Earl Fire Company	717-656-6791
•	Farmersville Fire Company	717-354-5841

Is there something you would like to see in the newsletter? Please feel free to let us know! Send your thoughts and ideas to – mwallace@westearltwp.org



# West Earl Township

## SUMMER

## JUNE 2017

## 157 W. METZLER RD PO BOX 787 717.859.3201

# Stormwater: Illicit Discharges and Connections

## WHAT IS AN ILLICIT DISCHARGE?

An illicit discharge is defined as any discharge to an MS4 (Municipal Separate Storm Sewer System) that is not composed entirely of storm water (with some exceptions). Illicit discharges are considered "illicit" because MS4s are not designed to accept, process, or discharge such non-stormwater wastes. Sources of illicit discharges can include sanitary wastewater, effluent from septic tanks, improper oil disposal, laundry wastewater, spills from roadway accidents or improper disposal of auto and household toxics. Illicit discharges enter the system through either direct connections (e.g., wastewater piping either mistakenly or deliberately connected to the storm



drains) or indirect connections (e.g., infiltration into the MS4 from cracked sanitary systems, spills collected by drain outlets, or paint, used oil or other debris dumped directly into a drain). The result is untreated discharges that contribute high levels of pollutants, including heavy metals, toxics, oil and grease, solvents, nutrients, viruses, and bacteria to receiving waterbodies. Pollutant levels from these illicit discharges have been shown in EPA studies to be high enough to significantly degrade receiving water quality and threaten aquatic, wildlife, and human health.

## DO ALL ILLICIT DISCHARGES NEED TO BE ADDRESSED?

No. The following is a list of discharges that the Township may allow based on the findings that they do not significantly contribute to pollution to surface waters of the Commonwealth.

- $\Rightarrow$  Individual residential car washing
- $\Rightarrow$  Discharges from fire fighting activities
- ➡ Water line flushing
- $\Rightarrow$  Landscape irrigation
- $\Rightarrow$  Diverted stream flows
- $\Rightarrow$  Rising ground waters
- ⇒ Uncontaminated ground water infiltration
- ➡ Uncontaminated pumped ground water
- Pavement wash waters where spills or leaks of toxic or hazardous materials have not occurred (unless all spill material has been re-

moved) and where detergents are not used

- $\Rightarrow$  Discharges from potable water sources
- $\Rightarrow$  Foundation drains
- $\Rightarrow$  Air conditioning condensation
- ➡ Springs
- ⇒ Water from crawl space pumps
- ➡ Footing drains
- Routine external building wash down (which does not use detergents or other compounds)
- ⇒ Dechlorinated swimming pool discharges
- $\Rightarrow$  Flows from riparian habitats and wetlands



## HOW TO REPORT AN ILLICIT DISCHARGE

To report an illicit discharge or connection please visit the Township's website and download the "Illicit Discharge Report" at <u>www.westearltwp.org/illicit-</u><u>discharge.html</u> or call the Township office at 859-3201. All reports will be kept confidential.



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# **Summer Safety Tips**

Summer is here and so is the warmer weather. Many believe that it is warmer in the summer because the Earth is closer to the sun in the summer. In fact, the Earth is actually farthest • from the sun in the summer and closest in the winter. It's warm in the summer because of the tilt of the Earth's axis. During the summer, the sun's rays hit the Earth at a steep angle. The light does not spread out much which increases the amount of energy hitting any given spot. Also, the long daylight hours allow the Earth plenty of time to reach warm temperatures.

## When was the hottest day ever recorded in Pennsylvania?

The hottest day on record in Pennsylvania was July 10, 1936. In Phoenixville, Pennsylvania, the recorded high was 111 degrees!

Hot and humid weather can be a silent killer. Several days of hot weather can build up heat in homes, especially those in cities. Elderly populations and children can have a tough time adjusting to the heat and extended exposure can lead to illness or even death.

## Key Summer Safety Tips

- Drink plenty of water; even if you do not feel thirsty. Avoid drinks with caffeine. Those with epilepsy or heart, kidney, or liver disease; are on fluid-restricted diets; or have a problem with fluid retention should consult a doctor before increasing liquid intake.
- Never leave children or pets alone in closed vehicles.
- Check on family, friends, and neighbors who do not have air conditioning and who spend much of their time alone.
- Check on your animals frequently to ensure that they are not suffering from the heat. Do not leave pets outside for long periods of time.
- Go to a designated public shelter if your home loses power during periods of extreme heat. Stay on the lowest floor out of the sunshine if air conditioning is not available.
- Check the weather/listen to NOAA Weather Radio for critical updates from the National Weather Service (NWS).

## If You Have To Go Outside

- Avoid strenuous work during the warmest part of the day. Use a buddy system when working in extreme heat, and take frequent breaks.
- Dress in loose-fitting, lightweight, and light-colored clothes that cover as much skin as possible. Avoid dark

colors because they absorb the sun's rays.

- Protect face and head by wearing sunblock and a wide -brimmed hat.
- Postpone outdoor games and activities.
- Stay indoors as much as possible and limit exposure to the sun.

## Additional Safety Tips

- Limit intake of alcoholic beverages.
- Consider spending the warmest part of the day in public buildings such as libraries, schools, movie theaters, shopping malls, and other community facilities.
- Do not take pets with you to run errands. Sparky may enjoy a fun car ride, but leaving pets in the car while you go into the store for even 15 minutes on a hot day could turn deadly.





The most recent West Earl Township Act 537 Plan Update (2004) identified the Conestoga View area of the Township in need of public sanitary sewer facilities. The most cost efficient alternative was determined to be a low-pressure sewer system (LPSS). The "Conestoga View Sanitary Sewer Extension Project" consists of areas along Millway Road, South Conestoga View Drive, Dogwood Drive, North Conestoga View Drive, White Street, Old Akron Road and Oregon Pike. All residential and non-residential properties abutting the sanitary sewer main and whose principal building(s) lies within 150 feet of the low-pressure main will be connected. WESA intends to install the grinder pumping stations, controls, and appurtenances for individual properties, however these facilities will be owned and operated by the property owners upon completion of the project.

The design and permitting of this project has been completed and WESA received public construction bids on June 1, 2017. The Authority authorized issuance of the Notice of Intent to Award the construction contract on June 14, 2017. Construction of the project is anticipated to commence in late July or early August 2017 and construction is scheduled to be completed by the end of April 2018. WESA will be scheduling two meetings in July 2017 with affected property owners to review project specifics, project costs, property owner responsibilities, etc. Once these meeting dates have been set, affected property owners will be notified.

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# COMPOST SITE

The following items are <u>NOT</u> accepted at the Township's compost site. Stones, concrete, dirt, appliances, trash, food waste and anything other than yard waste.



# CAUSE OF CANCER DEATHS.

# #1 reason to call.

When you look at the facts, it's a simple choice. Although colon cancer is #2 on the list of deadliest cancers, it can be prevented altogether, or removed at an early stage, with a routine colonoscopy. The prep is simple, and the procedure is brief, safe, painless and respectful.

So if you're 50+ and haven't been screened, talk to your primary care provider or call Regional Gi at (717) 869-4600.



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324 Glenbrook Rd. Leola, PA 17540 Along Route 772

Crop Cover

# Earth Day Cleanup

On April 20th, students from the Conestoga Valley High School Freshwater Biology class and Kindergartners from the Leola Elementary School participated in a river cleanup and beautification project at the Community Park in Talmage for Earth Day 2017. We would like to thank all the students. teachers and others who participated for their hard work and for doing a wonderful job.





Thank you to the local businesses, Benchmark Construction and Crystal Springs Water, for providing sandwiches and drinks for all the volunteers!

# SIDEWALK REPAIRS

In April of 2017 some residents received notification that their sidewalks are in need of repair or replacement (please note that this is not the same letter that was mailed to all residents back in the fall of 2016). The deadline for repairs is October 25, 2017. If you have any questions regarding the repairs please email the Zoning Officer at sservice@westearltwp.org or visit the Township website at http://www.westearltwp.org/pages/sidewalks.

## PAGE 6



## A NOTE FROM THE ZONING OFFICER - FENCES



Although the Township regulates where you may place fences, unless you are constructing a required swimming pool fence, no permit is needed. All fences over six feet high, however, do require a building permit, because they are covered under the Building Code. Zoning allows only a 3' high fence in the front yard, but side and rear yard fences may be up to 6'. Fences are not per-

mitted in utility easements or rights-of-way or in storm water easements. These areas must remain free of all obstructions, including fences.



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## POLLUTANT REDUCTION PLAN

The Township's Pollutant **Reduction Plan proposes a** reduction of 81,901 pounds of sediment resulting from stormwater flows through the Township's separate storm sewer system. These reductions in sediment are planned to be achieved through the construction or improvement of stormwater facilities throughout the Township. The Draft Pollutant Reduction Plan is available for Public View Monday-Friday 8am-4pm until July 19, 2017. Comments may also be made during the public comment period at the Board of Supervisors' meeting to be held on Monday, July 24, 2017 at 7:00 p.m.

## **Thank You West Earl Township!**

It has been our pleasure to serve the heating, cooling, and plumbing needs of families in this great community since 1970. Earning your trust and hearing your positive feedback is by far our proudest achievement. Go Buckskins!

## Warm regards from Jim, Dave, and Rusty.



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# EAST MAIN STREET STORMWATER IMPROVEMENTS

West Earl Township is considering applying for Fiscal Year 2018 Community Development Block Grant funds to assist in undertaking stormwater drainage improvements along East Main Street. These federal funds are available through the Lancaster County Redevelopment Authority. If the Township is successful in obtaining such a grant, the funds will be used to install new stormwater mains and inlets to improve stormwater drainage along the street and reduce flooding during

rain events, continuing the stormwater improvements work that the Township has carried out on East Main Street over the past three years.

To determine whether the Township is eligible to receive Community Development Block Grant funding for this project, we must complete some research on incomes of area residents. Residents in the project area should have recently received an income survey in the mail. Without 100% response of East Main Street residents, West Earl Township will not be able to apply for this funding to help accomplish this project.

Completed surveys should be mailed in the stamped, pre-addressed return envelope included with the mailing. The Redevelopment Authority will open the responses and tabulate the results. *Your individual responses will be kept by them in strict confidence and will not be shared with the Township.* 

Thank you for your continued cooperation and assistance as we strive to improve public health and safety in our neighborhoods.

West Earl Township PO BOX 787 Brownstown, PA 17508



## 

## Meetings

West Earl Board of Supervisors Meets the 2nd and 4th Monday of every month at 7:00pm

West Earl Planning Commission Meets the 3rd Tuesday of every month at 7:00pm

West Earl Parks and Recreation Board Meets the 3rd Monday of every month as needed at 7:00pm

West Earl Zoning Hearing Board Meet 1st Wednesday of the month as needed at 7:00pm

West Earl Sewer Authority Meets the 2nd Wednesday of every month at 7:00pm

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West Earl Water Authority Meets the first Monday of every month at 7:00pm

# Important Phone Numbers

•	Municipal Office	037-320
•	Fax Number	859-3499
•	Tax Collector	656-7522
•	Water & Sewer Dept	
	(after hours)	859-372
•	Police Department	859-141 <sup>-</sup>
•	Emergencies	911
•	Zoning Officer	859-320
•	Sewage Enforcement	625-1930

## **Email Addresses**

- Public Works Dept
- Water Dept
- Sewer Dept
- Township Manager
- Administrative Office
- Zoning Office

amartin@westearltwp.org waterdept@westearltwp.org tbeever@westearltwp.org cjohnson@westearltwp.org tbeever@westearltwp.org sservice@westearltwp.org

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CONTRACTORS/DEVELOPERS - updated 2/23/2018						
NAME	ADDR1	ADDR2	CITY	STATE	ZIP	
ADVANCED INTERIORS INC	PO BOX 43		BROWNSTOWN	PA	17508	
BLM CONSTRUCTION & REMODELING, LLC	2711 GOLF DRIVE		YORK	PA	17408	
BOTTOM LINE CONTRACTING	918 RABBIT HILL ROAD		LITITZ	PA	17543	
CONCRETE AUTHORITY	599 AIRPORT ROAD		LITITZ	PA	17543	
COUNTRYSIDE BUILDERS	540 COUNTRYSIDE LANE		NEW HOLLAND	PA	17557	
CREEKVIEW BUILDERS	29 E BURKHOLDER DRIVE		LITITZ	PA	17543	
EARTH TURF & WOOD	196 N REAMSTOWN ROAD		DENVER	PA	17517	
EBY EXTERIORS	127 N 7TH STREET		AKRON	PA	17501	
ELDEN E. WEAVER BUILDING & REMODELING	245 KEENER ROAD		LITITZ	PA	17543	
FARMERSVILLE CONSTRUCTION LLC	355 E FARMERSVILLE ROAD		EPHRATA	PA	17522	
HECK CONSTRUCTION	143 MAIN STREET		DENVER	PA	17517	
HIGHMARK CONSTRUCTION LLC	478 E MAIN		LEOLA	PA	17540	
INNOVATIVE BUILDING & REMODELING	330 POWELL DRIVE		LANCASTER	PA	17601	
JOHN REIFF BUILDER	371 N HERSHEY AVENUE		LEOLA	PA	17540	
KEYSTONE CUSTOM HOMES	227 GRANITE RUN DRIVE	#100	LANCASTER	PA	17601	
KEYSTONE CONSTRUCTION	236 WILLOW RIDGE		NEW HOLLAND	PA	17557	
KITCHEN ENCOUNTERS	2603 LITITZ PIKE		LANCASTER	PA	17601	
LONG BUILDERS	5334 S VIEW DRIVE		NEW HOLLAND	PA	17557	
MKS CONSTRUCTION LLC	360 W MT AIRY ROAD		STEVENS	PA	17578	
MORGAN RUN BUILDERS	143 NEWPORT ROAD		LEOLA	PA	17540	
PINNACLE BUILDING	2475 NEW HOLLAND PIKE		LANCASTER	PA	17602	
PINETREE BUILDERS	96A GLENBROOK ROAD		LEOLA	PA	17540	
R&R BUILDER	101 DURLACH ROAD		EPHRATA	PA	17522	
RB HESS CONSTRUCTION	1379 WOODLAND CIRCLE		DENVER	PA	17540	
SERVE-PRO OF LANCASTER EAST	3 FALCON LANE		LITITZ	PA	17543	
STUMPS QUALITY DECKS & PORCHES	2458 DIVISION HWY		EPHRATA	PA	17522	
SUMMIT LAND HOLDINGS, LLC	320 GRANITE RUN DRIVE		LANCASTER	PA	17601	
TRADEMARK CONTRACTORS	114 CIERA DRIVE		LITITZ	PA	17543	
TRIANGLE HEATING & AIR CONDITIONING	3200 OREGON PIKE		LEOLA	PA	17540	
RIDGE BUILDERS	32 MIDDLE CREEK ROAD		EPHRATA	PA	17522	
HOOVER EXCAVATING LLC	186 W METZLER ROAD		EPHRATA	PA	17522	

# BOARD OF SUPERVISORS West Earl Township

157 West Metzler Road - PO Box 787 Brownstown, PA 17508-0787

March 5, 2018

TO: Contractors and Builders

FROM: Sara Service Stormwater Coordinator

RE: Stormwater Pollution Prevention

Dear Neighbors:

As contractors and builders I'm sure you are aware of the importance of stormwater management and soil erosion prevention.

Enclosed is an informative pamphlet from the EPA which focuses on the prevention of stormwater pollution on construction sites. You're receiving this because you are either a contractor located within West Earl Township or have done work in the Township. West Earl Township strives to provide information such as this to its residents and neighboring businesses and I hope you will find it useful.

Thank you for your continued effort to help keep Pennsylvania, and West Earl Township, waters clean!

Sincerely,

Sara Service Stormwater Coordinator

# **EPA's Construction General Permit (CGP) Small Residential Lot Stormwater Pollution Prevention Plan (SWPPP) Template**

## Who needs to seek coverage under the EPA CGP?

Stormwater discharges from construction activities that disturb one or more acres, or smaller sites disturbing less than one acre that are part of a common plan of development or sale, are regulated under the National Pollutant Discharge Elimination System (NPDES) stormwater permitting program. Prior to the start of construction, construction operators must obtain coverage under an NPDES permit, which is administered either by the state (if it is authorized to operate the NPDES program) or EPA. Where EPA is the permitting authority, operators may seek coverage under the EPA CGP. The CGP requires operators of construction sites to meet effluent limits (i.e., through the implementation of erosion and sediment controls) and requires operators to develop a SWPPP detailing erosion and sediment controls and pollution prevention measures that will be implemented to meet the requirements of the CGP.

## What is the Small Residential Lot SWPPP Template?

The Small Residential Lot SWPPP Template is designed to help operators of small residential sites develop a streamlined SWPPP that meets the minimum requirements of EPA's CGP. This simplified template does not change, relax, or modify any existing conditions in the CGP, including the requirement to submit a Notice of Intent (NOI) for permit coverage.

## How does it work?



Think of the Small Residential Lot SWPPP Template as a 1040EZ tax form for small construction sites. All of the same requirements apply, but compliance options are focused on only those controls that apply to small residential lot construction, and they are presented in a simplified, user-friendly format.

The Small Residential Lot SWPPP Template streamlines SWPPP development by providing a simplified menu of erosion and sediment control and pollution prevention practices that operators can select from to complete a SWPPP consistent with the minimum requirements in the CGP.

## Easy to Use BMP Menu

The Small Residential Lot SWPPP Template provides operators with a walk-through menu of typical erosion and sediment control and pollution prevention practices (i.e., Best Management Practices or BMPs) appropriate for small construction sites.

## Illustrated Appendix with Pull-Out BMP Spec Sheets

Clear, step-by-step BMP spec sheets for each practice you choose are provided in an illustrated appendix that you may edit based on your site-specific conditions.

# **Does my project qualify for EPA's Small Residential Lot SWPPP Template?**

In order to use EPA's streamlined template, your site must meet a series of criteria, including:

- ✓ Projects must disturb less than one acre of land;
- ✓ Projects must be located outside of sensitive areas (areas with endangered species concerns, historic preservation issues, wetlands, etc.);
- ✓ Projects must not cause disturbance within 50 ft of a water of the U.S.;
- ✓ Projects must not require the use of chemical treatment for stormwater; and
- ✓ Projects must not disturb steep slopes.

To access EPA's streamlined Small Residential Lot SWPPP Template, visit: www.epa.gov/national-pollutant-discharge-elimination-system-npdes/stormwater-discharges-construction-activities



# 10 Steps to Stormwater Pollution Prevention on Small Residential Construction Sites

Stormwater management on small residential construction sites need not be complicated.

**Protect Any Areas Reserved for Vegetation or Infiltration and Preserve Existing Trees** If you will be installing infiltration-based features such as rain gardens or bioswales, make sure these areas are designated as off limits to avoid compaction.

Save time and money by preserving existing mature trees during construction. Preserving mature trees minimizes the amount of soil that needs to be stabilized once construction is complete, and minimizes the amount of runoff during and after construction activity.



EPA's CGP requires operators to preserve native topsoil on site unless infeasible and protect all soil storage piles from run-on and runoff. For smaller stockpiles, covering the entire pile with a tarp may be sufficient.

## Protect Construction Materials from Run-On and Runoff

At the end of every workday and during precipitation events, provide cover for materials that could leach pollutants.

## Designate Waste Disposal Areas

Clearly identify separate waste disposal areas on site for hazardous waste, construction waste, and domestic waste by designating with signage, and protect from run-on and runoff.

## 5 Install Perimeter Controls on Downhill Lot Line

Install perimeter controls such as sediment filter logs or silt fences around the downhill boundaries of your site.

## Install Inlet Controls

Sediment control logs, gravel barriers, and sand or rock bags are options for effective inlet controls. Make sure to remove accumulated sediment whenever it has reached halfway up the control.

## Install a Concrete/Stucco Washout Basin

Designate a leak-proof basin lined with plastic for washing out used concrete and stucco containers. Never wash excess stucco or concrete residue down a storm drain or into a stream!

## Maintain a Stabilized Exit Pad

Minimize sediment track-out from vehicles exiting your site by maintaining an exit pad made of crushed rock spread over geotextile fabric. If sediment track-out occurs, remove deposited sediment by the end of the same work day.

stormwater flow







## Post Your NOI and Keep an Up-to-Date Copy of Your SWPPP on Site

Post a sign or other notice of your permit coverage, including your NPDES tracking number and site contact information. Also, keep a copy of your complete and up-to-date SWPPP on site and easily accessible, including site maps showing where each BMP is or will be installed.



Immediately stabilize exposed portions of the site whenever construction work will stop for 14 or more days, even if work is only temporarily stopped. Remember, final stabilization is required prior to terminating permit coverage.



## **Sara Service**

From:	Teresa Burkhart <teresa_burkhart@conestogavalley.org></teresa_burkhart@conestogavalley.org>
Sent:	Tuesday, April 10, 2018 11:50 AM
То:	Sara Service
Subject:	RE: storm water education

Sara,

Here are our current classroom counts for grades K-3 if you can please have them counted out and labeled to give to teachers:

Artus – 19
Ditzler – 17
Mullen – 19
Upson – 20
Bowman – 17
Brubaker – 18
Childs – 19
Koehnke – 17
Dupuis – 20
Gorniak – 19
Jenkins – 19
Linton – 19
Reed – 20
Reylek – 20
Taylor -20
Wertz – 19

Teresa

From: Sara Service [mailto:SService@westearltwp.org]
Sent: Tuesday, April 10, 2018 11:37 AM
To: Teresa Burkhart <<u>Teresa Burkhart@conestogavalley.org</u>>
Subject: storm water education

Hi Teresa,

I'm the zoning officer and stormwater coordinator for West Earl Township. I was hoping I could provide some storm water educational materials (coloring books or something similar) for the younger students at Brownstown Elementary. Each year we try to come up with new ways to educate Township residents about storm water management and I thought that providing this information to some of your students might be a good idea.

Let me know what your thoughts are.

Thanks, Sara 305 Activity booklets delivered to Brownstown Elementary School on April 27, 2018
Home Compos	ting	
MADE EAS	Y!	
Step-by-Step Instructions, Produ for Backyard Compo	ucts & Resources sting	
MAY 19 Free Home Composting We to the public Public · Hosted by West Earl Township	orkshop - open 13 activity booklets distributed at Compost Workshop on May 19, 2018.	
★ Interested ✓ Going	A Share    ···	
<ul> <li>Saturday, May 19 at 1 PM - 2:30 PM</li> <li>West Earl Township 157 W. Metlzer Road, PO Box 787, Brownstown, Pennsylvania 17508</li> </ul>		
About	Discussion	

### COMPOST WORKSHOP ATTENDEES

#### Saturday, May 19, 2018

<u>Name</u>	<u># of people</u>
Pam Hayden	1
Christy Girard	1
Lauren Cacciatore	1
Kris Pursel	1
Rich Wilson	1
Charlie Doll	1
Jeff & Gale Shirk	2
Pamela Rice	1
Judy Stevens	1
Linda Miller	2
Clyde Hoover	1
Michelle & Matt Morgan	2
Bronwen Hartranft	1
Carey Neff	2
Shelia Hargrove	2

20

20 Water Cycle Activity books distributed

# MCM #2 Appendix

- MCM #2 Project Plan
- BMP 2.2 Attachments • PRP-meeting.pdf
- BMP 2.3 Attachments
  - Trash-a-thon\_LAMS.pdf
  - earth-day2018.pdf
  - LancasterWaterWeek-2018\_brochure.pdf
  - Conestoga-river-cleanup2018.pdf
  - adopt-a-drain-intro.pdf
  - adopt-a-drain-signup-agreement.pdf
  - drain-cleaning-guidelines.pdf
  - adopt-a-drain-inspection-form.pdf

# MCM #2 Project Plan

### • BMP 2.1

### **Description**:

Develop, implement and maintain a written Public Involvement and Participation Program (PIPP) Measurable Goal:

The PIPP for new permittees shall be developed and implemented within one year following approval of coverage under this General Permit. All permittees shall reevaluate the PIPP annually and make revisions as necessary.

The PIPP shall include, at a minimum:

- 1. 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.
- 2. 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 surface waters receiving the permittee's discharges.
- 3. Making Annual MS4 Status Reports and all other plans, programs, maps and reports required by this General Permit available to the public on the permittee's website, at the permittee's office(s), or by mail upon request.

### Action Plan:

The Public Involvement & Participation Plan (PIPP) will be evaluated and updated as necessary. Each year the PIPP will be reviewed, revised as necessary to improve effectiveness, and implemented in accordance with the following BMPs. The evaluation will be completed by June 30 of each year.

o The Township's Plan includes an annual public meeting where the Township's Stormwater Plan will be discussed.

o The Township plans to involve the Cocalico Creek Watershed Association in their PPP. The Township will meet with the

Association periodically to determine the methods to interact and communicate with Township residents and businesses.

o The Township will update their website to inform the public that the annual reports are available for review.

o The Township will work with the Conestoga Valley School District for the annual Earth Day River Clean-up and with the Lititz

Area Mennonite School for their annual Trash-a-thon.

o The Township will work with residents in the newly-established (April 2018) Adopt-A-Drain program.

• BMP 2.2

### Description:

The permittee shall advertise to the public and solicit public input on the following documents

prior to adoption or submission to DEP:

- Stormwater Management Ordinances (for municipalities)
- Standard Operating Procedures (SOPs) (for non-municipal entities)
- Pollutant Reduction Plans (PRPs), including modifications thereto

### Measurable Goal:

- 1. For Ordinances and SOPs, the permittee shall provide notice to the public; provide opportunities for public comment; document and evaluate the public comments; and document the permittee's responses to the comments prior to finalizing the documents. The permittee shall provide this documentation to DEP upon request.
- 2. For PRPs, public participation requirements are specified in Appendices D and E of this General Permit.

### Action Plan:

### Stormwater Management Ordinance

On July 9 2014, the Township adopted an updated and revised Stormwater Management Ordinance based on the Lancaster County Act 167 Model Ordinance. Prior to adoption of the Ordinance, the draft ordinance was discussed at numerous Township Planning Commission and Township Board of Supervisor meetings. Additionally, pending adoption of the ordinance was advertised in the local newspaper as required by the Pennsylvania Municipalities Planning Code. The ordinance was discussed at a public Board of Supervisors meeting.

Stormwater Management Ordinance website: http://westearltwp.org/pages/stormwater.html

### **Pollutant Reduction Plan**

West Earl Township's pollutant reduction plan (PRP) was developed as a requirement of Permit PAG#133535 for the MS4. The PRP outlines the actions the Township will take to address pollutant loads to waterbodies within the MS4 that drain to the Chesapeake Bay and Impaired waters within the MS4. These actions include public participation, mapping of outfalls and other discharges, pollutant load calculations, best management practices (BMPs) selection, identification of potential funding sources and partners, and operations and maintenance (O&M) activities.

A copy of the draft PRP was released via public notice on June 19th, 2017 to the following media outlets: LNP newspaper. The notice ran for one day. The public was given 30 days to provide commentary on the contents of the PRP. No written comments were received regarding the PRP. West Earl Township held a public meeting on July 10, 2017 to receive verbal commentary on the contents of the PRP. No comments were received at the July 10 meeting. No details were changed from the draft PRP to the final PRP due to the fact that no public comments were received on the draft plan. The final PRP was submitted to the PA DEP on September 13, 2017.

A copy of the PRP is included under the "Pollutant Reduction Plan" heading of this report and can be found on the Township's website at http://www.westearltwp.org/documents/WestEarlTwpPRPFinal2017.pdf

### • BMP 2.3

### Description:

Regularly solicit public involvement and participation from the target audience groups using available distribution and outreach methods. This shall include an effort to solicit public reporting of suspected illicit discharges. Assist the public in their efforts to help implement the SWMP.

### Measurable Goal:

1. The permittee shall solicit public involvement and participation from target audience groups

on the implementation of the SWMP. The solicitation can take the form of public meetings or other events. The public shall be given notice in advance of each meeting or event. During the meetings or events, the permittee should present a summary of progress, activities, and accomplishments with implementation of the SWMP, and the permittee should provide opportunities for the public to provide feedback and input. The presentation can be made at specific MS4 events or during any other public meeting. Existing permittees shall conduct at least one public meeting that includes information on SWMP implementation by March 15, 2023; new permittees shall conduct at least one public meeting within 5 years following approval of General Permit coverage.

- 2. The permittee shall document and report instances of cooperation and participation in MS4 activities; presentations the permittee made to local watershed organizations and conservation organizations; and similar instances of participation or coordination with organizations in the community.
- 3. The permittee shall also document and report activities in which members of the public assisted or participated in the meetings and in the implementation of the SWMP, including education activities or organized implementation efforts such as cleanups, monitoring, storm drain stenciling, or others.

### Action Plan:

The Township will discuss their stormwater management program at a regularly scheduled public meeting at least once per year and also perform the following:

o Provide annual update of Stormwater Management Program at a public meeting.

o Maintain a location on the website where residents can report potential illicit discharges.

o All reports will be documented including:

- >>Date and location of potential illicit discharge
- >>Results of township field visit
- >>Any follow-up measures to prevent future discharges

o The Township will document:

- >> Participation in the stormwater program of residents, businesses and other groups
- >> Coordination with watershed organizations
- >> Activities such as stream cleanups, monitoring, storm drain stenciling, etc.
- >> Updates to the Township Stormwater website page
- >> Activities related to the Adopt-A-Drain program started in April 2018

### NOTICE

Notice is hereby given that the West Earl Township Board of Supervisors have scheduled a workshop for Tuesday, May 23rd, 2017 beginning at noon to discuss the MS4 Pollutant Reduction Plan and any other business brought before the Board. The meetings will be held at the West Earl Township Municipal Building located at 157 W. Metzler Road, Brownstown. Special Meeting Minutes

Page 1

West Earl Township Board of Supervisors, 157 West Metzler Road, Brownstown, PA 17508

In Attendance:Member:Richard StoverMember:Keith KauffmanMember:Dave Thornton

Manager/Secretary: Candie Johnson Township Engineer: Cory Rathman, Becker Eng.

Others present: Sara Service, Stormwater Coordinator Emily West, LandStudies, Inc.

<u>Call to Order</u> The meeting was called to order at 12 p.m.

### **Draft Pollutant Reduction Plan**

Cory Rathman began the meeting by introducing Emily West from LandStudies, Inc. LandStudies has prepared a draft pollutant reduction for the Township.

Ms. West reviewed the map of water sheds. The Township is located within the Cocalico Creek, Conestoga River and Groff Creek basins. The Township's pollutant load calculations were done using simplified methods that were provided by the DEP. Ms. West said that the Township's 5-year plan includes reducing pollutants by 10% or 82,000 lbs. Ms. West provided a map of possible BMP locations that could be used to make these reductions.

Mr. Rathman briefly discussed the possibility of joining with other municipalities on joints projects. Individual BMP locations were discussed. Ms. West said the Township's options include storm water basin retrofits and channel stabilization. The Eaglview Estates basin was discussed.

Mr. Rathman said the Township needs to decide how these projects will be funded, who will be responsible for operation and maintenance and the frequency of inspections. The costs for these projects were discussed along with the possibility of using Township staff.

Individual BMPs were discussed, including those located on private land.

Ms. Johnson asked what the timeline is for the Pollutant Reduction Plan. Ms. West said she could flush out the details of the plan and fine tune the draft and have it back to the Township by the end of the first week of June. The Plan could then be advertised for public comment. Mr. Rathman said he will get a draft plan to the Supervisors for their June 12<sup>th</sup> meeting.

Adjournment

The meeting was adjourned at 1:30 p.m.



Notice for Township Offices:

### LAMS TRASH-A-THON 2017

We want to inform your Township and Police Department that Lititz Area Mennonite School students are preparing for their annual Trash-A-Thon on Thursday, October 12. Our rain date is set for Wednesday, October 18. This fundraising event benefits both Lancaster County communities and the school.

258 students, plus parents & teachers (no more than five students per adult) will be picking up litter along 240 miles of roadways, plus parks, church and commercial properties. We bring all our collected litter back to the school.

Prior to their five-hour work day, students will solicit neighborhoods and friends. The following safety guidelines are strictly followed:

- 1. Safety gloves and orange vests will be worn at all times.
- 2. Broken glass and sharp objects will be picked up by adults only, while children are standing still.
- 3. Adult will carry a red flag to make drivers aware of their work crew.
- 4. Adult's job is to watch traffic to insure children's safety.
- 5. At no time will a student cross the road or driveway without permission.
- 6. Adults will park their car and walk with student group at all times.
- 7. Busy parking lot areas will not be cleaned due to safety issues.

We are making every effort for a safe event.

Sincerely,

Keith Garner Administrator

2017 MS4



September 1, 2017

Dear Park Managers,

Our annual Trash-A-Thon will be held Thursday, October 12. The rain date is October 18. 258 students in kindergarten through 8th grade along with teachers and parents will walk along 240 miles of roads, plus parks, church and commercial properties to pick up litter.

Some of our groups will be using your park facility to take a break and eat lunch. We have a group of 20-25 children and adult supervisors coming to eat lunch at your park. We are requesting that the restrooms be **unlocked from 9:00 a.m. to 2:30 p.m.** After lunch, these students and their supervisors will spend a short time walking over your property cleaning up litter. All the litter collected will be returned to Lititz Area Mennonite School.

At times some questions have been raised as to insurance coverage. In the event of an accident or injury, the school's insurance policy will cover related expenses and no liability is placed on your business.

The following safety guidelines are strictly followed:

- 1. Safety gloves and orange vests will be worn at all times.
- 2. Broken glass and sharp objects will be picked up by adults only, while children are standing still.
- 3. Adult will carry a red flag to make drivers aware of their work crew.
- 4. Adult's job is to watch traffic to insure children's safety.
- 5. At no time will a student cross the road or driveway without permission.
- 6. Adults will park their car and walk with student group at all times.
- 7. Busy parking lot areas will not be cleaned due to safety issues.

This work day is designed to benefit the communities where our patrons live and work. The day is hard, dirty work, but lots of fun and a good teaching tool for the children.

Please return the enclosed postcard granting us permission to use your park restroom facilities. If you have any questions, please feel free to contact our school at 626-9551.

Thank you very much!

Keith Garner Administrator

### EARTH DAY 2018

4-19-18 Cardi + crew ! first a big thank you for your flexibility. The weather was perfect of and the planting was a huge success. The park looks beautiful. I The "stick" pickup event also proved to be a big hit with the kids. A buckskin salute to your great crew. Always making us feel appreciated + we are thatful for their help + support. Happy Every Day is Earth Day. Harring











# WHAT IS WATER WEEK?

Leading the way to clean water by protecting over 6,000 acres of wild lands, the Lancaster County Conservancy has created Lancaster Water Week to connect us all to clean water. Lancaster's 1.500 miles of streams and rivers drive local economic and agricultural growth. They are a place of recreation and the source of our drinking water. Water Connects Us All!

We strive for streams and rivers that are fishable, swimmable, and drinkable. We need your help.

**CELEBRATE** the unique waterways of Lancaster County

**EDUCATE** yourself about the challenges we face and opportunities we can create

**ACTIVATE** your community and get involved in our many Water Week events



# Lancaster County Conservancy

**WOULD LIKE TO THANK OUR 2018 SPONSORS** 





**OCTORARC** 

B

LANCASTER June 1-9, 2018

Lancaster County <u>Conservancy</u> SAVING NATÜRE





Dip your toes in one or commit to all three! Here are our three action steps you can take to help our waterways.



Creating native habitat is critical to pollinators (birds, CREATE HABITA bees, and other insects). You can start by planting several native species each year, pulling out invasive plants, and strategically placing a tree in order to capture water.

We know that water is essential to our life. We essential to our life. How is it unique? What type of fish are native to this area? What else lives in or near the water? What are some simple steps to protection

EXPLORE OUTDOORS Spending as little as 20 minutes outdoors daily can have a dramatic impact on your health. Imagine a therapy that is free, has no side effects, and increases your mental, emotional, and physical well being. Lancaster County Conservancy offers 45 unique nature preserves throughout the county. Get outside and explore!

Share your love of nature with us! #lancasterconservancy #lancasterwaterweek



### Friday, June 1

First Friday in Downtown Lancaster - 6-10pm Join us in Downtown Lancaster for First Friday as we kick-off Lancaster Water Week.

### Saturday, June 2

### Lancaster Farmland Trust Pedal to Preserve **Bicycle Ride** – 8am

Celebrate farmland preservation with the Lancaster Farmland Trust by riding in our Pedal to Preserve 2018. Ride route lengths are 6, 20, and 51 miles.

### Stream Health and Science – 9am-12pm

Hands on workshop that will explore insects and habitats that have a positive impact on the health of 11" x 17" Accordion Fold

Friends of Fishing Creek at Guarryville Library -

### 10-11:30am

Kick off your summer reading program with activities centered around the water cycle and water conservation and middle school kids.

# RIVERLANDS TRAIL FESTIVAL AT 95

### **Riverlands Trail Festival** – 10am-3pm

Organized hikes, canoe race, live music, food, and more along the Susquehanna River.

### **Riverlands Trail Festival: Wilton Meadow Hike** 9:30am-3pm

Hike a 3-mile section of the Mason Dixon Trail from High Point through Wilton Meadows Nature Preserve to John Wright Restaurant. Please reserve your tickets for the shuttle service.

### **Riverlands Trail Festival After Party** – 3-5pm

Live music at the John Wright Restaurant from Vinegar Creek Constituency. Stop in for dinner and Water Week beer from Fetish\* Brewing.

### A Day On Lititz Run – 2-5pm

Visit three restored sites including the Millport Conservancy. Lititz Wastewater Treatment Facility, and the Rock Lititz Campus. Fly casting, stream studies, interaction with the birds and bees, a trout hatchery, and more.

### Celebration at Rock Lititz with Fetish\* Brewing Co. - 5-8pm

Food. Water Week beer, live music, and information about the restoration of Lititz Run.

# Sunday, June 3

#### The North Museum - 12-5pm



Family fun filled with water themed activities. Demonstrations about rain gardens and stormwater management. Movies in the SciDome Theater titled. "Habitat Earth" and "Dynamic Earth."

# Monday, June 4

### 4th Annual Clear Waters Golf Tournament – 1-5pm

Crisscross the Little Conestoga River and view several restoration projects while enjoying a beautiful afternoon on the links.

### **Rain Garden Design and Installation Workshop** – 6-8:30pm

Join the Little Conestoga Watershed Alliance in planting a rain garden while learning some tips on how to design and install one at

home! 11" x 17" Accordion Fold

#### Inside Middle) Zoetropolis Movie Night – 6-9pm

A reception and evening of film that focuses on the impact of Habitat on our local environment. The evening will include the preview of a new short film focused on the advantages of no till and cover crop farming. \$15 includes movie, food, and beverages. Tickets are limited.

### **Tuesday, June 5**

The Power of Water: Safe Harbor Dam Tour - 9 & 10am Hanessing the power of water into clean renewable energy is just

part of what you will learn on your tour of the Safe Harbor Dam.

### Clean Streams Farm Tour - 5-8 pm

Take a ride throughout Oregon Dairy's agricultural operation to learn how they take care of the stream flowing through their property. End your evening with a BBQ picnic dinner as the sun sets over the farm

### Wednesday, June 6

### **Chiques Watershed Expo** – 6-8pm

Held at the Manheim Farm Show Complex, this expo is family-friendly event full of education and fun!

> Please visit our website for more details and to pre-register for all events: lancasterwaterweek.org/events

#### Native Plant Conference – June 6 through June 9

Includes inspirational field trips, educational workshops, engaging topics of concern, native plant and book sale, and native plant merchandise. Special discount for Lancaster Water Week; use code "WW2018" to receive 10% off Thursday and/or Friday registration costs. More information at www.millersvillenativeplants.org

### Thursday, June 7

### Kellvs Run Nature Hike - 10am

Join the Lancaster County Conservancy's Director of Stewardship, Brandon Tennis, for a guided tour of this beautiful Riverlands preserve.

### **Green Infrastructure Bike Tour** – 5-7pm

The City of Lancaster is transforming its streets, parks, commercial, and private properties to capture stormwater. The tour ends at The Fridge to enjoy our Water Week beer.

### Propagating Native Plants at Home – 6:30-8:30pm

Mike Van Clef will discuss basic techniques to propagate a variety of native species at home including seed collection, cleaning, storage, sowing, and germination/growth. \$30 per person.

### Eshelman Run Tree Planting - 6-8pm

Volunteers will be planting around 175 native trees and shrubs adjacent to a tributary to Exheman Ruesion Fold

(Inside Middle)

### Friday, June 8

Native Plant Sale - Friday, 6:30 - 9:30pm/Saturday, 8am - 12pm Offering native trees, shrups, and perennials.

### Lecture: "Perennial Gardening: The Know Maintenance

### Approach"-7-8pm

Understanding best gardening practices that accompany the plants to maturity as well as to the continued health, beauty, and well-being of the plant community.

# Saturday, June 9

### Lecture "Native Wild Edibles of PA" - 9-10am

Wild plant expert, nutritionist, and forager Debbie Naha will discuss native wild plants of our area.

### Lecture "Butterflies and Moths as Pollinators" 10:15-11:15am

Learn about connecting native plants with butterflies and moths that we want to attract.

### **Conestoga Clean Up** – 9am-1pm

Join us at one of seven locations to help us work towards a cleaner, safer, and more beautiful Conestoga River.





Please visit our website for more details and to pre-register for all events: lancasterwaterweek.org/events

### Volunteers Needed - Conestoga River Clean-Up Comes to the Conestoga Valley - June 9, 9AM -11:30 AM (Free picnic for all volunteers 12-1pm)

Join us at one of three sites in the municipalities in the Conestoga Valley (East Lampeter Township, West Earl Township, and Upper Leacock Township) to clean-up litter in and along the Conestoga River. We will be volunteering in the Conestoga Valley at the same time that other partners will be working elsewhere along the Conestoga River, all part of the Lancaster Water Week Conestoga Clean-up. Families, clubs, businesses, and individuals are all encouraged to come out and be part of this important event for our community!

Register in advance, and select the site you will join us at, by visiting: <u>https://www.eventbrite.com/e/conestoga-clean-up-lancaster-water-week-tickets-45006874774</u>. You will receive more specific details on where to meet and how to prepare after you register.

\*\*Following the clean-up, all volunteers from across the entire clean-up will meet at noon for a FREE pizza and ice cream lunch at Lancaster County Park, celebrating the day! Check out the other Lancaster Water Week events at <u>https://www.lancasterwaterweek.org/events</u>.



Final: (717) 859-3201 Fax: (717) 859-3499 www.westearltwp.org

### West Earl Township Adopt-a-Drain Program

In an effort to work with our community and keep our storm drains and waterways clean, the Township has started an Adopt-a-Drain Program.

As a result of stormwater runoff pollution, Pennsylvania has about 19,900 miles of impaired waterways according to the 2016 Pennsylvania Integrated Water Quality Monitoring and Assessment Report. Among the impaired waterways in Pennsylvania are the Cocalico Creek, Groff Creek, Conestoga River and unnamed tributaries located within West Earl Township.

The Adopt-a-Drain Program was implemented in an effort to help reduce the stormwater runoff pollution that enters our creeks and streams. As a volunteer in the Adopt-a-Drain Program you are partnering with us to reduce this pollution. Volunteers will be asked to "adopt" a drain near their home and help to keep it free of yard waste, litter and debris.

### **Program Goals**

Increase community awareness of stormwater runoff pollution

- Partner with community volunteers to reduce pollution
- Reduce the impacts of stormwater pollution in West Earl's waterways
- Keep storm drains pollution-free

For more information about this program or to volunteer please email Sara Service at sservice@westearltwp.org.





Phone: (717) 859-3201 Fax: (717) 859-3499 www.westearltwp.org

### West Earl Township Adopt-a-Drain Sign-up Form & Maintenance Agreement

Your Name:			
Your Address:			 
Email:		Phone Number:	 
Preferred method of contact (circle one)	email	phone	
Nearest address to adopted storm drain (or da	rain #):		 

### Adopt-a-drain Cleaning and Safety Guidelines

- **1.** Check adopted storm drain for garbage/debris and yard waste at least once per month and prior to, and following, a forecasted rain event.
- 2. Whenever possible, stay out of the street. Work from the sidewalk or curbside and watch for traffic.
- 3. If children are helping, make sure an adult is supervising.
- **4.** If garbage/debris or yard waste is present, use a rake or broom to sweep it away from the top of the drain grate. Never sweep anything into the storm drain.
- 5. Place any collected garbage/debris with your trash for collection and place recyclables into your recycle bin. <u>NEVER PICK UP</u> <u>ANY SHARP OBJECT OR BROKEN GLASS WITH YOUR HANDS. USE GLOVES AND/OR A SHOVEL.</u>
- **6.** Yard waste that is collected can be placed with the yard waste from your property or can be taken to the Township's compost site.
- DO NOT ATTEMPT TO REMOVE THE STORM DRAIN GRATES. If you notice garbage/debris, hazardous substances (e.g. oil, paint or fuel) or a foul odor inside the drain please report it to the Road Department at 717-859-3201 or email sservice@westearltwp.org.
- 8. <u>NEVER WADE INTO PONDING OR STANDING WATER NEAR A STORM DRAIN.</u>
- **9.** Complete the Adopt-a-Drain Inspection/Clean-out Form and mail it to PO Box 787, Brownstown, PA 17508 or email it to <u>sservice@westearltwp.org</u>. Taking a before and after picture is encouraged!

### THANK YOU FOR YOUR PARTICIPATION IN THE ADOPT-A-DRAIN PROGRAM AND FOR YOUR CONTRIBUTION TO THE TOWNSHIP'S EFFORTS TO REDUCE STORMWATER POLLUTION

### LIABILITY WAIVER

\_\_\_\_\_\_ releases West Earl Township and its elected and appointed officials and employees from any liability or claims for injuries or damages to persons or property resulting from or relating in any way to the removal of garbage, debris, yard waste or cleaning of the adopted storm drain or participation in the Adopt a Drain Program. \_\_\_\_\_\_\_ agrees to regularly remove garbage, debris and yard waste from the adopted storm drain in accordance with the Adopt-a-Drain Cleaning and Safety Guidelines listed above

accordance with the Adopt-a-Drain Cleaning and Safety Guidelines listed above.



Phone: (717) 859-3201 Fax: (717) 859-3499 www.westearltwp.org

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### • NEVER WADE INTO PONDING OR STANDING WATER NEAR A STORM DRAIN.

• Complete the Adopt-a-Drain clean-out report and mail or email (sservice@westearltwp.org) it to the Township. Taking a before and after picture is encouraged.

### THANK YOU FOR YOUR PARTICIPATION IN THE ADOPT-A-DRAIN PROGRAM AND FOR YOUR CONSTRIBUTION TO THE TOWNSHIP'S EFFORTS TO REDUCE STORMWATER POLLUTION



Phone: (717) 859-3201 Fax: (717) 859-3499 www.westearltwp.org

No No

### West Earl Township Adopt-a-Drain Inspection and Clean-out Form

Your Name:
Your Address:
Drain Number:
Date of Inspection/clean-out:
Storm Drain Condition:         Good (sturdy and well maintained)         Fair (some erosion around drain, infrastructure shows some signs of wear)         Poor (highly eroded around drain, metal broken or cracked, infrastructure is damaged)         Storm Drain Blockage (debris/yard waste)
Minimal (0-19% covered with debris or yard waste)
Partial (20-39% covered with debris or yard waste)
Significant (40-79% covered with debris or yard waste)
Blocked (80-100% covered with debris or yard waste)
Items removed from on or around the storm drain grate (do not attempt to remove items from inside the storm drain) Grass clippings, leaves or other yard waste Sediment or dirt
• Plastic bottles
o Aluminum cans
o Glass bottles
• Food wrappers
o Plastic bags
<ul> <li>Cigarette butts</li> </ul>
o Sharps
o Broken glass
o Other
Evidence of dumping (any fluids such as paint, oil, fuel or unusual odors in or around the drain) Yes If "Yes" what was seen/smelled?

Please return this completed form to the West Earl Township Office at PO Box 787, Brownstown, PA 17508 or email to <u>sservice@westearltwp.org</u>. If you've taken any before or after photos of the clean-up, please include those as well.



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### West Earl Township Adopt-a-Drain Sign-up Form & Maintenance Agreement

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Your Address:			 
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Preferred method of contact (circle one)	email	phone	
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### • NEVER WADE INTO PONDING OR STANDING WATER NEAR A STORM DRAIN.

• Complete the Adopt-a-Drain clean-out report and mail or email (sservice@westearltwp.org) it to the Township. Taking a before and after picture is encouraged.

### THANK YOU FOR YOUR PARTICIPATION IN THE ADOPT-A-DRAIN PROGRAM AND FOR YOUR CONSTRIBUTION TO THE TOWNSHIP'S EFFORTS TO REDUCE STORMWATER POLLUTION



Phone: (717) 859-3201 Fax: (717) 859-3499 www.westearltwp.org

No No

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Your Name:
Your Address:
Drain Number:
Date of Inspection/clean-out:
Storm Drain Condition:         Good (sturdy and well maintained)         Fair (some erosion around drain, infrastructure shows some signs of wear)         Poor (highly eroded around drain, metal broken or cracked, infrastructure is damaged)         Storm Drain Blockage (debris/yard waste)
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<ul> <li>Cigarette butts</li> </ul>
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o Broken glass
o Other
Evidence of dumping (any fluids such as paint, oil, fuel or unusual odors in or around the drain) Yes If "Yes" what was seen/smelled?

Please return this completed form to the West Earl Township Office at PO Box 787, Brownstown, PA 17508 or email to <u>sservice@westearltwp.org</u>. If you've taken any before or after photos of the clean-up, please include those as well.

# MCM #3 Appendix

- MCM #3 Project Plan
- BMP 3.1 Attachments
  - IDDE-plan.pdf
  - IDDE-field-guidance.pdf
  - illicit-discharge-flow-chart.pdf
  - corrective-action-flow-chart.pdf
- BMP 3.2 Attachments
  - Outfall-mapMay2018.pdf
- BMP 3.3 Attachments
  - collection-system-map-small.pdf
- BMP 3.6 Attachments
  - StormwaterEducation-TwpWebsite.pdf
  - $\circ \ \ Illicit Discharges and Connections-Twp Website.pdf$
  - illicit-discharge-complaintform.pdf

# MCM #3 Project Plan

### • BMP 3.1

### Description:

The permittee shall develop and implement a written program for the detection, elimination, and prevention of illicit discharges into the regulated small MS4.

### Measurable Goal:

- 1. 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.
- 2. For existing permittees, the IDD&E program shall continue to be implemented and evaluated annually.

### Action Plan:

An Illicit Discharge Detection and Elimination (IDDE) Plan was developed during the first year of the Permit. Implementation of the plan occurred during the subsequent years. Each year, the IDDE Plan will be reviewed, revised as necessary to improve effectiveness, and implemented in accordance with the following BMPs.

o The IDDE Plan can be found on the following pages (or attachment). The plan will be reviewed annually and BMPs added and/or updated as necessary to make the program more effective and efficient.

### • BMP 3.2

### Description:

The permittee shall develop and maintain map(s) that show permittee and urbanized area boundaries, the location of all outfalls and, if applicable, observation points, and the locations and names of all surface waters that receive discharges from those outfalls. Outfalls and observation points shall be numbered on the map(s).

### Measurable Goal:

- 1. For new permittees, the map(s) must be developed and submitted to DEP as an attachment to an Annual MS4 Status Report by September 30, 2022 or the fourth (4th) Annual MS4 Status Report following approval of coverage under this General Permit, whichever is later.
- 2. For existing permittees, the existing map(s) shall be updated and maintained as necessary during each year of coverage under this General Permit.

### Action Plan:

The Township developed an Outfall Map during the first year of permit coverage. The Outfall Map depicts the location of outfall locations, roads, named water bodies, municipal boundaries, watershed boundaries, and the Urbanized Area among other features. A copy of the outfall map is included with this stormwater program.

o The Outfall Map will be reviewed annually to determine if additional outfalls should be included.

### • BMP 3.3

### Description:

In conjunction with the map(s) created under BMP #2 (either on the same map or on a different map), the permittee shall develop and maintain map(s) that show the entire storm sewer collection system within the permittee's jurisdiction that are owned or operated by the permittee (including

roads, inlets, piping, swales, catch basins, channels, and any other components of the storm sewer collection system), including privately-owned components of the collection system where conveyances or BMPs on private property receive stormwater flows from upstream publicly-owned components.

### Measurable Goal:

- 1. For new permittees, the map(s) must be developed and submitted to DEP as an attachment to an Annual MS4 Status Report by September 30, 2022 or the fourth (4th) Annual MS4 Status Report following approval of coverage under this General Permit, whichever is later.
- 2. For existing permittees, the existing map(s) shall be updated and maintained as necessary during each year of coverage under this General Permit.

### Action Plan:

The Township has begun a GIS mapping project to identify the location of inlets, pipes, swales, basins, etc. that are part of the Township stormwater infrastructure within the Urbanized Area. The mapping may also include areas outside of the Urbanized Areas. A current copy of the outfall and stormwater system map is included with this stormwater program.

o A map of the entire stormwater system within the Urbanized Area will be updated periodically throughout the year to reflect installation of stormwater management and conveyance facilities.

### • BMP 3.4

### Description:

The permittee shall conduct dry weather screenings of its MS4 outfalls to evaluate the presence of illicit discharges. If any illicit discharges are present, the permittee shall identify the source(s) and take appropriate actions to remove or correct any illicit discharges. The permittee shall also respond to reports received from the public or other agencies of suspected or confirmed illicit discharges associated with the storm sewer system, as well as take enforcement action as necessary. The permittee shall immediately report to DEP illicit discharges that would endanger users downstream from the discharge, or would otherwise result in pollution or create a danger of pollution or would damage property, in accordance with Part A III.D.4 of this General Permit.

### Measurable Goal:

- 1. For new permittees, all of the identified regulated small MS4 outfalls shall be screened during dry weather at least twice within the 5-year period following approval of coverage under this General Permit.
- 2. For existing permittees, each of the identified regulated small MS4 outfalls shall be screened during dry weather at least once by March 15, 2023. 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 during each year of permit coverage.
- 3. If a discharge is observed from any outfall during dry weather screenings, the discharge shall be inspected for color, odor, floating solids, scum, sheen, and substances that result in observed deposits in the surface waters. In addition, the discharge cannot contain substances that result in deposits in the receiving water or produce an observable change in the color, odor or turbidity of the receiving water.

If the discharge exhibits any of the above characteristics, or contains any other pollutants or causes an observed change in the surface waters, the permittee shall sample the discharge(s) for field and/or laboratory analysis of one or more common IDD&E parameters in order to determine if the dry weather flow is illicit. Possible parameters include, but are not limited to: pH, Conductivity, Fecal Coliform bacteria, Heavy Metals, Chemical Oxygen Demand (COD), 5-day Biochemical Oxygen Demand (BOD5), Total Suspended Solids (TSS), Total Dissolved Solids (TDS), Oil and Grease, Total Residual Chlorine (TRC) and Ammonia-Nitrogen. Proper quality assurance and quality control procedures shall be followed when collecting, transporting or analyzing water samples. The permittee shall retain sample results with the

inspection report in accordance with Part A III.B of this General Permit.

- 4. Each time an outfall is screened, the permittee shall record outfall observations, regardless of the presence of dry weather flow. All outfall inspections shall be documented on the MS4 Outfall Field Screening Report form (3800-FM-BCW0521), or equivalent. The report must be signed by the inspector and be maintained by the permittee in accordance with Part A III.B of this General Permit. If an outfall flow is determined by the permittee to be illicit, the actions taken to identify and eliminate the illicit flow shall also be documented.
- 5. The permittee shall summarize the results of outfall inspections and actions taken to remove or correct illicit discharges in Annual MS4 Status Reports.
- 6. If the permittee determines that an outfall cannot be accessed due to safety or other reasons, the permittee shall establish an "observation point†at an appropriate location prior to the outfall where outfall field screening shall be performed. If observation points are established by the permittee, such points shall be identified on the map required under BMP #2 of this section.
- 7. Permittees must ensure that outfalls are properly maintained in accordance with Part C I.B.6.b of this General Permit.

### Action Plan:

The identified outfalls will be screened a minimum of 1 time during the 5-year permit coverage term. The Township will target screening 33% of the outfalls annually. Targeting 33% of the outfalls will provide flexibility in the event outfalls are not screened during a permit year. The outfall screening will be conducted in accordance with the Outfall Screening Protocol on the following pages.

All identified outfalls were inspected during the 2015/2016 permit year.

• BMP 3.5

### **Description**:

Enact a Stormwater Management Ordinance or SOP to implement and enforce a stormwater management program that includes prohibition of non-stormwater discharges to the regulated small MS4.

### Measurable Goal:

- Municipal permittees shall submit a copy of an ordinance that is consistent with DEP's 2022 Model Stormwater Management Ordinance (3800-PM-BCW0100j) as an attachment to an Annual MS4 Status Report by September 30, 2022 (existing permittees) or the fourth (4th) Annual MS4 Status Report following approval of coverage under this General Permit (new permittees).
- Permittees that lack the authority to enact ordinances (non-municipal permittees and counties) shall develop and adopt an SOP that prohibits non-stormwater discharges consistent with this General Permit, and shall submit a copy of the SOP as an attachment to an Annual MS4 Status Report by September 30, 2022 (existing permittees) or the fourth (4th) Annual MS4 Status Report following approval of coverage under this General Permit (new permittees).
- 3. Notice must be provided to DEP of the approval of any waiver or variance by the permittee that allows an exception to non-stormwater discharge provisions of an ordinance or SOP. This notice shall be submitted in the next Annual MS4 Status Report following approval of the waiver or variance.

### Action Plan:

On June 9, 2014, West Earl Township enacted a Stormwater Management Ordinance conforming to the requirements of the Lancaster County Act 167 Model Ordinance. The Township incorporated Prohibited Discharges into the Stormwater Management Ordinance which identifies specific non-stormwater discharges that cannot be discharged to the storm sewer. Copies of the

Ordinances are available on the Township's website and at the Township Office.

### • BMP 3.6

### Description:

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.

### Measurable Goal:

- 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. The permittee shall establish and promote a stormwater pollution reporting mechanism (e.g., a complaint line with message recording) by the end of the first year of General Permit coverage for the public to use to notify the permittee of illicit discharges, illegal dumping or outfall pollution. The permittee shall respond to all complaints in a timely and appropriate manner. The permittee shall document all responses, including the action taken, the time required to take the action, and whether the complaint was resolved successfully.
- Educational outreach may 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.

### Action Plan:

See MCM#1 for specific public outreach that was done for reporting illicit discharges during the 2017/2018 MS4 permit year.

### Illicit Discharge Detection & Elimination (IDDE) Program

The following program has been developed in accordance with the MS4 regulations.

The program will be administered jointly by the Stormwater Coordinator and the Assistant Road Master.

A map of the outfall locations will be developed along with identification of the contributing areas to each outfall location. The map will be reviewed and updated annually.

The program will be divided into the following areas:

- 1. Identifying Priority Areas
- 2. Procedures for Screening Outfalls
- 3. Procedures for Identifying Sources of Illicit Discharges
- 4. Procedures for Eliminating Illicit Discharges
- 5. Program Documentation, Evaluation and Assessment
- 6. Reporting Illicit Discharges

#### **Identifying Priority Areas**

Priority areas are locations with a higher likelihood of illicit discharges, illicit connections and illegal dumping. Typically, older infrastructure, a concentration of high-risk activities, or past history of pollution are areas that can be identified as priority areas. Any areas identified as potential problem areas, may be evaluated on a more frequent basis.

#### Procedure for Screening Outfalls

The Township currently identifies 31 outfalls within its Urbanized Area. The Township plans to screen approximately 33% of outfalls annually for dry weather flows; this amount allows for the possibility of screenings not occurring during a permit year. Dry weather is defined to be a 48 hour period with no occurrence of a stormwater producing event.

Any dry weather flows observed during the screening shall be visually evaluated for color, odor, turbidity, sheen, floating or submerged solids, and adverse impacts to the nearby plants and surrounding area. Suspected illicit discharges shall be tested for appropriate biological and /or chemical parameters. Common parameters include pH, conductivity, E. Coli bacteria, fecal coliform bacteria, metals, suspended solids, dissolved solids, oils, ammonia, detergents, chlorine and fluoride.

All outfall inspection information shall be recorded on the Outfall Reconnaissance Inventory/Sample Collection form even if no dry weather flow is observed. A copy of the Outfall Reconnaissance Inventory/Sample Collection form can be found as part of MCM3, BMP#4. Outfall screening records shall be kept for inclusion in the annual report.

Personnel performing outfall screenings shall be familiar with the procedures for using the field testing equipment and for collecting samples for off-site analysis, such as sampling technique, storage of the sample, and holding times prior to conducting outfall screenings.

Additional outfall screenings may be necessary based on the results of the inspection or if biological and/or chemical testing indicates the presence of pollutants.

#### Procedures for Identifying Sources of Illicit Discharges

When an illicit discharge is detected at an outfall, Township personnel trace the source of water using the stormwater system maps. After determining the drainage area to the outfall, the following procedures may be utilized as needed to track an illicit discharge to its source:

After determining the drainage area to the outfall, the following procedures may be utilized as needed to track an illicit discharge to its source:

- (a) Storm Drain Investigation: Using the storm sewer system map, field crews begin at the outfall and follow the storm sewer upstream. Depending on the extent of the drainage area, multiple sections of the storm sewer system may need to be investigated for a particular outfall. Manholes and/or inlets are to be inspected for indicators of pollution while following the storm sewer. Biological and/or chemical sampling is to be performed as needed at reasonable locations upstream of the outfall to isolate the source of the illicit discharge.
- (b) On-Site Investigations: To pinpoint the exact source of an illicit discharge within the storm sewer network, additional testing may be necessary including dye testing, video testing, or smoke testing. Field personnel should select the appropriate testing method based on drainage area, frequency of the illicit discharge, location, and property accessibility.

For additional information regarding the tracking of illicit discharges, Township staff should reference Illicit Discharge Detection and Elimination-A Guidance Manual for Program Development and Technical Assessments (Center for Watershed Protection & University of Alabama, October 2004).

### Procedures for Eliminating Illicit Discharges

Methods used to remove/correct the illicit connections will be site specific. If the source of the illicit discharge is the responsibility of the Township, appropriate repairs must be completed to eliminate the source of pollution. If the source of the illicit discharge is the responsibility of private property owner, the Township shall notify the property owner.

Township staff shall follow the flow chart on the following page (or attachment) for procedures on eliminating the illicit discharge. All actions shall be documented.

#### Program Documentation, Evaluation and Assessment

As a final step, all actions taken under the plan will be documented. Doing this will illustrate that continuous progress is being made to eliminate illicit discharges and connections. This data will also be included as one of the measurable goals achieved in the required annual report. This information documented will include: number of outfalls screened; any complaints received and corrected; the number of discharges eliminated and the number of tests conducted.

#### **Reporting Illicit Discharges**

When an illicit discharge is reported to the Township, appropriate personnel will conduct a site visit to determine if an illicit discharge is present. If an illicit discharge has occurred, the Township is to identify the source per the procedures. In all cases, whether an illicit discharge was confirmed or not, a field report is to be completed providing the date, location, and field observations and be included with the MS4 periodic report.

The following activities have been determined to have negligible flows/discharges to be considered an illicit discharge.

- Water line flushing
- Landscape irrigation
- Rising ground water
- Uncontaminated ground water infiltration
- Uncontaminated pumped ground water
- Discharges from potable water sources
- Foundation drains
- Air conditioning condensation
- Springs
- Footing drains

The following documents and forms can be found on the following pages.

- 1. PADEP Field Screening Guidance
- 2. Illicit Discharge Field Screening Data Collection Form/Outfall Observation Record

### PHASE II MS4 STORM WATER MANAGEMENT PROGRAM PROTOCOLS MINIMUM CONTROL MEASURE: ILLICIT DISCHARGE DETECTION & ELIMINATION

### FIELD SCREENING GUIDANCE

According to 40 CFR122.6, a program is required of all MS4s to detect and remove illicit discharges and improper disposal in the storm sewer. A dry weather visual inspection is the easiest way to screen for these discharges. Theoretically, if water is found flowing from a storm water outfall during dry weather conditions, it can be assumed that some illicit source of discharge is present in the storm sewer system. If such a dry weather flow is located, action must be taken to determine the source of the discharge so that it can be eliminated if a dry weather flow is detected grab samples can be taken and analyzed using field testing methods for temperature, pH, phenol, chlorine, and detergents. Laboratory testing may be necessary as well for certain situations or potential pollutant that cannot be detected using a field test kit.

When performing field screening for illicit discharge detection and elimination, one should remember to follow proper QA/QC procedures for collecting, cataloging analyzing visual inspections and grab samples. It is important to note the time, date, and weather conditions when the observation was made or samples are taken. This information will be critical during the investigation and enforcement procedures that may follow the field screening process.

Specific guidance on sample collection and analysis can be found in Appendix 2 of a document created for the Pennsylvania Citizens' Volunteer Monitoring Program entitled "Designing Your Monitoring Program: A Technical Handbook for Community-Based Monitoring In Pennsylvania," by Geoff Dates of the River Network. Appendix 2, titled "Guide to Indicators and Monitoring Methods," is available from DEP on the Phase II MS4 Storm Water Management Program Protocol CD-ROM (open the file entitled **Sampling Guidance B**). You can also obtain Appendix 2 via the Internet at the following URL:

### http://www.dep.state.pa.us/dep/deputate/watermgt/WC/subjects/CVMP/Appendix%202.pdf

The entire document may be found at the following URL:

### http://www.dep.state.pa.us/dep/deputate/watermgt/WC/subjects/CVMP/cvmp\_HdBook.htm

In addition, in Pennsylvania it is not unusual for underground springs to be diverted directly to the storm drain, which might create the appearance of a dry weather flow. Where possible, these groundwater drains and connections should be mapped and base flow confirmed during various seasons to best understand when flow can be attributed to this uncontaminated ground water or when it should be investigated further. No sampling normally is required when it can be verified that the flow observed is uncontaminated groundwater. However, visual analysis of the water should be performed regularly to ensure that the flow remains uncontaminated. If visual or odor inspections indicate something unusual (e.g. color, turbidity, sheen, floatables) in the groundwater flow, it should be treated as a potential illicit discharge, grab samples should be taken and the proper analysis performed.

### ILLICIT DISCHARGE DETECTION & ELEMINATION

### **REPORTING & INVESTIGATING PROCESS**



### **ILLICIT DISCHARGE DETECTION & ELEMINATION**

### **CORRECTIVE ACTION**


# CSDatum



# CSDatum





## MS4 PROGRAM STORMWATER MANAGEMENT RESOURCES

Below are several links to educational brochures and websites where you can find useful information about stormwater management and the Township's MS4 program.

Adopt-a-Drain Program ADDED 5/1/18

Illicit Discharges and Connections ADDED 6/1/17 Illicit Discharge Complaint Form MS4 Program Annual Report 2016/2017 MS4 Program Annual Report 2016/2017 - with all supporting documents MS4 Program Annual Report 2015/2016 MS4 Program Update May 1, 2016 - April 30, 2017 Earth Day Clean-up - CV students

WEBSITES

National Resources Conservation Center Pennsylvania Watersheds Lancaster County Clean Water Consortium Lancaster County Watersheds Lancaster County Conservancy United States Environmental Protection Agency Chesapeake Stormwater Network Create a Rain Garden

**BROCHURES AND ARTICLES** 

Point Source and Non-Point Source Pollution...What's the difference? ADDED 5/1/18 Stormwater BMPs - What are they & what do they do? ADDED 12/28/17 The Chesapeake Bay in Lancaster County ADDED 10/5/17 Homeowner's Guide to Stormwater BMP Maintenance ADDED 7/11/17 Backyard Conservation Make Your Property Bay Friendly The Drop You Drink is More Thank You Think Fence 'Em Out Build Your Own Rain Barrel After the Storm Lancaster County Watershed Basics Solution to Pollution Homeowner's Guide to Stormwater

Lancaster County Conservancy - rain barrel assessment & order forms <u>Rain Barrel Registration & Assessment Form</u> <u>Rain Barrel Maintenance</u> <u>Rain Barrel DIY pictures</u>

> West Earl Township 157 W. Metzler Road P.O. Box 787 Brownstown, PA 17508 <u>datadept@westearltwp.org</u> Phone: 717-859-3201 Fax: 717-859-3499

> > Š 2018 West Earl Township



#### THIS PAGE ADDED TO WEBSITE 6/1/17

## **ILLICIT DISCHARGES AND CONNECTIONS**

#### WHAT IS AN ILLICIT DISCHARGE?

An illicit discharge is defined as any discharge to an MS4 (Municipal Separate Storm Sewer System) that is not composed entirely of storm water (with some exceptions). Illicit discharges are considered "illicit" because MS4s are not designed to accept, process, or discharge such non-stormwater wastes. Sources of illicit discharges can include sanitary wastewater, effluent from septic tanks, improper oil disposal, laundry wastewater, spills from roadway accidents or improper disposal of auto and household toxics. Illicit discharges enter the system through either direct connections (e.g., wastewater piping either mistakenly or deliberately connected to the storm drains) or indirect connections (e.g., infiltration into the MS4 from cracked sanitary systems, spills collected by drain outlets, or paint or used oil dumped directly into a drain). The result is untreated discharges that contribute high levels of pollutants, including heavy metals, toxics, oil and grease, solvents, nutrients, viruses, and bacteria to receiving waterbodies. Pollutant levels from these illicit discharges have been shown in EPA studies to be high enough to significantly degrade receiving water quality and threaten aquatic, wildlife, and human health.

#### DO ALL ILLICIT DISCHARGES NEED TO BE ADDRESSED?

No. The following is a list of discharges that the Township may allow based on the findings that they do not significantly contribute to pollution to surface waters of the Commonwealth.

- Individual residential car washing
- Water line flushing
- Landscape irrigation
- Diverted stream flows
- Rising ground waters
- Uncontamminated ground water infiltration
- Uncomtaminated pumped ground water
- 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
- Discharges from potable water sources
- Foundation drains
- Air conditioning condensation
- Springs
- Water from crawl space pumps
- Footing drains
- Routine external building wash down (which does not use detergents or other compounds)
- Dechlorinated swimming pool discharges
- Flows from riparian habitats and wetlands

### HOW TO REPORT AN ILLICIT DISCHARGE

To report an illicit discharge or connection please download and complete the illicit discharge report form below or call the Township office at 859-3201 or email <u>datadept@westearltwp.org</u>. All reports will be kept confidential.

Illicit Discharge Report Form

West Earl Township 157 W. Metzler Road P.O. Box 787 Brownstown, PA 17508 <u>datadept@westearltwp.org</u> Phone: 717-859-3201 Fax: 717-859-3499

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## WEST EARL TOWNSHIP ILLICIT DISCHARGE REPORTING FORM

Name: Date: Date of Last Rain Event:				_ Conta	Contact Phone Number: _ Time Discharge Discovered:				
				_ Time					
					Estimated Quantity of Rain:				
LOCATION OF DISCHARGE (indicate nearby street intersections, addresses, and/or landmarks for reference):									
WHERE W	AS DISCHA		ID? OPEN D	ОІТСН	STREAM	PIPE OUTFAL	L OTHER:		
WAS WATER FLOW OBSERVED?					NO	YES			
WAS FLOW SOLID OR PULSING?					SOLID	PULSING			
WAS A PHOTO TAKEN? NO			YES	(Please atta	ich a copy to fo	rm)			
ODOR:	NONE	MUSTY	SEWAGE	ROT	TEN EGGS	SOUR MILK	OTHER:		
COLOR:	CLEAR	RED	YELLOW	BROW	N GREE	N GREY	OTHER:		
CLARITY:	CLEAR	CLOUD	Y OPA	QUE					
WAS THERE AN:		OILY SHEEN GARBAGE/SEWAGE OTHER:		AGE	YES YES	NC	)		

ADDITIONAL INFORMATION TO ASSIST IN THE INVESTIGATION:

Follow up Investigation (to be completed by staff)   OUTFALL NO: INSPECTOR NAME	PHONE							
FIELD ANALYSIS:   WATER TEMP: °F / °C   pH: mg/l	CHLORINE (Total): mg/l COPPER: mg/l DETERGENTS: mg/l							
WAS A LABORATORY SAMPLE COLLECTED? (if yes attach copy of chain-of-custody record) COMMENTS:	NO YES							
DATA SHEET FILLED OUT BY: (signature):	DATE:							
Additional notes to file:								
Follow-up with Complainant:								

\_\_\_\_\_

## MCM #4 Appendix

- MCM #4 Project Plan
- BMP 4.1 Attachments
  - NPDES-permit2018.pdf
- BMP 4.2 Attachments
  - 2015MOU-LCCD.pdf

## MCM #4 Project Plan

## • BMP 4.1

## Description:

The permittee may not issue a building or other permit or final approval to those proposing or conducting earth disturbance activities requiring an NPDES permit unless the party proposing the earth disturbance has valid NPDES Permit coverage (i.e., not expired).

## Measurable Goal:

None

## Action Plan:

With regard to Construction Site Stormwater Runoff Control, West Earl Township will rely on DEP's statewide program for issuing NPDES Permits for Stormwater Discharges Associated with Construction Activities (through the Lancaster County Conservation District) to satisfy all requirements under MCM #4 and all requirements under BMPs #1 through #3 of MCM #5. In this case, West Earl Township is not required as a condition of their NPDES permit to implement any of the BMPs listed under MCM #4 nor any of the first three BMPs listed under MCM #5 in Appendix A of the Authorization to Discharge.

• BMP 4.2

## Description:

A municipality or county which issues building or other permits shall notify DEP or the applicable county conservation district (CCD) within 5 days of the receipt of an application for a permit involving an earth disturbance activity consisting of one acre or more.

## Measurable Goal:

None

## Action Plan:

**None Specified** 

• BMP 4.3

## Description:

Enact, implement and enforce an ordinance or SOP to require the implementation and maintenance of E&S control BMPs, including sanctions for non-compliance, as applicable.

## Measurable Goal:

- Municipal permittees shall enact, implement, and enforce an ordinance to require the implementation of E&S control BMPs, including sanctions for non-compliance. All municipal permittees shall submit a copy of an ordinance that is consistent with DEP's 2022 Model Stormwater Management Ordinance (3800-PM-BCW0100j) as an attachment to an Annual MS4 Status Report by September 30, 2022 (existing permittees) or the fourth (4th) Annual MS4 Status Report following approval of coverage under this General Permit (new permittees).
- Permittees that lack the authority to enact ordinances shall develop, implement and enforce an SOP to require the implementation and maintenance of E&S control BMPs by September 30, 2022 (existing permittees) or the first Annual MS4 Status Report following approval of coverage under this General Permit (new permittees).

## Action Plan:

A copy of the Township's Stormwater Ordinance can be downloaded and printed at

www.westearltwp.org or can be viewed at the Township office.



JUN 2 2 2018 Candie Johnson West Earl Township Lancaster County PO Box 725 Brownstown, PA 17508

Re: PAG-13 General Permit Approval West Earl Township MS4 NPDES Permit No. PAG133535 Authorization ID No. 1202679 West Earl Township, Lancaster County

Dear Ms. Johnson:

The Department of Environmental Protection (DEP) has reviewed your Notice of Intent (NOI) to operate under the PAG-13 General NPDES Permit and has determined that you are eligible for coverage under the statewide General Permit. Your permit is enclosed.

The statewide General Permit expires on March 15, 2023. However, your coverage under the General Permit does not expire unless your coverage is revoked by DEP. A Notice of Intent (NOI) to renew your coverage is no longer required. When the statewide General Permit is renewed, the permit will be published in the Pennsylvania Bulletin. Following publication of the final renewed General Permit, you must comply with the terms and conditions of the renewed General Permit or otherwise submit an application for an individual NPDES permit. You may submit an application for a waiver to DEP anytime during the term of your General Permit coverage if, due to changing circumstances, you become eligible for a waiver.

The General Permit contains numerous scheduled requirements that may apply to you. Please review DEP's "Summary of Scheduled Requirements" document, available at <u>www.elibrary.dep.state.pa.us</u> (select "Permit and Authorization Packages", "Clean Water", and "PAG-13 MS4 General Permit").

The submission of Annual MS4 Status Reports is required by the General Permit. You must submit the annual reports to the DEP office that approved your General Permit coverage by September  $30^{\text{th}}$  of each year to describe activities conducted under the General Permit during the period of July 1 – June 30. You must also submit the annual installment payment of \$500 to DEP's Bureau of Clean Water by September  $30^{\text{th}}$  of each year. The first annual report and annual payment is due by September 30, 2018. The first annual report will cover the period from the end of your last reporting period under the previous PAG-13 General Permit until June 30, 2018.

You are required to comply with the Pollutant Control Measures (PCMs) contained in Appendix B for the surface waters identified in DEP's MS4 Requirements Table (see <u>www.dep.pa.gov/MS4</u>). You are required to submit to DEP the following: 1) a storm sewershed map for outfalls that discharge to the impaired surface waters; 2) an inventory of all suspected and known sources of the pollutant(s) of concern within the storm sewershed(s); and 3) a report documenting an investigation of each suspected source. Deadlines for submission of this

documentation as attachments to future Annual MS4 Status Reports are established in the Appendices. You must also enact an ordinance that requires proper management of animal wastes on property owned by the permittee. If an ordinance or SOP already exists that controls animal wastes, it must be attached to the first Annual MS4 Status Report due following the first year of coverage unless the ordinance or SOP was attached to the NOI for General Permit coverage). If a new ordinance or SOP is enacted or adopted, the new ordinance or SOP must be attached to the first Annual MS4 Status Report due following the to the first Annual MS4 Status Report attached to the 30, 2022.

DEP has reviewed your Pollutant Reduction Plan(s) (PRP(s)). Your PRP(s) are hereby approved. The following elements of your PRP(s) will be evaluated by DEP during the permit term:

- There is no PRP Planning Area shown on the map which is outside of the Urbanized Area, nor is there any discussion of such Planning Area in the text. The PRP Planning Area can include areas outside the Urbanized Area which drain into the MS4. Please address this issue and make any needed changes to the map and loading calculations.
- Existing and proposed BMPs were used as credit to reduce the baseline load. Please confirm that the drainage areas being treated by the existing BMPs are included in the existing load calculations. Any areas that are not included in the existing load calculations can't be used to reduce the baseline load.
- The plan states that there were pockets of medium-density residential land that does not drain to any type of MS4 infrastructure, but drain as incidental dispersion into surrounding lands. These areas were parsed out of the Planning Area. Any stormwater that enters the UA and is upstream of MS4 infrastructure is assumed to discharge to a surface water at some point. Therefore, areas of incidental dispersion may not be parsed. Please make any needed changes to the map and loading calculations.
- The PRP is proposing a riparian buffer project, to meet the reduction requirements. Please be advised that in accordance with current Chesapeake Bay Program guidelines, a buffer may treat a maximum area equal to twice the proposed buffer area (i.e. twice the length multiplied by buffer width). However, a site-specific evaluation may justify the treatment of a larger drainage area. If necessary, please revise the calculations to reduce the treated area, and/or provide a site-specific evaluation.
- Your plan proposes a stream restoration BMP. Please be advised that the final designs for stream restoration BMPs should be in general accordance with DEP's "Considerations of Stream Restoration Projects" document, available at www.dep.pa.gov/ms4.

During the permit term, DEP will evaluate your progress in implementing the PRP(s). If progress is not satisfactory DEP may require you to obtain coverage under an individual permit.

You are required to implement the load reduction requirements established in Appendices D and E of the General Permit within five years, and you must submit a report demonstrating that you have met these requirements as an attachment to the first Annual MS4 Status Report that is due following completion of the 5th year of General Permit coverage.

Any person aggrieved by this action may appeal the action to the Environmental Hearing Board (Board), pursuant to Section 4 of the Environmental Hearing Board Act, 35 P.S. § 7514, and the Administrative Agency Law, 2 Pa.C.S. Chapter 5A. The Board's address is:

Environmental Hearing Board Rachel Carson State Office Building, Second Floor 400 Market Street P.O. Box 8457 Harrisburg, PA 17105-8457

TDD users may contact the Environmental Hearing Board through the Pennsylvania Relay Service, 800-654-5984.

Appeals must be filed with the Board within 30 days of receipt of notice of this action unless the appropriate statute provides a different time. This paragraph does not, in and of itself, create any right of appeal beyond that permitted by applicable statutes and decisional law.

A Notice of Appeal form and the Board's rules of practice and procedure may be obtained online at <u>http://ehb.courtapps.com</u> or by contacting the Secretary to the Board at 717-787-3483. The Notice of Appeal form and the Board's rules are also available in braille and on audiotape from the Secretary to the Board.

IMPORTANT LEGAL RIGHTS ARE AT STAKE. YOU SHOULD SHOW THIS DOCUMENT TO A LAWYER AT ONCE. IF YOU CANNOT AFFORD A LAWYER, YOU MAY QUALIFY FOR FREE PRO BONO REPRESENTATION. CALL THE SECRETARY TO THE BOARD AT 717-787-3483 FOR MORE INFORMATION. YOU DO NOT NEED A LAWYER TO FILE A NOTICE OF APPEAL WITH THE BOARD.

## IF YOU WANT TO CHALLENGE THIS ACTION, YOUR APPEAL MUST BE FILED WITH AND RECEIVED BY THE BOARD WITHIN 30 DAYS OF RECEIPT OF NOTICE OF THIS ACTION.

If you have any questions, please contact Jacob Rakowsky at 717.705.4918.

Sincerely,

Maria & Benk

Maria D. Bebenek, P.E. Program Manager Clean Water Program

Enclosures

cc: Becker Engineering, LLC LandStudies, Inc. Central Office, Division of Operations

#### COMMONWEALTH OF PENNSYLVANIA DEPARTMENT OF ENVIRONMENTAL PROTECTION BUREAU OF CLEAN WATER

## 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. PAG133535

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.,

#### West Earl Township Lancaster County PO Box 725 Brownstown, PA 17508

is authorized to discharge from a regulated small municipal separate storm sewer system (MS4) located in **West Earl Township, Lancaster County** to **Cocalico Creek, Conestoga River, Unnamed Tributary to Cocalico Creek, Unnamed Tributary to Conestoga River, and Unnamed Tributary to Groff Creek** in Watershed(s) **7-J** 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 JULY 1, 2018. 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:

- 1. 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, the permittee must submit an application for an individual NPDES permit within 90 days of publication of the final General Permit.
- 3. 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.
- 4. 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.
- 6. The permittee shall achieve pollutant loading reductions for sediment, Total Phosphorus and/or Total Nitrogen as specified in **Appendices D and E** by <u>June 30, 2023</u>.

#### This approval of coverage is authorized by:

Maria Blank

Maria D. Bebenek, P.E. Clean Water Program Manager Southcentral Regional Office Department 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)

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*., the Department of Environmental Protection (DEP) hereby authorizes, by this General Permit, the discharge of stormwater from regulated small municipal separate storm sewer systems (MS4s) to surface waters in accordance with effluent limitations, monitoring requirements and other conditions set forth herein.

Eligible dischargers who wish to be covered under this General Permit must submit a Notice of Intent (NOI) to DEP in accordance with the requirements of this General Permit, using the NOI form provided by DEP.

No new discharge may be commenced under this General Permit until the applicant complies with all of the following:

- 1. The applicant has submitted a complete Notice of Intent (NOI) in accordance with the requirements of this General Permit, using a NOI form provided by DEP.
- 2. The applicant has received a signed copy of the Approval of Coverage from DEP that authorizes coverage under the PAG-13 General Permit.

DEP may deny coverage under the PAG-13 General Permit and require submission of an application for an individual permit based on a review of the NOI or other relevant information, including monitoring data.

Once coverage is approved under the PAG-13 General Permit, coverage will continue when the PAG-13 General Permit is reissued, unless the permittee is otherwise notified by DEP. The submission each year of the Annual MS4 Status Report in accordance with Part A III.D of the General Permit shall constitute the permittee's NOI for continued coverage under the General Permit unless DEP notifies the permittee in writing that the submission of a new NOI is required.

#### SCOPE

The PAG-13 General Permit is intended to provide NPDES permit coverage to regulated small MS4s for discharges of stormwater to surface waters. Permittees operating under this General Permit have been either automatically designated as regulated by the U.S. Environmental Protection Agency (EPA) pursuant to 40 CFR § 122.32(a)(1) or designated as regulated by DEP under 40 CFR § 122.32(a)(2).

#### NOI REQUIREMENTS

#### **Deadlines for NOI**

MS4 permittees with existing NPDES permit coverage, MS4s that previously have been waived by DEP, and MS4s newly designated as a result of the 2010 census that are seeking coverage under this PAG-13 General Permit or a waiver must submit and DEP must receive an administratively complete and acceptable NOI by <u>September 16, 2017</u>. MS4s authorized to discharge under an individual NPDES permit who are seeking coverage under this General Permit may continue to discharge in accordance with the individual permit while their NOI and associated documents are being reviewed by DEP.

#### Contents of the NOI

The NOI shall be signed in accordance with the signatory requirements of this General Permit and shall contain the information required in the NOI form.

#### Where to Submit the NOI

An NOI is to be submitted to the regional office of DEP that has jurisdiction over the county where the MS4 is located.

#### DISCHARGES AUTHORIZED BY THIS GENERAL PERMIT

Except where specifically prohibited under the "Discharges Not Authorized by this General Permit" section, this General Permit authorizes the discharge of stormwater to surface waters from regulated small MS4s. In addition, the following non-stormwater discharges are authorized by this General Permit as long as such discharges do not cause or contribute to pollution as defined in Pennsylvania's Clean Streams Law:

- 1. Discharges or flows from firefighting activities.
- 2. Discharges from potable water sources including water line flushing and fire hydrant flushing, if such discharges do not contain detectable concentrations of Total Residual Chlorine (TRC).
- 3. Non-contaminated irrigation water, water from lawn maintenance, landscape drainage and flows from riparian habitats and wetlands.
- 4. Diverted stream flows and springs.
- 5. Non-contaminated pumped ground water and water from foundation and footing drains and crawl space pumps.
- 6. Non-contaminated HVAC condensation and water from geothermal systems.
- 7. Residential (i.e., not commercial) vehicle wash water where cleaning agents are not utilized.
- 8. Non-contaminated hydrostatic test water discharges, if such discharges do not contain detectable concentrations of TRC.

In the event existing outfall(s) are identified during the term of General Permit coverage that were not identified on maps submitted as part of the NOI (where required), the permittee shall identify the outfall(s) in the subsequent Annual MS4 Status Report that is submitted to the DEP office that approved permit coverage. In the event new stormwater outfalls are proposed, the permittee shall submit written notification to the DEP office that approved permit coverage at least 60 days prior to commencing a discharge, unless such discharges would meet one or more of the criteria specified in the "Discharges Not Authorized By This General Permit" section, in which case an individual permit application must be submitted and an individual permit obtained prior to commencing a discharge.

#### DISCHARGES NOT AUTHORIZED BY THIS GENERAL PERMIT

The following discharges are <u>not</u> authorized under the PAG-13 General Permit, and DEP may deny coverage under the General Permit when one or more of the following conditions exist:

- 1. The discharge, individually or in combination with other similar discharges, is or has the potential to be a contributor of pollution, as defined in the Pennsylvania Clean Streams Law, which is more appropriately controlled under an individual permit.
- 2. The discharger is not, or will not be, in compliance with one or more of the conditions of the General Permit.
- 3. 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.
- 4. A change has occurred in the availability of demonstrated technology or practices for the control or abatement of pollutants applicable to the point source.
- 5. Categorical point source effluent limitations are promulgated by the EPA for those point sources covered by the General Permit.
- 6. The discharge is not, or will not, result in compliance with an applicable effluent limitation or water quality standard.

- 7. Other point sources within the MS4 require issuance of an individual permit, and issuance of both an individual and a General Permit for the facility would constitute an undue administrative burden on DEP.
- 8. The discharge from the regulated small MS4 is or would be to a surface water classified as a High Quality (HQ) or an Exceptional Value (EV) water under 25 Pa. Code Chapter 93 (relating to Water Quality Standards).
- 9. The discharge contains toxic or hazardous pollutants, 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 surface waters.
- 10. The discharge individually or cumulatively has the potential to cause significant adverse environmental impact or have been determined by DEP to have caused impairment to the surface waters receiving the discharge(s).
- 11. The discharge would adversely affect a listed endangered or threatened species or its critical habitat.
- 12. The MS4 is covered by an individual permit, and coverage under this General Permit would result in less stringent effluent limitations or terms and conditions.
- 13. DEP determines that the denial of coverage is necessary for any other reason to ensure compliance with the Federal Clean Water Act, the Pennsylvania Clean Streams Law or DEP regulations.
- 14. The regulated MS4 is a large or medium MS4 as defined in 40 CFR §§ 122.26(b)(4) or (7).
- 15. The permittee is implementing a local or tribal Qualifying Local Program (QLP) pursuant to 40 CFR 122.44(s) that is not the state's program as outlined in 25 Pa. Code Chapter 102.
- 16. The regulated small MS4 is assigned a wasteload allocation (WLA) (either specific to the MS4 or general) in a Total Maximum Daily Load (TMDL) approved by the U.S. Environmental Protection Agency (EPA) for local surface waters, where the pollutant(s) of concern are nutrients (i.e., nitrogen and/or phosphorus) and/or sediment (i.e., siltation or total suspended solids), and the MS4 is identified in the "MS4 Requirements Table" (see definitions) as needing to complete a TMDL Plan.
- The regulated small MS4 1) discharges to waters impaired for nutrients and/or sediment without an EPA-approved TMDL or discharges to the Chesapeake Bay watershed; 2) is identified in DEP's "MS4 Requirements Table"; and 3) has not developed and submitted a Pollutant Reduction Plan (PRP) with the NOI to reduce pollutant loading for the cause(s) of impairment.
- 18. The discharge will be commingled with sources of non-stormwater unless such non-stormwater discharges are identified in the "Discharges Authorized by this General Permit" section of this General Permit or are in compliance with a separate NPDES permit and do not cause or contribute to pollution.
- 19. Stormwater discharges associated with industrial activity as defined in 40 CFR §§ 122.26(b)(14)(i)-(ix) and (xi).
- 20. Stormwater discharges associated with construction activity as defined in 40 CFR § 122.26(b)(14)(x) or 40 CFR § 122.26(b)(15).

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

- If the permittee submits a timely NOI for coverage under this General Permit (i.e., received by DEP on or before September 16, 2017) and the previous General Permit expires, the permittee is authorized to continue discharging under the terms and conditions of this General Permit. The permittee must comply with all terms and conditions in this General Permit with the exception of requirements that do not take effect until DEP's approval of coverage, as specified in this General Permit.
- 2. DEP may require a permittee with discharge(s) authorized by this General Permit to apply for and obtain an individual permit by notifying the permittee in writing that an individual permit application is required. Any interested person may petition DEP to take action under this paragraph.

DEP's notice will include the following:

- A brief statement of the reason(s) for this decision;
- An individual permit application form;
- A deadline for the owner or operator to submit the application; and
- A statement that on the effective date of the individual permit, coverage under this General Permit shall automatically terminate.

If a permittee fails to submit an individual permit application required by DEP under this paragraph in a timely manner, then the applicability of this General Permit to the permittee is automatically terminated at the end of day specified for submission of the application.

- 3. Any person authorized to discharge by this General Permit may request to be excluded from the coverage of this General Permit by applying for an individual permit.
- 4. When an individual permit is issued to a person whose discharge(s) are covered by this General Permit, the applicability of this General Permit is automatically terminated on the effective date of the individual permit. When an individual permit is denied to a person whose discharge(s) are covered by this General Permit, the person may continue discharging if all eligibility requirements under this General Permit are met.
- 5. This General Permit will expire 5 years from the date of its issuance. DEP will publish a notice in the *Pennsylvania Bulletin* of the draft reissued General Permit or of any amendments to this General Permit. After a comment period, notice of the final reissued or amended General Permit will be published in the *Pennsylvania Bulletin*. 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, reissued or amended General Permit, the permittee must submit an application for an individual permit within 90 days of publication of the final renewed, reissued or amended General Permit.
- 6. If DEP decides to administratively extend this General Permit, DEP will publish a notice in the *Pennsylvania Bulletin*. The terms and conditions of the General Permit will continue during the period of administrative extension. Permittees with existing coverage under the General Permit will continue to have coverage, unless otherwise notified by DEP. DEP will not approve new coverage under the General Permit during the period of administrative extension.
- 7. Following approval of coverage under this General Permit, if the permittee encounters a condition affecting eligibility under this General Permit as identified above ("Discharges Not Authorized by this General Permit") and does not provide a remedy to correct that condition, coverage under this General Permit may be revoked in writing by DEP, and DEP may require the permittee to obtain an individual permit. Coverage under this General Permit may be revoked if there is evidence indicating potential or actual adverse impacts to water quality as a result of the permittee's discharge(s).
- 8. No condition of this General Permit shall release the permittee from any responsibility or requirements under other federal or Pennsylvania environmental statutes or regulations or local ordinances.
- 9. Following initial coverage under this General Permit, the submission of an Annual MS4 Status Report 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 is authorized to discharge in accordance with the terms of the General Permit immediately upon submission of the Annual MS4 Status Report.
- 10. The permittee shall comply with the requirements of this General Permit in accordance with the schedules contained herein. A summary of the scheduled requirements contained in this General Permit is available (see Document ID No. 3800-PM-BCW0100I).

General Permit (PAG-13) Issued

Lee A. McDonnell, P.E. Director Bureau of Clean Water

Ву

Effective: March 16, 2018

Expires: March 15, 2023

#### PART A

#### EFFLUENT LIMITATIONS, REPORTING AND RECORDKEEPING REQUIREMENTS

#### I. EFFLUENT LIMITATIONS

- A. This General Permit establishes effluent limitations in the form of implementation of a Stormwater Management Program (SWMP), as specified in Part C I of this General Permit, to reduce the discharge of pollutants from the regulated small MS4 to the maximum extent practicable. The permittee shall comply with Minimum Control Measures (MCMs) and best management practices (BMPs) in Part C I of this General Permit, which constitutes compliance with the standard of reducing pollutants to the maximum extent practicable.
- B. All discharges from regulated small MS4s must comply with all applicable requirements established in accordance with 25 Pa. Code Chapters 91-96, 102, and 105 of DEP's rules and regulations. For all MS4s covered under this General Permit, DEP may, upon written notice, require additional BMPs or other control measures to ensure that the water quality standards of the surface waters receiving stormwater discharges are attained.

#### II. DEFINITIONS

Best Management Practices (BMPs) means schedules of activities, prohibitions of practices, maintenance procedures and other management practices to prevent or reduce pollutant loading to surface waters of this Commonwealth. The term includes treatment requirements, operating procedures and practices to control plant site runoff, spillage or leaks, sludge or waste disposal, or drainage from raw material storage. The term includes activities, facilities, measures, planning or procedures used to minimize accelerated erosion and sedimentation and manage stormwater to protect, maintain, reclaim and restore the quality of waters and the existing and designated uses of waters within this Commonwealth before, during and after earth disturbance activities. (25 Pa. Code § 92a.2)

Clean Water Act (CWA) means the Federal Water Pollution Control Act, as amended, 33 U.S.C.A. §§ 1251 - 1387.

*Cleaning Agent* means any product, substance or chemical other than water that is used to clean the exterior surface of vehicles.

*Designated Uses* are 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. (25 Pa. Code § 93.1)

*Dry Weather* means a condition in which there are no precipitation, snowmelt, drainage or other events producing a stormwater discharge for more than 48 consecutive hours.

*Existing Permittee* means any entity that has been designated as a regulated small MS4 and has previously obtained permit coverage under the PAG-13 General Permit or obtained an Individual NPDES MS4 Permit.

*Existing Uses* are 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. (25 Pa. Code § 93.1)

*Illicit Connection* means any physical connection to a municipal separate storm sewer system that can convey illicit discharges into the system and/or is not authorized or permitted by the permittee.

*Illicit Discharge* means any discharge to a municipal separate storm sewer that is not composed entirely of stormwater, except non-stormwater discharges as described in the "Discharges Authorized by this General Permit" section of this General Permit. 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 municipal separate storm sewer system. Illicit discharges can be accidental or intentional.

*Impaired Waters* means surface waters that fail to attain one or more of its designated uses under 25 Pa. Code Chapter 93 and as listed in Categories 4 and 5 of Pennsylvania's Integrated Water Quality Monitoring and Assessment Report.

Integrated Water Quality Monitoring and Assessment Report means the report published every other year by DEP to report on the conditions of Pennsylvania's surface waters to satisfy sections 305(b) and 303(d) of the CWA.

*Intermittent Stream* means a body of water flowing in a channel or bed composed primarily of substrates associated with flowing water, which, during periods of the year, is below the local water table and obtains its flow from both surface runoff and groundwater discharges. (25 Pa. Code § 92a.2)

Load Allocation means 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) means 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.

*MS4 Requirements Table* is a compilation of information regarding Pennsylvania MS4s, surface waters that receive stormwater discharges from MS4s, surface water impairments and TMDLs that is posted to DEP's website, <u>www.dep.pa.gov/MS4</u>. The MS4 Requirements Table has been assembled by DEP to assist MS4 permittees in determining applicable requirements for the development of plans and implementation of BMPs, as well as eligibility for the PAG-13 General Permit. In general, the MS4 Requirements Table will be updated prior to each renewal of this General Permit based on DEP's latest published Integrated Water Quality Monitoring and Assessment Report.

*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): (i) Owned or operated by 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, or an Indian tribe or an authorized Indian tribal organization, or a designated and approved management agency under section 208 of the CWA that discharges to surface waters; (ii) Designed or used for collecting or conveying stormwater; (iii) Which is not a combined sewer; and (iv) Which is not part of a Publicly Owned Treatment Works (POTW) as defined at 40 CFR 122.2. (25 Pa. Code § 92a.32(a) and 40 CFR § 122.26(b)(8))

*Municipal Separate Storm Sewer System (MS4)* means 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)(4), (b)(7), and (b)(16), respectively, or designated under 40 CFR § 122.26(a)(1)(v). (25 Pa. Code § 92a.32(a) and 40 CFR § 122.26(b)(18))

*Municipality* means a city, town, borough, county, township, school district, institution, authority or other public body created by or pursuant to State law and having jurisdiction over disposal of sewage, industrial wastes or other wastes. (25 Pa. Code § 92a.2)

*New Permittee* means any entity that has been designated as a regulated small MS4 and has not previously obtained permit coverage under the PAG-13 General Permit or obtained an Individual NPDES MS4 Permit.

*NOI* means the Notice of Intent for coverage under the NPDES General Permit for Stormwater Discharges from Small Municipal Separate Storm Sewer Systems.

*Non-Municipal Permittee* means a regulated small MS4 that is not a municipality, e.g., military bases, large hospital or prison complexes, and highways and other thoroughfares.

*Non-Structural BMPs* means actions that involve management and source controls such as: (1) policies and ordinances that provide requirements and standards to direct growth to identified areas, promote redevelopment, 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) education programs for developers and the public about minimizing water quality impacts; (3) measures such as minimizing the percentage of impervious area after development, use of measures to minimize directly connected impervious areas, street sweeping, and source control measures such as good housekeeping, maintenance, and spill prevention; and other BMPs as referenced in Chapter 5 of the Pennsylvania Stormwater BMP Manual (363-0300-002).

Ordinance means a law enacted by the government of a municipality.

*Outfall* means a point source as defined by 40 CFR § 122.2 at the point where a municipal separate storm sewer discharges to surface waters and does not include open conveyances connecting two municipal separate storm sewers, or pipes, tunnels or other conveyances which connect segments of the same stream or other surface waters and are used to convey surface waters. (25 Pa. Code § 92a.32(a) and 40 CFR § 122.26(b)(9))

*Owner or Operator* means the owner or operator of any "facility" or "activity" subject to regulation under the NPDES program. (25 Pa. Code § 92a.3(b)(1) and 40 CFR § 122.2)

*Permittee* means the owner or operator of a regulated small MS4 authorized to discharge under the terms of this General Permit.

*Point Source* means a 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 (CAAP), Concentrated Animal Feeding Operation (CAFO), landfill leachate collection system, or vessel or other floating craft from which pollutants are or may be discharged. (25 Pa. Code § 92a.2)

*Pollutant* means 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 Pennsylvania Clean Streams Law, 35 P.S. § 691.1. (25 Pa. Code § 92a.2)

*Qualifying Development or Redevelopment Project* means an earth disturbance activity that requires an NPDES permit for stormwater discharges associated with construction activity per 25 Pa. Code Chapter 102.

*Regulated Small MS4* means 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 subset of "small MS4s" as defined in this section.

*Riparian Forest Buffer* means 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.

*Small Municipal Separate Storm Sewer System (Small MS4)* means an MS4, as defined in this section, that is not a large or medium MS4 pursuant to 40 CFR §§ 122.26(b)(4) and 122.26(b)(7). The term small MS4 includes systems similar to separate storm sewer systems in municipalities, 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. (25 Pa. Code § 92a.32(a) and 40 CFR § 122.26(b)(16))

Standard Operating Procedure (SOP) means a policy or set of procedures that are enacted by a non-municipal permittee to implement a stormwater management program.

*Storm Sewershed* means the land area that drains to an individual MS4 outfall from within the jurisdiction of the MS4 permittee. The term "combined storm sewershed" means the drainage areas of all MS4 outfalls that discharge to a specific surface water or to waters within the Chesapeake Bay watershed.

Stormwater means runoff from precipitation, snow melt runoff and surface runoff and drainage. "Stormwater"

has the same meaning as "storm water." (25 Pa. Code § 92a.2)

*Structural BMPs* means stormwater storage and management practices including, but not limited to, wet ponds and extended detention outlet structures; filtration practices such as grassed swales, sand filters and filter strips; infiltration practices such as infiltration basins and infiltration trenches; and other BMPs as referenced in Chapter 6 of the Pennsylvania Stormwater BMP Manual (363-0300-002).

*Surface Waters* means 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. (25 Pa. Code § 92a.2)

*Total Maximum Daily Load (TMDL)* means the sum of individual waste load allocations for point sources, load allocations for nonpoint sources and natural quality and a margin of safety expressed in terms of mass per time, toxicity or other appropriate measures. (25 Pa. Code § 96.1)

*Urbanized Area (UA)* means 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.

*Wasteload Allocation (WLA)* means the portion of a surface water's loading capacity that is allocated to existing and future point source discharges. (25 Pa. Code § 96.1)

*Water Quality Criteria* means numeric concentrations, levels or surface water conditions that need to be maintained or attained to protect existing and designated uses. (25 Pa. Code § 93.1)

*Water Quality Standards* means the combination of water uses to be protected and the water quality criteria necessary to protect those uses. (25 Pa. Code § 92a.2)

#### III. MONITORING, REPORTING AND RECORDKEEPING

- A. Where samples are collected and analyzed or measurements are taken under this General Permit, the permittee shall assure:
  - 1. Samples and measurements taken for the purpose of monitoring shall be representative of the monitored activity. (25 Pa. Code § 92a.3(c) and 40 CFR § 122.41(j)(1))
  - 2. Records of monitoring information shall include (25 Pa. Code § 92a.3(c) and 40 CFR § 122.41(j)(3)):
    - a. The date, exact place, and time of sampling or measurements.
    - b. The individual(s) who performed the sampling or measurements.
    - c. The date(s) analyses were performed.
    - d. The individual(s) who performed the analyses.
    - e. The analytical techniques or methods used.
    - f. The results of such analysis.
  - Monitoring must be conducted according to test procedures approved under 40 CFR Part 136 unless another method is required under 40 CFR Subchapters N or O. (25 Pa. Code § 92a.3(c) and 40 CFR § 122.41(j)(4))
- B. Records Retention All records of monitoring activities and results, copies of all plans and reports required by this General Permit, and records of all data used to complete the application for this General Permit shall be retained by the permittee for at least 5 years from the date of the sample measurement, report or application. Such records must be submitted to DEP upon request or as required for annual reports. The permittee must make records available to the public at reasonable times during regular business hours. (25 Pa. Code § 92a.3(c), 40 CFR §§ 122.34(g)(2) and 122.41(j)(2))

- C. Proper Operation and Maintenance (O&M) The permittee shall at all times properly operate and maintain all facilities and systems of treatment and control (and related appurtenances), including stormwater BMPs, that are installed or used by the permittee to achieve compliance with the conditions of this permit. (25 Pa. Code § 92a.3(c) and 40 CFR § 122.41(e))
- D. Reporting Requirements
  - 1. The permittee shall submit a complete Annual MS4 Status Report using DEP's annual report template (3800-FM-BPNPSM0491) to the DEP regional office that issued General Permit coverage approval by September 30 of each year.
    - a. For existing permittees, the first annual report submitted to DEP under this General Permit shall have a reporting period starting from the end of the latest annual or progress report period (under the previous General Permit) to June 30, 2018. The first annual report is due by September 30, 2018. For new permittees, the first annual report is due by September 30 following the first year of General Permit coverage.
    - b. Following the first annual report, the reporting period shall thereafter be July 1 June 30, and the report shall be due by September 30.
  - 2. In addition to the Annual MS4 Status Report submitted to the DEP regional office, a check or money order in the amount of \$500.00, which is an installment of the NOI fee, shall be submitted to DEP's Central Office, made payable to "Commonwealth of Pennsylvania." The fee shall be submitted by September 30 of each year to the following address:

PA Department of Environmental Protection Bureau of Clean Water Rachel Carson State Office Building 400 Market Street, PO Box 8466 Harrisburg, PA 17105-8466

For existing permittees, the first fee is due by September 30, 2018. For new permittees, the first fee is due by September 30 following the first year of General Permit coverage.

- 3. The permittee shall submit the Annual MS4 Status Report and fee to DEP electronically upon receipt of written notification from DEP.
- 4. Unanticipated Non-Compliance or Potential Pollution Reporting
  - a. Immediate Reporting The permittee shall immediately report any incident causing or threatening pollution in accordance with the requirements of 25 Pa. Code §§ 91.33 and 92a.41(b) listed below:
    - (i) If, because of an accident, other activity or incident a toxic substance or another substance which would endanger users downstream from the discharge, or would otherwise result in pollution or create a danger of pollution or would damage property, the permittee shall immediately notify DEP by telephone of the location and nature of the danger. Oral notification to the Department is required as soon as possible, but no later than 4 hours after the permittee becomes aware of the incident causing or threatening pollution.
    - (ii) If reasonably possible to do so, the permittee shall immediately notify downstream users of the waters of the Commonwealth to which the substance was discharged. Such notice shall include the location and nature of the danger.
    - (iii) The permittee shall immediately take or cause to be taken steps necessary to prevent injury to property and downstream users of the waters from pollution or a danger of pollution and, in addition, within 15 days from the incident, shall remove the residual substances contained thereon or therein from the ground and from the affected waters of this Commonwealth to the extent required by applicable law.

- b. The permittee shall report any non-compliance which may endanger health or the environment in accordance with the requirements of 40 CFR § 122.41(I)(6). These requirements include the following obligations:
  - (i) 24 Hour Reporting The permittee shall orally report any non-compliance with this permit which may endanger health or the environment within 24 hours from the time the permittee becomes aware of the circumstances.
  - (ii) Written Report A written submission shall also be provided within 5 days of the time the permittee becomes aware of any non-compliance which may endanger health or the environment. The written submission shall contain a description of the non-compliance and its cause; the period of non-compliance, including exact dates and times, and if the non-compliance has not been corrected, the anticipated time it is expected to continue; and steps taken or planned to reduce, eliminate, and prevent reoccurrence of the non-compliance.
  - (iii) Waiver of Written Report DEP may waive the written report on a case-by-case basis if the associated oral report has been received within 24 hours from the time the permittee becomes aware of the circumstances which may endanger health or the environment. Unless such a waiver is expressly granted by DEP, the permittee shall submit a written report in accordance with this paragraph. (25 Pa. Code § 92a.3(c) and 40 CFR § 122.41(l)(6)(iii))
- 5. Other Non-Compliance

The permittee shall report all instances of non-compliance not reported under paragraph D.4 of this section or specific requirements of compliance schedules, at the time Annual Reports are submitted, on the Non-Compliance Reporting Form (3800-FM-BPNPSM0440). The reports shall contain the information listed in paragraph D.4.b.(ii) of this section. (25 Pa. Code § 92a.3(c) and 40 CFR § 122.41(l)(7))

- 6. Signatory Requirements
  - a. Completed Annual Reports and all other reports, NOIs, and information submitted to DEP shall be signed and certified by either of the following applicable persons, as defined in 25 Pa. Code § 92a.22:
    - For a corporation by a principal executive officer of at least the level of vice president, or an authorized representative, if the representative is responsible for the overall operation of the facility from which the discharge described in the NPDES form originates.
    - For a partnership or sole proprietorship by a general partner or the proprietor, respectively.
    - For a municipality, state, federal or other public agency by a principal executive officer or ranking elected official.
  - b. If signed by a person other than the above, the person must be a duly authorized representative of the permittee. A person is a duly authorized representative only if:
    - The authorization is made in writing by a person described in paragraph a., above, and submitted to DEP.
    - The authorization specifies either an individual or a position having responsibility for the operation of the regulated system, 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 company. A duly authorized representative may thus be either a named individual or any individual occupying a named position.
  - c. Changes in Signatory Authorization If an authorization is no longer accurate because a different individual or position has responsibility for the overall operation of the system or facility, a new authorization satisfying the requirements of paragraphs 6.a and 6.b, above, must be submitted to DEP prior to or together with any reports, information or NOI to be signed by an authorized representative.

#### PART B

#### STANDARD CONDITIONS

#### I. MANAGEMENT REQUIREMENTS

A. Compliance

The permittee must comply with all conditions of this General Permit. Any permit non-compliance constitutes a violation of the Clean Water Act and is grounds for enforcement action; for permit termination, revocation and reissuance, or modification; or denial of a permit renewal application. (25 Pa. Code § 92a.3(c) and 40 CFR § 122.41(a))

- B. Permit Modification, Termination, or Revocation and Reissuance
  - 1. Permit coverage may be modified, terminated, or revoked and reissued during its term in accordance with Title 25 Pa. Code §§ 92a.72 and 92a.74 and 40 CFR § 122.41(f).
  - 2. The filing of a request by the permittee for a permit modification, revocation and reissuance, or termination, or a notification of planned changes or anticipated non-compliance, does not stay any General Permit condition. (25 Pa. Code § 92a.3(c) and 40 CFR § 122.41(f))
- C. Duty to Provide Information
  - 1. The permittee shall furnish to DEP, within a reasonable time, any information which DEP may request to determine whether cause exists for modifying, revoking and reissuing, or terminating coverage under this General Permit, or to determine compliance with this General Permit. (25 Pa. Code § 92a.3(c) and 40 CFR § 122.41(h))
  - 2. The permittee shall furnish to DEP, upon request, copies of records required to be kept by this General Permit. (25 Pa. Code § 92a.3(c) and 40 CFR § 122.41(h))
  - 3. Other Information Where the permittee becomes aware that it failed to submit any relevant facts in an NOI, or submitted incorrect information in an NOI or in any report to DEP, it shall promptly submit the correct and complete facts or information. (25 Pa. Code § 92a.3(c) and 40 CFR § 122.41(I)(8))
  - 4. The permittee shall give advance notice to the DEP office that approved permit coverage of any planned physical alterations or additions to the regulated small MS4. Notice is only required when: 1) the alteration or addition to a permitted facility may meet one of the criteria for determining whether a facility is a new source in 40 CFR § 122.29(b), or 2) the alteration or addition could significantly change the nature or increase the quantity of pollutants discharged. (25 Pa. Code § 92a.3(c) and 40 CFR § 122.41(l))

#### D. Duty to Mitigate

The permittee shall take all reasonable steps to minimize or prevent any discharge in violation of this permit that has a reasonable likelihood of adversely affecting human health or the environment. (25 Pa. Code § 92a.3(c) and 40 CFR § 122.41(d))

#### II. PENALTIES AND LIABILITY

- A. Violations of Permit Conditions
  - 1. Any person violating Sections 301, 302, 306, 307, 308, 318 or 405 of the CWA or any permit condition or limitation implementing such sections in a permit issued under Section 402 of the Act is subject to civil, administrative and/or criminal penalties as set forth in 40 CFR § 122.41(a)(2).
  - 2. Any person or municipality, who violates any provision of this General Permit; any rule, regulation or order of DEP; or any condition or limitation of any permit issued pursuant to the Clean Streams Law, is subject to criminal and/or civil penalties as set forth in Sections 602, 603 and 605 of the Clean Streams Law.
- B. Falsifying Information

Any person who does any of the following:

- Falsifies, tampers with, or knowingly renders inaccurate any monitoring device or method required to be maintained under this permit, or
- Knowingly makes any false statement, representation, or certification in any record or other document submitted or required to be maintained under this permit (including monitoring reports or reports of compliance or non-compliance)

Shall, upon conviction, be punished by a fine and/or imprisonment as set forth in 18 Pa.C.S.A. § 4904 and 40 CFR §§ 122.41(j)(5) and (k)(2).

- C. Liability
  - 1. Nothing in this General Permit shall be construed to relieve the permittee from civil or criminal penalties for non-compliance pursuant to Section 309 of the CWA or Sections 602, 603 or 605 of the Clean Streams Law.
  - 2. Nothing in this General Permit shall be construed to preclude the institution of any legal action or to relieve the permittee from any responsibilities, liabilities or penalties to which the permittee is or may be subject to under the CWA and the Clean Streams Law.
- D. Need to Halt or Reduce Activity Not a Defense

It shall not be a defense for the permittee in an enforcement action that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the conditions of this General Permit. (25 Pa. Code § 92a.3(c) and 40 CFR § 122.41(c))

#### III. OTHER RESPONSIBILITIES

A. Right of Entry

Pursuant to Section 5(b) of Pennsylvania's Clean Streams Law (35 P.S. § 691.5(b)), 25 Pa. Code Chapter 92a and 40 CFR § 122.41(i), the permittee shall allow authorized representatives of DEP and EPA, upon the presentation of credentials and other documents as may be required by law:

- To enter upon the permittee's premises where a regulated facility or activity is located or conducted, or where records must be kept under the conditions of this General Permit; (25 Pa. Code § 92a.3(c) and 40 CFR § 122.41(i)(1))
- 2. To have access to and copy, at reasonable times, any records that must be kept under the conditions of this General Permit; (25 Pa. Code § 92a.3(c) and 40 CFR § 122.41(i)(2))

- 3. To inspect at reasonable times any facilities, equipment (including monitoring and control equipment), practices or operations regulated or required under this General Permit; and (25 Pa. Code § 92a.3(c) and 40 CFR § 122.41(i)(3))
- 4. To sample or monitor at reasonable times, for the purposes of assuring permit compliance or as otherwise authorized by the Clean Water Act or the Clean Streams Law, any substances or parameters at any location. (25 Pa. Code § 92a.3(c) and 40 CFR § 122.41(i)(4))
- B. Transfer of Permits
  - Transfers by modification. Except as provided in paragraph B.2 of this section, permit coverage may be transferred by the permittee to a new owner or operator only if this General Permit coverage has been modified or revoked and reissued, or a minor modification made to identify the new permittee and incorporate such other requirements as may be necessary under the Clean Water Act. (25 Pa. Code § 92a.3(c) and 40 CFR § 122.61(a))
  - 2. Automatic transfers. As an alternative to transfers under paragraph 1 of this section, any NPDES permit may be automatically transferred to a new permittee if:
    - a. The current permittee notifies DEP at least 30 days in advance of the proposed transfer date in paragraph 2.b. of this section; (25 Pa. Code § 92a.3(c) and 40 CFR § 122.61(b)(1))
    - b. The notice includes the appropriate DEP transfer form signed by the existing and new permittees containing a specific date for transfer of permit responsibility, coverage and liability between them; (25 Pa. Code § 92a.3(c) and 40 CFR § 122.61(b)(2))
    - c. DEP does not notify the existing permittee and the proposed new permittee of its intent to modify or revoke and reissue coverage under this General Permit, the transfer is effective on the date specified in the agreement mentioned in paragraph 2.b. of this section; and (25 Pa. Code § 92a.3(c) and 40 CFR § 122.61(b)(3))
    - d. The new permittee is in compliance with existing DEP issued permits, regulations, orders and schedules of compliance, or has demonstrated that any non-compliance with the existing permits has been resolved by an appropriate compliance action or by the terms and conditions of the permit (including compliance schedules set forth in the permit), consistent with 25 Pa. Code § 92a.51 (relating to schedules of compliance) and other appropriate DEP regulations. (25 Pa. Code § 92a.71)
  - 3. In the event DEP does not approve transfer of coverage under this General Permit, the new owner or controller must submit a new NOI.
- C. Property Rights The approval of coverage under this General Permit does not convey any property rights of any sort, or any exclusive privilege. (25 Pa. Code § 92a.3(c) and 40 CFR § 122.41(g))
- D. Duty to Reapply The submission of the Annual MS4 Status Reports (3800-FM-BPNPSM0491) in accordance with Part A III.D of this General Permit constitutes the submission of an NOI for continued coverage under the General Permit. In addition, the permittee must submit an NOI (3800-PM-BCW0100b) to continue coverage under this General Permit when notified by DEP in writing.
- E. 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.

#### PART C

#### SPECIAL CONDITIONS

#### I. STORMWATER MANAGEMENT PROGRAM (SWMP)

- A. The permittee must develop, implement, and enforce an SWMP designed to reduce the discharge of pollutants from the MS4 to the maximum extent practicable, to protect water quality, and to satisfy the appropriate water quality requirements of the Clean Water Act and Pennsylvania Clean Streams Law, as described in paragraph B, below. There are six Minimum Control Measures (MCMs) that comprise the SWMP. Specific BMPs are identified under each MCM. The permittee shall demonstrate compliance with the SWMP through the submission of Annual MS4 Status Reports due by September 30 each year.
- B. Minimum Control Measures (MCMs)
  - 1. MCM #1: Public Education and Outreach on Stormwater Impacts. (25 Pa. Code § 92a.32(a) and 40 CFR § 122.34(b)(1))

The permittee shall 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.

- a. **BMP #1**: Develop, implement and maintain a written Public Education and Outreach Program.
  - (1) For new permittees, a written Public Education and Outreach Program (PEOP) shall be developed and implemented within one year following approval of coverage under this General Permit, and shall be re-evaluated each year thereafter and revised as needed.
  - (2) For existing permittees, the existing PEOP shall be reviewed annually 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.

- b. **BMP #2**: Develop and maintain lists of target audience groups that are present within the areas served by the permittee's regulated small MS4. In most communities, the target audiences shall include residents, businesses (including commercial, industrial and retailers), developers, schools, and municipal employees.
  - (1) For new permittees, the lists shall be developed within one year following approval of coverage under this General Permit, and reviewed and updated as necessary every year thereafter.
  - (2) For existing permittees, the lists shall continue to be reviewed and updated annually.
- c. BMP #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 description of the permittee's SWMP, and/or information about the permittee's 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., DEP and EPA stormwater websites, and any other sources that will be helpful to readers). The permittee must implement at least one of the following alternatives:
  - Publish and distribute in printed form a newsletter, a pamphlet or a flyer containing information consistent with this BMP.
  - Publish educational and informational items including links to DEP's and EPA's stormwater websites on the permittee's website.

- (1) 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.
- (2) In subsequent years, and for existing permittees, the list of items published and the content in these items shall be reviewed, updated, and maintained annually.

The permittee's publications shall contain stormwater educational information that addresses one or more of the six MCMs.

d. **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, presentations, conferences, meetings, fact sheets, giveaways, and storm drain stenciling.

All permittees shall select and utilize at least two distribution methods annually. These are in addition to BMP #3, above.

2. MCM #2: Public Involvement / Participation. (25 Pa. Code § 92a.32(a) and 40 CFR § 122.34(b)(2))

The permittee shall comply with applicable state and local public notice requirements when implementing a public involvement / participation program.

a. **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.

The PIPP for new permittees shall be developed and implemented within one year following approval of coverage under this General Permit. All permittees shall reevaluate the PIPP annually and make revisions as necessary.

The PIPP shall include, at a minimum:

- (1) 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.
- (2) 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 surface waters receiving the permittee's discharges.
- (3) Making Annual MS4 Status Reports and all other plans, programs, maps and reports required by this General Permit available to the public on the permittee's website, at the permittee's office(s), or by mail upon request.
- b. **BMP #2**: The permittee shall advertise to the public and solicit public input on the following documents prior to adoption or submission to DEP:
  - Stormwater Management Ordinances (for municipalities);
  - Standard Operating Procedures (SOPs) (for non-municipal entities); and
  - Pollutant Reduction Plans (PRPs), including modifications thereto.
  - (1) For Ordinances and SOPs, the permittee shall provide notice to the public; provide opportunities for public comment; document and evaluate the public comments; and document the permittee's responses to the comments prior to finalizing the documents. The permittee shall provide this documentation to DEP upon request.
  - (2) For PRPs, public participation requirements are specified in Appendices D and E of this General Permit.

- c. **BMP #3**: Regularly solicit public involvement and participation from the target audience groups using available distribution and outreach methods. This shall include an effort to solicit public reporting of suspected illicit discharges. Assist the public in their efforts to help implement the SWMP.
  - (1) The permittee shall solicit public involvement and participation from target audience groups on the implementation of the SWMP. The solicitation can take the form of public meetings or other events. The public shall be given notice in advance of each meeting or event. During the meetings or events, the permittee should present a summary of progress, activities, and accomplishments with implementation of the SWMP, and the permittee should provide opportunities for the public to provide feedback and input. The presentation can be made at specific MS4 events or during any other public meeting. Existing permittees shall conduct at least one public meeting that includes information on SWMP implementation by March 15, 2023; new permittees shall conduct at least one public meeting within 5 years following approval of General Permit coverage.
  - (2) The permittee shall document and report instances of cooperation and participation in MS4 activities; presentations the permittee made to local watershed organizations and conservation organizations; and similar instances of participation or coordination with organizations in the community.
  - (3) The permittee shall also document and report activities in which members of the public assisted or participated in the meetings and in the implementation of the SWMP, including education activities or organized implementation efforts such as cleanups, monitoring, storm drain stenciling, or others.
- 3. MCM #3: Illicit Discharge Detection and Elimination (IDD&E). (25 Pa. Code § 92a.32(a) and 40 CFR § 122.34(b)(3))

The permittee shall develop, implement and enforce a program to detect and eliminate illicit discharges into the permittee's regulated small MS4.

- a. **BMP #1**: The permittee shall develop and implement a written program for the detection, elimination, and prevention of illicit discharges into the regulated small MS4. 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. The 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.
  - 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) and for investigating illicit connections and discharges.

- Procedures for program documentation, evaluation and assessment. 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.
- Procedures for addressing information or complaints received from the public.
- (1) 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.
- (2) For existing permittees, the IDD&E program shall continue to be implemented and evaluated annually.
- b. BMP #2: The permittee shall develop and maintain map(s) that show permittee and urbanized area boundaries, the location of all outfalls and, if applicable, observation points, and the locations and names of all surface waters that receive discharges from those outfalls. Outfalls and observation points shall be numbered on the map(s).
  - (1) For new permittees, the map(s) must be developed and submitted to DEP as an attachment to an Annual MS4 Status Report by September 30, 2022 or the fourth (4<sup>th</sup>) Annual MS4 Status Report following approval of coverage under this General Permit, whichever is later.
  - (2) For existing permittees, the existing map(s) shall be updated and maintained as necessary during each year of coverage under this General Permit.
- c. BMP #3: In conjunction with the map(s) created under BMP #2 (either on the same map or on a different map), the permittee shall develop and maintain map(s) that show the entire storm sewer collection system within the permittee's jurisdiction that are owned or operated by the permittee (including roads, inlets, piping, swales, catch basins, channels, and any other components of the storm sewer collection system), including privately-owned components of the collection system where conveyances or BMPs on private property receive stormwater flows from upstream publicly-owned components.
  - (1) For new permittees, the map(s) must be developed and submitted to DEP as an attachment to an Annual MS4 Status Report by September 30, 2022 or the fourth (4<sup>th</sup>) Annual MS4 Status Report following approval of coverage under this General Permit, whichever is later.
  - (2) For existing permittees, the existing map(s) shall be updated and maintained as necessary during each year of coverage under this General Permit.
- d. BMP #4: The permittee shall conduct dry weather screenings of its MS4 outfalls to evaluate the presence of illicit discharges. If any illicit discharges are present, the permittee shall identify the source(s) and take appropriate actions to remove or correct any illicit discharges. The permittee shall also respond to reports received from the public or other agencies of suspected or confirmed illicit discharges associated with the storm sewer system, as well as take enforcement action as necessary. The permittee shall immediately report to DEP illicit discharges that would endanger users downstream from the discharge, or would otherwise result in pollution or create a danger of pollution or would damage property, in accordance with Part A III.D.4 of this General Permit.
  - (1) For new permittees, all of the identified regulated small MS4 outfalls shall be screened during dry weather at least twice within the 5-year period following approval of coverage under this General Permit.
  - (2) For existing permittees, each of the identified regulated small MS4 outfalls shall be screened during dry weather at least once by March 15, 2023. 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 during each year of permit coverage.
  - (3) If a discharge is observed from any outfall during dry weather screenings, the discharge shall be inspected for color, odor, floating solids, scum, sheen, and substances that result in observed

deposits in the surface waters. In addition, the discharge cannot contain substances that result in deposits in the receiving water or produce an observable change in the color, odor or turbidity of the receiving water.

If the discharge exhibits any of the above characteristics, or contains any other pollutants or causes an observed change in the surface waters, the permittee shall sample the discharge(s) for field and/or laboratory analysis of one or more common IDD&E parameters in order to determine if the dry weather flow is illicit. Possible parameters include, but are not limited to: pH, Conductivity, Fecal Coliform bacteria, Heavy Metals, Chemical Oxygen Demand (COD), 5-day Biochemical Oxygen Demand (BOD5), Total Suspended Solids (TSS), Total Dissolved Solids (TDS), Oil and Grease, Total Residual Chlorine (TRC) and Ammonia-Nitrogen. Proper quality assurance and quality control procedures shall be followed when collecting, transporting or analyzing water samples. The permittee shall retain sample results with the inspection report in accordance with Part A III.B of this General Permit.

- (4) Each time an outfall is screened, the permittee shall record outfall observations, regardless of the presence of dry weather flow. All outfall inspections shall be documented on the MS4 Outfall Field Screening Report form (3800-FM-BCW0521), or equivalent. The report must be signed by the inspector and be maintained by the permittee in accordance with Part A III.B of this General Permit. If an outfall flow is determined by the permittee to be illicit, the actions taken to identify and eliminate the illicit flow shall also be documented.
- (5) The permittee shall summarize the results of outfall inspections and actions taken to remove or correct illicit discharges in Annual MS4 Status Reports.
- (6) If the permittee determines that an outfall cannot be accessed due to safety or other reasons, the permittee shall establish an "observation point" at an appropriate location prior to the outfall where outfall field screening shall be performed. If observation points are established by the permittee, such points shall be identified on the map required under BMP #2 of this section.
- (7) Permittees must ensure that outfalls are properly maintained in accordance with Part C I.B.6.b of this General Permit.
- e. **BMP #5**: Enact a Stormwater Management Ordinance or SOP to implement and enforce a stormwater management program that includes prohibition of non-stormwater discharges to the regulated small MS4.
  - (1) Municipal permittees shall submit a copy of an ordinance that is consistent with DEP's 2022 Model Stormwater Management Ordinance (3800-PM-BCW0100j) as an attachment to an Annual MS4 Status Report by September 30, 2022 (existing permittees) or the fourth (4<sup>th</sup>) Annual MS4 Status Report following approval of coverage under this General Permit (new permittees).
  - (2) Permittees that lack the authority to enact ordinances (non-municipal permittees and counties) shall develop and adopt an SOP that prohibits non-stormwater discharges consistent with this General Permit, and shall submit a copy of the SOP as an attachment to an Annual MS4 Status Report by September 30, 2022 (existing permittees) or the fourth (4<sup>th</sup>) Annual MS4 Status Report following approval of coverage under this General Permit (new permittees).
  - (3) Notice must be provided to DEP of the approval of any waiver or variance by the permittee that allows an exception to non-stormwater discharge provisions of an ordinance or SOP. This notice shall be submitted in the next Annual MS4 Status Report following approval of the waiver or variance.
- f. **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.
  - (1) 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.

The permittee shall establish and promote a stormwater pollution reporting mechanism (e.g., a complaint line with message recording) by the end of the first year of General Permit coverage for the public to use to notify the permittee of illicit discharges, illegal dumping or outfall pollution. The permittee shall respond to all complaints in a timely and appropriate manner. The permittee shall document all responses, including the action taken, the time required to take the action, and whether the complaint was resolved successfully.

- (2) Educational outreach may 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.
- 4. MCM #4: Construction Site Stormwater Runoff Control. (25 Pa. Code § 92a.32(a) and 40 CFR § 122.34(b)(4))

Permittees with coverage under the PAG-13 General Permit must rely on DEP's program for issuing NPDES permits for stormwater discharges associated with construction activities to satisfy MCM #4. In addition to relying on the state NPDES permit program for stormwater discharges associated with construction activities, the permittee shall implement the BMPs identified below.

- a. **BMP #1**: The permittee may not issue a building or other permit or final approval to those proposing or conducting earth disturbance activities requiring an NPDES permit unless the party proposing the earth disturbance has valid NPDES Permit coverage (i.e., not expired) under 25 Pa. Code Chapter 102.
- b. BMP #2: A municipality or county which issues building or other permits shall notify DEP or the applicable county conservation district (CCD) within 5 days of the receipt of an application for a permit involving an earth disturbance activity consisting of one acre or more, in accordance with 25 Pa. Code § 102.42.
- c. **BMP #3**: Enact, implement and enforce an ordinance or SOP to require the implementation and maintenance of E&S control BMPs, including sanctions for non-compliance, as applicable.
  - (1) Municipal permittees shall enact, implement, and enforce an ordinance to require the implementation of E&S control BMPs, including sanctions for non-compliance. All municipal permittees shall submit a copy of an ordinance that is consistent with DEP's 2022 Model Stormwater Management Ordinance (3800-PM-BCW0100j) as an attachment to an Annual MS4 Status Report by September 30, 2022 (existing permittees) or the fourth (4<sup>th</sup>) Annual MS4 Status Report following approval of coverage under this General Permit (new permittees).
  - (2) Permittees that lack the authority to enact ordinances shall develop, implement and enforce an SOP to require the implementation and maintenance of E&S control BMPs by September 30, 2022 (existing permittees) or the first Annual MS4 Status Report following approval of coverage under this General Permit (new permittees).
- 5. **MCM #5**: Post-Construction Stormwater Management (PCSM) in New Development and Redevelopment. (25 Pa. Code § 92a.32(a) and 40 CFR § 122.34(b)(5))

Permittees with coverage under the PAG-13 General Permit must rely on DEP's program for issuing NPDES permits for stormwater discharges associated with construction activities to satisfy MCM #5. In addition to relying on the state NPDES permit program for stormwater discharges associated with construction activities, the permittee shall implement the BMPs identified below.

a. **BMP #1**: Enact, implement and enforce an ordinance or SOP to require post-construction stormwater management from new development and redevelopment projects, including sanctions for non-compliance.

- (1) Municipal permittees shall enact, implement, and enforce an ordinance to require the implementation of PCSM BMPs, including sanctions for non-compliance. All municipal permittees shall submit a copy of an ordinance that is consistent with DEP's 2022 Model Stormwater Management Ordinance (3800-PM-BCW0100j) as an attachment to an Annual MS4 Status Report by September 30, 2022 (existing permittees) or the fourth (4<sup>th</sup>) Annual MS4 Status Report following approval of coverage under this General Permit (new permittees).
- (2) Permittees that lack the authority to enact ordinances shall develop, implement and enforce an SOP to require the implementation and maintenance of PCSM BMPs and submit the SOP to DEP by September 30, 2022 (existing permittees) or the fourth (4<sup>th</sup>) Annual MS4 Status Report following approval of coverage under this General Permit (new permittees).
- b. BMP #2: Develop and implement measures to encourage and expand the use of Low Impact Development (LID) in new development and redevelopment. Measures should also be included to encourage retrofitting LID into existing development. Guidance on implementing LID practices may be found on DEP's MS4 website, <u>www.dep.pa.gov/MS4</u>. Enact ordinances consistent with LID practices and repeal sections of ordinances that conflict with LID practices. Submission of an ordinance that is consistent with DEP's 2022 Model Stormwater Management Ordinance (3800-PM-BCW0100j) will satisfy this BMP.
- c. **BMP #3**: Ensure adequate O&M of all post-construction stormwater management BMPs that have been installed at development or 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.

An inventory of PCSM BMPs shall be developed by new permittees by the end of the first year of General Permit coverage and shall be continually updated during the term of coverage under the General Permit as development projects are reviewed, approved, and constructed. Existing permittees shall update and maintain its current inventory during the term of coverage under the General Permit. The permittee must track the following information in its PCSM BMP inventory:

- 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., latitude and longitude, with street address).
- Information (e.g., name, address, phone number(s)) for BMP owners and entities responsible for BMP O&M, if different from BMP owners.
- 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 conducted for each BMP.
- An assessment by the permittee if proper O&M has occurred during the year and if not, what actions the permittee has taken, or shall take, to address compliance with O&M requirements.
- 6. MCM #6: Pollution Prevention / Good Housekeeping. (25 Pa. Code § 92a.32(a) and 40 CFR § 122.34(b)(6))

The permittee must develop and implement an O&M program that includes a training component and has the ultimate goal of preventing and reducing pollutant runoff from operations, facilities and activities under the control of the permittee (collectively, "operations"). The program must include employee training to prevent and reduce stormwater pollution from activities such as park and open space maintenance, fleet and building maintenance, new construction and land disturbances, and stormwater system maintenance.

a. BMP #1: Identify and document all operations that are owned or operated by the permittee and have the potential for generating pollution in 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.).

- (1) New permittees shall create an inventory of all operations and land uses that may contribute to pollution in stormwater runoff within areas of operations that discharge to the regulated small MS4 by the end of the first year of General Permit coverage, and review and update the inventory annually thereafter.
- (2) All permittees must review and update the inventory each year of General Permit coverage, as necessary.
- b. BMP #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, as identified under BMP #1. This program shall address stormwater collection or conveyance systems within the regulated MS4. The written O&M program shall stress pollution prevention and good housekeeping measures, contain site-specific information, and include the following:
  - Management practices, policies, and procedures shall be developed and implemented to reduce or prevent the discharge of pollutants to the regulated small MS4s. The permittee shall 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 the regulated small MS4s.
  - 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, salt / sand (anti-skid) storage locations and snow disposal areas. Controls for solid chemical products stored and utilized for the principal purpose of deicing roadways for public safety must be consistent with the BMPs for existing salt storage and distribution sites contained in the PAG-03 NPDES General Permit for Stormwater Discharges Associated with Industrial Activity.
  - Procedures for the proper disposal of waste, including dredge spoil, accumulated sediments, trash, household hazardous waste, used motor oil, street sweepings, and other debris.
  - (1) New permittees shall develop and implement a written O&M program by the end of the first year of General Permit coverage and review and update the program each year thereafter.
  - (2) All permittees must review and update the written O&M program each year of General Permit coverage, as necessary.
- c. **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 operations to the regulated small MS4. The program may be developed and implemented using guidance and training materials that are available from federal, state or local agencies, or other organizations. All relevant employees and contractors shall receive training (i.e., public works staff, building, zoning, and code enforcement staff, engineering staff, police and fire responders, etc.). Training topics shall include operation, inspection, maintenance and repair activities associated with any of the operations identified under BMP #1. Training must cover all relevant parts of the permittee's overall stormwater management program that could affect operations, such as illicit discharge detection and elimination, construction sites, and ordinance requirements.

- (1) 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 by the end of the first year of General Permit coverage.
- (2) All permittees must review and update the training program each year of General Permit coverage, as necessary.
- (3) Employee training shall occur at least annually and shall be documented in writing and reported in Annual MS4 Status Reports. Documentation shall include the date(s) of the training, the names of attendees, the topics covered, and the training presenter(s).

#### II. POLLUTANT CONTROL MEASURES AND POLLUTANT REDUCTION PLANS

Permittees with coverage under this General Permit that discharge to impaired waters are required to implement Pollutant Control Measures (PCMs) and Pollutant Reduction Plans (PRPs), as applicable. Permittees are encouraged to consult DEP's MS4 Requirements Table, available at <u>www.dep.pa.gov/MS4</u>, to determine the applicability of PCMs under Appendices A, B, and C and PRPs under Appendices D and E of this General Permit.

- A. PCMs are activities undertaken by the MS4 permittee to identify and control pollutant loading to impaired waters from MS4s, regardless of whether a TMDL has been approved. PCMs are BMPs and other strategies that are in addition to the permittee's SWMP identified in Part C I of this General Permit. PCMs must be implemented where the permittee 1) has at least one stormwater outfall that discharges to impaired waters, and 2) the "cause of impairment" is one or more of the causes listed in paragraphs A.1 through A.3, below.
  - 1. Where surface waters are impaired for metals (e.g., Iron, Manganese and Aluminum) and/or pH associated with Abandoned Mine Drainage (AMD), the permittee shall implement the PCMs identified in **Appendix A** of this General Permit, in accordance with the schedule therein.
  - 2. Where surface waters are impaired for Pathogens (e.g., Fecal Coliform), the permittee shall implement the PCMs identified in **Appendix B** of this General Permit, in accordance with the schedule therein.
  - 3. Where surface waters are impaired for Priority Organic Compounds (e.g., Polychlorinated Biphenyls (PCBs), pesticides, or other organic compounds), the permittee shall implement the PCMs identified in **Appendix C** of this General Permit, in accordance with the schedule therein.
- B. A PRP is a planning document prepared by the permittee which guides the selection and implementation of specific BMPs to reduce pollutant loading to surface waters. The objective of a PRP is to improve the condition of surface waters such that the waters eventually attain water quality standards and its designated and existing uses in accordance with 25 Pa. Code Chapter 93. A PRP shall be developed and submitted to DEP with the NOI if one or more of the following criteria are met:
  - At the time of the NOI submission, the permittee has at least one MS4 outfall that discharges to surface waters within the Chesapeake Bay watershed, or otherwise has at least one discharge to storm sewers owned or operated by a different entity within the Chesapeake Bay watershed. Upon DEP's written approval of General Permit coverage, permittees shall implement the PRP in accordance with **Appendix D** of this General Permit.
  - 2. At the time of the NOI submission, the permittee has at least one stormwater outfall that discharges to waters impaired for nutrients (i.e., nitrogen and/or phosphorus) and/or sediment (i.e., siltation), and a TMDL has not been approved for such waters, or a TMDL has been approved but no wasteload allocation (WLA) has been assigned by the TMDL for the permittee's discharge(s). Upon DEP's written approval of General Permit coverage, permittees shall implement the PRP in accordance with **Appendix E** of this General Permit.

#### III. OTHER REQUIREMENTS

A. Screenings and other solids collected by the permittee shall be handled, recycled and/or disposed of in compliance with the Solid Waste Management Act (35 P.S. §§ 6018.101 – 6018.1003), 25 Pa. Code Chapters 287, 288, 289, 291, 295, 297, and 299 (relating to requirements for landfilling, impoundments, land

application, composting, processing, and storage of residual waste), federal regulation 40 CFR Part 257, The Clean Streams Law, and the Federal Clean Water Act and its amendments.

- B. DEP may require monitoring of stormwater discharge(s) as may be reasonably necessary in order to characterize the nature, volume or other attributes of that discharge or its sources.
- C. The permittee shall ensure that its SWMP, including its Stormwater Management Ordinance(s) or SOPs, is designed to prevent increased loadings of pollutants and to not cause or contribute to a violation of water quality standards by any discharge from its regulated small MS4.
- D. The permittee shall develop and maintain adequate legal authorities, where applicable, and shall maintain adequate funding and staffing to implement this General Permit, including the SWMP contained in Part C I of this General Permit.
- E. In accordance with 40 CFR § 122.35, the permittee may rely on another entity to satisfy NPDES permit obligations to implement a minimum control measure if: (1) the other entity, in fact, implements the control measure; (2) the particular control measure, or component thereof, is at least as stringent as the corresponding NPDES permit requirement; and (3) the other entity agrees to implement the control measure on the permittee's behalf. The permittee must specify in Annual MS4 Status Reports that it is relying on another entity to satisfy some of its NPDES permit obligations. The permittee remains responsible for compliance with permit obligations if the other entity fails to implement the control measure (or component thereof).

#### APPENDIX B

#### POLLUTANT CONTROL MEASURES FOR WATERS IMPAIRED BY PATHOGENS

The permittee shall implement the following Pollutant Control Measures (PCMs) within the storm sewershed of any outfall that discharges to waters impaired due to Pathogens (e.g., Fecal Coliform), regardless of whether there is an approved TMDL:

- A. Map and Inventory.
  - The permittee shall develop map(s) of the storm sewershed(s) associated with all outfalls that discharge to surface waters subject to Appendix B. The purpose is to identify the area the permittee is responsible for within its legal boundaries in developing a source inventory. For new permittees, the map(s) shall be submitted to DEP with an Annual MS4 Status Report that is due no later than two years following DEP's written approval of General Permit coverage. For existing permittees, the map(s) shall be submitted to DEP with an Annual MS4 Status Report due no later than September 30, 2019.
  - 2. The permittee shall develop an inventory of all suspected and known sources of bacteria in stormwater within the storm sewershed, at a minimum, that discharge to impaired waters. The inventory must identify whether the source is suspected or known, the basis for this determination, the responsible party (if known), and any corrective action the permittee has taken or plans to take for any of these sources. For new permittees, the inventory shall be submitted to DEP with an Annual MS4 Status Report is due no later than three years following DEP's written approval of General Permit coverage. For existing permittees, the inventory shall be submitted to DEP with an Annual MS4 Status Report due no later than September 30, 2020.
- B. The permittee shall complete an investigation of each suspected source. This investigation must include stormwater sampling if the investigation is required as part of implementing the IDD&E program under MCM #3 of the General Permit, and otherwise is voluntary. For new permittees, the results of the investigation shall be submitted to DEP with an Annual MS4 Status Report that is due no later than five years following DEP's written approval of General Permit coverage. For existing permittees, the results of the investigation shall be submitted to DEP with an Annual MS4 Status Report due no later than September 30, 2022.
- C. The permittee shall enforce ordinances that prohibit illicit and illegal connections and discharges of sewage to the MS4. Anytime an illicit and illegal connection or discharge of sewage into the MS4 is discovered by the permittee, the permittee shall report the finding in the subsequent Annual MS4 Status Report along with a description of corrective action by the permittee.
- D. If not already established in its Stormwater Management Ordinance (municipal permittees) or SOP (non-municipal permittees), the permittee shall enact an ordinance or develop and adopt an SOP that requires proper management of animal wastes on property owned by the permittee. If an ordinance or SOP already exists that controls animal wastes, it must be attached to the first Annual MS4 Status Report due following the first year of coverage for new permittees and no later than September 30, 2018 for existing permittees (unless the ordinance or SOP was attached to the NOI for General Permit coverage). If a new ordinance or SOP is enacted or adopted, the new ordinance or SOP must be attached to the first Annual MS4 Status Report due following enactment or adopted, the new ordinance or SOP must be attached to the first Annual MS4 Status Report due following enactment or adopted, but no later than September 30, 2022.
- E. The permittee shall document the progress of its investigations, source control efforts and BMPs to control sources of pathogens in its Annual MS4 Status Reports.

#### APPENDIX D

#### POLLUTANT REDUCTION PLAN REQUIREMENTS FOR DISCHARGES TO THE CHESAPEAKE BAY WATERSHED

MS4 permittees with at least one stormwater discharge to surface waters within the Cheseapeake Bay watershed must develop and submit a Chesapeake Bay Pollutant Reduction Plan (CBPRP) with the NOI to reduce the load of nutrients (nitrogen and phosphorus) and sediment to surface waters. In the event the permittee also has at least one stormwater discharge to local surface waters that are considered impaired for nutrients and/or sediment, the CBPRP may be combined with the PRP for localized nutrient and/or sediment impairment as described in Appendix E.

The CBPRP is approved upon DEP's approval of coverage under this General Permit. The permittee shall implement its approved CBPRP and comply with the following:

- A. The permittee shall achieve the pollutant load reduction(s) (lbs/year) proposed in its CBPRP within 5 years following DEP's approval of coverage under the General Permit (identified on page 1 of the General Permit). The minimum percent reduction for pollutant loadings of sediment, Total Phosphorus (TP), and Total Nitrogen (TN) shall be 10%, 5%, and 3%, respectively, over the 5-year period following DEP's approval of coverage. Pollutant reduction efficiencies for selected BMPs shall be in accordance with the BMP Effectiveness Values document published by DEP (3800-PM-BCW0100m) or Chesapeake Bay Program Office expert panel reports. The permittee shall submit a report demonstrating implementation of the CBPRP as an attachment to the first Annual MS4 Status Report that is due following completion of the 5<sup>th</sup> year of General Permit coverage.
- B. The BMPs proposed in the CBPRP for the term of General Permit coverage shall be implemented in accordance with the schedule in the CBPRP. In the event the permittee decides to modify the location, type or number of proposed BMPs or modify the storm sewershed map, the permittee shall submit an update to its CBPRP to DEP prior to implementing the changes. A modified CBPRP that meets the conditions of paragraphs 1 3 herein may be implemented upon submission to DEP unless DEP issues an objection in writing within 60 days.
- C. Where submission of a modified CBPRP to DEP is required, the permittee shall solicit public involvement and participation, as follows:
  - 1. The permittee shall make a complete copy of the CBPRP available for public review.
  - 2. The permittee shall publish, in a newspaper of general circulation in the area, a public notice containing a statement describing the plan, where it may be reviewed by the public, and the length of time the permittee will provide for the receipt of comments. The public notice must be published at least 45 days prior to the deadline for submission of the PRP to DEP.
  - 3. The permittee shall accept written comments for a minimum of 30 days from the date of public notice.
  - 4. The permittee shall accept comments from any interested member of the public at a public meeting or hearing, which may include a regularly scheduled meeting of the governing body of the municipality or municipal authority that is the permittee.
  - 5. The permittee shall consider and make a record of the consideration of each timely comment received from the public during the public comment period concerning the plan, identifying any changes made to the plan in response to the comment.

Modified CBPRPs submitted to DEP must include a copy of the newspaper notice, a copy of all written comments received from the public and a copy of the permittee's record of consideration of all timely comments received in the public comment period.

D. Progress with achieving the required pollutant load reductions shall be reported in each Annual MS4 Status Report.

#### APPENDIX E

#### POLLUTANT REDUCTION PLAN REQUIREMENTS FOR DISCHARGES TO WATERS IMPAIRED FOR NUTRIENTS AND/OR SEDIMENT

MS4 permittees with at least one stormwater discharge to surface waters considered impaired for nutrients (nitrogen and phosphorus) and/or sediment, in which a TMDL has not been developed or the TMDL has not identified a wasteload allocation (WLA) for the permittee, must develop and submit a Pollutant Reduction Plan (PRP) with the NOI to reduce the pollutant loads to those waters. In the event the permittee also has at least one stormwater discharge to surface waters within the Chesapeake Bay watershed, the PRP may be combined with the CBPRP described in Appendix D.

The PRP is approved upon DEP's approval of coverage under this General Permit. The permittee shall implement its approved PRP and comply with the following:

- A. The permittee shall achieve the pollutant load reduction(s) (lbs/year) proposed in its PRP within 5 years following DEP's approval of coverage under the General Permit (identified on page 1). The minimum percent reduction for pollutant loadings of sediment and Total Phosphorus (TP) shall be 10% and 5%, respectively. If the surface water is impaired for both sediment and nutrients, both sediment (10%) and TP (5%) reductions must be achieved. If the surface water is impaired for sediment alone, a sediment (10%) reduction must be achieved. If the surface water is nutrients, a TP (5%) reduction must be achieved. Pollutant reduction efficiencies for selected BMPs shall be in accordance with the BMP Effectiveness Values document published by DEP (3800-PM-BCW0100m) or Chesapeake Bay Program Office expert panel reports. The permittee shall submit a report demonstrating implementation of the PRP as an attachment to the first Annual MS4 Status Report that is due following completion of the 5<sup>th</sup> year of General Permit coverage.
- B. The BMPs proposed in the PRP for the term of General Permit coverage shall be implemented in accordance with the schedule in the PRP. In the event the permittee decides to modify the location, type or number of proposed BMPs or modify the storm sewershed map, the permittee shall submit an update to its PRP to DEP prior to implementing the changes. A modified PRP that meets the conditions of paragraphs 1 3 herein may be implemented upon submission to DEP unless DEP issues an objection in writing within 60 days.
- C. Where submission of a modified PRP to DEP is required, the permittee shall solicit public involvement and participation, as follows:
  - 1. The permittee shall make a complete copy of the PRP available for public review.
  - 2. The permittee shall publish, in a newspaper of general circulation in the area, a public notice containing a statement describing the plan, where it may be reviewed by the public, and the length of time the permittee will provide for the receipt of comments. The public notice must be published at least 45 days prior to the deadline for submission of the PRP to DEP.
  - 3. The permittee shall accept written comments for a minimum of 30 days from the date of public notice.
  - 4. The permittee shall accept comments from any interested member of the public at a public meeting or hearing, which may include a regularly scheduled meeting of the governing body of the municipality or municipal authority that is the permittee.
  - 5. The permittee shall consider and make a record of the consideration of each timely comment received from the public during the public comment period concerning the plan, identifying any changes made to the plan in response to the comment.

Modified PRPs submitted to DEP must include a copy of the newspaper notice, a copy of all written comments received from the public and a copy of the permittee's record of consideration of all timely comments received in the public comment period.

D. Progress with achieving the required pollutant load reductions shall be reported in each Annual MS4 Status Report.

## MEMORANDUM OF UNDERSTANDING BETWEEN THE LANCASTER COUNTY CONSERVATION DISTRICT AND

## WEST EARL TOWNSHIP

WHEREAS, the Lancaster County Conservation District, hereafter referred to as "LCCD", and <u>WEST\_EARL\_TOWNSHIP</u>, hereafter referred to as Municipality, have common areas of responsibility in serving the citizens of <u>WEST\_EARL\_TOWNSHIP</u> and

WHEREAS, there are common areas of work that require communication and support of each of these parties to the other party, and

WHEREAS, the District and the Municipality desire to formalize their interactions in relation to common programs and responsibilities, and

WHEREAS, this Memorandum of Understanding will serve as a foundation for a cooperative and mutually beneficial working relationship between the District and the Municipality,

NOW THEREFORE, the parties agree to jointly enter into this Memorandum of Understanding. The Memorandum of Understanding has six component parts as listed herein:

I.	Erosion & Sediment Pollution Control/NPDES for Stormwater Discharges Associated with Construction Activities	<u>Page</u> 2
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111.	NPDES Municipal Separate Storm Sewer Systems (MS-4 – NPDES Permit PAG-13 MCM 1, 2, 4, 5)	9
IV.	Agricultural Related Activities (Manure Management & Erosion Control) I. Plain Sect Outreach	12
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## I. EROSION AND SEDIMENT POLLUTION CONTROL

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## **NPDES for Stormwater Discharges Associated with Construction Activities**

**PURPOSE**: Erosion and the resulting deposition of sediment in our waterways is the primary pollutant by volume of our streams. Minimizing erosion and sediment pollution of our streams requires initiatives at the federal, state, county and local municipal levels of government. The purpose of this Memorandum of Understanding (MOU) is to serve as a joint commitment to control accelerated erosion and to prevent sediment pollution to the waters of the Commonwealth, which may result from the conduct of earth disturbance activities. This MOU also serves as a basis for stating the role of each party in appropriately updating and administering appropriate Ordinances of the municipality in relation to Erosion and Sediment Pollution Control.

**DISTRICT RESPONSIBILITIES**: In carrying out the intent of this memorandum, the LCCD shall, within the limits of its capabilities and within the scope of its Delegation Agreement with PA DEP, administer and implement the Commonwealth's Erosion and Sediment and Stormwater Control (Chapter 102 and Chapter 92- NPDES) Programs:

- 1. Records, Resources, Materials and Documents:
- a. Provide to the Municipality a schedule of plan review fees and sufficient quantities of all necessary forms. The LCCD will promptly notify the municipality of any change in the plan review fee schedule and provide updated forms and educational materials in a timely manner.
- b. Upon request, provide all applicants with a DEP Erosion and Sediment Pollution Control Program Manual, National Pollutant Discharge Elimination System (NPDES) permit applications, and related forms, worksheets, checklists and all other forms and documents necessary to successfully prepare an E&S plan and/or NPDES permit application for discharge of stormwater from construction activities.
- c. Provide the municipality with a year-end summary of NPDES and Erosion and Sediment Pollution Control activities within the municipality. The summary is intended to inform the municipality of activities and document activities for municipal MS4 permit requirements. The report is titled "Annual MS-4 Supplemental Report for WEST EARL TOWNSHIP".
- d. Serve as a repository for all erosion and sediment control plans (E&S) plans, permit applications, plan and permit reviews, complaints, inspection reports, correspondence and other materials and documents concerning the conduct of earth disturbance activities permitted under the municipal ordinance. All such information shall be contained in a dedicated filing system, which shall be available for inspection by municipal officials at any time.

- e. The LCCD will maintain information and materials on its website related to NPDES permitting and the E&S program. Municipalities may provide links to the LCCD website from municipal websites. This activity provides additional outreach and satisfies relevant MS4 requirements.
- f. The LCCD shall maintain a filling system, in accordance with DEP's Records Retention Policy, that may be available for municipal official review.

## 2. Plan Reviews and Permitting:

- a. Receive all applications and ESCP plans required by NPDES permitting regulations and complete administrative and technical reviews within time frames established by DEP.
- b. Receive all E & S plans required by municipal ordinance or submitted voluntarily, and complete reviews of the plans within time frames established by the LCCD.
- c. Within 10 calendar days of a review action, the LCCD will forward to the municipality, applicant and/or responsible party:
  - Notice of NPDES permit decisions including permit and plan approvals and renewal deficiency letters, denials and withdrawals.
  - II. Notice of E & S plan decisions where NPDES permits are not required including approvals and deficiency letters.

#### 3. Inspections:

- a. The LCCD will inspect earth disturbance activities to ensure that the implementation and maintenance of the E & S plan and E & S practices are in compliance with the NPDES program and Chapter 102 regulations.
- b. Inspections will be performed:
  - I. At a minimum, in compliance with DEP inspection schedules for permitted projects
  - II. At the request of the municipality.
  - III. Within 10 calendar days of receipt, in response to a complaint from the municipality or the public.
  - IV. Routinely, as time, workload, or staffing resources may allow.
- c. Within 10 calendar days of completion the LCCD will forward to the municipality and applicant or responsible party:

- I. Inspection reports resulting from complaints investigations and other inspections
- d. Initiate enforcement actions within the scope of the delegation agreement between the LCCD and the PA DEP.

## 4. Municipal Assistance:

- a. The LCCD will assist the municipality with environmental problems, permit applications and resource management issues within the scope of the LCCD's role under the NPDES and Chapter 102 program. The LCCD will enlist assistance from cooperating agencies when appropriate.
- b. The LCCD will provide an invitation to the municipality to all appropriate educational events.
- c. At the request of the municipality, the LCCD will review appropriate sections of municipal stormwater management and subdivision and land development ordinances and make recommendations for consistency with current Chapter 102 regulations and NPDES permit requirements.
- d. Meetings:
  - 1. The LCCD will invite the municipality to all scheduled pre-application meetings. Where the LCCD is not the entity organizing the meeting, the LCCD will recommend to the meeting organizer that the municipality be invited. Attendance and choice of representative is at the discretion of the municipality.
  - II. LCCD staff, at the request of the municipality, will meet with municipal representatives to provide information or to discuss issues related to NPDES permitting and Chapter 102 regulations.
  - III. LCCD staff, where appropriate, will notify the municipality of any site meetings related to inspections, violations or complaints and invite the municipality to attend these meetings.

**MUNICIPAL RESPONSIBILITIES:** In carrying out the intent of this memorandum, the municipality shall:

## 1. Resources and Information:

- a. Inform those involved with earth disturbance activities of any Erosion and Sediment Pollution Control and NPDES permitting requirements involving municipal ordinances.
- b. Retain a sufficient quantity of the application form for E & S plans and issue such information to all proposed earth disturbance projects that require review and approval in accordance

with the provisions of the municipal ordinance. The municipality shall provide instructions as necessary to have the plans submitted to the LCCD.

- c. Distribute education information about the LCCD's programs and provide contact information to the public for the LCCD.
- d. Retain all correspondence from the LCCD including copies of inspection reports, permit authorizations, denials and withdrawals, notices of violations; E & S plan approvals and other correspondence needed by the municipality for MS4 permit documentation or other municipal purposes.

## 2. Notice and Referral to the District:

- a. Forward complaints involving earth disturbance activities to the LCCD within 10 calendar days of receipt for inspection.
- b. Forward all questions related to the preparation of E & S plans and NPDES permit applications to the LCCD.
- c. Notify the LCCD of the receipt of a building permit application involving earth disturbance of one acre or more within five (5) working days of receipt. (**Required under 25 PA Code §102.42**).
- d. Forward to the LCCD an Act 167 consistency letter to confirm that projects meet the intent of the municipality's stormwater ordinance, if covered under an Act 167 ordinance.
- e. Forward to the LCCD copies of municipal engineer review letters when comments pertain to the E & S plans, stormwater management plans, and/or NPDES applications.
- f. Coordinate pre-application meetings with the LCCD whenever possible.
- g. Complete Attachment A, contained in this MOU, to better facilitate communications between the municipality and the LCCD.

## 3. Municipal Approvals and Actions:

a. Before issuing any permits or approvals, with the exception of local stormwater approvals, the municipality will require evidence of an issued Individual NPDES permit, authorized General NPDES permit or approved E & S permit if required, or an approved E & S plan where municipal regulations require an approved E & S plan where NPDES or E & S permits are required. Per Section 102.43, municipalities may not issue building or other permits to applicants proposing earth disturbance activities requiring a permit under Chapter 102.

- b. Where violations of Chapter 102 or NPDES permitting regulations are discovered, the municipality will cooperate with the LCCD to document and resolve the violations. Cooperation may entail providing access or copies of approved subdivision or land development plans, issued permits, review comments, revocation of municipal permits and other reasonable measures legally and practically available to the municipality.
- c. Encourage the preservation and responsible use of all of Lancaster County's natural resources.

## II. Chapter 105- Dam Safety & Waterway Management

**PURPOSE:** Pennsylvania's Chapter 105 program regulates the waterways and wetlands of the Commonwealth. Chapter 105 establishes the thresholds for permitting requirements for encroachment or obstruction activities to jurisdictional waters and wetlands. The regulations also specify for requirements related to dam and floodway activities. This section of the MOU establishes the delegation authority for the Chapter 105 program given to the LCCD by PA DEP.

**DISTRICT RESPONSIBILITIES:** In carrying out the intent of this memorandum, the LCCD shall, within the limits of its capabilities and within the scope of its Delegation Agreement with PA DEP, administer and implement the Commonwealth's Chapter 105 program.

## 1. Records, Resources, Materials & Documents:

a. Provide to the Municipality a schedule of Chapter 105 application fees and sufficient quantities of all necessary forms. The LCCD will promptly notify the municipality of any changes in the application fees or regulations.

b. Serve as a repository for all Chapter 105 General Permit applications and associated E & S plans, inspection reports, complaint information, and other materials and documents concerning the conduct of encroachment and obstruction activities related to the Chapter 105 program.

c. The LCCD will maintain information and materials on its website related to the Chapter 105 program. Municipalities are encouraged to provide the link to the LCCD website on their own municipal website.

d. The LCCD will maintain a filing system, in accordance with DEP's Records Retention Policy, that may be available for municipal review.

## 2. Chapter 105 General Permit Review & Permit Acknowledgement:

a. Receive all Chapter 105 General Permit #'s 1, 2, 3, 4, 5, 6, 7, 8, and 9 applications and corresponding fee application for review. Applications will be processed in the timeframes established by DEP.

b. Within 10 calendar days of permit acknowledgement, forward notice of permit use to the municipality.

## 3. Municipal Assistance:

a. The LCCD will assistant the municipality with environmental problems, permit applications and resource management issues within the scope and resources of the LCCD's role under the Chapter 105 program. The LCCD will enlist assistance from cooperating agencies when appropriate.

- b. The LCCD will provide an invitation to the municipality to all appropriate educational events.
- c. Meetings:
  - I. The LCCD will invite the municipality to all scheduled pre-application meetings. Where the LCCD is not the entity organizing the meeting, the LCCD will recommend to the meeting organizer that the municipality be invited.
  - II. LCCD staff, at the request of the municipality, will meet with municipal representatives to provide information or to discuss issues related to the Chapter 105 regulations.
  - LCCD staff, where appropriate, will notify the municipality of any site meetings related to inspections, violations or complaints and invite the municipality to attend these meetings.

## MUNICIPAL RESPONSIBILITIES:

- a. Refer residents to the LCCD when they have questions on permitting or earth moving activities related to streams, wetlands, ponds, springs or other waters regulated under Chapter 105.
- b. Distribute fact sheets and other educational materials provided by the LCCD.
- c. Retain copies of all correspondence from the LCCD pertaining to the Chapter 105 program for municipal purposes.
- d. Forward any complaints related to the Chapter 105 program to LCCD within 10 calendar days of receipt.

## III. NPDES Municipal Separate Storm Sewer Systems (MS-4 – NPDES Permit PAG-13)

**PURPOSE:** Many municipalities in Lancaster County and the County itself are subject to NPDES permit requirements for Municipal Separate Storm Sewer Systems (MS4). The purpose of this agreement is to coordinate, where possible and desirable, the activities of the municipalities and the county associated with MS4 permit requirements. While not all requirements lend themselves to coordination, several of the requirements are such that coordination will result in decreased compliance cost and greater efficiency for both the municipality and county. The following details the municipal and LCCD responsibilities by Minimum Control Measure (MCM)

## MCM 1 – PUBLIC EDUCATION AND OUTREACH

**<u>DISTRICT RESPONSIBILITIES</u>**: In carrying out the intent of this memorandum, the LCCD shall, within the limits of its capabilities:

- a. Distribute an educational publication to developers, contractors, farmers and other stakeholders in Lancaster County, once per permit year at minimum.
- b. Maintain on the LCCD website, information related to stormwater regulations, educational materials and resources. It is recommended that Municipalities provide a link from the municipal website, if available, to the LCCD website.
- c. Annually, no later than 30 days after the end of the permit year, provide a summary to each regulated municipality of the above activities and any other educational activities conducted by the LCCD that would be applicable for MS4 permit compliance. Where possible, copies of the educational materials, the dates distributed and a summary or list of those the material was distributed to will be included in the summary.

**MUNICIPAL RESPONSIBILITIES** In carrying out the intent of this memorandum, the municipality shall, within the limits of its capabilities:

- a. Annually, no later than 30 days prior to the end of the permit year, provide a summary to the LCCD of the use and or distribution of educational posters.
- b. Where practical and applicable, notify the LCCD at least 15 calendar days in advance of municipal public outreach events where the LCCD could play a role in providing public outreach.

## MCM 2 - PUBLIC PARTICIPATION

**<u>DISTRICT RESPONSIBILITIES</u>**: In carrying out the intent of this memorandum, the municipality shall, within the limits of its capabilities:

a. Notify regulated municipalities of public participation events, as appropriate 30 days prior to the event.

**MUNICIPAL RESPONSIBILITIES:** In carrying out the intent of this memorandum, the municipality shall, within the limits of its capabilities:

a. Notify the LCCD of public participation events, as appropriate, at least 30 days prior to the event.

## MCM 4 – CONSTRUCTION SITE STORMWATER MANAGEMENT

**<u>DISTRICT RESPONSIBILITIES:</u>** In carrying out the intent of this memorandum, the LCCD shall, within the limits of its capabilities:

- a. Meet all of its responsibilities listed in the E & S section of this MOU.
- b. Annually, no later than 30 days after the end of the permit year, provide a summary to each regulated municipality of LCCD activities conducted in the municipality. The summary will include:
  - I. The number of sites inspected and the number of inspections conducted.
  - II. The number of complaints received, the number of inspections conducted in response to complaints, and the number of complaints referred to other parties.
- III. The number of enforcement actions taken.
- IV. The number of NPDES permits issued.
- V. The number of E & S plans reviewed.
- VI. A list of NPDES permits issued with the date of issuance, expirations and permit number.

MUNICIPAL RESPONSIBILITIES: In carrying out the intent of this memorandum, the municipality shall, within the limits of its capabilities:

- a. The municipality will meet all of its responsibilities listed in the E & S section of this MOU.
- b. Retain all correspondence from the LCCD including copies of inspection reports, permit authorizations, notices of violation; E & S plan approvals and other correspondence needed by the municipality for MS4 documentation purposes.

- c. Annually provide the LCCD with a list of contacts, their company, address, email and phone number, as to where the municipality would like copies of correspondences sent.
- d. Provide copies of ordinances related to stormwater management, erosion and sediment control and illicit discharges. The municipality will provide the LCCD with copies of any revised ordinances within 30 days of adoption.

-

## IV. AGRICULTURAL RELATED ACTIVITIES (MANURE MANAGEMENT & EROSION CONTROL)

**PURPOSE:** To conserve the agricultural resources of Lancaster County, by educating local municipalities and the public. This document encompasses but is not limited to, Nutrient Management, erosion control on farms, and compliance related topics.

**DISTRICT RESPONSIBILITIES:** In carrying out the intent of this memorandum, the LCCD is a clearing house of information relating to agricultural farming. The following items are available to municipalities across Lancaster County.

a. Administer the State's Act 38 program, also known as the Nutrient Management Law. LCCD staff reviews nutrient management plans, conducts onsite yearly status reviews relating to nutrient application. These plans are developed on an animal density calculation. Any operation that has over 2.0 Animal Equivalent Units (AEU's)/Acre, is required to have an approved Act 38 Nutrient Management Plan.

b. The Commonwealth also requires farmers to have a Manure Management Plan (Chapter 91.36), developed for every farm that produces or applies manure on their ground, no limit on size or scope of operation. Once farm size reaches certain thresholds based on livestock, further requirement for nutrient management may be required (such as Act 38 or CAFO). These plans must be available upon request for review from the landowner/operator on site, but are not required to be submitted for review or approval.

- c. Erosion and Sediment Control on farming operations:
  - The LCCD will oversee 25 PA Code Chapter 102.4(a) (Erosion & Sediment Control) relating to agriculture operations. Chapter 102.4 requires all farming operations that disturb over 5,000 sq. ft. to have a Conservation Plan or Ag E & S plan developed and implemented. This also includes no-till as an earth disturbing practice. These plans must be available upon request for review from the landowner/operator on site, but are not required to be submitted for review or approval.
- d. The LCCD will offer Technical Assistance for farming operations within the county. This technical assistance can be used by the farming landowner/operator to help with the implementation of BMPs found within their Conservations Plans. When needed, for BMP implementation, a reviewed design packet will accompany, along with spot inspections of construction implementation, and certification.
- e. Conduct complaint investigations regarding nutrient and sediment pollution events. (See Attachment B)
- f. When applicable, provide guidance on conservation planning, within the Bio-Solids Program.

- g. Provide the LCCD wide fee schedule, which includes fees pertinent to agricultural operations.
- h. Provide the municipality with a reasonable quantity of related resource materials at the request of the municipality.

**MUNICIPAL RESPONSIBILITIES:** In carrying out the intent of this memorandum, within the limits of its capabilities and available resources, the municipality shall:

- a. Forward to the LCCD (Ag Compliance Coordinator), any agricultural complaint relating to, but not limited to: Nutrient pollution, and sediment pollution.
- b. The LCCD highly recommends that the municipality require development of these plans before building permits for agricultural operations are approved. The municipality should not release permits to agricultural operations, until those landowners can produce a Nutrient or Manure Management Plan AND Conservation, or Ag E & S Plan.
- c. Make available to the public any educational materials provided by the LCCD.

## IV.1 Plain Sect Outreach

**PURPOSE:** The LCCD dedicates an Ag staff person as the 'Plain Sect' Outreach Coordinator. This person has experience working with the 'Plain Sect' community and is available to meet with municipal representatives to provide information related to conservation issues within the 'Plain Sect' community. This staff person is available to meet with individual 'Plain Sect' farmers and can serve as a resource person for any municipal sponsored informational meeting for the agriculture community.

## DISTRICT RESPONSIBILITIES:

- a. Provide assistance to the "Plain Sect" community by informing the community on agricultural regulatory requirements and best management farming practices.
- b. Refer farmers to the appropriate Agricultural Technician within the LCCD for technical guidance and planning.
- c. Provide assistance to municipalities when they need support in dealing with the Plain Sect.

## MUNICIPAL RESPONSIBILITIES:

- a. Be aware that the Plain Sect Outreach Coordinator position exists and is available for assistance.
- b. Refer Plain Sect farmers to the LCCD for assistance, when appropriate.

## V. EDUCATION & OUTREACH

**PURPOSE:** The mission of the LCCD is to promote stewardship of the land, water, and other natural resources; and to make all citizens aware of the interrelationships between human activities and the natural environment; to provide assistance for current efforts in natural resource conservation; and to develop and implement programs which promote the stewardship of natural resources; while enlisting and coordinating help from public and private sources in accomplishing this mission. The education departments of the LCCD serve as a beginning point for many of our goals. Educating the public about our county's natural resources is a primary goal. Through education we can protect, preserve and promote the mission of the LCCD.

## V.I Watershed Program

**PURPOSE:** The LCCD's Watershed Program goals are to educate, create and foster grassroot volunteer watershed efforts, water quality monitor, and be a resource on all things water related in Lancaster County. The Watershed Coordinator for the LCCD should be used as a resource tool by community members, businesses, schools, and especially municipalities. Items the Watershed Program can deal with include, but are not limited to, stream water quality, wetlands, pond management, stormwater education, groundwater recharge, volunteer conservation efforts, and many additional issues. One of the ultimate goals of the watershed program is to get local streams off the state's list of impaired waterways. This goal can be accomplished through combined efforts from the LCCD, surrounding landowners, businesses, and the municipality. This MOU outlines general areas of cooperation between both parties.

**<u>DISTRICT RESPONSIBILITIES</u>**: In carrying out the intent of this memorandum, the LCCD shall, within the limits of its capabilities:

- a. Help to keep all municipalities informed of local watershed associations/group activities within their jurisdiction. The types of activities these organizations conduct can assist municipalities in their MS4 requirements. (i.e. public education and public participation)
- b. Provide the municipality with any volunteer water monitoring data that may be gathered for streams within your municipal boundary. All of this data can be found on the Lancaster County Watersheds website, www.lancasterwatersheds.org, under the volunteer monitoring data tab.
- c. Provide copies of resource and educational materials the LCCD may create. Limited amounts of such copies will be provided at no charge. For larger quantities, the LCCD will provide copies in a format, where practical, suitable for producing copies or at cost. (i.e. stormwater management, riparian buffers, floodplains, groundwater recharge, water conservation, backyard conservation, and other natural resource issues.)

- d. Maintain a Lancaster County Watershed website (www.lancasterwatersheds.org) that provides current and useful local, regional, and statewide water resources that municipalities can use. (i.e. local watershed plans, list of volunteer watershed groups, stormwater action plans, local TMDL plans, electronic versions of educational publications, and a host of other useful tools.)
- e. Assist the municipality with watershed or water quality/quantity issues and permit applications that fall within the LCCD's area of expertise. The LCCD will enlist the services of cooperating agencies when necessary.
- f. Provide the municipality with watershed technical training opportunities and points of contact for LCCD programs.
- g. Notify municipalities of public participation events, as appropriate 30 days prior to the event.

**MUNICIPAL RESPONSIBILITIES:** In carrying out the intent of this memorandum, the municipality shall, within the limits of its capabilities:

- a. Be an active participant in local volunteer watershed groups as they devise ways to educate, restore, or improve the local watershed within your municipality.
- b. Inform the LCCD of natural resource issues especially those that are water related.
- c. Where practical and applicable, notify the LCCD at least 30 calendar days in advance of municipal public outreach events where the LCCD could play a role in providing public outreach.
- d. Cooperate with the LCCD on studies, pilot projects or surveys related to water resource conservation within the municipality.

## IT IS MUTUALLY AGREED WITHIN THE LIMITS OF ABILITIES AND RESOURCES:

- a. Both parties will provide for the mutual sharing of information.
- b. Both parties will supply each other with available maps, geographic information system and computer aided drafting files, printed material, photos/slides, video and displays pertaining to pertinent programs.
- c. Both parties will work on projects mutually benefiting the LCCD and the municipality.

## V.2 Education Program

**PURPOSE:** The purpose of this agreement is to define educational programs provided by the LCCD and available to the municipalities and the county. The mission of the LCCD is the stewardship of land, water, and other natural resources. The LCCD administers and participates in a variety of programs to protect and promote the wise use of natural resources.

**DISTRICT RESPONSIBILITIES:** In carrying out the intent of this memorandum, the LCCD shall, within the limits of its capabilities:

- a. Develop and present lessons and programs designed to address the PA Department of Education Environment and Ecology Standards for teachers, students, community organizations, watershed organizations, and the public within municipalities.
- b. Publish and distribute educational materials for teachers, students, and the public.
- c. Provide educational materials requested by municipalities for schools or public outreach.

## **LCCD Education Program Links**

- www.lancasterconservation.org
- www.lancasterwatersheds.org

**MUNICIPAL RESPONSIBILITIES:** In carrying out the intent of this memorandum, the municipality shall, within the limits of its capabilities:

- a. Notify the Conservation LCCD when possible and applicable of municipal public outreach activities or events where the LCCD could be of assistance in providing educational presentations or materials.
- b. Notify the Conservation LCCD of public participation events, as appropriate.
- c. Post educational materials or programs available from the LCCD, as appropriate.

## V.3 Agricultural Ombudsman Program

**PURPOSE:** The PA Agricultural Ombudsman Program handles public relations, education and conflict management related to agriculture. The Program offers statewide liaison services to communities on issues affecting agriculture, land use, environment and planning. The Ombudsman Program focuses on pro-active education, but has re-active responsibilities, too. The Agricultural Ombudsman is not an advocate for any particular party, but seeks to achieve a satisfactory resolution to disputes through training and education.

## DISTRICT RESPONSIBILITIES:

- a. Serve as an intermediary between agricultural producers and municipalities, Conservation Districts and regulatory authorities, and to assist producers in navigating applications and permit and plan review processes to ensure the producer is treated fairly and expeditiously in that process, while ensuring municipalities, Districts and regulatory agencies that the producer has met all the applicable requirements.
- b. Provide assistance to help municipal officials prepare for meetings expected to attract significant public interest or concern. Sample policies are available for municipalities to review and consider using to ensure an orderly, productive meeting that allows all parties involved to give their input.
- c. Inform municipalities and residents about current farming practices and help dispel myths about modern agriculture.
- d. Provide educational materials to help address public concerns about agricultural operations.

### **MUNICIPAL RESPONSIBILITIES:**

- a. Contact the Conservation District seeking services of the Agricultural Ombudsman to assist with conflict management, resulting from the interface of production agriculture and suburban/urban constituents.
- b. Contact the Conservation District seeking services of the Agricultural Ombudsman to assist with educational input or non-legal advice regarding impacts on agriculture and the potential for farmer/resident conflicts because of what is currently written or proposed in a municipal ordinance.
- c. Direct residents to contact the Agricultural Ombudsman when residents are experiencing fly concerns, odor management concerns or other concerns generated by agricultural activities.

### VI. EXECUTION

This Memorandum of Understanding shall become effective only after it has been adopted by vote of the governing bodies of both parties. Signatures must be those of a member of the governing body authorized to sign for the governing body.

This Memorandum of Understanding may be terminated by either party for any reason. Termination of this Memorandum of Understanding must be by certified mail. Termination shall become effective 30 days after receipt of the notice of termination.

This Memorandum of Understanding shall be reviewed periodically by either or both parties and may be amended by mutual consent of both parties.

With the execution of this Memorandum of Understanding any previous Memorandum of Understandings between the Municipality and the District shall be invalid.

## LANCASTER COUNTY CONSERVATION DISTRICT

By:	Kennett & Meck
Title:	Chairman
Date:	September 1, 2015

#### WEST EARL TOWNSHIP

Bv:	ABS ford cum
Title:	9/11/15
Date:	CHARMAN

# (SIGN AND RETURN THIS PAGE ALONG WITH THE NEXT PAGE, ATTACHMENT A)

September 1, 2015

# **ATTACHMENT A- Municipal Contact Information**

Please complete the <u>entire form</u>. Contact information will be used by the LCCD to communicate with your municipal officials throughout the year.

Candia 1 Johnson Municipal Information
Municipal Manager: <u>UUIUIC L. JOITINON</u>
Zoning Officer: 10M ZOKDAO GH
Road Master: Sylvan Fisher
Municipality Mailing Address: Po Box 787
Phone Number 11-854-3201
Manager's email address: CJohnson @ West earl twp. org
Municipal Engineer Information
Cocy Rollhman
Municipal Engineer (Name): VOLY NUTTITICUT
Engineer's Email Address: <u>Crbeckereng</u> . Net
Engineering Firm: Becker Engineeeing
Sim Mailing Address 115 Millersville Rd, Lancaster, PA
Firm Maning Address. 17603
Who should the MS-4 Report be mailed to (Name): Cory Rathman MS-4/167 Information
115 Millersville PJ Lancaster PA 17603
Mailing Address: 115 MILLINGVING NUL NULLING Address:
Engineering Firm: BUCKER CNGINEERING
Email Address: <u>Crbeckereng.net</u>
Phone Number: 717-295-4975
May 1. 2015 to April 30, 2019
INTO-4 I CITUM (Degiuning Data Data Data) 110-110-110-110-110-110-110-110-110-110
ACT 167 Adopted (Date): (JULE 1401)

## **ATTACHMENT B- Common Complaint Contacts List**

# What the Lancaster County Conservation District is Responsible for:

## Biosolids Application to Farmland Complaints

Kevin Selbert, Agriculture Compliance Coordinator (717) 299-5361 Ext. 125 (If unavailable, see "Other Organizations")

#### **Excessive Soil Erosion from Ag Operations**

Kevin Seibert, Agricultural Compliance Coordinator (717) 299-5361, Ext. 125

#### **Excessive Soil Erosion from Construction Sites**

Nate Kurtz, E&S Program Manager (717) 299-5361, Ext. 141

#### Manure Complaints

Kevin Seibert, Agriculture Compliance Coordinator (717) 299-5361, Ext. 125

#### Act 38 Nutrient Management Law Compliance Complaints Jeff Hill, Agriculture Program Manager (717) 299-5361, Ext. 143

#### **Fly Related Complaints**

Shelly Dehoff, Pennsylvania Agriculture Ombudsman (717) 299-5361 x149 or (717) 880-0848 shelly.dehoff@gmall.com OR Kevin Seibert, Agriculture Compliance Coordinator (717) 299-5361 Ext. 125

## What Other Organizations are Responsible for:

### Stormwater Complaints (Varies from case to case)

- 1. Local (Borough or Township)
- 2. Lancaster County Planning Commission Dean Severson (717) 299-8333
- 3. Pennsylvania Department of Transportation (717) 299-7621

Invasive Species Complaints (plant or insects) PA Dept of Agriculture Region VI Office 717-772-5209

### Dead Animal (Mortality) Disposal Complaints

PA Dept of Agriculture Region VI Office Joyce McLaughlin (717) 783-8300 Fax: 717-787-1868

#### Pesticide Application Complaints

PA Dept of Agriculture Region VI Office Joe Uran (717) 772-5212 Hypersensitivity Registry Forms Dona McCory (717) 787-4392

## Stream & Wetland Encroachment Complaints

PA Dept of Environmental Protection Jeff Minski (717-705-4709)

## Biosolids Application to Farmland Complaints PA Dept of Environmental Protection

Eric Laur, Soil Scientist (717) 507-4773

## Manure or Other Contaminant Complaints

PA Dept of Environmental Protection Deborah Miller (717) 705-4780 e-mail – debomiller@state.pa.us And/Or PA Fish and Boat Commission Lancaster Co. Office (Lititz) (717) 626-0228

#### Manure Odor Complaints

PA Dept of Environmental Protection Jeff Minski 717-705-4709 OR State Conservation Commission Karl Diamond 570-836-2181 x 120



Conserving Natural Resources for Our Future

- To: Lancaster County Township and Borough Managers
- From: Christopher M. Thompson, Administrator
- Date: September 1, 2015
- Re: Memorandum of Understanding

The enclosed document is a Memorandum of Understanding (MOU) between the Lancaster County Conservation District (LCCD) and your municipality. This MOU indicates both parties' responsibilities between our agencies. The MOU will also serve as a document to validate the linkage between your municipality and LCCD as required by the Municipal Separate Storm Sewer System (MS4) protocol and will remain in effect unless terminated or renewed in writing. <u>This</u> <u>MOU requires action by your municipal board</u>. The District requests that you return: A signed copy of the Execution page and Attachment A – Municipal Contact Information, pages 18 &19, in the enclosed self-addressed envelope within 60 days of receipt of this letter. Please keep a copy for your records.

The District will coordinate efforts with municipalities and interested parties to better determine how we can help meet municipal MS-4 requirements through our delegation responsibilities.

From time to time, you may have other natural resource concerns in your municipality that are not identified within the MOU. I have included a list of contact agencies/people that can assist you with these concerns.

If you have questions in regard to this MOU or would like to receive correspondence via email instead of standard mail, please contact Roberta Hartz, at (717) 299-5361 x 113, to be added to our email list.

Cordially, Christopher M. Thompson

Enclosures: MOU Agency Contact List



# MCM #5 Appendix

- MCM #5 Project Plan
- BMP 5.3 Attachments
  - WestEarlBMPInventory2017-07-21.pdf

# MCM #5 Project Plan

## • BMP 5.1

## Description:

Enact, implement and enforce an ordinance or SOP to require post-construction stormwater management from new development and redevelopment projects, including sanctions for non-compliance.

## Measurable Goal:

- Municipal permittees shall enact, implement, and enforce an ordinance to require the implementation of PCSM BMPs, including sanctions for non-compliance. All municipal permittees shall submit a copy of an ordinance that is consistent with DEP's 2022 Model Stormwater Management Ordinance (3800-PM-BCW0100j) as an attachment to an Annual MS4 Status Report by September 30, 2022 (existing permittees) or the fourth (4th) Annual MS4 Status Report following approval of coverage under this General Permit (new permittees).
- 2. Permittees that lack the authority to enact ordinances shall develop, implement and enforce an SOP to require the implementation and maintenance of PCSM BMPs and submit the SOP to DEP by September 30, 2022 (existing permittees) or the fourth (4th) Annual MS4 Status Report following approval of coverage under this General Permit (new permittees).

## Action Plan:

West Earl Township implements their Post Construction Stormwater Management Program through enforcement of the West Earl Township Stormwater Management Ordinance (Ordinance). The Ordinance was adopted on June 9, 2014.

For BMPs 1-3, West Earl Township will rely on DEP's statewide program for issuing NPDES Permits for Stormwater Discharges Associated with Construction Activities (through the Lancaster County Conservation District) to satisfy all requirements under MCM #4 and all requirements under BMPs #1 through #3 of MCM #5. In this case, West Earl Township is not required as a condition of their NPDES permit to implement any of the BMPs listed under MCM #4 nor any of the first three BMPs listed under MCM #5 in Appendix A of the Authorization to Discharge.

## • BMP 5.2

## Description:

Develop and implement measures to encourage and expand the use of Low Impact Development (LID) in new development and redevelopment. Measures should also be included to encourage retrofitting LID into existing development. Guidance on implementing LID practices may be found on DEP's MS4 website, www.dep.pa.gov/MS4. Enact ordinances consistent with LID practices and repeal sections of ordinances that conflict with LID practices. Submission of an ordinance that is consistent with DEP's 2022 Model Stormwater Management Ordinance (3800-PM-BCW0100j) will satisfy this BMP.

## Measurable Goal:

None

## Action Plan:

The West Earl Township Stormwater Management Ordinance (Ordinance) encourages and promotes Low Impact Development (LID) practices to accomplish stormwater management. The Ordinance was recently updated to include LID practices and adopted on June 9, 2014.

A list of BMPs utilizing LID practices is included in the following inventory under BMP 6. It should be noted that the inventory may include BMPs that are outside of the regulated MS4 area.

• BMP 5.3

## **Description**:

Ensure adequate O&M of all post-construction stormwater management BMPs that have been installed at development or 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.

## Measurable Goal:

An inventory of PCSM BMPs shall be developed by new permittees by the end of the first year of General Permit coverage and shall be continually updated during the term of coverage under the General Permit as development projects are reviewed, approved, and constructed. Existing permittees shall update and maintain its current inventory during the term of coverage under the General Permit. The permittee must track the following information in its PCSM BMP inventory:

- 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., latitude and longitude, with street address).
- Information (e.g., name, address, phone number(s)) for BMP owners and entities responsible for BMP O&M, if different from BMP owners.
- 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 conducted for each BMP.
- An assessment by the permittee if proper O&M has occurred during the year and if not, what actions the permittee has taken, or shall take, to address compliance with O&M requirements.

## Action Plan:

An operation and maintenance agreement is included in the West Earl Township Stormwater Management Ordinance (Ordinance) and entering into this agreement is a requirement for all regulated projects involving stormwater management. The agreement is between the owner of the BMP and the Township. The agreement identifies the operation, maintenance and inspection responsibilities of the BMP owner. Additionally, BMP operation, maintenance and inspection responsibilities are listed on the recorded plans.

An inventory of BMPs is listed in the following spreadsheet under BMP 6. The inventory currently reflects BMPs since 2011 but will be updated to include BMPs installed since 2003. It should be noted that the inventory may include BMPs that are outside of the regulated MS4 area.

## Prepared by: Cory Rathman, PE, Becker Engineering

Structural BMP	Site Address	Location (CSDatum BMP ID Number)	) Tax Parcel ID	Latitude & Longitude	Recorded SWMEA	Drainage Area	Year Installed/ LCCD Prmt Issue Date	Within Urbanized Area (y/n)	Name of Receiving Water Body	Impervious Area Treated (ac) <sup>1</sup>	Volume Reduction Permanently Removed (cf) <sup>2</sup>	Volume of stormwater treated (cf) <sup>3</sup>	Acres Treated (ac) <sup>3</sup>	Inspection/ Maintenance Frequency Responsible Person or Organization	NPDES Permit	NPDES NOT
REID WISSLER SUBDIVISION		#001				0	01/31/2003								PAG2003603009	-
PLEASANT VALLEY MENNONITE SCHOOL		#002		40° 9' 40.3", -76° 9' 18.2"		5.43	02/05/2003	Y	Conestoga River	2.49	0	25522	5.43		PAG2003603010	
EAGLEVIEW ESTATES (FORMERLY TOBACCO ROAD PHASE 1) REV.		#003		40° 8' 50.7", -76° 11' 57"		71.87	04/24/2003	Y	Conestoga River	12.00	0	61236	71.87		PAR10O303-R	
JOHN M STOLTZFUS		#004				0	06/25/2003	N	Croff Crook						PAG2003603065	
EAIRMOUNT HOMES - EAST CAMPUS		#005		40° 6 7.2 , -76° 10 12.6° 40° 8' 0 6" -76° 8' 46"		0	04/01/2004	N	Conestoga River						PAG2003604028	
CLOVERBROOK		#007		40° 8' 19.3", -76° 13' 16.1"		30.91	04/12/2004	Y	Cocalico Creek	13.81	0	71194	30.91		PAG2003604034	1
ANGLESEA (WENGER PROPERTY)		#008		40° 6' 1.2", -76° 9' 36.2"		54.858	04/26/2004	Y	Groff Creek	18.27	0	126498	54.858		PAG2003604037	
MILLWAY ACRES COMMERCIAL SUBD		#009		40° 8' 41.9", -76° 12' 48.8"		13.27	09/02/2004	Y	Cocalico Creek	4.99	0	42082	13.27		PAG2003604089	
VICTOR S MARTIN		#010				0	12/17/2004								PAG2003604115	
CLEVELAND BROTHERS - Basin A		#011A		40° 8' 3.9", -76° 12' 43.4"		0	04/26/2005	Y	Cocalico Creek						PAG2003605036	
CLEVELAND BROTHERS - Basin B		#011B		40° 8' 10.6", -76° 12' 34.4"		0	04/26/2005		Cocalico Creek							
DS WATERS - Basin A1		#012A		40° 8' 3.9", -76° 13' 6.7"		1.48	08/02/2005	Y	Cocalico Creek	0.98	0	3432	1.48		PAG2003605101	
DS WATERS - Basin A2		#012B		40° 8' 7.8", -76° 13' 7.9"		1.55	08/02/2005	Y	Cocalico Creek	0.72	3693	6533	1.55			<b>_</b>
SONIC DRIVE-IN		#013		40° 8' 0.6", -76° 12' 56.6"		0	08/10/2005	Y	Cocalico Creek	1.46	0	16457	5.07		PAG2003605094	
ESTHER HOOVER SUBDIVISION		#014				0	06/07/2006	Ť	Cocalico Creek	1.40	0	10457	5.97		PAG2003606013 PAG2003606067	
FRANK H HOOVER		#016				0	06/28/2006								PAG2003606054	
JOHN J SHEAFFER II		#017				0	08/18/2006								PAG2003606094	
		#018				0									PAG2003606130	
		#019A		40° 7' 6.3", -76° 9' 32.8"		0	08/20/2007	N	Groff Creek						PAG2003607060	
WARREN H NOLT		#019B #020		40°7 6.8, -76°9 34.9		0	01/08/2009	IN	Groll Creek						PAG2003608088	
LCCTC BROWNSTOWN CAMPUS - Infiltration & Extended Detention Basin		#021		40° 8' 1.2", -76° 11' 24.9"		5.43	04/25/2012	N	Conestoga River	1.03	0	10364	5.43		PAG02003612026	
CREEK HILL - Extended Detention-Constructed Wetland Basin		#022		40° 7' 21.7", -76° 14' 5.8"		18.5	2017	Y	Cocalico Creek	10.68	5354	126185	18.5			
MIKE GROSS - DIAMOND STATION RD - Infiltration Basin		#023	210-27689-0-0000	40° 9' 12.3", -76° 10' 10.4"		2.59	2015	N	Conestoga River	0.23	0	3160	2.59			
LAMAR WEAVER SUBDIVISION - Infiltration & Extended Detention Basin		#024	210-56489-0-0000	40° 6' 41.8", -76° 8' 22.4"		0.775	2015	N	Conestoga River	0.215	2150	2150	0.775			<u> </u>
ELI LANTZ - Cistern		#025	210-42916-0-0000	40° 7' 11.2", -76° 13' 38.4"		0.055	2015	Y	Cocalico Creek	0.055	2160	2160	0.055			
EARL MARTIN - Infiltration & Extended Detention Basin	123 Willis Pierce Road Ephrata, PA 17522	#026		40° 8' 51.9", -76° 9' 4.9"		2.96	2015	Ν	Conestoga River	1.08	12289	12387	2.96			
DAVID LAPP - Infiltration & Extended Detention Basin	182 Cider Mill Rd Ephrata, PA 17522	#027		40° 8' 27.1", -76° 9' 11.1"		0	2016	Ν	Conestoga River							
FAIRMOUNT HOMES - COUNTRY VIEW DR - Infiltration & Extended Detention Basin	333 Wheat Ridge Drive Ephrata, PA 17522	#028		40° 7' 54.6", -76° 8' 49.9"		0	2016	N	Groff Creek							
TIM WEIST - Infiltration Bed		#029		40° 9' 41.1", -76° 9' 25.7"		0.1148	2016	Y	Conestoga River	0.1148	3360	3360	0.1148			
SENSENIG REPAIR - Infiltration Bed & Cistern	210 E Farmersville Road Ephrata, PA 17522	#030		40° 7' 52.7", -76° 8' 56.6"		0.19	2016	N	Groff Creek	0.19	2115	2115	0.19		NA	
WILMER HOOVER - Cistern	300 N Farmersville Road Ephrata, PA 17522	#031	210-26336-0-0000	40° 8' 24", -76° 10' 36.5"		0.23	2016	Ν	Conestoga River	0.23	2264	2264	0.23		NA	
BUCH POULTRY BARN - Infiltration & Extended Detention Basin	20 Buch Rd Ephrata, PA 17522	#032		40° 8' 47.3", -76° 11' 32.8"		0	2016	Ν	Conestoga River							
ELAM HORNING POULTRY BARN - Infiltration & Extended Detention Basin 1	175 S Farmersville Road Leola, PA	#033A		40° 6' 0.6", -76° 9' 5.6"		0.94	2016	Ν	Groff Creek	0.42	4750	4750	0.94		PG02003616004	
ELAM HORNING POULTRY BARN - Infiltration & Extended Detention Basin 2	175 S Farmersville Road Leola, PA	#033B		40° 5' 58.7", -76° 9' 4.1"		1.02	2016	N	Groff Creek	0.475	5273	5273	1.02		PG02003616004	
AARON ZIMMERMAN SUBDIV - Infiltration Bed		Under Constr				0	2017	N								<u> </u>
JOHN STOLTZFUS - Infiltration Bed	84 Hickory Lane	Under Constr	210 01545 0 0000	40° 0' 20 2" 76° 0' 22 0"		0	2017	N	Concetage River	0.07	400	100	0.07			
	Ephrata, PA 17522 426 Millway Road	#034	210-01545-0-0000	40 9 20.3 , -76 8 33.8		0.07	2018	N		0.07	400	400	0.07		NA	
MILLER/GRUBE - Inflitration Bed - Front Yard (Proj name - Grube)	Ephrata, PA 17522 426 Millway Road	#035A	210-00520-0-0000	40° 8 59°, -76° 13 2.9°		0.07	2016	Y		0.07	768	768	0.07		NA	
	Ephrata, PA 17522 165 Chapel Lane	#035B	210-00520-0-0000	40° 8 58.9°, -76° 13 2.3°		0.05	2016	Y		0.04	454	454	0.05		NA	
JOHN LEID - Infiltration & Extended Detention Basin	Ephrata, PA 17522	#030 Under Constr	210-91448-0-0000	40 / 10./ , -/0- 12 20./"		0.08	2010	r		0.08	603	003	0.08		NA	
SCHOOL LANE FARMS - Extended Detention Basin		#037		40° 7' 22.8", -76° 12' 22.1"		0	1998?	Y	Conestoga River						NA	
EMM Sales - Infiltration Bed		#038		40°07'54.7"N 76°13'18.0"W	,	0.07	2016	Y	Cocalico Creek	0.07			0.07		NA	
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Date Updated:	
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April 5, 2017

# MCM #6 Appendix

- MCM #6 Project Plan
- BMP 6.1 Attachments
  - West-Earl-Facilities-List.pdf
- BMP 6.2 Attachments
  - equipment-storage-bldg.pdf
  - Good Housekeeping-O-M program (5).pdf
  - street\_sweeping-w-weigh slips.pdf
- BMP 6.3 Attachments
  - employee-training-records2017-2018.pdf
  - certified-stormwater-inspector.pdf
  - Watershed-conference\_2017.pdf
  - PABCO-2017\_MS4\_training-session.pdf
  - PRP\_BMP-meeting.pdf
  - LandisHomes-MS4-training.pdf
  - employee-training-3-5-2018.pdf

# MCM #6 Project Plan

## • BMP 6.1

## Description:

Identify and document all operations that are owned or operated by the permittee and have the potential for generating pollution in 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:

- 1. New permittees shall create an inventory of all operations and land uses that may contribute to pollution in stormwater runoff within areas of operations that discharge to the regulated small MS4 by the end of the first year of General Permit coverage, and review and update the inventory annually thereafter.
- 2. All permittees must review and update the inventory each year of General Permit coverage, as necessary.

## Action Plan:

The Pollution Prevention / Good Housekeeping Program for West Earl Township is included in the following pages. \*\*Note that there are no Township owned facilities within the urbanized area or within the drainage areas to the MS4 outfalls with the exception of the Township roads. However, a Pollution Prevention/Good Housekeeping Program has been developed for the Township owned properties.

• BMP 6.2

## **Description**:

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, as identified under BMP #1. This program shall address stormwater collection or conveyance systems within the regulated MS4. The written O&M program shall stress pollution prevention and good housekeeping measures, contain site-specific information, and include the following:

- Management practices, policies, and procedures shall be developed and implemented to reduce or prevent the discharge of pollutants to the regulated small MS4s. The permittee shall 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 the regulated small MS4s.
- 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, salt / sand (anti-skid) storage locations and snow disposal areas. Controls for solid chemical products stored and utilized for the principal purpose of deicing roadways for public safety must be consistent with the BMPs for existing salt storage and distribution sites contained in the PAG-03 NPDES

General Permit for Stormwater Discharges Associated with Industrial Activity.

• Procedures for the proper disposal of waste, including dredge spoil, accumulated sediments, trash, household hazardous waste, used motor oil, street sweepings, and other debris.

## Measurable Goal:

- 1. New permittees shall develop and implement a written O&M program by the end of the first year of General Permit coverage and review and update the program each year thereafter.
- 2. All permittees must review and update the written O&M program each year of General Permit coverage, as necessary.

## Action Plan:

The O&M Program objectives:

1. Identify and document all municipal facilities and activities that may contribute pollutants to receiving waters via the regulated MS4 through stormwater runoff or a non-stormwater discharge.

2. Implement, maintain, and document all practices, controls, procedures, and so on for a group of selected BMPs aimed at reducing or preventing pollutants that may result from municipal facilities or activities.

3. Implement, maintain, and document an employee and contractor training program to improve the knowledge of employees and contractors for reducing or preventing pollutants that may result from municipal facilities or activities.

4. Identify and document all other activities, policies, and so on with a focus on pollution prevention and good housekeeping for municipal operations.

The program, along with its components, will be reviewed annually by the Stormwater Coordinator & Township Manager. Components to be reviewed include, but are not limited to, the BMP Implementation and Maintenance Schedule and selected BMPs. Modifications or revisions to the O&M Program may occur during the annual reviews.

See attached O&M full plan

• BMP 6.3

## Description:

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. The program may be developed and implemented using guidance and training materials that are available from federal, state or local agencies, or other organizations. All relevant employees and contractors shall receive training (i.e., public works staff, building, zoning, and code enforcement staff, engineering staff, police and fire responders, etc.). Training topics shall include operation, inspection, maintenance and repair activities associated with any of the operations identified under BMP #1. Training must cover all relevant parts of the permittee's overall stormwater management program that could affect operations, such as illicit discharge detection and elimination, construction sites, and ordinance requirements.

## Measurable Goal:

- 1. 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 by the end of the first year of General Permit coverage.
- 2. All permittees must review and update the training program each year of General Permit coverage, as necessary.
- 3. Employee training shall occur at least annually and shall be documented in writing and

reported in Annual MS4 Status Reports. Documentation shall include the date(s) of the training, the names of attendees, the topics covered, and the training presenter(s).

## Action Plan:

An annual training plan will be developed by February 1st of each year. The topics of focus in the training plan are based on selected BMPs or any items relative to stormwater and water quality deemed necessary. The Annual Training and Education Plan can be found in Attachment B. Training is provided to municipal employees and contractors by the following methods, but not limited to:

- Formal or informal
- "Tail-gate" training
- On-site
- Classroom or similar

Training is conducted by appropriate and qualified persons, including those persons listed as responsible persons in Section 2.

Training Records will be completed and logged documenting training completed, and will include information such as the date of training, location of training, instructor(s)/presenter(s), and topics reviewed. Training Records can be found in Attachment C. Records will be completed for training activities outlined in the Annual Training Plan and for non-planned activities.
#### West Earl Township Facilities List & Description

Municipal Drive Complex; 157 W. Metzler Rd Ephrata Pa 17522 (Building are fenced in)

Office Building

- Twp offices & Meeting Rooms
- Police offices & cruiser bays
- Public Works Garage & Shops

Pole Shed

- Cold Storage
- 4 bay garage
- Stand by generator
- Police evidence storage
- On the N/W end of the building 2 bays for stone storage

#### Salt Shed

- 3 sided pole shed with 3 bays
- Raw salt storage
- Mix storage
- Cold patch storage

#### Municipal Drive Park

- Baseball Field
- Tennis Court
- Basket Ball Court
- Pavilion & Bleachers
- Storage shed for ball field equipment

Compost Facility 161 Locust Street Leola Pa 17540 (storage site)

- Brush pile
- Yard waste pile
- Yard waste composting windrows
- Single ground mulch pile
- Double ground mulch pile
- Humus pile
- Topsoil pile
- Fill pile
- Asphalt millings pile
- Firewood pile
- Pole shed to house the compost turner
- 3 sedimentation ponds
- 13 acres total, (7 blacktop & 5 grass and ponds)

Sewer Treatment Plant facility 161 Locust Street Rear Leola Pa 17540 (treatment facility)

- 2 SBR units with a blower room
- Control building
- In ground sludge storage
- Twin clear wells
- UV Channel
- Influent wet well
- 4.5 Acres

Sewer Lift Stations (various locations)

- Eagle Drive
- Cocalico Creek Road.
- Newport Road.
- Oregon Pike
- Church Street

The lift stations typically consist of block control buildings with a diesel generator for backup power. Influent wet well with pumps that transfer the sewage toward the main sewer treatment plant.

Water Treatment Plant (potable)

- Main control building for Nolt's Well
- Main control building for two additional booster stations and two tanks.
- Nitrate reduction and disinfection control process for the Nolt's well is at this location.

Oregon Pike Booster Station

- Pump building for the main interconnect with Lancaster City.
- Disinfection boost
- Diesel Generator for back up power

Main Metering Pit

- Dual Metering pit for the city tie in.
- Located at the West Earl Township / Manheim Township Line on Oregon Pike

#### Hilltop Tank

- 350000 gallon Hydro Piller
- 100000 gallon standpipe
- Detention basin for overflow

Akron Booster Station

- Main Booster Station for the Akron zone
- Disinfection boost
- No generator on site, direct service from the PPL substation.
- 1/5<sup>th</sup> acre lot

#### Akron Hill Tank

- 250000 gallon elevated reservoir
- 1 Acre lot

Stone Quarry Rd Park

- Open field, 13 acres
- Walking trails (gravel)
- Parking lot (gravel)

#### Lions Park

- 20 acre park
- Paved walking trail and parking lot
- Tot-lot, restrooms and pavilion

#### Eagle View Park

• 10 acres in design stages.

In June 2018 the West Earl Township Public Works Department finished construction of a pole barn to house Township equipment. Keeping the equipment covered will help reduce the potential for stormwater runoff pollution.

Before and after pictures following.







# Good Housekeeping Operation & Maintenance Program

(O&M Program)

The Municipal Pollution Prevention/Good Housekeeping Plan (MS4 PPGHP)

West Earl Township Municipality

Updated February 23, 2017

Date

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#### ATTACHMENTS

Attachment A	Municipal Inventory List
Attachment B	Annual Training and Education Plan(s)
Attachment C	Training Records
Attachment D	Inspection Records
Attachment E	Event Records
Attachment F	Activity Records
Attachment G	BMP Implementation & Maintenance Schedule
Attachment H	Individual BMP Fact Sheets

### Section 1 Background & Introduction

The Good Housekeeping Operation and Maintenance Program (O&M Program) was developed to outline operational management and maintenance practices, policies, procedures, and protocols (or Best Management Practices ("BMPs")) for reducing and/or preventing pollutants associated with municipal facilities and activities from entering receiving waters as outlined and/or required by the National Pollutant Discharge Elimination System (NPDES) and an issued NPDES Small Municipal Separate Storm Sewer System (MS4) Permit (including PAG-13).

Compliance is a broad word with respect to an issued MS4 Permit and corresponding applicable laws and regulations such as Title 40 ("40 CFR") and 25 Pa. Code, which provide the basis of the permit. There are two primary categories for consideration for an MS4 Permit—documentation and program effectiveness. A program is built to effectively prevent or reduce pollutants from entering receiving waters via stormwater runoff or non-stormwater discharges to meet the requirements of an MS4 Permit. Documentation provides the specifics of the program; along with evidence the permitted entity is addressing not only the requirements of the MS4 Permit, but also the applicable laws and regulations.

The O&M Program specifically addresses the regulatory requirements outlined for municipal good housekeeping practices for operations and maintenance of facilities and activities, and is more commonly known as Minimum Control Measure Number Six ("MCM #6") in an issued MS4 Permit. An important aspect of the O&M Program is the training component as required by 40 CFR Part 122.34(b) (6) (i).

The O&M Program addresses, but is not limited to:

- municipal operations.
- the stormwater collection and conveyance system.
- facilities, activities, and land uses that have the potential to generate stormwater runoff.
- facilities, activities, and land uses that may contribute pollutants via stormwater runoff or nonstormwater discharges to receiving waters.
- pollution prevention and good housekeeping control measures for reducing or eliminating the discharge of pollutants from municipal facilities and activities through Best Management Practices (BMPs) including, but not limited to:
  - o practices and procedures.
  - o maintenance and inspection activities.
  - o assessing goals and effectiveness.
  - training and education.

Section 4 of the O&M Program is the Operational Plan of the program. This section provides the specifics of activities, policies, procedures, and so on. The O&M Program as described in the contents section effectively becomes the MS4 Pollution Prevention/Good Housekeeping Plan ("MS4 PPGHP") for MCM #6 of an issued MS4 Permit.

#### 1.1 OBJECTIVES

The O&M Program has four main objectives:

- 1. Identify and document all municipal facilities and activities that may contribute pollutants to receiving waters via the regulated MS4 through stormwater runoff or a non-stormwater discharge.
- 2. Implement, maintain, and document all practices, controls, procedures, and so on for a group of selected BMPs aimed at reducing or preventing pollutants that may result from municipal facilities or activities.
- 3. Implement, maintain, and document an employee and contractor training program to improve the knowledge of employees and contractors for reducing or preventing pollutants that may result from municipal facilities or activities.
- 4. Identify and document all other activities, policies, and so on with a focus on pollution prevention and good housekeeping for municipal operations.

#### 1.2 APPLICABLE REGULATIONS

Congress established the Federal Water Pollution Control Act in 1948. This law provides the foundation of current water quality and water pollution control regulations. In 1972, Congress passed an amendment to the original act known as the Clean Water Act ("CWA"). Section 301 of the CWA prohibits discharges to waters of the U.S. except with a permit. Also, the CWA authorized the NPDES in Section 402. The U.S. Environmental Protection Agency ("EPA") developed the NPDES through promulgation of regulations found in 40 CFR. The Commonwealth of Pennsylvania issues NPDES permits through an approved program following requirements that meet or exceed 40 CFR §123.

In 1987, Congress passed another amendment to the original Federal Water Pollution Control Act. The amendment is more commonly known as the Water Quality Act. This act specifically labeled stormwater as a "problem."

25 Pa. Code Chapter 92a incorporates 40 CFR into Pennsylvania code. Chapter 92a is more commonly known as the NPDES Permitting, Monitoring, and Compliance regulations. Additional chapters in 25 Pa. Code that affect municipal operations governed by an MS4 Permit include Chapter 93 (Water Quality Standards and Criteria), Chapter 96 (Water Quality Protection Requirements), and Chapter 105 (Waterway Management). Chapter 96 also outlines requirements associated with an issued Total Maximum Daily Load ("TMDL").

#### 1.3 O&M PROGRAM MODIFICATIONS AND REVIEWS

The program, along with its components, will be reviewed annually by the Township Manager, Stormwater Coordinator and/or the Assistant Roadmaster. Components to be reviewed include, but are not limited to, the BMP Implementation and Maintenance Schedule and selected BMPs. Modifications or revisions to the O&M Program may occur during the annual reviews. Primary purposes of the review include:

- Ensuring selected BMPs and program information match actual municipal facilities and activities.
- Qualitatively measure effectiveness and goals of the overall program.
- Qualitatively measure effectiveness and goals of individual components of the program.
- Outline new goals for the program or components of the program.

The annual review will be noted on the update page following the MCM #6 cover sheet. Annual Reports will further reflect modifications to the O&M Program.

#### **1.4 EFFECTIVE PERMIT**

The O&M Program is developed to address the requirements of MCM #6 in an issued NPDES MS4 Permit for the municipality. A copy of the permit can be found in West Earl Township office.

Permit # PAG 133535 was issued to West Earl Township.

The effective date of the permit is \_\_\_\_\_\_\_\_ May 1, 2014\_\_\_\_\_\_, and expires

<u>April 30, 2019</u>

#### 1.5 O&M PROGRAM PREPARATION

The O&M Program was prepared by:

Section 2 Purpose & Responsibilities

West Earl Township is a permitted entity under the Commonwealth of Pennsylvania Department of Environmental Protection National Pollutant Discharge Elimination System (NPDES) Stormwater Discharges from Small Municipal Separate Storm Sewer Systems (MS4s) Permit ("MS4 Permit'). Permitted entities are required to develop, implement, and maintain a written operation and maintenance program ("O&M Program") per Minimum Control Measure No. 6 ("MCM #6") as outlined in the MS4 Permit, and further described in applicable federal regulations. The ultimate purpose of the O&M Program is preventing or reducing polluted runoff from municipal operations and activities.

#### 2.1 O&M PROGRAM OVERVIEW

The O&M Program lists procedures and practices (BMPs) to minimize pollution to receiving waters via stormwater runoff or non-stormwater discharges through direct discharge or the municipally owned and operated stormwater conveyance system in the regulated area. The O&M Program describes the facilities, activities, and land uses that have the potential to generate stormwater runoff along with polluting the runoff. Procedures and practices include, but are not limited to documentation, inspections, monitoring, and training.

Development and implementation of an O&M Program will aid West Earl Township in achieving compliance with the three BMPs under MCM #6 in Appendix A of the issued MS4 Permit (PAG-13) and applicable regulations such as follows:

- PAG-13/MCM #6 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.
  - The Municipal Inventory provides a list of properties owned by the Township.
  - The O&M Program will include a map identifying the locations of municipal facilities and activities.
  - MEASURABLE GOAL: Development of the O&M Program components/attachments listed above by April 2015 will help achieve this goal.
- PAG-13/MCM #6 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, etc.
  - The BMP Fact Sheets in Attachment H provides a centralized location for information regarding management practices, management procedures, maintenance activities, inspection procedures, and so on.
  - Inspection Records (Attachment D), Event Records (Attachment E), and Activity Records (Attachment F), provides documentation pertaining to inspections and activities to reduce the potential for pollutants to reach the regulated small MS4.
  - The O&M Program calls for the insertion of the Waste Disposal Plan and Spill Response and Control Plan as attachments.
  - MEASURABLE GOAL: Development of the O&M Program and items listed above by April 2015 will help achieve this goal.
- PAG-13/MCM #6 BMP #3: Develop and implement an employee training program
  - The Annual Training and Education Plan is located in Attachment B.
  - Training Records (Attachment C) provide documented training activities.
  - MEASURABLE GOAL(s): Implementation of the above items and as outlined in the O&M Program by April 2015 will achieve the goals.

#### 2.1.1 DOCUMENTATION

All documentation relative to good housekeeping and pollution prevention referenced in the O&M Program or as applicable will be centralized into one location. Persons responsible for the

implementation and maintenance of the O&M Program and corresponding activities and procedures of the BMPs outlined in the program are as follows:

Candie Johnson, Township Manager\_\_\_\_

Sara Service, Stormwater Coordinator

Ashley Martin, Assistant Roadmaster

Each person listed is qualified to manage and/or administer the activities and procedures outlined in the O&M Program.

Documentation guidance for selected and implemented BMPs can be found on the BMP Fact Sheets in Attachment H.

The responsible persons assume the following duties:

- Ensuring compliance with MCM #6 of the MS4 Permit and applicable laws and regulations as it pertains to pollution prevention and good housekeeping for municipal operations.
- Implementing elements of the MS4 PPGHP
- Inspections
- Documentation
- Correlating activities and procedures with other MS4 Permit requirements
- Administer the O&M Program of the MS4 PPGHP

#### 2.1.2 INSPECTIONS

Inspections will be conducted of municipal facilities and activities. Inspection protocols are further described in Section 4 of the O&M Program and the individual implemented BMPs. Descriptions will include the frequency of regular inspections for individual BMPs implemented. Certain rain events will warrant inspections of certain BMPs outside of the normal regular inspection frequency. A defined rain event that will warrant an inspection of particular BMPs is as follows:

DEFINED RAIN EVENT: Greater than 3 inches of rain in any given period of time.

The measured rainfall amount will be based on documented rainfalls from Pennsylvania State Climatologist website to determine if the threshold for a defined rain event has been met. <u>http://climate.psu.edu/data/</u>

For any continuous rain event greater than 24 hours in duration, all BMPs identified for rain event inspections will be inspected. Rain event inspections will follow the defined rain event. From time-to-time, municipal personnel may inspect applicable BMPs prior to a significant and forecasted rain event.

The person(s) responsible for inspections of municipal activities and facilities, along with corresponding BMPs outlined in this O&M Program are as follows:

Candie Johnson, Township Manager\_\_\_\_

Sara Service, Stormwater Coordinator

Ashley Martin, Assistant Roadmaster

#### 2.1.3 MONITORING AND ANALYTICAL TESTING

General monitoring is a continuous activity, and further described in Section 4 of the O&M Program. Analytical monitoring will be conducted as warranted. Such monitoring may include field testing by qualified municipal employees or a qualified laboratory. -Actual analytical monitoring protocols are further described in Section 4 of the O&M Program.

From time to time, analytical testing of samples will be required. The following laboratories or similar type entity will conduct testing of samples:

#### LABORATORY 1

Eurofins Lancaster Laboratories Environmental (Lancaster Labs)
Laboratory

2425 New Holland Pike Address

Lancaster, PA 17601 City, State, Zip

LancLabsEnv@EurofinsUS.com Contact

717-656-2300 Contact Number

#### 2.1.4 TRAINING

Training of employees and relevant contractors will be conducted for both general pollution prevention knowledge and implemented BMPs as it pertains to MCM #6 and good housekeeping. A training plan will be developed annually and is found in Attachment B. More information regarding employee and contractor training is found in Section 4 of the O&M Program.

Candie Johnson/Sara Service/Ashley Martin is responsible for the annual development of the training and education plan.

#### 2.2 BMP SELECTION

A primary purpose of the O&M Program is to document the selection, implementation, and maintenance of BMPs to meet the requirements of MCM #6 in an issued MS4 Permit and applicable federal and state regulations and laws.

The process for selecting, implementing, and maintaining BMPs is as follows:

- An inventory of municipal facilities and activities will be completed per Section 3 of the O&M Program
- BMPs corresponding to the inventory will be selected per Section 4 of the O&M Program.
  - BMPs will be identified as either existing or proposed.
  - A schedule of inspections, maintenance, and implementation of proposed BMPs (if applicable) will be completed and maintained per Section 4 of the O&M Program.
- Selected BMPs are listed in the BMP Implementation and Maintenance Schedule included in Attachment G.
- Implemented BMPs will be reviewed periodically as further described in Section 4 of the O&M Program.

### Section 3 Description of Municipality

Understanding the features and facilities of a municipality aids with establishing a comprehensive and effective program. This section describes the facilities and activities of the municipality.

#### 3.1 MUNICIPAL INVENTORY

The municipality owns or operates facilities and conducts certain activities. These facilities and activities, along with certain land uses, either have the potential to generate stormwater runoff or contribute pollutants to stormwater runoff. Certain facilities and activities may contribute pollutants directly through contact with stormwater runoff or non-stormwater discharges.

A complete list of all municipal facilities, activities, and land uses can be found on the Municipal Inventory List found in Attachment A. The list will be reviewed annually for accuracy or needed modifications by a responsible person listed in Section 2 by **February 1<sup>st</sup>** of each year. An Activity Record will be completed and logged for this action to document the annual review. Activity Records can be found in Attachment F.

A primary facility of the municipality is the municipal yard. A number of facilities and activities are located or conducted within the boundaries of the yard. A map showing the locations of all municipal facilities, activities, and relevant land uses will be developed in future permit years.

#### 3.3 STORMWATER COLLECTION AND CONVEYANCE SYSTEM

Certain structural and natural components within the municipality collect and convey stormwater to receiving waters. Such components include pipes, curbs, ditches, basins, and inlets that are municipally

owned. A goal of the municipality is to prevent or reduce polluted stormwater in the entire collection and conveyance system. However, the issued MS4 Permit provides focus to an established regulated area. A map revealing the regulated area and corresponding components of the collection and conveyance system within the regulated area is found as part of the mapping for MCM #3.

The stormwater collection and conveyance system in the regulated area drains to the following waters:

Cocalico Creek Conestoga River Groff Creek

BMPs addressing components of the collection and conveyance system are further described in Section 4, along with the practices aimed at reducing or preventing polluted discharges from municipal facilities and activities from entering the regulated MS4 and/or collection and conveyance system.

### Section 4 Operational Plan

The Operational Plan outlines the specific practices, controls, procedures, and so on aimed at reducing or eliminating the discharge of pollutants from streets, roads, municipal facilities, municipal activities, storage areas, and any other municipally owned facility or activity as identified in Section 3 and the corresponding Municipal Inventory List. The Operational Plan also addresses training and education of municipal employees and contractors for the specific practices, controls, procedures, and so on identified.

#### 4.1 BEST MANAGEMENT PRACTICES (BMPs)

Based on the Municipal Inventory List found in Attachment A, a set of BMPs have been selected. The selected BMPs are primarily source-control BMPs with a goal to reduce or prevent the discharge of pollutants. The objectives, protocols/practices (including operations and maintenance), inspection procedures, and documentation procedures of selected BMPs can be found within the individual BMP Fact Sheets located in Attachment H. Effectiveness, established milestones/goals, and practices will be reviewed. An Activity Record will be completed and logged for this action. Along with this action, the BMP Implementation and Maintenance Schedule will be reviewed and updated to note any changes in the annual review.

#### 4.1.1 WASTE DISPOSAL PLAN

Along with the selection of BMP GH-7, a Waste Disposal Plan addressing collection and disposal of waste removed from the regulated MS4 and as a result of municipal activities will be developed. The Plan addresses disposal of wastes such as dredge spoil, accumulated sediments, trash, hazardous wastes (including household), used motor oil, and other debris.

#### 4.1.2 SPILL RESPONSE AND CONTROL PLAN

Along with the selection of BMP GH-10, a Spill Response and Control Plan addressing spills that may pollute stormwater runoff or contribute pollutants directly to receiving waters via the regulated MS4 will be developed. The plan outlines such items as spill control materials and responsibilities.

#### 4.2 PROGRAM GOALS

Goals have been identified and established for the facilitation of the O&M Program. Goals may be modified, changed, or added during annual reviews. Initial goals associated with the program or components of the program are as follows:

- 1. Implementation and documentation of O&M plan for stormwater facilities
- 2. Development/update of Waste Disposal plan
- 3. Development/update of Spill Response & Control plan
- 4. Development and implementation of Training & Education plan

#### 4.3 TRAINING AND EDUCATION

An annual training plan will be developed by <u>February 1<sup>st</sup></u> of each year. The topics of focus in the training plan are based on selected BMPs or any items relative to stormwater and water quality deemed necessary. The Annual Training and Education Plan can be found in Attachment B. Training is provided to municipal employees and contractors by the following methods, but not limited to:

- Formal or informal
- "Tail-gate" training
- On-site
- Classroom or similar

Training is conducted by appropriate and qualified persons, including those persons listed as responsible persons in Section 2.

Training Records will be completed and logged documenting training completed, and will include information such as the date of training, location of training, instructor(s)/presenter(s), and topics reviewed. Training Records can be found in Attachment C. Records will be completed for training activities outlined in the Annual Training Plan and for non-planned activities.

#### 4.4 INSPECTIONS

Inspections of facilities and activities as outlined in selected BMPs will be conducted by responsible persons. Inspection Records are located in Attachment D. Inspections will be conducted on a regular basis and based on the selected BMP for a particular facility or activity. Most BMPs will follow a regular inspection frequency.

Inspections will include, but are not limited to the following:

- Comparison of observed facility or activity against the selected practices.
- A note if maintenance or repairs are needed.
- A note if a spill, leak or discharge was observed.
- Any concerns that need addressed.
- Any follow-up activities that may be required such as training or spill control.

Monitoring will be conducted along with inspections to ensure an effective program. More information is provided in Section 4.7 below.

#### 4.5 BMP IMPLEMENTATION AND MAINTENANCE ACTIVITES

Any activities associated with implementing or maintaining a BMP for a municipal operation or facility will be documented on an Activity Record. Activity Records are located in Attachment F.

Activities include repairs to a facility or activity, street sweeping, waste transport, modifying a facility or activity to reflect a BMP, illicit connection investigation, and so on. Individual BMP fact sheets located in Attachment H provide guidance for activities to be documented.

#### 4.6 EVENTS

Significant events are recorded on Event Records. Event Records are located in Attachment E. Events that are recorded include major rain events and illicit discharges.

#### 4.7 MEASURING EFFECTIVENESS

The primary measurement of effectiveness is ensuring proper execution of practices and protocols outlined in the O&M Program (and specifically the selected BMPs) through adequate documentation and review of documentation reflecting implementation and maintenance of BMPs.

#### 4.7.1 GENERAL MONITORING

General monitoring entails frequent observations of municipal activities and facilities outside the normal inspection schedule. Municipal employees and contractors will observe potential polluting conditions (e.g. leaks, discharges, and so on) during normal operations.

#### 4.7.2 FIELD MONITORING

Field monitoring entails documented observations of selected municipal facilities and activities. Field monitoring may include sample acquisition by qualified municipal employees or contractors. Most samples acquired will be tested with a field test kit.

There is no overarching frequency identified for field monitoring. Field monitoring will be conducted as needed or as identified as a measurement of effectiveness for selected BMPs.

#### 4.7.3 ANALYTICAL MONITORING

As required by the NPDES permit, analytical monitoring and testing will be conducted to measure the quality of waters within the regulated area to ensure selected practices and protocols for good housekeeping are effective. Analytical monitoring may also include sample acquisition at other locations in the regulated area of the MS4.

Analytical monitoring will be conducted by a laboratory listed in Section 2. Sample acquisition may be completed by qualified municipal personnel, contractors, or the laboratory. The monitoring report will note the person acquiring the sample, along with proper chain of custody forms and other relevant information to ensure quality control.

There is no overarching frequency identified for analytical monitoring. Analytical monitoring will be conducted as needed and for potential pollutants as deemed appropriate.

STREET SWEEPING		
Louise Avenue	Valley View Drive	
Marlou Aveue	Concord Drive	
Evergreen Lane	Batten's Circle	
Locust Street	Highview Drive	
Stone Ridge Drive	Bareview Drive	
Cornerstone Way	Circleview Drive	
Briar Hill Lane	Countryside Lane	
Chapel Lane	Robindale Drive	
School Lane Avenue	Meadow View Drive	
N & S Church Street	Orchard View Drive	
Conestoga Avenue	E, W, N & S Farmersville Road	
Allen Road	Eagle Drive	
Wolf Circle	Hawk Lane	
Brown Road	Sparrow Lane	
Goldin Circle	Talon Drive	
Buchland Road	Pearl Avenue	
Walnut Drive	Pool Road	
Redwood Circle	N & S Conestoga View Drive	
Cedar Avenue	Dogwood Drive	
Greenwood Circle	White Street	
Mellinger Circle	Circle Rock Drive	
Municipal Drive	Gregory Court	
Dane Drive	Garland Lane	
Brian Drive	N & S State Street	
Industrial Road	E & W Main Street	
Zook's Mill Road	Groff's Drive	
Hilltop Drive	Millstone Drive	
Southview Drive	Waterwheel Drive	
Northview Drive	Cocalico Creek Road	
Stone Quarry Road	Millway Road	
	Hillside Drive	

SOURCE SEPARATED RE	STE, RESIDUAL WASTE & CYCLABLE MATERIALS	LCSWMA
A. GENERATOR INFORMATION	TRX #:	3049 River Rd Conestoga, PA 17516
Origin Number: 18	Generator Type (Check One): Residential [ Commercial/Institutional [ Industrial [	REMIT TO: PO Box 4425 Lancaster PA 1760 ] ] ]
Senerator Name:	bus waste according to federal and sta omposition as specifically approved lies.	
Signature & Title	Date	Pay Type: Account
B. TRANSPORTER INFORMATION (T CSWMA License Number: Transporter Company Name: Driver Name: (Please Print) certify this material was received from	the Generator identified above a	Carr: 231325/WEST EARL TOWNSHIP DEP: WH13826 Truck: 16423 Truck Type: TRIANS (160) NUE License: MG 3912E Origin: PA036118/West Earl Township Caid: WF0Working Face
Regulations.	Date $\frac{1}{2} = \frac{1}{2}$	Driver: COM/COBIMERCIAL
C. MATERIAL INFORMATION	Date <u>5 - 70 7</u>	Gross: 29000 LBS In Scale 1 Tare: 18300 LBS Out Scale 2
C. MATERIAL INFORMATION  Type Qua	DateDateDateDateDateDate	Gross: 29000 LBS In Scale 1 Gross: 29000 LBS Out Scale 2 Net: 10700 LBS TONS: 5.35
C. MATERIAL INFORMATION       Type         Quadratic	Date	Ind       Griss: 29000 LBS In Scale 1         Gross: 29000 LBS In Scale 1         Tare: 18300 LBS Out Scale 2         Net: 10700 LBS         Ims         Material: F-01/Refuse         Quantity: 5.35 TON
C. MATERIAL INFORMATION         Type         Qua         H         D. FACILITY INFORMATION	DateDateDateDateDate      Inity Units of Measure     Pounds, CuYd, Drums, Ite	Ind       Grid: WF/WORKing Face         Driver: COM/COMMERCIAL
C. MATERIAL INFORMATION  Type Qua  Type Qua  Frey Farm Landfill Frey Farm Staging Area Resource Recovery Facility Transfer Station Other (if delivered to non-LCSWMA Facility ID Number: Facility Name:	accordance with LCSWMA Rules a	Ind       Griss: 29000 LBS In Scale 1
C. MATERIAL INFORMATION  Type Qua  Type Qua  Frey Farm Landfill Frey Farm Staging Area Resource Recovery Facility Transfer Station Other (if delivered to non-LCSWMA Facility ID Number: Facility Name: Certify that the materials described above on this manifest and were processed, re CSWMA Rules and Regulations.	accordance with LCSWMA Rules a Date Date Date Date Pounds, CuYd, Drums, Ite were received by the Facility indica cycled or disposed in accordance v	Ind       Gross: 29000 LBS In Scale 1

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LCS	SWMA MANIFEST FORM	
REGULATED MUI SOURCE SEP/	NICIPAL WASTE, RESIDUAL WASTE & ARATED RECYCLABLE MATERIALS	LCSWMA
A. GENERATOR INFORM	TRX #:	3049 River Rd Conesioga PA 17516
Origin Number:/ &	Generator Type (Check One): Residential	REMIT TO: PO Box 4425 Lancaster PA 17604
Generator Name: (,) P S+	= ar.) → a (	
I certify this material is a RCRA regulations and is of the same LCSWMA for disposal at LCS	A nonhazardous waste according to federal and state e type and composition as specifically approved by SWMA Facilities.	Date: 5/8/2017 Time: 13:23:38 - 13:40:49 Direction: Inbound
Signature & Title	Date	Pay Type: Account
B. TRANSPORTER INFO	RMATION (To be completed by Transporter)	Cust: 231325/WEST EARL TOWNSHIP Carr: 231325/WEST EARL TOWNSHIP DEP: WH138 <sup>2</sup> 6
LCSWMA License Number: Transporter Company Name: Driver Name:		Truck: 16423 Truck Type: TRIAXLE/TRIAXLE License: MG 3912F
(Please Print) I certify this material was redelivered to the Facility ident	eceived from the Generator identified above and ified below in accordance with LCSWMA Rules and	Origin: PA036118/West Earl Township Grid: WF/Working Face
Regulations.	17 <sup>11</sup>	Driver: COM/COMMERCIAL
Driver's Signature Date	Date	
C. MATERIAL INFORMA	TION	Gross: 28520 LBS In Scale 1
Type	Quantity Units of Measure	Tare: 18240 LBS Out Scale 2 Net: 10280 LBS
<u> </u>	Pounds, CuYd, Drums, Items	TONS: 5.14
	Pounds, CuYd, Drums, Items Pounds, CuYd, Drums, Items	
	Pounds, CuYd, Drums, Items	Material: F-01/Refuse
	10N	Quantity: 5.14 TON \$73.00/TON
		Amount: \$ 375.22
Frey Farm Landfill     Frey Farm Staging Area     Resource Recovery Fac	a cility	Total Amount: \$ 375.22
Other (if delivered to no	n-LCSWMA Facility)	Weighmaster: Rob Dodson 77289
Facility ID Number:		Driver:
I certify that the materials des on this manifest and were p LCSWMA Rules and Regula	scribed above were received by the Facility indicated processed, recycled or disposed in accordance with tions.	AAM WATO
Signature & Title:	Date	
n na na a <del>ta</del> tata ya uk <del>ata</del> tana kukata ku	n an	***** INVOICE *****

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Appendix C

### WEST EARL TOWNSHIP ANNUAL EMPLOYEE TRAINING AND EDUCATION PLAN

Permit #:133535Permit Cycle Year:2017-2018Updated:February 22, 2017

Training Event	Target Employee	Planned Frequency	Topics
	Audience		
SWMP Review	All Staff	Annually	Updates on the SWMP
Illicit Discharge and Detection	All Staff	Annually	How to spot and report illicit discharges
Waste Disposal	Public Works Staff	Annually	Proper disposal of various materials
Salt & Materials Storage	Public Works Staff	Semi-annually	Proper storage of salt & other materials



Certified Stormwater Inspector Harrisburg, June 5-6, 2017

> Presented by National Stormwater Center www.NPDES.com Email: info@npdes.com 1-772-288-6852





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### Paul E. Davis. P.E.

38 years – Tennessee Department of Environment & Conservation 24 years – Director, Water Pollution Control

TN Licensed PE Environmental Engineer

WEF National Stormwater Committee

BS - Engineering Physics/Science MS – Water Resources University of Tennessee

US Masters Swimmer

SYDAMING







#### Here's what I want us to accomplish

- I want you to know what federal and state law require MS4s to do and how inspection is part of that.
- We'll skim through your 3 permits and highlight what I think is particularly important for you.
- We'll discuss the art and science of stormwater management.
- We'll look at some pictures and enforcement situations and discuss how we see them.
- I expect us to enjoy these 2 days!



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	lt's Abou	t Dirt	
Texture Class	Water Capacity (inch per inch)	Infiltration Rate (inch per hour)	Grouping
Sand	0.35	8.27	А
Loamy Sand	0.31	2.41	Α
Sandy Loam	0.25	1.02	В
Loam	0.19	0.52	В
Silt Loam	0.17	0.27	с
Sandy Clay Loam	0.14	0.17	C
Clay Loam	0.14	0.09	D
Silty Clay Loam	0.11	0.06	D
Sandy Clay	0.09	0.05	D
Silty Clay	0.09	0.04	D
Clay	0.08	0.02	D





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#### in-spect 🗘 (īn-spēkt')

tr.v. in-spect-ed, in-spect-ing, in-spects
1. To examine carefully and critically, especially for flaws.
2. To review or examine officially: The commander inspected the troops.

How is this supposed to be? What will I do about it?



It's About Discretion

Action !











# HOMEWORK!

- Prepare 1 or more <u>SHORT</u> inspection issues, situations, ideas good and bad... for our discussion on Day 2.
- I'll give you some examples.
- Email to <u>pedh2o@gmail.com</u> by 10:00 PM or just bring to class.

# MORE HOMEWORK!

А

• Find yourself on <u>How's My Waterway</u> and determine what watershed you're in and check out the available info for that watershed. We'll do a demo today...



#### **Testing Made Easy**

- Read and answer the question
- Pick the best answer or answers
- Class will let us know if they disagree with your answer
- Passing grade is 75%
- Grade your test, put your name on it, leave it with me



### Course Graduation

CSI

Visible Recognition



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- Sticker (for Hard Hat)
- Professional Recognition Letter
  - "Qualified Inspector"
  - Certification for 5 Yrs. Renewable





# SEVENTH LEHIGH VALLEY WATERSHED CONFERENCE CONFLUENCE: CONFLUENCE OCTOBER 17, 2017 BETHLEHEM, PA Changing Communities and Changing D

Registration and Coffee (STEPS Building Atrium) 7:45 - 8:30 8:30 - 9:45 Welcome and Plenary Session

# Lehigh River, from Past to Today Gary Walters, Assessment Section Chief of the PADEP Presenting on the historical water quality data for the Lehigh River.

# 9:45 - 10:00 Break

# 10:00 - 11:15 Morning Course 1 (STEPS Building)

# Session A — 🔊

# A Moment of Science

Diane Husic, Moravian College Rebecca Kennedy, PENNVEST

Talking about complex scientific topics to the public in 2017 - an interactive conversation

Session B — When the Sewer Meets the Stream

Liesel Gross, Lehigh County Authority

The challenges facing wastewater authorities with sanitary sewer overflows

# Session C-

Are We Ready for the Big One?

Geoff Reese, LVPC

Planning for municipal infrastructure in a changing climate

## **Municipal Separate Storm** Sewer System Management Technical Track for Municipal Staff and Decisionmakers on Strategies and Tools for Addressing MS-4s in Your Community

# Session MS4 D —

# "Rain Tax" or Smart Planning?

Charlotte Katzenmoyer, PubWork City of Lancaster

Working with municipal stormwater fees

# Workshops: 🔊 🌭

**Explore Invasive Management** Two Hands-On Half-Day Workshops Suitable for landscapers, land managers, and anyone interested in learning how plants and animals from other continents are invading Lehigh Valley native landscapes, and how to best tackle the issues.

10:00 - 12:15 Workshop 1 ---Take It or Leaf It?\* Kathy Salisbury

# **Invasive Management: Plants**



U.S. Fish and Wildlife Service -Northeast Region

# 11:15 - 12:15 Morning Course 2 (STEPS Building)

Session A — 🔊

The Buffer Brigade -**Riparian Restoration in** the Lehigh Valley

## Kate Ebel. Wildlands Conservancy

How local partners are cooperating to make an impact on streamsides on public and private property Session B —

# Synthetic Waters

Julie Lawson, Trash Free Maryland

How microplastics from our clothing and cosmetics are affecting our aquatic ecosystems and what can be done to help

Session C— 🔊 **Tick Talk and** Mosquito Buzz

Jeff Carroll, Penn State Ext. and Louise Bugbee, formerly of Penn State Ext.

Up-to-date information on everyone's favorite outdoor critters, the disSession MS4 D — Stormwater: Resource or Nuisance

Adrianne Vicari, HRG Rebecca Kennedy, PENNVEST

Is a Stormwater Authority right for your municipality?

eases they carry, and how to best stay clean and clear

# 12:15 - 1:30 Lunch Break

#### 1:30 - 2:30 Afternoon Course 1 (STEPS Building) 1:30 - 4:00 Workshop 2 ---Session C— Session B — 🐋 Session MS4 D ---Session A — What's Bugging You? \* Cougars on the Prowl Cutting Through the So You Want to be a Your Site or Mine? Emilie Swackhamer, Penn State Acronyms and Jargon Scientist? Michelle LaRue, Becki Douglas, Perkiomen Extension Cougar Network Watershed Conservancy to Action John Jackson, **Invasive Management: Insects** Stroud Water Research Effective website design The eastern expansion Mike Hickman, Center of the North American Tools/programs for citizen and online outreach for for Watershed Protection Cougar scientists, including DIY watershed groups Pollutant Reduction Plan and water testing equipment & Total Maximum Daily Load updates on the Delaware Implementation & Adaptive **River Watershed Initiative** Management 2:45 - 4:00 Afternoon Course 2 (STEPS Building) David Cappaert, Michigan State University Session C- ~ Session A - 🔊 Session B — 🐋 Session MS4 D -**Climate Change Comes** Greening the Gray The Nitty Gritty Not in My Backyard, \* ISA Certified Arborist, PCH, PDH, Yours Might Be Better Home Karen Pooley, Mike Hickman, Center Pesticide Credits and PA Landscape Lehigh University for Watershed Protection Vinnie Controne, PSU, Architect CEUs available. Dru Germanoski, Kathryn Semmens, Nurture Contact Emilie Swackhamer at Lafayette College The interface between Muncipal Separate Stormwater Nature Center, Diane Husic, exs33@psu.edu or 610-489-4315 cities and their natural Sewer System Program Plans The science and impacts Moravian College for more information. environment, and how and Standard Operating of pipelines planners are increasingly Procedures including how Impacts of a changing looking at cities' public to write plans, involve the public, climate in Lehigh Valley and implement good housespaces for environmental towns and backyards initiatives keeping practices A green leaf next to the title indicates that the presentation will be made on a basic level.

All other presentations will assume some background in subject matter.

Conference Organizers: Watershed Coalition of the Lehigh Valley

Lehigh University Department of Earth and Environmental Sciences, Environmental Initiative • Penn State Extension Northampton County Conservation District • Lehigh County Conservation District • Nurture Nature Center • Wildlands Conservancy









# PENNSYLVANIA ASSOCIATION OF BUILDING CODE OFFICIALS

PABCO

"Helping to Build a Safer Pennsylvania"

MEMBERSHIP DEPARTMENT PO Box 202 Roaring Spring, PA 16673 Pabco4871@aol.com

### 4th Annual Pennsylvania Municipal Code Enforcement Conference

Location and Date:	Wednesday, October 4 <sup>th</sup> , 2017	Clarion Hotel & Conference Center 148 Sheraton Drive I-83 & PA Turnpike – New Cumberland 717-774-2721	
Time:	7:30 AM – 8:30 AM Registration and Full Continental Breakfast 8:30 AM – 4:30 PM Conference Program		
Directions:	Will be sent with confirmation		
Cost:	\$65.00 pre-registered / PABCO members & sponsors (add \$20 for on-site registration)		
	\$95.00 pre-registered / non-members (add \$20 for on-site registration) (Join PABCO and have \$30.00 applied to your membership dues)		
	\$15.00 per hour for UCC Continuing Education Credits / ICC Continuing Education Units (optional)		
	Includes hot lunch, continental break	fast and conference materials	
Continuing Education:	6.0 UCC Continuing Education Credits / 0 .6 ICC Continuing Education Units are available (optional pricing) PABCO is an <u>Approved UCC Training Provider</u> and is an <u>ICC Preferred Provider</u>		
Planned Program/ Schedule	Several plenary sessions are plan         ✓ Land Banking         ✓ Blighted Property E         ✓ Municipal Separate         There will be three optional session         ○ Property Maintenan         ○ Wireless Communic         ○ Mold – What Is It an         ○ Carbon Monoxide –         ○ Act 133 Real Estate         ○ Occupancy	nforcement Processes Storm Water Systems (MS4) ons throughout the day, with <u>two topics</u> ce – From Ordinance to Abatement cations Facilities Zoning Ordinances d When Is It A Hazard Enforcement and Best Practices erty Maintenance Complaints Transactions – Certificates of	


## STATEWIDE MUNICIPAL CODE ENFORCEMENT CONFERENCE OCTOBER 4, 2017 NEW CUMBERLAND, PA CLARION HOTEL AND CONFERENCE CENTER

8:30 AM	Plenary Session	Welcome and Introductions Overview of Today's Schedule	Donald C Forry President, PABCO	
8:45 AM	Plenary Session (45 min.)	Blighted Properties – Effective Abatement Strategies David Patton, Codes Administrator City of Harrisburg Department of Public Safety		
9:30 AM	Choose One (45 min.)	Land Banking - Everything You Need to Know and More Justin Eby, Dir. of Housing and Community Development at Lancaster County Redevelopment	Hoarding - Understanding the Mental Disorder and Fire Safety Hazards Effective Abatement Strategies Matt Paxton, Co-Founder and CMO of Legacy Navigator	
10:15 AM	Break	Break	Break	
10:30 AM	Choose One (1hr.)	Property Maintenance Ordinances - Adoption, Enforcement, Abatement Tim Knisely, Centre Region Code Senior Fire and Housing Inspector	Wireless Communication Facilities in Right-Of-Way - Ordinances Bethany Emkey, Esquire Hartman Valeriano Magovern Lutz	
11:30 AM	Plenary Session (1hr.)	Hot Buffet Lunch	Hot Buffet Lunch	
12:30 PM	Plenary Session (1hr.)	City of Jeannette's Fight Against Blighted Properties A City's Inspiration, Reinvention and Keys to Success Michael Nestico, Esquire, Jeannette City Manager		
1:30 PM	Choose One (1hr.)			
		Municipal Separate Stormwater Systems (MS4) Nick Johnson, PE Great Valley Consultants	Liability & Negligent Inspection Lawsuits Chad Michaelson, Esquire Meyer Unkovic and Scott	
2:30 PM	Break	Municipal Separate Stormwater Systems (MS4) Nick Johnson, PE Great Valley Consultants Break	Liability & Negligent Inspection Lawsuits Chad Michaelson, Esquire Meyer Unkovic and Scott Break	
2:30 PM 2:45 PM	Break Choose One (45min.)	Municipal Separate Stormwater Systems (MS4) Nick Johnson, PE Great Valley Consultants Break Effective Abatement of Property Maintenance Complaints Randy B. Maurer, ICC MCP Associated Building Inspections	Liability & Negligent Inspection Lawsuits Chad Michaelson, Esquire Meyer Unkovic and Scott Break Act 133 - Real Estate Transactions Certificates of Occupancy Stacey Morgan, Esquire Brubaker Connaughton Goss & Lucarelli	

PABCO Conference

10/3/2017



Nicholas R. Johnson, P.E. Great Valley Consultants

## **Primary Goals**

- History of Stormwater Management
- How it impacts you
- New Regulations





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#### MS4

"Municipal Separate Storm Sewer Systems"
1999 – Large Municipalities (Few in PA Qualified)
2003 – Small Municipalities (about 970)
Six Minimum Control Measures (MCMs)

#### MCMs

- MCM 1 Public Education and Outreach
- MCM 2 Public Participation and Input
- MCM 3 Illicit Discharge Detection and Elimination
- MCM 4 Construction-Phase Stormwater Management
- MCM 5 Post-Construction Stormwater Management
- MCM 6 Good Housekeeping

## MCMs (in English)

- MCM 1 "Teach the Public"
- MCM 2 "Listen to the Public"
- MCM 3 "Eliminate Pollution"
- MCM 4 "Stop Construction Run-off"
- MCM 5 "Long-term Run-off Controls"
- MCM 6 "Good Housekeeping"

## MCMs (in English)

- MCM 1 "Teach the Public"
- MCM 2 "Listen to the Public"
- MCM 3 "Eliminate Pollution"
- MCM 4 "Stop Mud Run-off"\*
- MCM 5 "Long-term Run-off Controls"\*
- MCM 6 "Good Housekeeping"
- \* Most likely to involve Code Officials



## Act 167/MS4

MS4 Permit requires adoption of a stormwater management (167) Ordinance

MCM 2/BMP 2 MCM 3/BMP 5

MCM 4/BMP 3

MCM 5/BMPs 1&2 MCM 6/BMP 3

## Important to Outsider

- 5,000 square feet of disturbance Approved E&S Plan Required
- 43,560 square feet (1 acre) of disturbance NPDES Permit
- 500-1000 square feet\* additional impervious cover - Stormwater Management (SWM) Design

## SWM Design

• Stringency varies greatly







• Building a garage?

How will your Municipality Handle It?











## Conflict with UCC

- Debate at Local Seminar
- Legality and Enforceability Concern

Who Inspects? On-Lot Stormwater Facilities PCSWM Facilities - 10 Years of Inspections must be inspected once every other year for O years + then as

## Property/Civil Issues

- "Something Changed"
- Flooding and Neighbors

## Authorized Discharges

- DISCHARGES AUTHORIZED BY THIS GENERAL PERMIT Except when specifically problem during the "Discharges like Authoritism by the Convert Penmi" landow, the Orient Penmi Industria Reidatarge of Authoritism by Convert Penmi as Not and MCM. In order, on Boldowing non-dominated advantages are autorized by Ris Convert Penmi as Not as such discharges do not cause or combinate by Datarian a define all Penvarianta's Cause Sharem Law.
- Discharges or flows from firefighting activities.
   Discharges from potable water sources including water line fushing and fire hydrant flushing, if such di
   dio not occlane detectable concentrations of Total Residual Chlorine (TRC).
- Non-contaminated impactor water, water from lawn maintenance, landscape draikage and flows from riparian flubibits and vetlands.
- Overted stream flows and springs.
   Non-contaminated pumped ground valer and water from foundation and footing drains and crawl space pum
- Residential (i.e., not commercial) vehicle wash water where cleaning agents are not utilized.
   Non-contaminated hydrostatic test water discharges, if such discharges do not contain detectable concentra
   of TRC.
- c min. In the event existing outfailing are identified doining the form of General Permit coverage that were not identified on many advantational as part of the KO larlow required; the permittee that identify the outfailing) is the subsequent downers outfailed and the termination of the subsequent downers outfails are provides the permittee with advant within Conduction to the Dutle "Conductive Conductive" of the constraints of the Advanced to (This constraint) and the constraints of the constraints of the constraints of the Advanced to (This constraint) and the constraints of the constraints of the constraints of the Advanced to (This constraint) and the constraints of the constraints of the Advanced to (This constraint) and the constraints of the constraints of the Advanced to (This constraint) and the constraints of the constraints of the Advanced to (This constraint) and the constraints of the constraints of the Advanced to (This constraint) and the constraints of the constraints of the Advanced to (This constraint) and the constraints of the constraints of the constraints of the Advanced to (This constraint) and the constraints of the constraints











10/3/2017





Pollutant Reduction Plan & BMP meeting February 14, 2018

## Attendees:

Keith Kauffman, Supervisor Butch Keppley, Supervisor Candie Johnson, Township Manager Ashley Martin, Assistant Roadmaster Jordan Levering, Road Department Sara Service, Stormwater Coordinator Cory Rathman, Township Engineer

**Discussion Items:** BMPs outlined in the Pollutant Reduction Plan

Hoover channel stabilization – work on design and permitting in 2018

Eagleview Estates – look into the Akron Borough stormwater that draining down into the Eagleview development.

Set up meeting with Homeowners' Associations to discuss BMP maintenance and the pollutant reduction plan.

BMP ID	BMP Project	Sediment Load
		Reduction (lbs)
PRP1	Eagleview Estates Detention Basin	15,727 HOA DWDS
	Retrofit	
PRP2	Anglesea Detention Basin Retrofit	13,670 HOA OWNS
PRP4	Main Street Bioswale	2,208
PRP5	School Lane Farms Detention Basin	7,631
PRP7A/7B	West Earl Community Park Riparian	318 / 953
	Buffer / Extended Riparian Buffer	
PRP8	West Metzler Road Channel	44,880 Jan Hanger
	Stabilization 2018/2019 ?	

Table 4. Summary of Proposed BMPs for the Middle Conestoga RiverSubwatershed

#### BMP PRP1: Eagleview Estates Detention Basin Retrofit Project - HOA

Eagleview Estates is an existing detention basin, built in 2003, that receives drainage from 59.9 acres of pervious area and 12 acres of impervious area. This privately-owned basin is proposed to be retrofitted to increase the capacity of stormwater detained in the basin. The total area of the basin retrofit is 1.06 acres. This BMP will serve as a Stormwater Treatment practice (as defined by the Expert Panel) for the Conestoga River Planning Area (part of the Middle Conestoga River Basin). Load reductions for this BMP were calculated based on procedures from the Expert Panel. Calculation details are included in Appendix D. - Look into Akron Boro Stormwater drawing into development.

#### BMP PRP2: Anglesea Detention Basin Retrofit Project ~ HOA

The Anglesea housing development has an existing detention basin, built in 2004, that receives drainage from 36.6 acres of pervious area and 18.3 acres of impervious area. This privately-owned basin is proposed to be retrofitted to increase the capacity of stormwater detained in the basin. The total area of the basin retrofit is 1.01 acres. This BMP will serve as a Stormwater Treatment practice for the Groff Creek Planning Area (part of the Middle Conestoga River Basin). Load reductions for this BMP were calculated based on procedures from the Expert Panel. Calculation details are included in Appendix D.

#### BMP PRP4: Main Street Bioswale / Channel Stabilization

There is an eroded channel on the south side of Main Street that receives drainage from 3.55 acres of pervious area and 1.45 acres of impervious area. This channel conveys stormwater to the Conestoga River during storm events. West Earl Township proposes stabilizing this channel by creating an approximately 700 ft x 30 ft bioswale to reduce sediment erosion discharging to the river during storm events. This BMP will serve as a Stormwater Treatment practice for the Conestoga River Planning Area (part of the Middle

West Earl Township Pollutant Reduction Plan July 24, 2017



Conestoga River Basin). Load reductions for this BMP were calculated based on procedures from the Expert Panel. Calculation details are included in Appendix D.

#### BMP PRP5: School Lane Farms Detention Basin Retrofit Project

The School Lane Farms housing development has an existing detention basin that receives drainage from 22.01 acres of pervious area and 8.99 acres of impervious area. This privately-owned basin is proposed to be retrofitted to increase the capacity of stormwater detained in the basin. The total area of the basin retrofit is 0.558 acres. This BMP will serve as a Stormwater Treatment practice for the Conestoga River Planning Area (part of the Middle Conestoga River Basin). Load reductions for this BMP were calculated based on procedures from the Expert Panel. Calculation details are included in Appendix D.

#### BMP PRP7A/7B: West Earl Community Park Riparian Buffer Project

West Earl Township proposes to create a riparian buffer along a drainage channel / unnamed stream that runs through the West Earl Community Park (publicly owned) and ultimately connects to the Conestoga River. The proposed buffer is 350 in length and 35 feet wide on both sides of the stream. The buffer will treat a drainage area that is 0.8 pervious acres and 0.33 impervious acres within the Conestoga River Planning Area (part of the Middle Conestoga River Basin). As an additive alternative (BMP ID# PRP7B), the riparian buffer could be extended onto the other side of Route 772 for an additional 700 linear feet to the confluence with the Conestoga River. This alternative buffer would treat a drainage area that is 2.40 acres of pervious area and 0.98 acres impervious area. The additional length of buffer would require coordination with a private landowner. Load reductions were calculated using the BMP effectiveness values for Forest Buffers (see BMP Effectiveness Values). Calculation details are included in Appendix D.

## BMP PRP8: West Metzler Road Channel Stabilization Project - John Hoover

West Earl Township proposes to create a channel stabilization project along an unnamed tributary to the Conestoga River off of West Metzler Road. The proposed project is intended to stabilize 1,000 linear feet of stream running through a privately owned agricultural field within the UA. The channel stabilization will treat the drainage area within the Conestoga River Planning Area (part of the Middle Conestoga River Basin). The length of channel stabilization could be reduced depending on site specifics and the amount of load reduction achieved from the implementation of other BMPs. Sediment load reductions for a channel stabilization project are calculated at 44.88 lbs/ft/yr based on the BMP effectiveness values for Stream Restoration (see BMP Effectiveness Values). Calculation details are included in Appendix D. - Work on design & permitting in 2018. Tritial evaluation

in March? Of Moving forword? If all of the above BMPs are implemented, the sediment load reduction in the Middle Conestoga River Basin would be 85,069 lbs/yr which is above the minimum 10% sediment reduction requirement.



West Earl Township Pollutant Reduction Plan July 24, 2017 To meet the pollutant load reduction requirements for the Cocalico Creek Planning Area, West Earl Township proposes the implementation of the following BMPs summarized in Table 5:

BMP ID	BMP Project	Sediment Load Reduction (Ibs)
PRP3	Millway Acres Detention Basin Retrofit	5,706
PRP6	Industrial Road Detention Basin Retrofit	10,337

#### BMP PRP3: Millway Acres Detention Basin Retrofit Project

Millway Acres is an existing detention basin, built in 2004, that receives drainage from 8.28 acres of pervious area and 4.99 acres of impervious area. This privately-owned basin is proposed to be retrofitted to increase the capacity of stormwater detained in the basin. The total area of the basin retrofit is 0.63 acres. This BMP will serve as a Stormwater Treatment practice for the Cocalico Creek Planning Area. Load reductions for this BMP were calculated based on procedures from the Expert Panel. Calculation details are included in Appendix D.

#### BMP PRP6: Industrial Road Detention Basin Retrofit Project

Industrial Road is the location of an existing detention basin that receives drainage from 20.66 acres of pervious area and 8.44 acres of impervious area. This privately-owned basin is proposed to be retrofitted to increase the capacity of stormwater detained in the basin. The total area of the basin retrofit is 1.03 acres. This BMP will serve as a Stormwater Treatment practice for the Cocalico Creek Planning Area. Load reductions for this BMP were calculated based on procedures from the Expert Panel. Calculation details are included in Appendix D.

If the above BMPs are implemented, the sediment load reduction in the Cocalico Creek subwatershed would be 16,042 lbs/yr, which is less than the minimum 10% sediment reduction requirement for this particular area. This portion of the subwatershed within West Earl Township boundaries has limited opportunities for stormwater BMP implementation.

Based on guidance from DEP, West Earl Township plans to utilize additional load reductions from proposed BMPs implemented within the Middle Conestoga River subwatershed to satisfy the overall 10% load reduction requirements for the municipality.

#### G. Funding Mechanism Identification

In order to install and maintain the BMPs listed in Section E, West Earl Township proposes the following sponsors/partners and funding sources:



West Earl Township Pollutant Reduction Plan July 24, 2017

Capitie & Ash ULY Sara.



# Inspecting and Maintaining Your Stormwater BMPs

Hosted by the Lancaster County Clean Water Consortium (lccwc.com)

October 19 9 AM - 2:30 PM

Landis Homes 1001 E Oregon Rd Lititz, PA



Join the Chesapeake Stormwater Network for a one-day workshop on how to quickly and effectively inspect and maintain your stormwater management practices! Learn why maintaining your stormwater practices is so important for protecting the health of your local streams. Then, be introduced to CSN's Visual Indicators approach to learn how to rapidly assess the condition of your stormwater practices and diagnose any potential problems that could impact their performance.

## Chesapeake Stormwater Network:

The Chesapeake Stormwater Network (CSN) is a small non-profit dedicated to providing high quality training and resources to their network of nearly 11,000 stormwater professionals across the Bay watershed.

Registration deadline is October 13: https://www.surveymonkey.com/r/inspect maintain Or call Kristen Kyler at 717-948-6609 \$10 for LCCWC Members \$25 for non-members  $\times 3 = \oplus 15$ Check or cash payment will be taken at the door. Checks should be made out to the "Lancaster County Clean Water Consortium"



## Stormwater Inspection & Maintenance Workshop October 19, 2017 Landis Homes, Lancaster, Pennsylvania

9:00-9:15	Welcome and Introductions	ALL
9:15 — 9:45	<b>Operation and Maintenance Guidebook</b> An introduction to the new Operation and Maintenance Guidebook released by the Lancaster County Clean Water Consortium.	LCCWC
9:45 – 10:00	Break	Υ
10:15 – 11:15	<b>Bioretention and The Visual Indicators</b> <b>Approach to Inspecting and</b> <b>Maintaining Stormwater BMPs</b> An introduction to the Visual Indicators inspection system for LID practices, with an emphasis on bioretention.	David Wood and Tom Schueler, CSN
11:15 - 12:00	The Pond Protocols An overview of the simple visual indicators to rapidly assess dam safety and water quality functions of stormwater ponds.	Tom Schueler and David Wood, CSN
12:00 – 1:00	<b>Lunch</b> Sponsored by David Miller/Associates, Inc.	
1:00 - 2:30	<b>Field Walk to Inspect LID Practices</b> A field visit to facility sites to test out the visual inspection approach.	ALL
2:30	Adjourn	



Hosted by:

LANCASTER COUNTY CLEAN WATER CONSORTIUM Restoring the waters of Lancaster County and the Chesapeake Bay

unu chesapatestormuater. net

## Lancaster County Clean Water Consortium Chesapeake Stormwater Network

"Inspecting and Maintaining Your Stormwater BMPs" workshop October 19, 2017 – 9am-2:30pm Landis Homes – 1001 E. Oregon Road, Lititz, PA 17543

Sara Service & Ashley Martin attended.

Notes from the workshop

#### **Bio-retention – visual inspection approach**

- Inlet obstruction Sediment, debris, sediment staining
- Inlet erosion
- Structural Integrity
- Size of the Surface Area does the surface area match the original design?
- Side Slope Erosion check design plan to confirm which vegetative plant is used to help stabilize soils
- Ponding Volume
- Sinking filter bed check underdrain or outfalls, test excavation, possible causes sinkhole, damaged pipe, and poor connection.
- Sediment deposition & caking determine sediment depth & it's probably source or its contributing drainage areas.
- Standing Water
  - Saturated soils
  - Inches of standing water 72 hours after rain
  - > Too much mulch? Evaluate materials
  - Check filter cloth
  - Compacted soil won't allow infiltration
- Ponding Depth
- Mulch Depth look at design on plan and remove any excess mulch
- Trash remove if there is any
- Bed Erosion changes over time original design should specify desired plants.

#### Infiltration – Visual indicators

- Inlet check the condition of the contributing drainage area
- Bed check for sinking pavement, sediment, standing water, staining
- Outlet check the condition of the overflow and underdrain

#### **Grass channels – visual indicators**

• Inlet – check condition of CDA, runoff capture, inflow erosion

- Perimeter check pavement edge, side slope erosion
- Bed check flow distribution, sediment, standing water, trash
- Vegetated cover check conditions
- Outlet check terminus

#### **Pond Management**

- Evaluate performance Is it not performing or under performing
- Water quality can you see visible sediment
- Short circuiting does inflow of pond flow directly to outlet with little to no dispersion water will not be fully treated
- High pool elevation are low flow pipes clogged? Look for riser staining
- Low pool elevation are sediments exposed? is there a structured sinkhole?
- Invasive plant species is there a large resident geese population?
- Hypertrophic pond conditions harmful algae blooms present, pool is stagnant, smells bad
- Erosion check downstream and upstream

#### Definitions

- **Outfall/Outlet** Point where water flows from a conduit, stream, pipe, or drain.
- **Inlet** A surface connection to a closed drain. The upstream end of any structure through which water may flow.

## WEST EARL TOWNSHIP MS4 PERMIT YEAR 2017-2018 EMPLOYEE TRAINING

March 5, 2018 "Stormwater Pollution Prevention Plan" training video American Training Resources https://www.americantrainingresources.com/ptv-227.aspx



## **Employees Attended**

Sara Service Ashley Martin Candie Johnson Sylvan Fisher Rick Haverstick Jerry Howe Jordan Levering Robert Buckwalter Teresa Beever Missy Wallace Amy Carter

# **Pollutant Reduction Plan**

- NPDES-permit2018.pdf
- 20170523-SpecialMeeting.pdf
- AD-PRP-Meeting.pdf
- NOI\_NPDES\_application.pdf
- West Earl Twp PRP Final 2017.pdf



JUN 2 2 2018 Candie Johnson West Earl Township Lancaster County PO Box 725 Brownstown, PA 17508

Re: PAG-13 General Permit Approval West Earl Township MS4 NPDES Permit No. PAG133535 Authorization ID No. 1202679 West Earl Township, Lancaster County

Dear Ms. Johnson:

The Department of Environmental Protection (DEP) has reviewed your Notice of Intent (NOI) to operate under the PAG-13 General NPDES Permit and has determined that you are eligible for coverage under the statewide General Permit. Your permit is enclosed.

The statewide General Permit expires on March 15, 2023. However, your coverage under the General Permit does not expire unless your coverage is revoked by DEP. A Notice of Intent (NOI) to renew your coverage is no longer required. When the statewide General Permit is renewed, the permit will be published in the Pennsylvania Bulletin. Following publication of the final renewed General Permit, you must comply with the terms and conditions of the renewed General Permit or otherwise submit an application for an individual NPDES permit. You may submit an application for a waiver to DEP anytime during the term of your General Permit coverage if, due to changing circumstances, you become eligible for a waiver.

The General Permit contains numerous scheduled requirements that may apply to you. Please review DEP's "Summary of Scheduled Requirements" document, available at <u>www.elibrary.dep.state.pa.us</u> (select "Permit and Authorization Packages", "Clean Water", and "PAG-13 MS4 General Permit").

The submission of Annual MS4 Status Reports is required by the General Permit. You must submit the annual reports to the DEP office that approved your General Permit coverage by September  $30^{\text{th}}$  of each year to describe activities conducted under the General Permit during the period of July 1 – June 30. You must also submit the annual installment payment of \$500 to DEP's Bureau of Clean Water by September  $30^{\text{th}}$  of each year. The first annual report and annual payment is due by September 30, 2018. The first annual report will cover the period from the end of your last reporting period under the previous PAG-13 General Permit until June 30, 2018.

You are required to comply with the Pollutant Control Measures (PCMs) contained in Appendix B for the surface waters identified in DEP's MS4 Requirements Table (see <u>www.dep.pa.gov/MS4</u>). You are required to submit to DEP the following: 1) a storm sewershed map for outfalls that discharge to the impaired surface waters; 2) an inventory of all suspected and known sources of the pollutant(s) of concern within the storm sewershed(s); and 3) a report documenting an investigation of each suspected source. Deadlines for submission of this

documentation as attachments to future Annual MS4 Status Reports are established in the Appendices. You must also enact an ordinance that requires proper management of animal wastes on property owned by the permittee. If an ordinance or SOP already exists that controls animal wastes, it must be attached to the first Annual MS4 Status Report due following the first year of coverage unless the ordinance or SOP was attached to the NOI for General Permit coverage). If a new ordinance or SOP is enacted or adopted, the new ordinance or SOP must be attached to the first Annual MS4 Status Report due following the to the first Annual MS4 Status Report attached to the 30, 2022.

DEP has reviewed your Pollutant Reduction Plan(s) (PRP(s)). Your PRP(s) are hereby approved. The following elements of your PRP(s) will be evaluated by DEP during the permit term:

- There is no PRP Planning Area shown on the map which is outside of the Urbanized Area, nor is there any discussion of such Planning Area in the text. The PRP Planning Area can include areas outside the Urbanized Area which drain into the MS4. Please address this issue and make any needed changes to the map and loading calculations.
- Existing and proposed BMPs were used as credit to reduce the baseline load. Please confirm that the drainage areas being treated by the existing BMPs are included in the existing load calculations. Any areas that are not included in the existing load calculations can't be used to reduce the baseline load.
- The plan states that there were pockets of medium-density residential land that does not drain to any type of MS4 infrastructure, but drain as incidental dispersion into surrounding lands. These areas were parsed out of the Planning Area. Any stormwater that enters the UA and is upstream of MS4 infrastructure is assumed to discharge to a surface water at some point. Therefore, areas of incidental dispersion may not be parsed. Please make any needed changes to the map and loading calculations.
- The PRP is proposing a riparian buffer project, to meet the reduction requirements. Please be advised that in accordance with current Chesapeake Bay Program guidelines, a buffer may treat a maximum area equal to twice the proposed buffer area (i.e. twice the length multiplied by buffer width). However, a site-specific evaluation may justify the treatment of a larger drainage area. If necessary, please revise the calculations to reduce the treated area, and/or provide a site-specific evaluation.
- Your plan proposes a stream restoration BMP. Please be advised that the final designs for stream restoration BMPs should be in general accordance with DEP's "Considerations of Stream Restoration Projects" document, available at www.dep.pa.gov/ms4.

During the permit term, DEP will evaluate your progress in implementing the PRP(s). If progress is not satisfactory DEP may require you to obtain coverage under an individual permit.

You are required to implement the load reduction requirements established in Appendices D and E of the General Permit within five years, and you must submit a report demonstrating that you have met these requirements as an attachment to the first Annual MS4 Status Report that is due following completion of the 5th year of General Permit coverage.

Any person aggrieved by this action may appeal the action to the Environmental Hearing Board (Board), pursuant to Section 4 of the Environmental Hearing Board Act, 35 P.S. § 7514, and the Administrative Agency Law, 2 Pa.C.S. Chapter 5A. The Board's address is:

Environmental Hearing Board Rachel Carson State Office Building, Second Floor 400 Market Street P.O. Box 8457 Harrisburg, PA 17105-8457

TDD users may contact the Environmental Hearing Board through the Pennsylvania Relay Service, 800-654-5984.

Appeals must be filed with the Board within 30 days of receipt of notice of this action unless the appropriate statute provides a different time. This paragraph does not, in and of itself, create any right of appeal beyond that permitted by applicable statutes and decisional law.

A Notice of Appeal form and the Board's rules of practice and procedure may be obtained online at <u>http://ehb.courtapps.com</u> or by contacting the Secretary to the Board at 717-787-3483. The Notice of Appeal form and the Board's rules are also available in braille and on audiotape from the Secretary to the Board.

IMPORTANT LEGAL RIGHTS ARE AT STAKE. YOU SHOULD SHOW THIS DOCUMENT TO A LAWYER AT ONCE. IF YOU CANNOT AFFORD A LAWYER, YOU MAY QUALIFY FOR FREE PRO BONO REPRESENTATION. CALL THE SECRETARY TO THE BOARD AT 717-787-3483 FOR MORE INFORMATION. YOU DO NOT NEED A LAWYER TO FILE A NOTICE OF APPEAL WITH THE BOARD.

### IF YOU WANT TO CHALLENGE THIS ACTION, YOUR APPEAL MUST BE FILED WITH AND RECEIVED BY THE BOARD WITHIN 30 DAYS OF RECEIPT OF NOTICE OF THIS ACTION.

If you have any questions, please contact Jacob Rakowsky at 717.705.4918.

Sincerely,

Maria & Benk

Maria D. Bebenek, P.E. Program Manager Clean Water Program

Enclosures

cc: Becker Engineering, LLC LandStudies, Inc. Central Office, Division of Operations

#### COMMONWEALTH OF PENNSYLVANIA DEPARTMENT OF ENVIRONMENTAL PROTECTION BUREAU OF CLEAN WATER

## 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. PAG133535

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.,

#### West Earl Township Lancaster County PO Box 725 Brownstown, PA 17508

is authorized to discharge from a regulated small municipal separate storm sewer system (MS4) located in **West Earl Township, Lancaster County** to **Cocalico Creek, Conestoga River, Unnamed Tributary to Cocalico Creek, Unnamed Tributary to Conestoga River, and Unnamed Tributary to Groff Creek** in Watershed(s) **7-J** 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 JULY 1, 2018. 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:

- 1. 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, the permittee must submit an application for an individual NPDES permit within 90 days of publication of the final General Permit.
- 3. 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.
- 4. 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.
- 6. The permittee shall achieve pollutant loading reductions for sediment, Total Phosphorus and/or Total Nitrogen as specified in **Appendices D and E** by <u>June 30, 2023</u>.

#### This approval of coverage is authorized by:

Maria Blank

Maria D. Bebenek, P.E. Clean Water Program Manager Southcentral Regional Office Department 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)

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*., the Department of Environmental Protection (DEP) hereby authorizes, by this General Permit, the discharge of stormwater from regulated small municipal separate storm sewer systems (MS4s) to surface waters in accordance with effluent limitations, monitoring requirements and other conditions set forth herein.

Eligible dischargers who wish to be covered under this General Permit must submit a Notice of Intent (NOI) to DEP in accordance with the requirements of this General Permit, using the NOI form provided by DEP.

No new discharge may be commenced under this General Permit until the applicant complies with all of the following:

- 1. The applicant has submitted a complete Notice of Intent (NOI) in accordance with the requirements of this General Permit, using a NOI form provided by DEP.
- 2. The applicant has received a signed copy of the Approval of Coverage from DEP that authorizes coverage under the PAG-13 General Permit.

DEP may deny coverage under the PAG-13 General Permit and require submission of an application for an individual permit based on a review of the NOI or other relevant information, including monitoring data.

Once coverage is approved under the PAG-13 General Permit, coverage will continue when the PAG-13 General Permit is reissued, unless the permittee is otherwise notified by DEP. The submission each year of the Annual MS4 Status Report in accordance with Part A III.D of the General Permit shall constitute the permittee's NOI for continued coverage under the General Permit unless DEP notifies the permittee in writing that the submission of a new NOI is required.

#### SCOPE

The PAG-13 General Permit is intended to provide NPDES permit coverage to regulated small MS4s for discharges of stormwater to surface waters. Permittees operating under this General Permit have been either automatically designated as regulated by the U.S. Environmental Protection Agency (EPA) pursuant to 40 CFR § 122.32(a)(1) or designated as regulated by DEP under 40 CFR § 122.32(a)(2).

#### NOI REQUIREMENTS

#### **Deadlines for NOI**

MS4 permittees with existing NPDES permit coverage, MS4s that previously have been waived by DEP, and MS4s newly designated as a result of the 2010 census that are seeking coverage under this PAG-13 General Permit or a waiver must submit and DEP must receive an administratively complete and acceptable NOI by <u>September 16, 2017</u>. MS4s authorized to discharge under an individual NPDES permit who are seeking coverage under this General Permit may continue to discharge in accordance with the individual permit while their NOI and associated documents are being reviewed by DEP.

#### Contents of the NOI

The NOI shall be signed in accordance with the signatory requirements of this General Permit and shall contain the information required in the NOI form.

#### Where to Submit the NOI

An NOI is to be submitted to the regional office of DEP that has jurisdiction over the county where the MS4 is located.

#### DISCHARGES AUTHORIZED BY THIS GENERAL PERMIT

Except where specifically prohibited under the "Discharges Not Authorized by this General Permit" section, this General Permit authorizes the discharge of stormwater to surface waters from regulated small MS4s. In addition, the following non-stormwater discharges are authorized by this General Permit as long as such discharges do not cause or contribute to pollution as defined in Pennsylvania's Clean Streams Law:

- 1. Discharges or flows from firefighting activities.
- 2. Discharges from potable water sources including water line flushing and fire hydrant flushing, if such discharges do not contain detectable concentrations of Total Residual Chlorine (TRC).
- 3. Non-contaminated irrigation water, water from lawn maintenance, landscape drainage and flows from riparian habitats and wetlands.
- 4. Diverted stream flows and springs.
- 5. Non-contaminated pumped ground water and water from foundation and footing drains and crawl space pumps.
- 6. Non-contaminated HVAC condensation and water from geothermal systems.
- 7. Residential (i.e., not commercial) vehicle wash water where cleaning agents are not utilized.
- 8. Non-contaminated hydrostatic test water discharges, if such discharges do not contain detectable concentrations of TRC.

In the event existing outfall(s) are identified during the term of General Permit coverage that were not identified on maps submitted as part of the NOI (where required), the permittee shall identify the outfall(s) in the subsequent Annual MS4 Status Report that is submitted to the DEP office that approved permit coverage. In the event new stormwater outfalls are proposed, the permittee shall submit written notification to the DEP office that approved permit coverage at least 60 days prior to commencing a discharge, unless such discharges would meet one or more of the criteria specified in the "Discharges Not Authorized By This General Permit" section, in which case an individual permit application must be submitted and an individual permit obtained prior to commencing a discharge.

#### DISCHARGES NOT AUTHORIZED BY THIS GENERAL PERMIT

The following discharges are <u>not</u> authorized under the PAG-13 General Permit, and DEP may deny coverage under the General Permit when one or more of the following conditions exist:

- 1. The discharge, individually or in combination with other similar discharges, is or has the potential to be a contributor of pollution, as defined in the Pennsylvania Clean Streams Law, which is more appropriately controlled under an individual permit.
- 2. The discharger is not, or will not be, in compliance with one or more of the conditions of the General Permit.
- 3. 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.
- 4. A change has occurred in the availability of demonstrated technology or practices for the control or abatement of pollutants applicable to the point source.
- 5. Categorical point source effluent limitations are promulgated by the EPA for those point sources covered by the General Permit.
- 6. The discharge is not, or will not, result in compliance with an applicable effluent limitation or water quality standard.

- 7. Other point sources within the MS4 require issuance of an individual permit, and issuance of both an individual and a General Permit for the facility would constitute an undue administrative burden on DEP.
- 8. The discharge from the regulated small MS4 is or would be to a surface water classified as a High Quality (HQ) or an Exceptional Value (EV) water under 25 Pa. Code Chapter 93 (relating to Water Quality Standards).
- 9. The discharge contains toxic or hazardous pollutants, 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 surface waters.
- 10. The discharge individually or cumulatively has the potential to cause significant adverse environmental impact or have been determined by DEP to have caused impairment to the surface waters receiving the discharge(s).
- 11. The discharge would adversely affect a listed endangered or threatened species or its critical habitat.
- 12. The MS4 is covered by an individual permit, and coverage under this General Permit would result in less stringent effluent limitations or terms and conditions.
- 13. DEP determines that the denial of coverage is necessary for any other reason to ensure compliance with the Federal Clean Water Act, the Pennsylvania Clean Streams Law or DEP regulations.
- 14. The regulated MS4 is a large or medium MS4 as defined in 40 CFR §§ 122.26(b)(4) or (7).
- 15. The permittee is implementing a local or tribal Qualifying Local Program (QLP) pursuant to 40 CFR 122.44(s) that is not the state's program as outlined in 25 Pa. Code Chapter 102.
- 16. The regulated small MS4 is assigned a wasteload allocation (WLA) (either specific to the MS4 or general) in a Total Maximum Daily Load (TMDL) approved by the U.S. Environmental Protection Agency (EPA) for local surface waters, where the pollutant(s) of concern are nutrients (i.e., nitrogen and/or phosphorus) and/or sediment (i.e., siltation or total suspended solids), and the MS4 is identified in the "MS4 Requirements Table" (see definitions) as needing to complete a TMDL Plan.
- The regulated small MS4 1) discharges to waters impaired for nutrients and/or sediment without an EPA-approved TMDL or discharges to the Chesapeake Bay watershed; 2) is identified in DEP's "MS4 Requirements Table"; and 3) has not developed and submitted a Pollutant Reduction Plan (PRP) with the NOI to reduce pollutant loading for the cause(s) of impairment.
- 18. The discharge will be commingled with sources of non-stormwater unless such non-stormwater discharges are identified in the "Discharges Authorized by this General Permit" section of this General Permit or are in compliance with a separate NPDES permit and do not cause or contribute to pollution.
- 19. Stormwater discharges associated with industrial activity as defined in 40 CFR §§ 122.26(b)(14)(i)-(ix) and (xi).
- 20. Stormwater discharges associated with construction activity as defined in 40 CFR § 122.26(b)(14)(x) or 40 CFR § 122.26(b)(15).

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

- If the permittee submits a timely NOI for coverage under this General Permit (i.e., received by DEP on or before September 16, 2017) and the previous General Permit expires, the permittee is authorized to continue discharging under the terms and conditions of this General Permit. The permittee must comply with all terms and conditions in this General Permit with the exception of requirements that do not take effect until DEP's approval of coverage, as specified in this General Permit.
- 2. DEP may require a permittee with discharge(s) authorized by this General Permit to apply for and obtain an individual permit by notifying the permittee in writing that an individual permit application is required. Any interested person may petition DEP to take action under this paragraph.

DEP's notice will include the following:

- A brief statement of the reason(s) for this decision;
- An individual permit application form;
- A deadline for the owner or operator to submit the application; and
- A statement that on the effective date of the individual permit, coverage under this General Permit shall automatically terminate.

If a permittee fails to submit an individual permit application required by DEP under this paragraph in a timely manner, then the applicability of this General Permit to the permittee is automatically terminated at the end of day specified for submission of the application.

- 3. Any person authorized to discharge by this General Permit may request to be excluded from the coverage of this General Permit by applying for an individual permit.
- 4. When an individual permit is issued to a person whose discharge(s) are covered by this General Permit, the applicability of this General Permit is automatically terminated on the effective date of the individual permit. When an individual permit is denied to a person whose discharge(s) are covered by this General Permit, the person may continue discharging if all eligibility requirements under this General Permit are met.
- 5. This General Permit will expire 5 years from the date of its issuance. DEP will publish a notice in the *Pennsylvania Bulletin* of the draft reissued General Permit or of any amendments to this General Permit. After a comment period, notice of the final reissued or amended General Permit will be published in the *Pennsylvania Bulletin*. 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, reissued or amended General Permit, the permittee must submit an application for an individual permit within 90 days of publication of the final renewed, reissued or amended General Permit.
- 6. If DEP decides to administratively extend this General Permit, DEP will publish a notice in the *Pennsylvania Bulletin*. The terms and conditions of the General Permit will continue during the period of administrative extension. Permittees with existing coverage under the General Permit will continue to have coverage, unless otherwise notified by DEP. DEP will not approve new coverage under the General Permit during the period of administrative extension.
- 7. Following approval of coverage under this General Permit, if the permittee encounters a condition affecting eligibility under this General Permit as identified above ("Discharges Not Authorized by this General Permit") and does not provide a remedy to correct that condition, coverage under this General Permit may be revoked in writing by DEP, and DEP may require the permittee to obtain an individual permit. Coverage under this General Permit may be revoked if there is evidence indicating potential or actual adverse impacts to water quality as a result of the permittee's discharge(s).
- 8. No condition of this General Permit shall release the permittee from any responsibility or requirements under other federal or Pennsylvania environmental statutes or regulations or local ordinances.
- 9. Following initial coverage under this General Permit, the submission of an Annual MS4 Status Report 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 is authorized to discharge in accordance with the terms of the General Permit immediately upon submission of the Annual MS4 Status Report.
- 10. The permittee shall comply with the requirements of this General Permit in accordance with the schedules contained herein. A summary of the scheduled requirements contained in this General Permit is available (see Document ID No. 3800-PM-BCW0100I).

General Permit (PAG-13) Issued

Lee A. McDonnell, P.E. Director Bureau of Clean Water

Ву

Effective: March 16, 2018

Expires: March 15, 2023

#### PART A

#### EFFLUENT LIMITATIONS, REPORTING AND RECORDKEEPING REQUIREMENTS

#### I. EFFLUENT LIMITATIONS

- A. This General Permit establishes effluent limitations in the form of implementation of a Stormwater Management Program (SWMP), as specified in Part C I of this General Permit, to reduce the discharge of pollutants from the regulated small MS4 to the maximum extent practicable. The permittee shall comply with Minimum Control Measures (MCMs) and best management practices (BMPs) in Part C I of this General Permit, which constitutes compliance with the standard of reducing pollutants to the maximum extent practicable.
- B. All discharges from regulated small MS4s must comply with all applicable requirements established in accordance with 25 Pa. Code Chapters 91-96, 102, and 105 of DEP's rules and regulations. For all MS4s covered under this General Permit, DEP may, upon written notice, require additional BMPs or other control measures to ensure that the water quality standards of the surface waters receiving stormwater discharges are attained.

#### II. DEFINITIONS

Best Management Practices (BMPs) means schedules of activities, prohibitions of practices, maintenance procedures and other management practices to prevent or reduce pollutant loading to surface waters of this Commonwealth. The term includes treatment requirements, operating procedures and practices to control plant site runoff, spillage or leaks, sludge or waste disposal, or drainage from raw material storage. The term includes activities, facilities, measures, planning or procedures used to minimize accelerated erosion and sedimentation and manage stormwater to protect, maintain, reclaim and restore the quality of waters and the existing and designated uses of waters within this Commonwealth before, during and after earth disturbance activities. (25 Pa. Code § 92a.2)

Clean Water Act (CWA) means the Federal Water Pollution Control Act, as amended, 33 U.S.C.A. §§ 1251 - 1387.

*Cleaning Agent* means any product, substance or chemical other than water that is used to clean the exterior surface of vehicles.

*Designated Uses* are 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. (25 Pa. Code § 93.1)

*Dry Weather* means a condition in which there are no precipitation, snowmelt, drainage or other events producing a stormwater discharge for more than 48 consecutive hours.

*Existing Permittee* means any entity that has been designated as a regulated small MS4 and has previously obtained permit coverage under the PAG-13 General Permit or obtained an Individual NPDES MS4 Permit.

*Existing Uses* are 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. (25 Pa. Code § 93.1)

*Illicit Connection* means any physical connection to a municipal separate storm sewer system that can convey illicit discharges into the system and/or is not authorized or permitted by the permittee.

*Illicit Discharge* means any discharge to a municipal separate storm sewer that is not composed entirely of stormwater, except non-stormwater discharges as described in the "Discharges Authorized by this General Permit" section of this General Permit. 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 municipal separate storm sewer system. Illicit discharges can be accidental or intentional.

*Impaired Waters* means surface waters that fail to attain one or more of its designated uses under 25 Pa. Code Chapter 93 and as listed in Categories 4 and 5 of Pennsylvania's Integrated Water Quality Monitoring and Assessment Report.

Integrated Water Quality Monitoring and Assessment Report means the report published every other year by DEP to report on the conditions of Pennsylvania's surface waters to satisfy sections 305(b) and 303(d) of the CWA.

*Intermittent Stream* means a body of water flowing in a channel or bed composed primarily of substrates associated with flowing water, which, during periods of the year, is below the local water table and obtains its flow from both surface runoff and groundwater discharges. (25 Pa. Code § 92a.2)

Load Allocation means 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) means 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.

*MS4 Requirements Table* is a compilation of information regarding Pennsylvania MS4s, surface waters that receive stormwater discharges from MS4s, surface water impairments and TMDLs that is posted to DEP's website, <u>www.dep.pa.gov/MS4</u>. The MS4 Requirements Table has been assembled by DEP to assist MS4 permittees in determining applicable requirements for the development of plans and implementation of BMPs, as well as eligibility for the PAG-13 General Permit. In general, the MS4 Requirements Table will be updated prior to each renewal of this General Permit based on DEP's latest published Integrated Water Quality Monitoring and Assessment Report.

*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): (i) Owned or operated by 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, or an Indian tribe or an authorized Indian tribal organization, or a designated and approved management agency under section 208 of the CWA that discharges to surface waters; (ii) Designed or used for collecting or conveying stormwater; (iii) Which is not a combined sewer; and (iv) Which is not part of a Publicly Owned Treatment Works (POTW) as defined at 40 CFR 122.2. (25 Pa. Code § 92a.32(a) and 40 CFR § 122.26(b)(8))

*Municipal Separate Storm Sewer System (MS4)* means 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)(4), (b)(7), and (b)(16), respectively, or designated under 40 CFR § 122.26(a)(1)(v). (25 Pa. Code § 92a.32(a) and 40 CFR § 122.26(b)(18))

*Municipality* means a city, town, borough, county, township, school district, institution, authority or other public body created by or pursuant to State law and having jurisdiction over disposal of sewage, industrial wastes or other wastes. (25 Pa. Code § 92a.2)

*New Permittee* means any entity that has been designated as a regulated small MS4 and has not previously obtained permit coverage under the PAG-13 General Permit or obtained an Individual NPDES MS4 Permit.

*NOI* means the Notice of Intent for coverage under the NPDES General Permit for Stormwater Discharges from Small Municipal Separate Storm Sewer Systems.

*Non-Municipal Permittee* means a regulated small MS4 that is not a municipality, e.g., military bases, large hospital or prison complexes, and highways and other thoroughfares.

*Non-Structural BMPs* means actions that involve management and source controls such as: (1) policies and ordinances that provide requirements and standards to direct growth to identified areas, promote redevelopment, 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) education programs for developers and the public about minimizing water quality impacts; (3) measures such as minimizing the percentage of impervious area after development, use of measures to minimize directly connected impervious areas, street sweeping, and source control measures such as good housekeeping, maintenance, and spill prevention; and other BMPs as referenced in Chapter 5 of the Pennsylvania Stormwater BMP Manual (363-0300-002).

Ordinance means a law enacted by the government of a municipality.

*Outfall* means a point source as defined by 40 CFR § 122.2 at the point where a municipal separate storm sewer discharges to surface waters and does not include open conveyances connecting two municipal separate storm sewers, or pipes, tunnels or other conveyances which connect segments of the same stream or other surface waters and are used to convey surface waters. (25 Pa. Code § 92a.32(a) and 40 CFR § 122.26(b)(9))

*Owner or Operator* means the owner or operator of any "facility" or "activity" subject to regulation under the NPDES program. (25 Pa. Code § 92a.3(b)(1) and 40 CFR § 122.2)

*Permittee* means the owner or operator of a regulated small MS4 authorized to discharge under the terms of this General Permit.

*Point Source* means a 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 (CAAP), Concentrated Animal Feeding Operation (CAFO), landfill leachate collection system, or vessel or other floating craft from which pollutants are or may be discharged. (25 Pa. Code § 92a.2)

*Pollutant* means 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 Pennsylvania Clean Streams Law, 35 P.S. § 691.1. (25 Pa. Code § 92a.2)

*Qualifying Development or Redevelopment Project* means an earth disturbance activity that requires an NPDES permit for stormwater discharges associated with construction activity per 25 Pa. Code Chapter 102.

*Regulated Small MS4* means 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 subset of "small MS4s" as defined in this section.

*Riparian Forest Buffer* means 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.

*Small Municipal Separate Storm Sewer System (Small MS4)* means an MS4, as defined in this section, that is not a large or medium MS4 pursuant to 40 CFR §§ 122.26(b)(4) and 122.26(b)(7). The term small MS4 includes systems similar to separate storm sewer systems in municipalities, 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. (25 Pa. Code § 92a.32(a) and 40 CFR § 122.26(b)(16))

Standard Operating Procedure (SOP) means a policy or set of procedures that are enacted by a non-municipal permittee to implement a stormwater management program.

*Storm Sewershed* means the land area that drains to an individual MS4 outfall from within the jurisdiction of the MS4 permittee. The term "combined storm sewershed" means the drainage areas of all MS4 outfalls that discharge to a specific surface water or to waters within the Chesapeake Bay watershed.

Stormwater means runoff from precipitation, snow melt runoff and surface runoff and drainage. "Stormwater"

has the same meaning as "storm water." (25 Pa. Code § 92a.2)

*Structural BMPs* means stormwater storage and management practices including, but not limited to, wet ponds and extended detention outlet structures; filtration practices such as grassed swales, sand filters and filter strips; infiltration practices such as infiltration basins and infiltration trenches; and other BMPs as referenced in Chapter 6 of the Pennsylvania Stormwater BMP Manual (363-0300-002).

*Surface Waters* means 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. (25 Pa. Code § 92a.2)

*Total Maximum Daily Load (TMDL)* means the sum of individual waste load allocations for point sources, load allocations for nonpoint sources and natural quality and a margin of safety expressed in terms of mass per time, toxicity or other appropriate measures. (25 Pa. Code § 96.1)

*Urbanized Area (UA)* means 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.

*Wasteload Allocation (WLA)* means the portion of a surface water's loading capacity that is allocated to existing and future point source discharges. (25 Pa. Code § 96.1)

*Water Quality Criteria* means numeric concentrations, levels or surface water conditions that need to be maintained or attained to protect existing and designated uses. (25 Pa. Code § 93.1)

*Water Quality Standards* means the combination of water uses to be protected and the water quality criteria necessary to protect those uses. (25 Pa. Code § 92a.2)

#### III. MONITORING, REPORTING AND RECORDKEEPING

- A. Where samples are collected and analyzed or measurements are taken under this General Permit, the permittee shall assure:
  - 1. Samples and measurements taken for the purpose of monitoring shall be representative of the monitored activity. (25 Pa. Code § 92a.3(c) and 40 CFR § 122.41(j)(1))
  - 2. Records of monitoring information shall include (25 Pa. Code § 92a.3(c) and 40 CFR § 122.41(j)(3)):
    - a. The date, exact place, and time of sampling or measurements.
    - b. The individual(s) who performed the sampling or measurements.
    - c. The date(s) analyses were performed.
    - d. The individual(s) who performed the analyses.
    - e. The analytical techniques or methods used.
    - f. The results of such analysis.
  - Monitoring must be conducted according to test procedures approved under 40 CFR Part 136 unless another method is required under 40 CFR Subchapters N or O. (25 Pa. Code § 92a.3(c) and 40 CFR § 122.41(j)(4))
- B. Records Retention All records of monitoring activities and results, copies of all plans and reports required by this General Permit, and records of all data used to complete the application for this General Permit shall be retained by the permittee for at least 5 years from the date of the sample measurement, report or application. Such records must be submitted to DEP upon request or as required for annual reports. The permittee must make records available to the public at reasonable times during regular business hours. (25 Pa. Code § 92a.3(c), 40 CFR §§ 122.34(g)(2) and 122.41(j)(2))

- C. Proper Operation and Maintenance (O&M) The permittee shall at all times properly operate and maintain all facilities and systems of treatment and control (and related appurtenances), including stormwater BMPs, that are installed or used by the permittee to achieve compliance with the conditions of this permit. (25 Pa. Code § 92a.3(c) and 40 CFR § 122.41(e))
- D. Reporting Requirements
  - 1. The permittee shall submit a complete Annual MS4 Status Report using DEP's annual report template (3800-FM-BPNPSM0491) to the DEP regional office that issued General Permit coverage approval by September 30 of each year.
    - a. For existing permittees, the first annual report submitted to DEP under this General Permit shall have a reporting period starting from the end of the latest annual or progress report period (under the previous General Permit) to June 30, 2018. The first annual report is due by September 30, 2018. For new permittees, the first annual report is due by September 30 following the first year of General Permit coverage.
    - b. Following the first annual report, the reporting period shall thereafter be July 1 June 30, and the report shall be due by September 30.
  - 2. In addition to the Annual MS4 Status Report submitted to the DEP regional office, a check or money order in the amount of \$500.00, which is an installment of the NOI fee, shall be submitted to DEP's Central Office, made payable to "Commonwealth of Pennsylvania." The fee shall be submitted by September 30 of each year to the following address:

PA Department of Environmental Protection Bureau of Clean Water Rachel Carson State Office Building 400 Market Street, PO Box 8466 Harrisburg, PA 17105-8466

For existing permittees, the first fee is due by September 30, 2018. For new permittees, the first fee is due by September 30 following the first year of General Permit coverage.

- 3. The permittee shall submit the Annual MS4 Status Report and fee to DEP electronically upon receipt of written notification from DEP.
- 4. Unanticipated Non-Compliance or Potential Pollution Reporting
  - a. Immediate Reporting The permittee shall immediately report any incident causing or threatening pollution in accordance with the requirements of 25 Pa. Code §§ 91.33 and 92a.41(b) listed below:
    - (i) If, because of an accident, other activity or incident a toxic substance or another substance which would endanger users downstream from the discharge, or would otherwise result in pollution or create a danger of pollution or would damage property, the permittee shall immediately notify DEP by telephone of the location and nature of the danger. Oral notification to the Department is required as soon as possible, but no later than 4 hours after the permittee becomes aware of the incident causing or threatening pollution.
    - (ii) If reasonably possible to do so, the permittee shall immediately notify downstream users of the waters of the Commonwealth to which the substance was discharged. Such notice shall include the location and nature of the danger.
    - (iii) The permittee shall immediately take or cause to be taken steps necessary to prevent injury to property and downstream users of the waters from pollution or a danger of pollution and, in addition, within 15 days from the incident, shall remove the residual substances contained thereon or therein from the ground and from the affected waters of this Commonwealth to the extent required by applicable law.

- b. The permittee shall report any non-compliance which may endanger health or the environment in accordance with the requirements of 40 CFR § 122.41(I)(6). These requirements include the following obligations:
  - (i) 24 Hour Reporting The permittee shall orally report any non-compliance with this permit which may endanger health or the environment within 24 hours from the time the permittee becomes aware of the circumstances.
  - (ii) Written Report A written submission shall also be provided within 5 days of the time the permittee becomes aware of any non-compliance which may endanger health or the environment. The written submission shall contain a description of the non-compliance and its cause; the period of non-compliance, including exact dates and times, and if the non-compliance has not been corrected, the anticipated time it is expected to continue; and steps taken or planned to reduce, eliminate, and prevent reoccurrence of the non-compliance.
  - (iii) Waiver of Written Report DEP may waive the written report on a case-by-case basis if the associated oral report has been received within 24 hours from the time the permittee becomes aware of the circumstances which may endanger health or the environment. Unless such a waiver is expressly granted by DEP, the permittee shall submit a written report in accordance with this paragraph. (25 Pa. Code § 92a.3(c) and 40 CFR § 122.41(l)(6)(iii))
- 5. Other Non-Compliance

The permittee shall report all instances of non-compliance not reported under paragraph D.4 of this section or specific requirements of compliance schedules, at the time Annual Reports are submitted, on the Non-Compliance Reporting Form (3800-FM-BPNPSM0440). The reports shall contain the information listed in paragraph D.4.b.(ii) of this section. (25 Pa. Code § 92a.3(c) and 40 CFR § 122.41(l)(7))

- 6. Signatory Requirements
  - a. Completed Annual Reports and all other reports, NOIs, and information submitted to DEP shall be signed and certified by either of the following applicable persons, as defined in 25 Pa. Code § 92a.22:
    - For a corporation by a principal executive officer of at least the level of vice president, or an authorized representative, if the representative is responsible for the overall operation of the facility from which the discharge described in the NPDES form originates.
    - For a partnership or sole proprietorship by a general partner or the proprietor, respectively.
    - For a municipality, state, federal or other public agency by a principal executive officer or ranking elected official.
  - b. If signed by a person other than the above, the person must be a duly authorized representative of the permittee. A person is a duly authorized representative only if:
    - The authorization is made in writing by a person described in paragraph a., above, and submitted to DEP.
    - The authorization specifies either an individual or a position having responsibility for the operation of the regulated system, 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 company. A duly authorized representative may thus be either a named individual or any individual occupying a named position.
  - c. Changes in Signatory Authorization If an authorization is no longer accurate because a different individual or position has responsibility for the overall operation of the system or facility, a new authorization satisfying the requirements of paragraphs 6.a and 6.b, above, must be submitted to DEP prior to or together with any reports, information or NOI to be signed by an authorized representative.
#### PART B

### STANDARD CONDITIONS

#### I. MANAGEMENT REQUIREMENTS

A. Compliance

The permittee must comply with all conditions of this General Permit. Any permit non-compliance constitutes a violation of the Clean Water Act and is grounds for enforcement action; for permit termination, revocation and reissuance, or modification; or denial of a permit renewal application. (25 Pa. Code § 92a.3(c) and 40 CFR § 122.41(a))

- B. Permit Modification, Termination, or Revocation and Reissuance
  - 1. Permit coverage may be modified, terminated, or revoked and reissued during its term in accordance with Title 25 Pa. Code §§ 92a.72 and 92a.74 and 40 CFR § 122.41(f).
  - 2. The filing of a request by the permittee for a permit modification, revocation and reissuance, or termination, or a notification of planned changes or anticipated non-compliance, does not stay any General Permit condition. (25 Pa. Code § 92a.3(c) and 40 CFR § 122.41(f))
- C. Duty to Provide Information
  - 1. The permittee shall furnish to DEP, within a reasonable time, any information which DEP may request to determine whether cause exists for modifying, revoking and reissuing, or terminating coverage under this General Permit, or to determine compliance with this General Permit. (25 Pa. Code § 92a.3(c) and 40 CFR § 122.41(h))
  - 2. The permittee shall furnish to DEP, upon request, copies of records required to be kept by this General Permit. (25 Pa. Code § 92a.3(c) and 40 CFR § 122.41(h))
  - 3. Other Information Where the permittee becomes aware that it failed to submit any relevant facts in an NOI, or submitted incorrect information in an NOI or in any report to DEP, it shall promptly submit the correct and complete facts or information. (25 Pa. Code § 92a.3(c) and 40 CFR § 122.41(I)(8))
  - 4. The permittee shall give advance notice to the DEP office that approved permit coverage of any planned physical alterations or additions to the regulated small MS4. Notice is only required when: 1) the alteration or addition to a permitted facility may meet one of the criteria for determining whether a facility is a new source in 40 CFR § 122.29(b), or 2) the alteration or addition could significantly change the nature or increase the quantity of pollutants discharged. (25 Pa. Code § 92a.3(c) and 40 CFR § 122.41(l))

### D. Duty to Mitigate

The permittee shall take all reasonable steps to minimize or prevent any discharge in violation of this permit that has a reasonable likelihood of adversely affecting human health or the environment. (25 Pa. Code § 92a.3(c) and 40 CFR § 122.41(d))

### II. PENALTIES AND LIABILITY

- A. Violations of Permit Conditions
  - 1. Any person violating Sections 301, 302, 306, 307, 308, 318 or 405 of the CWA or any permit condition or limitation implementing such sections in a permit issued under Section 402 of the Act is subject to civil, administrative and/or criminal penalties as set forth in 40 CFR § 122.41(a)(2).
  - 2. Any person or municipality, who violates any provision of this General Permit; any rule, regulation or order of DEP; or any condition or limitation of any permit issued pursuant to the Clean Streams Law, is subject to criminal and/or civil penalties as set forth in Sections 602, 603 and 605 of the Clean Streams Law.
- B. Falsifying Information

Any person who does any of the following:

- Falsifies, tampers with, or knowingly renders inaccurate any monitoring device or method required to be maintained under this permit, or
- Knowingly makes any false statement, representation, or certification in any record or other document submitted or required to be maintained under this permit (including monitoring reports or reports of compliance or non-compliance)

Shall, upon conviction, be punished by a fine and/or imprisonment as set forth in 18 Pa.C.S.A. § 4904 and 40 CFR §§ 122.41(j)(5) and (k)(2).

- C. Liability
  - 1. Nothing in this General Permit shall be construed to relieve the permittee from civil or criminal penalties for non-compliance pursuant to Section 309 of the CWA or Sections 602, 603 or 605 of the Clean Streams Law.
  - 2. Nothing in this General Permit shall be construed to preclude the institution of any legal action or to relieve the permittee from any responsibilities, liabilities or penalties to which the permittee is or may be subject to under the CWA and the Clean Streams Law.
- D. Need to Halt or Reduce Activity Not a Defense

It shall not be a defense for the permittee in an enforcement action that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the conditions of this General Permit. (25 Pa. Code § 92a.3(c) and 40 CFR § 122.41(c))

### III. OTHER RESPONSIBILITIES

A. Right of Entry

Pursuant to Section 5(b) of Pennsylvania's Clean Streams Law (35 P.S. § 691.5(b)), 25 Pa. Code Chapter 92a and 40 CFR § 122.41(i), the permittee shall allow authorized representatives of DEP and EPA, upon the presentation of credentials and other documents as may be required by law:

- To enter upon the permittee's premises where a regulated facility or activity is located or conducted, or where records must be kept under the conditions of this General Permit; (25 Pa. Code § 92a.3(c) and 40 CFR § 122.41(i)(1))
- 2. To have access to and copy, at reasonable times, any records that must be kept under the conditions of this General Permit; (25 Pa. Code § 92a.3(c) and 40 CFR § 122.41(i)(2))

- 3. To inspect at reasonable times any facilities, equipment (including monitoring and control equipment), practices or operations regulated or required under this General Permit; and (25 Pa. Code § 92a.3(c) and 40 CFR § 122.41(i)(3))
- 4. To sample or monitor at reasonable times, for the purposes of assuring permit compliance or as otherwise authorized by the Clean Water Act or the Clean Streams Law, any substances or parameters at any location. (25 Pa. Code § 92a.3(c) and 40 CFR § 122.41(i)(4))
- B. Transfer of Permits
  - Transfers by modification. Except as provided in paragraph B.2 of this section, permit coverage may be transferred by the permittee to a new owner or operator only if this General Permit coverage has been modified or revoked and reissued, or a minor modification made to identify the new permittee and incorporate such other requirements as may be necessary under the Clean Water Act. (25 Pa. Code § 92a.3(c) and 40 CFR § 122.61(a))
  - 2. Automatic transfers. As an alternative to transfers under paragraph 1 of this section, any NPDES permit may be automatically transferred to a new permittee if:
    - a. The current permittee notifies DEP at least 30 days in advance of the proposed transfer date in paragraph 2.b. of this section; (25 Pa. Code § 92a.3(c) and 40 CFR § 122.61(b)(1))
    - b. The notice includes the appropriate DEP transfer form signed by the existing and new permittees containing a specific date for transfer of permit responsibility, coverage and liability between them; (25 Pa. Code § 92a.3(c) and 40 CFR § 122.61(b)(2))
    - c. DEP does not notify the existing permittee and the proposed new permittee of its intent to modify or revoke and reissue coverage under this General Permit, the transfer is effective on the date specified in the agreement mentioned in paragraph 2.b. of this section; and (25 Pa. Code § 92a.3(c) and 40 CFR § 122.61(b)(3))
    - d. The new permittee is in compliance with existing DEP issued permits, regulations, orders and schedules of compliance, or has demonstrated that any non-compliance with the existing permits has been resolved by an appropriate compliance action or by the terms and conditions of the permit (including compliance schedules set forth in the permit), consistent with 25 Pa. Code § 92a.51 (relating to schedules of compliance) and other appropriate DEP regulations. (25 Pa. Code § 92a.71)
  - 3. In the event DEP does not approve transfer of coverage under this General Permit, the new owner or controller must submit a new NOI.
- C. Property Rights The approval of coverage under this General Permit does not convey any property rights of any sort, or any exclusive privilege. (25 Pa. Code § 92a.3(c) and 40 CFR § 122.41(g))
- D. Duty to Reapply The submission of the Annual MS4 Status Reports (3800-FM-BPNPSM0491) in accordance with Part A III.D of this General Permit constitutes the submission of an NOI for continued coverage under the General Permit. In addition, the permittee must submit an NOI (3800-PM-BCW0100b) to continue coverage under this General Permit when notified by DEP in writing.
- E. 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.

### PART C

### SPECIAL CONDITIONS

#### I. STORMWATER MANAGEMENT PROGRAM (SWMP)

- A. The permittee must develop, implement, and enforce an SWMP designed to reduce the discharge of pollutants from the MS4 to the maximum extent practicable, to protect water quality, and to satisfy the appropriate water quality requirements of the Clean Water Act and Pennsylvania Clean Streams Law, as described in paragraph B, below. There are six Minimum Control Measures (MCMs) that comprise the SWMP. Specific BMPs are identified under each MCM. The permittee shall demonstrate compliance with the SWMP through the submission of Annual MS4 Status Reports due by September 30 each year.
- B. Minimum Control Measures (MCMs)
  - 1. MCM #1: Public Education and Outreach on Stormwater Impacts. (25 Pa. Code § 92a.32(a) and 40 CFR § 122.34(b)(1))

The permittee shall 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.

- a. **BMP #1**: Develop, implement and maintain a written Public Education and Outreach Program.
  - (1) For new permittees, a written Public Education and Outreach Program (PEOP) shall be developed and implemented within one year following approval of coverage under this General Permit, and shall be re-evaluated each year thereafter and revised as needed.
  - (2) For existing permittees, the existing PEOP shall be reviewed annually 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.

- b. **BMP #2**: Develop and maintain lists of target audience groups that are present within the areas served by the permittee's regulated small MS4. In most communities, the target audiences shall include residents, businesses (including commercial, industrial and retailers), developers, schools, and municipal employees.
  - (1) For new permittees, the lists shall be developed within one year following approval of coverage under this General Permit, and reviewed and updated as necessary every year thereafter.
  - (2) For existing permittees, the lists shall continue to be reviewed and updated annually.
- c. BMP #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 description of the permittee's SWMP, and/or information about the permittee's 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., DEP and EPA stormwater websites, and any other sources that will be helpful to readers). The permittee must implement at least one of the following alternatives:
  - Publish and distribute in printed form a newsletter, a pamphlet or a flyer containing information consistent with this BMP.
  - Publish educational and informational items including links to DEP's and EPA's stormwater websites on the permittee's website.

- (1) 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.
- (2) In subsequent years, and for existing permittees, the list of items published and the content in these items shall be reviewed, updated, and maintained annually.

The permittee's publications shall contain stormwater educational information that addresses one or more of the six MCMs.

d. **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, presentations, conferences, meetings, fact sheets, giveaways, and storm drain stenciling.

All permittees shall select and utilize at least two distribution methods annually. These are in addition to BMP #3, above.

2. MCM #2: Public Involvement / Participation. (25 Pa. Code § 92a.32(a) and 40 CFR § 122.34(b)(2))

The permittee shall comply with applicable state and local public notice requirements when implementing a public involvement / participation program.

a. **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.

The PIPP for new permittees shall be developed and implemented within one year following approval of coverage under this General Permit. All permittees shall reevaluate the PIPP annually and make revisions as necessary.

The PIPP shall include, at a minimum:

- (1) 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.
- (2) 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 surface waters receiving the permittee's discharges.
- (3) Making Annual MS4 Status Reports and all other plans, programs, maps and reports required by this General Permit available to the public on the permittee's website, at the permittee's office(s), or by mail upon request.
- b. **BMP #2**: The permittee shall advertise to the public and solicit public input on the following documents prior to adoption or submission to DEP:
  - Stormwater Management Ordinances (for municipalities);
  - Standard Operating Procedures (SOPs) (for non-municipal entities); and
  - Pollutant Reduction Plans (PRPs), including modifications thereto.
  - (1) For Ordinances and SOPs, the permittee shall provide notice to the public; provide opportunities for public comment; document and evaluate the public comments; and document the permittee's responses to the comments prior to finalizing the documents. The permittee shall provide this documentation to DEP upon request.
  - (2) For PRPs, public participation requirements are specified in Appendices D and E of this General Permit.

- c. **BMP #3**: Regularly solicit public involvement and participation from the target audience groups using available distribution and outreach methods. This shall include an effort to solicit public reporting of suspected illicit discharges. Assist the public in their efforts to help implement the SWMP.
  - (1) The permittee shall solicit public involvement and participation from target audience groups on the implementation of the SWMP. The solicitation can take the form of public meetings or other events. The public shall be given notice in advance of each meeting or event. During the meetings or events, the permittee should present a summary of progress, activities, and accomplishments with implementation of the SWMP, and the permittee should provide opportunities for the public to provide feedback and input. The presentation can be made at specific MS4 events or during any other public meeting. Existing permittees shall conduct at least one public meeting that includes information on SWMP implementation by March 15, 2023; new permittees shall conduct at least one public meeting within 5 years following approval of General Permit coverage.
  - (2) The permittee shall document and report instances of cooperation and participation in MS4 activities; presentations the permittee made to local watershed organizations and conservation organizations; and similar instances of participation or coordination with organizations in the community.
  - (3) The permittee shall also document and report activities in which members of the public assisted or participated in the meetings and in the implementation of the SWMP, including education activities or organized implementation efforts such as cleanups, monitoring, storm drain stenciling, or others.
- 3. MCM #3: Illicit Discharge Detection and Elimination (IDD&E). (25 Pa. Code § 92a.32(a) and 40 CFR § 122.34(b)(3))

The permittee shall develop, implement and enforce a program to detect and eliminate illicit discharges into the permittee's regulated small MS4.

- a. **BMP #1**: The permittee shall develop and implement a written program for the detection, elimination, and prevention of illicit discharges into the regulated small MS4. 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. The 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.
  - 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) and for investigating illicit connections and discharges.

- Procedures for program documentation, evaluation and assessment. 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.
- Procedures for addressing information or complaints received from the public.
- (1) 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.
- (2) For existing permittees, the IDD&E program shall continue to be implemented and evaluated annually.
- b. BMP #2: The permittee shall develop and maintain map(s) that show permittee and urbanized area boundaries, the location of all outfalls and, if applicable, observation points, and the locations and names of all surface waters that receive discharges from those outfalls. Outfalls and observation points shall be numbered on the map(s).
  - (1) For new permittees, the map(s) must be developed and submitted to DEP as an attachment to an Annual MS4 Status Report by September 30, 2022 or the fourth (4<sup>th</sup>) Annual MS4 Status Report following approval of coverage under this General Permit, whichever is later.
  - (2) For existing permittees, the existing map(s) shall be updated and maintained as necessary during each year of coverage under this General Permit.
- c. BMP #3: In conjunction with the map(s) created under BMP #2 (either on the same map or on a different map), the permittee shall develop and maintain map(s) that show the entire storm sewer collection system within the permittee's jurisdiction that are owned or operated by the permittee (including roads, inlets, piping, swales, catch basins, channels, and any other components of the storm sewer collection system), including privately-owned components of the collection system where conveyances or BMPs on private property receive stormwater flows from upstream publicly-owned components.
  - (1) For new permittees, the map(s) must be developed and submitted to DEP as an attachment to an Annual MS4 Status Report by September 30, 2022 or the fourth (4<sup>th</sup>) Annual MS4 Status Report following approval of coverage under this General Permit, whichever is later.
  - (2) For existing permittees, the existing map(s) shall be updated and maintained as necessary during each year of coverage under this General Permit.
- d. BMP #4: The permittee shall conduct dry weather screenings of its MS4 outfalls to evaluate the presence of illicit discharges. If any illicit discharges are present, the permittee shall identify the source(s) and take appropriate actions to remove or correct any illicit discharges. The permittee shall also respond to reports received from the public or other agencies of suspected or confirmed illicit discharges associated with the storm sewer system, as well as take enforcement action as necessary. The permittee shall immediately report to DEP illicit discharges that would endanger users downstream from the discharge, or would otherwise result in pollution or create a danger of pollution or would damage property, in accordance with Part A III.D.4 of this General Permit.
  - (1) For new permittees, all of the identified regulated small MS4 outfalls shall be screened during dry weather at least twice within the 5-year period following approval of coverage under this General Permit.
  - (2) For existing permittees, each of the identified regulated small MS4 outfalls shall be screened during dry weather at least once by March 15, 2023. 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 during each year of permit coverage.
  - (3) If a discharge is observed from any outfall during dry weather screenings, the discharge shall be inspected for color, odor, floating solids, scum, sheen, and substances that result in observed

deposits in the surface waters. In addition, the discharge cannot contain substances that result in deposits in the receiving water or produce an observable change in the color, odor or turbidity of the receiving water.

If the discharge exhibits any of the above characteristics, or contains any other pollutants or causes an observed change in the surface waters, the permittee shall sample the discharge(s) for field and/or laboratory analysis of one or more common IDD&E parameters in order to determine if the dry weather flow is illicit. Possible parameters include, but are not limited to: pH, Conductivity, Fecal Coliform bacteria, Heavy Metals, Chemical Oxygen Demand (COD), 5-day Biochemical Oxygen Demand (BOD5), Total Suspended Solids (TSS), Total Dissolved Solids (TDS), Oil and Grease, Total Residual Chlorine (TRC) and Ammonia-Nitrogen. Proper quality assurance and quality control procedures shall be followed when collecting, transporting or analyzing water samples. The permittee shall retain sample results with the inspection report in accordance with Part A III.B of this General Permit.

- (4) Each time an outfall is screened, the permittee shall record outfall observations, regardless of the presence of dry weather flow. All outfall inspections shall be documented on the MS4 Outfall Field Screening Report form (3800-FM-BCW0521), or equivalent. The report must be signed by the inspector and be maintained by the permittee in accordance with Part A III.B of this General Permit. If an outfall flow is determined by the permittee to be illicit, the actions taken to identify and eliminate the illicit flow shall also be documented.
- (5) The permittee shall summarize the results of outfall inspections and actions taken to remove or correct illicit discharges in Annual MS4 Status Reports.
- (6) If the permittee determines that an outfall cannot be accessed due to safety or other reasons, the permittee shall establish an "observation point" at an appropriate location prior to the outfall where outfall field screening shall be performed. If observation points are established by the permittee, such points shall be identified on the map required under BMP #2 of this section.
- (7) Permittees must ensure that outfalls are properly maintained in accordance with Part C I.B.6.b of this General Permit.
- e. **BMP #5**: Enact a Stormwater Management Ordinance or SOP to implement and enforce a stormwater management program that includes prohibition of non-stormwater discharges to the regulated small MS4.
  - (1) Municipal permittees shall submit a copy of an ordinance that is consistent with DEP's 2022 Model Stormwater Management Ordinance (3800-PM-BCW0100j) as an attachment to an Annual MS4 Status Report by September 30, 2022 (existing permittees) or the fourth (4<sup>th</sup>) Annual MS4 Status Report following approval of coverage under this General Permit (new permittees).
  - (2) Permittees that lack the authority to enact ordinances (non-municipal permittees and counties) shall develop and adopt an SOP that prohibits non-stormwater discharges consistent with this General Permit, and shall submit a copy of the SOP as an attachment to an Annual MS4 Status Report by September 30, 2022 (existing permittees) or the fourth (4<sup>th</sup>) Annual MS4 Status Report following approval of coverage under this General Permit (new permittees).
  - (3) Notice must be provided to DEP of the approval of any waiver or variance by the permittee that allows an exception to non-stormwater discharge provisions of an ordinance or SOP. This notice shall be submitted in the next Annual MS4 Status Report following approval of the waiver or variance.
- f. **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.
  - (1) 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.

The permittee shall establish and promote a stormwater pollution reporting mechanism (e.g., a complaint line with message recording) by the end of the first year of General Permit coverage for the public to use to notify the permittee of illicit discharges, illegal dumping or outfall pollution. The permittee shall respond to all complaints in a timely and appropriate manner. The permittee shall document all responses, including the action taken, the time required to take the action, and whether the complaint was resolved successfully.

- (2) Educational outreach may 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.
- 4. MCM #4: Construction Site Stormwater Runoff Control. (25 Pa. Code § 92a.32(a) and 40 CFR § 122.34(b)(4))

Permittees with coverage under the PAG-13 General Permit must rely on DEP's program for issuing NPDES permits for stormwater discharges associated with construction activities to satisfy MCM #4. In addition to relying on the state NPDES permit program for stormwater discharges associated with construction activities, the permittee shall implement the BMPs identified below.

- a. **BMP #1**: The permittee may not issue a building or other permit or final approval to those proposing or conducting earth disturbance activities requiring an NPDES permit unless the party proposing the earth disturbance has valid NPDES Permit coverage (i.e., not expired) under 25 Pa. Code Chapter 102.
- b. BMP #2: A municipality or county which issues building or other permits shall notify DEP or the applicable county conservation district (CCD) within 5 days of the receipt of an application for a permit involving an earth disturbance activity consisting of one acre or more, in accordance with 25 Pa. Code § 102.42.
- c. **BMP #3**: Enact, implement and enforce an ordinance or SOP to require the implementation and maintenance of E&S control BMPs, including sanctions for non-compliance, as applicable.
  - (1) Municipal permittees shall enact, implement, and enforce an ordinance to require the implementation of E&S control BMPs, including sanctions for non-compliance. All municipal permittees shall submit a copy of an ordinance that is consistent with DEP's 2022 Model Stormwater Management Ordinance (3800-PM-BCW0100j) as an attachment to an Annual MS4 Status Report by September 30, 2022 (existing permittees) or the fourth (4<sup>th</sup>) Annual MS4 Status Report following approval of coverage under this General Permit (new permittees).
  - (2) Permittees that lack the authority to enact ordinances shall develop, implement and enforce an SOP to require the implementation and maintenance of E&S control BMPs by September 30, 2022 (existing permittees) or the first Annual MS4 Status Report following approval of coverage under this General Permit (new permittees).
- 5. **MCM #5**: Post-Construction Stormwater Management (PCSM) in New Development and Redevelopment. (25 Pa. Code § 92a.32(a) and 40 CFR § 122.34(b)(5))

Permittees with coverage under the PAG-13 General Permit must rely on DEP's program for issuing NPDES permits for stormwater discharges associated with construction activities to satisfy MCM #5. In addition to relying on the state NPDES permit program for stormwater discharges associated with construction activities, the permittee shall implement the BMPs identified below.

a. **BMP #1**: Enact, implement and enforce an ordinance or SOP to require post-construction stormwater management from new development and redevelopment projects, including sanctions for non-compliance.

- (1) Municipal permittees shall enact, implement, and enforce an ordinance to require the implementation of PCSM BMPs, including sanctions for non-compliance. All municipal permittees shall submit a copy of an ordinance that is consistent with DEP's 2022 Model Stormwater Management Ordinance (3800-PM-BCW0100j) as an attachment to an Annual MS4 Status Report by September 30, 2022 (existing permittees) or the fourth (4<sup>th</sup>) Annual MS4 Status Report following approval of coverage under this General Permit (new permittees).
- (2) Permittees that lack the authority to enact ordinances shall develop, implement and enforce an SOP to require the implementation and maintenance of PCSM BMPs and submit the SOP to DEP by September 30, 2022 (existing permittees) or the fourth (4<sup>th</sup>) Annual MS4 Status Report following approval of coverage under this General Permit (new permittees).
- b. BMP #2: Develop and implement measures to encourage and expand the use of Low Impact Development (LID) in new development and redevelopment. Measures should also be included to encourage retrofitting LID into existing development. Guidance on implementing LID practices may be found on DEP's MS4 website, <u>www.dep.pa.gov/MS4</u>. Enact ordinances consistent with LID practices and repeal sections of ordinances that conflict with LID practices. Submission of an ordinance that is consistent with DEP's 2022 Model Stormwater Management Ordinance (3800-PM-BCW0100j) will satisfy this BMP.
- c. **BMP #3**: Ensure adequate O&M of all post-construction stormwater management BMPs that have been installed at development or 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.

An inventory of PCSM BMPs shall be developed by new permittees by the end of the first year of General Permit coverage and shall be continually updated during the term of coverage under the General Permit as development projects are reviewed, approved, and constructed. Existing permittees shall update and maintain its current inventory during the term of coverage under the General Permit. The permittee must track the following information in its PCSM BMP inventory:

- 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., latitude and longitude, with street address).
- Information (e.g., name, address, phone number(s)) for BMP owners and entities responsible for BMP O&M, if different from BMP owners.
- 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 conducted for each BMP.
- An assessment by the permittee if proper O&M has occurred during the year and if not, what actions the permittee has taken, or shall take, to address compliance with O&M requirements.
- 6. MCM #6: Pollution Prevention / Good Housekeeping. (25 Pa. Code § 92a.32(a) and 40 CFR § 122.34(b)(6))

The permittee must develop and implement an O&M program that includes a training component and has the ultimate goal of preventing and reducing pollutant runoff from operations, facilities and activities under the control of the permittee (collectively, "operations"). The program must include employee training to prevent and reduce stormwater pollution from activities such as park and open space maintenance, fleet and building maintenance, new construction and land disturbances, and stormwater system maintenance.

a. BMP #1: Identify and document all operations that are owned or operated by the permittee and have the potential for generating pollution in 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.).

- (1) New permittees shall create an inventory of all operations and land uses that may contribute to pollution in stormwater runoff within areas of operations that discharge to the regulated small MS4 by the end of the first year of General Permit coverage, and review and update the inventory annually thereafter.
- (2) All permittees must review and update the inventory each year of General Permit coverage, as necessary.
- b. BMP #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, as identified under BMP #1. This program shall address stormwater collection or conveyance systems within the regulated MS4. The written O&M program shall stress pollution prevention and good housekeeping measures, contain site-specific information, and include the following:
  - Management practices, policies, and procedures shall be developed and implemented to reduce or prevent the discharge of pollutants to the regulated small MS4s. The permittee shall 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 the regulated small MS4s.
  - 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, salt / sand (anti-skid) storage locations and snow disposal areas. Controls for solid chemical products stored and utilized for the principal purpose of deicing roadways for public safety must be consistent with the BMPs for existing salt storage and distribution sites contained in the PAG-03 NPDES General Permit for Stormwater Discharges Associated with Industrial Activity.
  - Procedures for the proper disposal of waste, including dredge spoil, accumulated sediments, trash, household hazardous waste, used motor oil, street sweepings, and other debris.
  - (1) New permittees shall develop and implement a written O&M program by the end of the first year of General Permit coverage and review and update the program each year thereafter.
  - (2) All permittees must review and update the written O&M program each year of General Permit coverage, as necessary.
- c. **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 operations to the regulated small MS4. The program may be developed and implemented using guidance and training materials that are available from federal, state or local agencies, or other organizations. All relevant employees and contractors shall receive training (i.e., public works staff, building, zoning, and code enforcement staff, engineering staff, police and fire responders, etc.). Training topics shall include operation, inspection, maintenance and repair activities associated with any of the operations identified under BMP #1. Training must cover all relevant parts of the permittee's overall stormwater management program that could affect operations, such as illicit discharge detection and elimination, construction sites, and ordinance requirements.

- (1) 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 by the end of the first year of General Permit coverage.
- (2) All permittees must review and update the training program each year of General Permit coverage, as necessary.
- (3) Employee training shall occur at least annually and shall be documented in writing and reported in Annual MS4 Status Reports. Documentation shall include the date(s) of the training, the names of attendees, the topics covered, and the training presenter(s).

### II. POLLUTANT CONTROL MEASURES AND POLLUTANT REDUCTION PLANS

Permittees with coverage under this General Permit that discharge to impaired waters are required to implement Pollutant Control Measures (PCMs) and Pollutant Reduction Plans (PRPs), as applicable. Permittees are encouraged to consult DEP's MS4 Requirements Table, available at <u>www.dep.pa.gov/MS4</u>, to determine the applicability of PCMs under Appendices A, B, and C and PRPs under Appendices D and E of this General Permit.

- A. PCMs are activities undertaken by the MS4 permittee to identify and control pollutant loading to impaired waters from MS4s, regardless of whether a TMDL has been approved. PCMs are BMPs and other strategies that are in addition to the permittee's SWMP identified in Part C I of this General Permit. PCMs must be implemented where the permittee 1) has at least one stormwater outfall that discharges to impaired waters, and 2) the "cause of impairment" is one or more of the causes listed in paragraphs A.1 through A.3, below.
  - 1. Where surface waters are impaired for metals (e.g., Iron, Manganese and Aluminum) and/or pH associated with Abandoned Mine Drainage (AMD), the permittee shall implement the PCMs identified in **Appendix A** of this General Permit, in accordance with the schedule therein.
  - 2. Where surface waters are impaired for Pathogens (e.g., Fecal Coliform), the permittee shall implement the PCMs identified in **Appendix B** of this General Permit, in accordance with the schedule therein.
  - 3. Where surface waters are impaired for Priority Organic Compounds (e.g., Polychlorinated Biphenyls (PCBs), pesticides, or other organic compounds), the permittee shall implement the PCMs identified in **Appendix C** of this General Permit, in accordance with the schedule therein.
- B. A PRP is a planning document prepared by the permittee which guides the selection and implementation of specific BMPs to reduce pollutant loading to surface waters. The objective of a PRP is to improve the condition of surface waters such that the waters eventually attain water quality standards and its designated and existing uses in accordance with 25 Pa. Code Chapter 93. A PRP shall be developed and submitted to DEP with the NOI if one or more of the following criteria are met:
  - At the time of the NOI submission, the permittee has at least one MS4 outfall that discharges to surface waters within the Chesapeake Bay watershed, or otherwise has at least one discharge to storm sewers owned or operated by a different entity within the Chesapeake Bay watershed. Upon DEP's written approval of General Permit coverage, permittees shall implement the PRP in accordance with **Appendix D** of this General Permit.
  - 2. At the time of the NOI submission, the permittee has at least one stormwater outfall that discharges to waters impaired for nutrients (i.e., nitrogen and/or phosphorus) and/or sediment (i.e., siltation), and a TMDL has not been approved for such waters, or a TMDL has been approved but no wasteload allocation (WLA) has been assigned by the TMDL for the permittee's discharge(s). Upon DEP's written approval of General Permit coverage, permittees shall implement the PRP in accordance with **Appendix E** of this General Permit.

### III. OTHER REQUIREMENTS

A. Screenings and other solids collected by the permittee shall be handled, recycled and/or disposed of in compliance with the Solid Waste Management Act (35 P.S. §§ 6018.101 – 6018.1003), 25 Pa. Code Chapters 287, 288, 289, 291, 295, 297, and 299 (relating to requirements for landfilling, impoundments, land

application, composting, processing, and storage of residual waste), federal regulation 40 CFR Part 257, The Clean Streams Law, and the Federal Clean Water Act and its amendments.

- B. DEP may require monitoring of stormwater discharge(s) as may be reasonably necessary in order to characterize the nature, volume or other attributes of that discharge or its sources.
- C. The permittee shall ensure that its SWMP, including its Stormwater Management Ordinance(s) or SOPs, is designed to prevent increased loadings of pollutants and to not cause or contribute to a violation of water quality standards by any discharge from its regulated small MS4.
- D. The permittee shall develop and maintain adequate legal authorities, where applicable, and shall maintain adequate funding and staffing to implement this General Permit, including the SWMP contained in Part C I of this General Permit.
- E. In accordance with 40 CFR § 122.35, the permittee may rely on another entity to satisfy NPDES permit obligations to implement a minimum control measure if: (1) the other entity, in fact, implements the control measure; (2) the particular control measure, or component thereof, is at least as stringent as the corresponding NPDES permit requirement; and (3) the other entity agrees to implement the control measure on the permittee's behalf. The permittee must specify in Annual MS4 Status Reports that it is relying on another entity to satisfy some of its NPDES permit obligations. The permittee remains responsible for compliance with permit obligations if the other entity fails to implement the control measure (or component thereof).

### APPENDIX B

### POLLUTANT CONTROL MEASURES FOR WATERS IMPAIRED BY PATHOGENS

The permittee shall implement the following Pollutant Control Measures (PCMs) within the storm sewershed of any outfall that discharges to waters impaired due to Pathogens (e.g., Fecal Coliform), regardless of whether there is an approved TMDL:

- A. Map and Inventory.
  - The permittee shall develop map(s) of the storm sewershed(s) associated with all outfalls that discharge to surface waters subject to Appendix B. The purpose is to identify the area the permittee is responsible for within its legal boundaries in developing a source inventory. For new permittees, the map(s) shall be submitted to DEP with an Annual MS4 Status Report that is due no later than two years following DEP's written approval of General Permit coverage. For existing permittees, the map(s) shall be submitted to DEP with an Annual MS4 Status Report due no later than September 30, 2019.
  - 2. The permittee shall develop an inventory of all suspected and known sources of bacteria in stormwater within the storm sewershed, at a minimum, that discharge to impaired waters. The inventory must identify whether the source is suspected or known, the basis for this determination, the responsible party (if known), and any corrective action the permittee has taken or plans to take for any of these sources. For new permittees, the inventory shall be submitted to DEP with an Annual MS4 Status Report is due no later than three years following DEP's written approval of General Permit coverage. For existing permittees, the inventory shall be submitted to DEP with an Annual MS4 Status Report due no later than September 30, 2020.
- B. The permittee shall complete an investigation of each suspected source. This investigation must include stormwater sampling if the investigation is required as part of implementing the IDD&E program under MCM #3 of the General Permit, and otherwise is voluntary. For new permittees, the results of the investigation shall be submitted to DEP with an Annual MS4 Status Report that is due no later than five years following DEP's written approval of General Permit coverage. For existing permittees, the results of the investigation shall be submitted to DEP with an Annual MS4 Status Report due no later than September 30, 2022.
- C. The permittee shall enforce ordinances that prohibit illicit and illegal connections and discharges of sewage to the MS4. Anytime an illicit and illegal connection or discharge of sewage into the MS4 is discovered by the permittee, the permittee shall report the finding in the subsequent Annual MS4 Status Report along with a description of corrective action by the permittee.
- D. If not already established in its Stormwater Management Ordinance (municipal permittees) or SOP (non-municipal permittees), the permittee shall enact an ordinance or develop and adopt an SOP that requires proper management of animal wastes on property owned by the permittee. If an ordinance or SOP already exists that controls animal wastes, it must be attached to the first Annual MS4 Status Report due following the first year of coverage for new permittees and no later than September 30, 2018 for existing permittees (unless the ordinance or SOP was attached to the NOI for General Permit coverage). If a new ordinance or SOP is enacted or adopted, the new ordinance or SOP must be attached to the first Annual MS4 Status Report due following enactment or adopted, the new ordinance or SOP must be attached to the first Annual MS4 Status Report due following enactment or adopted, but no later than September 30, 2022.
- E. The permittee shall document the progress of its investigations, source control efforts and BMPs to control sources of pathogens in its Annual MS4 Status Reports.

### APPENDIX D

### POLLUTANT REDUCTION PLAN REQUIREMENTS FOR DISCHARGES TO THE CHESAPEAKE BAY WATERSHED

MS4 permittees with at least one stormwater discharge to surface waters within the Cheseapeake Bay watershed must develop and submit a Chesapeake Bay Pollutant Reduction Plan (CBPRP) with the NOI to reduce the load of nutrients (nitrogen and phosphorus) and sediment to surface waters. In the event the permittee also has at least one stormwater discharge to local surface waters that are considered impaired for nutrients and/or sediment, the CBPRP may be combined with the PRP for localized nutrient and/or sediment impairment as described in Appendix E.

The CBPRP is approved upon DEP's approval of coverage under this General Permit. The permittee shall implement its approved CBPRP and comply with the following:

- A. The permittee shall achieve the pollutant load reduction(s) (lbs/year) proposed in its CBPRP within 5 years following DEP's approval of coverage under the General Permit (identified on page 1 of the General Permit). The minimum percent reduction for pollutant loadings of sediment, Total Phosphorus (TP), and Total Nitrogen (TN) shall be 10%, 5%, and 3%, respectively, over the 5-year period following DEP's approval of coverage. Pollutant reduction efficiencies for selected BMPs shall be in accordance with the BMP Effectiveness Values document published by DEP (3800-PM-BCW0100m) or Chesapeake Bay Program Office expert panel reports. The permittee shall submit a report demonstrating implementation of the CBPRP as an attachment to the first Annual MS4 Status Report that is due following completion of the 5<sup>th</sup> year of General Permit coverage.
- B. The BMPs proposed in the CBPRP for the term of General Permit coverage shall be implemented in accordance with the schedule in the CBPRP. In the event the permittee decides to modify the location, type or number of proposed BMPs or modify the storm sewershed map, the permittee shall submit an update to its CBPRP to DEP prior to implementing the changes. A modified CBPRP that meets the conditions of paragraphs 1 3 herein may be implemented upon submission to DEP unless DEP issues an objection in writing within 60 days.
- C. Where submission of a modified CBPRP to DEP is required, the permittee shall solicit public involvement and participation, as follows:
  - 1. The permittee shall make a complete copy of the CBPRP available for public review.
  - 2. The permittee shall publish, in a newspaper of general circulation in the area, a public notice containing a statement describing the plan, where it may be reviewed by the public, and the length of time the permittee will provide for the receipt of comments. The public notice must be published at least 45 days prior to the deadline for submission of the PRP to DEP.
  - 3. The permittee shall accept written comments for a minimum of 30 days from the date of public notice.
  - 4. The permittee shall accept comments from any interested member of the public at a public meeting or hearing, which may include a regularly scheduled meeting of the governing body of the municipality or municipal authority that is the permittee.
  - 5. The permittee shall consider and make a record of the consideration of each timely comment received from the public during the public comment period concerning the plan, identifying any changes made to the plan in response to the comment.

Modified CBPRPs submitted to DEP must include a copy of the newspaper notice, a copy of all written comments received from the public and a copy of the permittee's record of consideration of all timely comments received in the public comment period.

D. Progress with achieving the required pollutant load reductions shall be reported in each Annual MS4 Status Report.

### APPENDIX E

### POLLUTANT REDUCTION PLAN REQUIREMENTS FOR DISCHARGES TO WATERS IMPAIRED FOR NUTRIENTS AND/OR SEDIMENT

MS4 permittees with at least one stormwater discharge to surface waters considered impaired for nutrients (nitrogen and phosphorus) and/or sediment, in which a TMDL has not been developed or the TMDL has not identified a wasteload allocation (WLA) for the permittee, must develop and submit a Pollutant Reduction Plan (PRP) with the NOI to reduce the pollutant loads to those waters. In the event the permittee also has at least one stormwater discharge to surface waters within the Chesapeake Bay watershed, the PRP may be combined with the CBPRP described in Appendix D.

The PRP is approved upon DEP's approval of coverage under this General Permit. The permittee shall implement its approved PRP and comply with the following:

- A. The permittee shall achieve the pollutant load reduction(s) (lbs/year) proposed in its PRP within 5 years following DEP's approval of coverage under the General Permit (identified on page 1). The minimum percent reduction for pollutant loadings of sediment and Total Phosphorus (TP) shall be 10% and 5%, respectively. If the surface water is impaired for both sediment and nutrients, both sediment (10%) and TP (5%) reductions must be achieved. If the surface water is impaired for sediment alone, a sediment (10%) reduction must be achieved. If the surface water is nutrients, a TP (5%) reduction must be achieved. Pollutant reduction efficiencies for selected BMPs shall be in accordance with the BMP Effectiveness Values document published by DEP (3800-PM-BCW0100m) or Chesapeake Bay Program Office expert panel reports. The permittee shall submit a report demonstrating implementation of the PRP as an attachment to the first Annual MS4 Status Report that is due following completion of the 5<sup>th</sup> year of General Permit coverage.
- B. The BMPs proposed in the PRP for the term of General Permit coverage shall be implemented in accordance with the schedule in the PRP. In the event the permittee decides to modify the location, type or number of proposed BMPs or modify the storm sewershed map, the permittee shall submit an update to its PRP to DEP prior to implementing the changes. A modified PRP that meets the conditions of paragraphs 1 3 herein may be implemented upon submission to DEP unless DEP issues an objection in writing within 60 days.
- C. Where submission of a modified PRP to DEP is required, the permittee shall solicit public involvement and participation, as follows:
  - 1. The permittee shall make a complete copy of the PRP available for public review.
  - 2. The permittee shall publish, in a newspaper of general circulation in the area, a public notice containing a statement describing the plan, where it may be reviewed by the public, and the length of time the permittee will provide for the receipt of comments. The public notice must be published at least 45 days prior to the deadline for submission of the PRP to DEP.
  - 3. The permittee shall accept written comments for a minimum of 30 days from the date of public notice.
  - 4. The permittee shall accept comments from any interested member of the public at a public meeting or hearing, which may include a regularly scheduled meeting of the governing body of the municipality or municipal authority that is the permittee.
  - 5. The permittee shall consider and make a record of the consideration of each timely comment received from the public during the public comment period concerning the plan, identifying any changes made to the plan in response to the comment.

Modified PRPs submitted to DEP must include a copy of the newspaper notice, a copy of all written comments received from the public and a copy of the permittee's record of consideration of all timely comments received in the public comment period.

D. Progress with achieving the required pollutant load reductions shall be reported in each Annual MS4 Status Report.

Special Meeting Minutes

Page 1

West Earl Township Board of Supervisors, 157 West Metzler Road, Brownstown, PA 17508

In Attendance:Member:Richard StoverMember:Keith KauffmanMember:Dave Thornton

Manager/Secretary: Candie Johnson Township Engineer: Cory Rathman, Becker Eng.

Others present: Sara Service, Stormwater Coordinator Emily West, LandStudies, Inc.

<u>Call to Order</u> The meeting was called to order at 12 p.m.

# **Draft Pollutant Reduction Plan**

Cory Rathman began the meeting by introducing Emily West from LandStudies, Inc. LandStudies has prepared a draft pollutant reduction for the Township.

Ms. West reviewed the map of water sheds. The Township is located within the Cocalico Creek, Conestoga River and Groff Creek basins. The Township's pollutant load calculations were done using simplified methods that were provided by the DEP. Ms. West said that the Township's 5-year plan includes reducing pollutants by 10% or 82,000 lbs. Ms. West provided a map of possible BMP locations that could be used to make these reductions.

Mr. Rathman briefly discussed the possibility of joining with other municipalities on joints projects. Individual BMP locations were discussed. Ms. West said the Township's options include storm water basin retrofits and channel stabilization. The Eaglview Estates basin was discussed.

Mr. Rathman said the Township needs to decide how these projects will be funded, who will be responsible for operation and maintenance and the frequency of inspections. The costs for these projects were discussed along with the possibility of using Township staff.

Individual BMPs were discussed, including those located on private land.

Ms. Johnson asked what the timeline is for the Pollutant Reduction Plan. Ms. West said she could flush out the details of the plan and fine tune the draft and have it back to the Township by the end of the first week of June. The Plan could then be advertised for public comment. Mr. Rathman said he will get a draft plan to the Supervisors for their June 12<sup>th</sup> meeting.

Adjournment

The meeting was adjourned at 1:30 p.m.

# NOTICE

Notice is hereby given that the West Earl Township Board of Supervisors have scheduled a workshop for Tuesday, May 23rd, 2017 beginning at noon to discuss the MS4 Pollutant Reduction Plan and any other business brought before the Board. The meetings will be held at the West Earl Township Municipal Building located at 157 W. Metzler Road, Brownstown. 3800-PM-BCW0100b 5/2016 NOI Pennsylvania DEPARTMENT OF ENVIRONMENTAL PROTECTION

#### COMMONWEALTH OF PENNSYLVANIA DEPARTMENT OF ENVIRONMENTAL PROTECTION BUREAU OF CLEAN WATER

### **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.

Related ID#s   Client ID#   Site ID#   Facility ID#	(If Known) APS ID# Auth ID# 943455	of the accession of the second s	PAG	DI C	EP USE OI Date Receiv PDC	NLY /ed 3?	
	GENERAL INFOR		ION	-			
Type of Permit:	ge 🛛 Renewal of Coverage	ge	Permit No	o.: PA <u>G133</u>	<u>3535</u>		
Is a waiver of coverage being reques	ted and is a waiver application	attach	ned to this	NOI? [	] Yes	🛛 No	
Is PAG-13 General Permit coverage	requested for more than one N	/IS4 ap	oplicant?	[	] Yes	🛛 No	
If Yes, submit this NOI for each co-ap	oplicant and complete the infor	matior	n below (se	ee instructi	ions):		
Joint Client Name:		J	oint Client	Phone:			
Joint Client Address:		- Ji	oint Client	Contact:			
Joint Client City, State, Zip:		-					
							•
	MS4 CLIENT/OPERATO	R INF	ORMATIC	ON			
DEP Client ID#	Client Type/Code MUNI						
Organization Name or Registered Fic West Earl Township	ctitious Name	Emp 23- 6	loyer ID# ( 6000575	(EIN)	Dun & E	Bradstree	et ID#
Mailing Address Line 1	Mailing Address Line 2	<u>.</u>					
PO Box 725	·····						
Address Last Line – City	State	ZIP+	-4 C	Country			
Brownstown	PA	1750	<u>10 80</u>	ISA			
Client Contact Last Name	First Name	MI	S	Suffix			
Johnson Oligant Contact Title				ls.			
Managar		ΕXI			·		
Email Address	FAX						
ciohnson@westearltwp.org							
	MS4 SITE INFOR	RMAT	ION				
DEP Site ID#	Site Name						
	West Earl Township MS4						
Urbanized Area (UA) Name(s)				UA Are	ea (specify	acres o	r mi²)
Lancaster			enersea and the second	2,634.	50 acres		
County Name	Municipality Name			City	Boro	Twp	State
Lancaster	West Earl Township				<u> </u>		
County Name	wunicipality Name				вого		State
Site Location Address Line 1	Site Location Address Lin	ne 2		4			antartik en en

#### 3800-PM-BCW0100b 5/2016 NOI

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Site Location City		State		ZIP+4
Detailed Written Direc	tions to Site			
Site Contact Last Nan	е	First Name	MI	Suffix
Site Contact Title		Site	Contact Firm	m
Mailing Address Line	Maili	ng Address I	s Line 2	
Address Last Line – C	ty	State	2	ZIP+4
Phone Ex	t FAX	Emai	I Address	
SIC Code(s) (List All T	hat Apply)		١	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?
Cocalico Creek	015	WWF, MF	Yes	No	NA
Conestoga River	016	WWF, MF	Yes	No	NA
UNT to Groff Creek	031	WWF, MF	Yes	No	NA

#### 3800-PM-BCW0100b 5/2016 NOI

**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.

0		Latitude		Longitude			
Outrall No.	Degrees	Minutes	Seconds	Degrees	Minutes	Seconds	
015	40	06	59.7	-76	13	48.2	
016	40	07	2.2	-76	13	6.3	
031	40	06	4.2	-76	09	49.9	
			_				
Horizontal Reference Datum:		NAD of 1927	NAD of 1	983 🗌 WGS (	of 1984 🔲 Unk	nown	

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 (Ibs/yr)	Specific or General

**MS4 Requirements**. Are requirement(s) specified in DEP's MS4 Requirements Table for the MS4? Xes I 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.

# 3800-PM-BCW0100b 5/2016

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STORMWATER MANAGEMENT PROGRAM									
Minimum Control Measure (MCM)	BMP #	BMP Summary	Responsible Party	Contact Name	Contact Phone No.	MOU or Agreement?			
	1	Develop, implement and maintain a written Public Education and Outreach Program.	West Earl Twp	Candie Johnson	717-859-3201				
	2	Develop and maintain lists of target audience groups that are present within the areas served by the permittee's regulated small MS4.	West Earl Twp	Candie Johnson	717-859-3201				
#1 – Public Education and Outreach	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.	West Earl Twp	Candie Johnson	717-859-3201				
	4	Distribute stormwater educational materials and/or information to the target audiences using two methods annually.	West Earl Twp	Candie Johnson	717-859-3201	· .			
#2 – Public Participation and	1	Develop, implement and maintain a written Public Involvement and Participation Program (PIPP).	West Earl Twp	Candie Johnson	717-859-3201				
	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.	West Earl Twp	Candie Johnson	717-859-3201				
	3	Regularly solicit public involvement and participation from the target audience groups using available distribution and outreach methods.	West Earl Twp	Candie Johnson	717-859-3201				
	1	Develop and implement a written program for the detection, elimination, and prevention of illicit discharges into the regulated MS4.	West Earl Twp	Candie Johnson	717-859-3201				
	2	Develop and maintain a map of the regulated small MS4's outfalls and surface waters.	West Earl Twp	Candie Johnson	717-859-3201				
#3 – Illicit Discharge Detection and Elimination	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.	West Earl Twp	Candie Johnson	717-859-3201				
	4	The permittee shall conduct outfall field screening, identify the source of any illicit discharges, and remove or correct any illicit discharges.	West Earl Twp	Candie Johnson	717-859-3201				

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# 3800-PM-BCW0100b 5/2016

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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.	West Earl Twp	Candie Johnson	717-859-3201	
	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.	West Earl Twp	Candie Johnson	717-859-3201	
#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.	West Earl Twp	Candie Johnson	717-859-3201	
	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.	West Earl Twp	Candie Johnson	717-859-3201	
	3	Enact, implement, and enforce an ordinance to require the implementation of erosion and sediment control BMPs, as well as sanctions to ensure compliance.	West Earl Twp	Candie Johnson	717-859-3201	
#5, Post- Construction	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.	West Earl Twp	Candie Johnson	717-859-3201	
Management in New Development and	2	Develop and implement measures to encourage and expand the use of Low Impact Development (LID) in new development and redevelopment.	West Earl Twp	Candie Johnson	717-859-3201	
and Redevelopment	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.	West Earl Twp	Candie Johnson	717-859-3201	
	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.	West Earl Twp	Candie Johnson	717-859-3201	
#6 – Pollution Prevention / Good Housekeeping	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.	West Earl Twp	Candie Johnson	717-859-3201	
Housekeeping	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.	West Earl Twp	Candie Johnson	717-859-3201	

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### 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?		Yes	Date:		No
2.	Has a Stormwater Management Ordinance been enacted that is consistent with an Act 167 Plan approved by DEP in 2005 or later?			Date:	June 9, 2014	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).		Yes	Date:		No
	COMPLIANCE HISTOR	Y				

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	ł	Issued By			
General Permit	GP033616104	April 22, 201	6	PADEP, Lancaster Co Conserv Dist.			
Public Water Supply	3613515 MA	November 16, 2	2015	PADEP			
Act 537 Base Plan	A3-36959-201-3M	February 7, 2017		PADEP			
WQM Sewer Ext	WQG02361701	August 4, 201	17	PADEP			
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?							
If "Yes," list each per provide information or	rmit, order or schedule of complian all permits.	ance and provide cur	rent comp	liance status. Use additional sheets to			
Permit Program:	NPDES MS4			Permit No.: PAG-133535			
Brief Description of N	on-Compliance:						
NPDES MS4 Annual Report was not submitted for permit year 2009-2010							
Steps Taken to Achieve Compliance			Date(s) Compliance Achieved				

 $\Box$ 

Annual Report was submitted upon notification

In Compliance

Current Compliance Status:

In Non-Compliance

January 6, 2011

### 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.

Candie L. Johnson

Name (type or print legibly)

Signature

Township Manager

**Official Title** 

Date Signed

# West Earl Township Pollutant Reduction Plan

Brownstown, PA July 24, 2017





Prepared for: West Earl Township 157 W. Metzler Road P.O. Box 787 Brownstown, PA 17508

Prepared by: LandStudies, Inc. 315 North Street Lititz, PA 17543 717-627-4440 www.landstudies.com



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Appendix D – Proposed BMP Load Reduction Calculations



# A. Introduction

This pollutant reduction plan (PRP) was developed for West Earl Township as a requirement of Permit PAG#133535 for their municipal separate storm sewer system (MS4). The PRP outlines the actions the Township will take to address pollutant loads to waterbodies within the MS4 that drain to the Chesapeake Bay and Impaired waters within the MS4. These actions include public participation, mapping of outfalls and other discharges, pollutant load calculations, best management practices (BMPs) selection, identification of potential funding sources and partners, and operations and maintenance (O&M) activities.

# **B.** Public Participation

Public participation is an essential part of the PRP because it enhances buy-in from landowners that may have an impact on pollutant discharges, can uncover missing elements or errors in calculations, and builds cooperative partnerships among the municipality and other entities.

A copy of the draft PRP was released via public notice on June 19th, 2017 to the following media outlets: LNP newspaper. The notice ran for one day. A copy of the public notice is included as Item A-1. The public was given 30 days to provide commentary on the contents of the PRP. No written comments were received regarding the PRP. West Earl Township held a public meeting on July 10, 2017 to receive verbal commentary on the contents of the PRP. No comments were received at the July 10 meeting. No details were changed from the draft PRP to the final PRP due to the fact that no public comments were received on the draft plan.

### C. Map

Figure 1 below identifies the subwatersheds of the Cocalico Creek, Conestoga River and Groff Creek, including headwaters upstream from West Earl Township. Map B1 in Appendix B identifies the land use types throughout the Township, the MS4 outfall locations, and the storm sewershed boundaries grouped into Planning Areas. An additional map, Map B2 in Appendix B, identifies the Planning Areas for the Cocalico Creek, Conestoga River, and Groff Creek, respectively. It also includes the existing structural best management practice (BMP) that is considered in the calculation of the existing pollutant loads and the proposed location(s) of structural BMPs that will be implemented to achieve the required pollutant load reductions per watershed during the current permit cycle.







West Earl Township is approximately 77 percent non-urban lands, mostly used for agricultural activity. West Earl's Urbanized Area (UA) covers only 2,634.50 acres based on the 2010 U.S. Census data. The total impervious cover within the UA totals 764.01 acres or 29 percent based on DEP's Statewide MS4 Land Cover Estimates for West Earl Township. The remaining 71 percent of the UA is composed of 1,870.50 acres of pervious cover.

Since West Earl's urban storm sewersheds drain to the Cocalico Creek, Conestoga River, or Groff Creek, it was determined that these sub-watersheds would be grouped into the Cocalico Creek Planning Area, Conestoga River Planning Area, and the Groff Creek Planning Area. Note that Groff Creek and West Earl's reach of the Conestoga River are part of the same Middle Conestoga River HUC 12 watershed basin. So, even though they are separate planning areas, proposed BMPs to meet the pollutant load reductions will be aggregated for the larger Middle Conestoga River HUC 12 basin.

Within the UAs between these three drainage basins, there were over 650 acres of cropland / hay / pasture that did not contain any MS4 infrastructure. These agricultural lands that did not drain to the MS4 system were parsed out of the planning areas. Additionally, there were pockets of medium-density residential land that do not drain to any type of MS4 infrastructure, but drain as incidental dispersion into surrounding lands; thus, these areas were parsed out of the planning areas. West Earl Township's UAs are split by several major PENNDOT roadways, including Routes 222 and 272, which are parsed out of the planning areas. There were several large tracts of land in relatively flat areas in between PENNDOT roadways that were also parsed out of the planning areas because stormwater drainage from these parcels are assumed to drain to PENNDOT's system and not the municipality's MS4. In total, 1,085.8 acres of UA were excluded from the planning areas based on the aforementioned rational (see Excluded Areas in Map B2).

# D. Pollutants of Concern

Since the waterways of West Earl Township ultimately drain to the Chesapeake Bay, the following are pollutants concern: sediment, total nitrogen (TN), and total phosphorus (TP). Because of this drainage to the Chesapeake Bay, the Township must prepare a CBPRP in accordance with Appendix D in the PAG-13 General Permit. West Earl Township also discharges stormwater to local impaired waters, including the Cocalico Creek, Groff Creek and the Conestoga River and unnamed tributaries. Therefore, it must reduce pollutant loads associated with those impairments and prepare an impaired waters PRP in accordance with Appendix E in the PAG-13 General Permit. West Earl Township will select BMPs to reduce the sediment pollutant load by 10 percent, which is assumed to then reduce the TN and TP by 3 percent and 5 percent respectively according to DEP's PRP Instructions (3800-PM-BCW0100k).

Table 1 shows the affected subwatersheds within West Earl Township and the pollutant(s) that are of concern to the municipality as shown on the DEP MS4 requirements table revised



4/7/2017. The Township must reduce sediment loading by 10 percent, reduce phosphorus by 5 percent and nitrogen by 3 percent. In accordance with DEP's PRP instructions, West Earl Township will assume that a 10 percent sediment reduction will also accomplish the required nutrient reduction. Therefore, only sediment load reductions within the MS4 planning areas are reported in this PRP.

Planning Area	Pollutant(s) of Concern	
Cocalico Creek (including tributary)	Appendix E – Nutrients, Siltation (5)	
Conestoga River (including tributaries) <sup>1,2</sup>	Appendix B – Pathogens, Appendix E –	
	Nutrients, Organic Enrichment/Low	
	D.O., Siltation (5)	
Groff Creek (including tributaries)	Appendix E – Nutrients, Siltation (5)	

# Table 1. Pollutants of Concern

NOTE1: The section of the mainstem of the Conestoga River that flows through West Earl Township's UA is not identified as impaired; however, both upstream and downstream of the UA are identified as impaired for nutrients and siltation.

NOTE2: The MS4 Requirements Table identifies "Organic Enrichment / Low D.O." as Appendix E Pollutants of Concern for the Conestoga River. Organic Enrichment and Low D.O. are surrogates for nutrient impairment.

In accordance with DEP's PRP Instructions document (3800-PM-BCW0100K), this report is required specifically for stormwater discharges of nutrients and sediment to surface waters for the Chesapeake Bay (Appendix D) and impaired waters (Appendix E). Separate from the PRP, Pollutant Control Measures (PCMs) described in DEP's General Permit (3800-PM-BCW0100d) are to be implemented for Appendix A, B, and/or C pollutants of concern identified in the MS4 Requirements Table.

Because West Earl Township is subject to both a CBPRP and an impaired waters PRP, it will select BMPs that target the impaired waters discharges first, as action toward the local impaired waters will have a beneficial impact on the Chesapeake Bay.

# E. Existing Load for Pollutants of Concern

West Earl Township has a total of 761 acres in the Cocalico Creek Planning Area of which 221 acres are impervious and 540 acres are pervious. The Conestoga River Planning Area is 572 acres, of which 166 acres are impervious and 406 acres are pervious. The Groff Creek Planning Area covers 194 acres of which 56 acres are impervious and 138 are pervious.

The existing loading rates for West Earl Township's planning areas are shown in Table 2 below. These loading rates were calculated by using DEP's "Simplified Method" based on developed land loading rates for Pennsylvania counties from Attachment B of the PRP Instructions, 3800-PM-BCW0100K (See Appendix C for details).

# Table 2. Existing Loading Rates

Planning Area	Sediment Loading (Ibs)	N Loading (Ibs)	P Loading (Ibs)
Cocalico Creek			
Planning Area	403,169.23	20,059.87	515.61
Conestoga River			
Planning Area	306,343.57	14,983.92	385.73
Groff Creek			
Planning Area	109,497.31	5,226.7	136.7
TOTAL:	819,010.11	40,270.52	1,038.02

The existing loading estimate was adjusted to account for pollutant reductions from an existing stormwater basin BMP within the Cocalico Creek Watershed. BMP load reduction values were calculated based on the Recommendations of the Expert Panel to Define Removal Rates for Urban Stormwater Retrofit Projects (hereafter referred to as the Expert Panel) in conjunction with loading rates from Attachment B of the PRP instructions referenced above (Schueler and Lane, 2015). DEP's BMP Effectiveness Values Table (3800-PM-BCW0100m) was also utilized to calculate BMP load reductions.

# **Existing Structural BMPs**

West Earl Township is claiming credit for the following structural BMP that was implemented prior to development of this PRP to reduce existing load estimates:

BMP ID:	Cloverbrook Detention Basin
Coordinates:	40.1387, -76.2211
Map Location:	See Existing BMP in Item B3.
Permit #:	PAG2003604034
Load Reduction:	17,873.49 lbs; See Appendix C for BMP Load Reduction
	Calculation Details.
Details:	This 71,194 ft <sup>3</sup> dry extended detention basin was constructed in
	April 2004 as part of the development off of Cocalico Creek Road.
O&M Activities:	Basin mowed and otherwise maintained, as needed to functionally
	manage stormwater as this basin was designed.

### Table 3. Existing BMP



# F. BMPs Selected to Achieve the Minimum Required Reductions in Pollutant Loading

Based on the 10% sediment reduction targets established above, West Earl Township has identified a strategy to meet the minimum load reductions within 5 years following DEP's approval of permit coverage. The nutrient reduction requirements for the impaired waters are assumed to be addressed by the 10 percent sediment reductions.

Within West Earl Township, the following minimum 10 percent sediment load reductions per watershed planning area must be met:

- Cocalico Creek Planning Area = 40,317 lbs
- Conestoga River Planning Area = 30,634 lbs
- Groff Creek Planning Area = 10,950 lbs
  - Total for Middle Conestoga River Basin (Conestoga River and Groff Creek) = 41,584 lbs
- Total Reduction Requirements for West Earl Township= 81,901 lbs

# Summary of Alternatives and Selection of BMPs

West Earl Township evaluated and ranked each of the BMP alternatives listed in the tables below using the following criteria:

- Sediment reductions
- Cost per pound of pollutant reduction
- Ownership (public versus private land)
- Funding and Workforce availability
- Community benefit (site accessibility, visibility to the public, ability of public to experience benefits)
- Connectivity to other completed or proposed stormwater BMPs
- Timeframe to implement

The purpose of the evaluation was to determine the BMPs that would reduce the most pollutants for the least amount of money while getting closer to the goal of removing streams from the impaired waters list and protecting the Chesapeake Bay. The highest priority BMPs evaluated by West Earl Township are summarized in Tables 4 and 5 as potential BMPs that could be implemented to satisfy the load reduction requirements. West Earl Township is not committing to implementing all of the projects listed in this report as that would exceed their required deduction. The final selection of BMPs to be implemented will be based on detailed design criteria and cost. These BMPs will be implemented by the end of the 5 year permit cycle.

As identified previously, the Groff Creek Planning Area and Conestoga River Planning Area are aggregated as part of the Middle Conestoga River Basin. To meet the pollutant load reduction requirements for the Middle Conestoga River Basin, West Earl Township proposes the implementation of the following BMPs summarized in Table 4:



BMP ID	BMP Project	Sediment Load
		Reduction (lbs)
PRP1	Eagleview Estates Detention Basin	15,727
	Retrofit	
PRP2	Anglesea Detention Basin Retrofit	13,670
PRP4	Main Street Bioswale	2,208
PRP5	School Lane Farms Detention Basin	7,631
PRP7A/7B	West Earl Community Park Riparian	318 / 953
	Buffer / Extended Riparian Buffer	
PRP8	West Metzler Road Channel	44,880
	Stabilization	

Table 4. Summary of Proposed BMPs for the Middle Conestoga RiverSubwatershed

### BMP PRP1: Eagleview Estates Detention Basin Retrofit Project

Eagleview Estates is an existing detention basin, built in 2003, that receives drainage from 59.9 acres of pervious area and 12 acres of impervious area. This privately-owned basin is proposed to be retrofitted to increase the capacity of stormwater detained in the basin. The total area of the basin retrofit is 1.06 acres. This BMP will serve as a Stormwater Treatment practice (as defined by the Expert Panel) for the Conestoga River Planning Area (part of the Middle Conestoga River Basin). Load reductions for this BMP were calculated based on procedures from the Expert Panel. Calculation details are included in Appendix D.

### BMP PRP2: Anglesea Detention Basin Retrofit Project

The Anglesea housing development has an existing detention basin, built in 2004, that receives drainage from 36.6 acres of pervious area and 18.3 acres of impervious area. This privately-owned basin is proposed to be retrofitted to increase the capacity of stormwater detained in the basin. The total area of the basin retrofit is 1.01 acres. This BMP will serve as a Stormwater Treatment practice for the Groff Creek Planning Area (part of the Middle Conestoga River Basin). Load reductions for this BMP were calculated based on procedures from the Expert Panel. Calculation details are included in Appendix D.

### BMP PRP4: Main Street Bioswale / Channel Stabilization

There is an eroded channel on the south side of Main Street that receives drainage from 3.55 acres of pervious area and 1.45 acres of impervious area. This channel conveys stormwater to the Conestoga River during storm events. West Earl Township proposes stabilizing this channel by creating an approximately 700 ft x 30 ft bioswale to reduce sediment erosion discharging to the river during storm events. This BMP will serve as a Stormwater Treatment practice for the Conestoga River Planning Area (part of the Middle


Conestoga River Basin). Load reductions for this BMP were calculated based on procedures from the Expert Panel. Calculation details are included in Appendix D.

### BMP PRP5: School Lane Farms Detention Basin Retrofit Project

The School Lane Farms housing development has an existing detention basin that receives drainage from 22.01 acres of pervious area and 8.99 acres of impervious area. This privately-owned basin is proposed to be retrofitted to increase the capacity of stormwater detained in the basin. The total area of the basin retrofit is 0.558 acres. This BMP will serve as a Stormwater Treatment practice for the Conestoga River Planning Area (part of the Middle Conestoga River Basin). Load reductions for this BMP were calculated based on procedures from the Expert Panel. Calculation details are included in Appendix D.

### BMP PRP7A/7B: West Earl Community Park Riparian Buffer Project

West Earl Township proposes to create a riparian buffer along a drainage channel / unnamed stream that runs through the West Earl Community Park (publicly owned) and ultimately connects to the Conestoga River. The proposed buffer is 350 in length and 35 feet wide on both sides of the stream. The buffer will treat a drainage area that is 0.8 pervious acres and 0.33 impervious acres within the Conestoga River Planning Area (part of the Middle Conestoga River Basin). As an additive alternative (BMP ID# PRP7B), the riparian buffer could be extended onto the other side of Route 772 for an additional 700 linear feet to the confluence with the Conestoga River. This alternative buffer would treat a drainage area that is 2.40 acres of pervious area and 0.98 acres impervious area. The additional length of buffer would require coordination with a private landowner. Load reductions were calculated using the BMP effectiveness values for Forest Buffers (see BMP Effectiveness Values). Calculation details are included in Appendix D.

### BMP PRP8: West Metzler Road Channel Stabilization Project

West Earl Township proposes to create a channel stabilization project along an unnamed tributary to the Conestoga River off of West Metzler Road. The proposed project is intended to stabilize 1,000 linear feet of stream running through a privately owned agricultural field within the UA. The channel stabilization will treat the drainage area within the Conestoga River Planning Area (part of the Middle Conestoga River Basin). The length of channel stabilization could be reduced depending on site specifics and the amount of load reduction achieved from the implementation of other BMPs. Sediment load reductions for a channel stabilization project are calculated at 44.88 lbs/ft/yr based on the BMP effectiveness values for Stream Restoration (see BMP Effectiveness Values). Calculation details are included in Appendix D.

If all of the above BMPs are implemented, the sediment load reduction in the Middle Conestoga River Basin would be 85,069 lbs/yr which is above the minimum 10% sediment reduction requirement.



To meet the pollutant load reduction requirements for the Cocalico Creek Planning Area, West Earl Township proposes the implementation of the following BMPs summarized in Table 5:

BMP ID	BMP Project	Sediment Load Reduction (Ibs)
PRP3	Millway Acres Detention Basin Retrofit	5,706
PRP6	Industrial Road Detention Basin Retrofit	10,337

Table 5. Proposed BMPs for the Cocalico Creek Subwatershed

### BMP PRP3: Millway Acres Detention Basin Retrofit Project

Millway Acres is an existing detention basin, built in 2004, that receives drainage from 8.28 acres of pervious area and 4.99 acres of impervious area. This privately-owned basin is proposed to be retrofitted to increase the capacity of stormwater detained in the basin. The total area of the basin retrofit is 0.63 acres. This BMP will serve as a Stormwater Treatment practice for the Cocalico Creek Planning Area. Load reductions for this BMP were calculated based on procedures from the Expert Panel. Calculation details are included in Appendix D.

### BMP PRP6: Industrial Road Detention Basin Retrofit Project

Industrial Road is the location of an existing detention basin that receives drainage from 20.66 acres of pervious area and 8.44 acres of impervious area. This privately-owned basin is proposed to be retrofitted to increase the capacity of stormwater detained in the basin. The total area of the basin retrofit is 1.03 acres. This BMP will serve as a Stormwater Treatment practice for the Cocalico Creek Planning Area. Load reductions for this BMP were calculated based on procedures from the Expert Panel. Calculation details are included in Appendix D.

If the above BMPs are implemented, the sediment load reduction in the Cocalico Creek subwatershed would be 16,042 lbs/yr, which is less than the minimum 10% sediment reduction requirement for this particular area. This portion of the subwatershed within West Earl Township boundaries has limited opportunities for stormwater BMP implementation.

Based on guidance from DEP, West Earl Township plans to utilize additional load reductions from proposed BMPs implemented within the Middle Conestoga River subwatershed to satisfy the overall 10% load reduction requirements for the municipality.

### G. Funding Mechanism Identification

In order to install and maintain the BMPs listed in Section E, West Earl Township proposes the following sponsors/partners and funding sources:



Table 6. Funding Sources per Proposed BMP

BMP #	Sponsor/Partner/Funding Sources
DDD1	West Earl budget funds, local business tax; DCNR, DEP, NFWF are
	potential grant sources for installation;
DDD2	West Earl budget funds, local business tax; DCNR, DEP, NFWF are
11112	potential grant sources;
DDD3	West Earl budget funds, local business tax; DCNR, DEP, NFWF are
FILE S	potential grant sources for installation;
	West Earl budget funds, local business tax; DCNR, DEP, NFWF are
	potential grant sources;
DDDE	West Earl budget funds, local business tax; DCNR, DEP, NFWF are
FILE S	potential grant sources for installation;
DRDG	West Earl budget funds, local business tax; DCNR, DEP, NFWF are
FILEO	potential grant sources;
	West Earl budget funds, local business tax; DCNR, DEP, NFWF are
	potential grant sources for installation;
PRP7B	West Earl budget funds, local business tax; DCNR, DEP, NFWF are
	potential grant sources;
PRPS	West Earl budget funds, local business tax; DCNR, DEP, NFWF are
	potential grant sources for installation;

### H. Responsible Parties for Operation and Maintenance (O&M) of BMPs

All stormwater BMPs installed under this PRP are subject to West Earl's stormwater management ordinance.

The Operation and Maintenance (O&M) activities for each BMP are included in the table below. If the BMP is located on private land, the landowner must convey an easement to the Township to allow for access for periodic inspections and maintenance, as needed. Actual O&M activities will be listed in the Annual MS4 Status Report sent to the PADEP under the General Permit.

BMP #	Parties Responsible	O&M Activities	Frequency for O&M
	for O&M		Activities
PRP1	Township Public Works Department and maintenance staff, as coordinated with the landowner;	Inspection, mowing and weeding, plant replacement, inlet and outlet cleaning;	Monthly inspection and mowing (during the growing season); at least annual plant replacement (if needed); Additional O&M activities will be detailed in the final design;

Table 7. O&M Activities per Proposed BMP



	Township Public	Inspection, mowing and	Monthly inspection and
	Works Department	weeding, plant replacement,	mowing (during the
	and maintenance	inlet and outlet cleaning;	growing season); at least
0000	staff, as coordinated		annual plant
FNFZ	with the landowner;		replacement (if needed);
			Additional O&M activities
			will be detailed in the
			final design;
	Township Public	Inspection, mowing and	Monthly inspection and
	Works Department	weeding, plant replacement,	mowing (during the
	and maintenance	inlet and outlet cleaning;	growing season); at least
PRP3	staff, as coordinated		annual plant
110.5	with the landowner;		replacement (if needed);
			Additional O&M activities
			will be detailed in the
			final design;
	Township Public	Inspection, mowing (if	Monthly inspection and
	Works Department,	applicable depending on	mowing (during the
	maintenance staff;	design) and weeding, plant	growing season); at least
PRP4		replacement;	annual plant
			replacement (if needed);
			Additional O&M activities
			will be detailed in the
		· · · · · ·	final design;
	Township Public	Inspection, mowing and	Monthly inspection and
	works Department	weeding, plant replacement,	mowing (during the
	and maintenance	iniet and outlet cleaning;	growing season); at least
PRP5	stan, as coordinated		replacement (if peeded):
	with the landowner;		Additional ORM activition
			Auditional Oxivi activities
			final design:
	Townshin Public	Inspection mowing and	Monthly inspection and
	Works Department	weeding plant replacement	moving (during the
	and maintenance	inlet and outlet cleaning	growing (during the
	staff as coordinated		annual nlant
PRP6	with the landowner		renlacement (if needed)
			Additional O&M activition
			will be detailed in the
			final design
	Townshin Public	Inspection and plant and	Monthly inspection: at
	Works Department	plant protection	least annual plant and
PRP7A	and maintenance	replacement:	plant protection
	staff:		replacement (if needed)
1			



			Additional O&M activities
			will be detailed in the
			final design;
	Township Public	Inspection and plant and	Monthly inspection and
	Works Department	plant protection	mowing; annual plant
	and maintenance	replacement;	and plant protection
PRP7B	staff, as coordinated		replacement (if needed);
	with the landowner;		Additional O&M activities
			will be detailed in the
			final design;
	Township Public	Inspection in accordance	Biannual inspections for
	Works Department	with channel stabilization	first three years and
	and maintenance	design details;	annual inspections for 2
	staff, as coordinated		additional years.
PRP8	with the landowner;		Additional inspections
			following large storm
			events; Additional O&M
			activities will be detailed
			in the final design;



### I. Works Cited

Integrated Water Quality Report 2014 – 2014 Integrated List of All Waters (formerly 303(d) Report). Retrieved February 8, 2017, from http://www.dep.pa.gov/Business/Water/CleanWater/WaterQuality/Pages/Integrated-Water-Quality-Report-2014.aspx. Office of Water Management, Bureau of Water Supply &

Wastewater Management, Water Quality Assessment and Standards Division.

Schueler, T. and C. Lane. January 20, 2015. Recommendations of the Expert Panel to Define Removal Rates for Urban Stormwater Retrofit. Chesapeake Bay Program Urban Stormwater Workgroup.

Pennsylvania Department of Environmental Protection (PADEP). 2016. PRP / TMDL Plans MS4 Workshop. Harrisburg, PA.

Pennsylvania Department of Environmental Protection (PADEP) Bureau of Clean Water. 2016. National Pollutant Discharge Elimination System(NPDES) Stormwater Discharges from Small Municipal Separate Storm Sewer Systems BMP Effectiveness Values (3800-PM-BCW0100m). Harrisburg, PA.

Appendix A Public Participation: Item A1. Public Notice;



### PROOF OF PUBLICATION NOTICE IN

State of Pennsylvania} } ss: County of Lancaster}

Penny L. Stauffer of the County and State aforesaid, being duly sworn, deposes and says that the LNP, a daily newspaper of general circulation published at Lancaster, County and State aforesaid, was established 1794-1877 since which date said daily newspaper has been regularly issued in said county, and that a copy of the printed notice or publication is attached hereto exactly the same as was printed and published in the regular editions and issues of said daily newspaper on the following dates:

### 16<sup>TH</sup> DAY OF JUNE 2017

Affiant further deposes that she is the Clerk duly authorized by the LNP Media Group, Inc., a corporation, publisher of said LNP, a newspaper of general circulation, to verify the foregoing statement under oath, and also declares that affiant is not interested in the subject matter of the aforesaid notice or advertisement and that all allegations in the foregoing statement as to time, place and character of publication are true.

Notice is hereby given that West Earl Township, Lancaster County, Pennsylvania, shall conduct a public review period of the West Earl Township Pollutant Reduction Plan commencing on Monday, June 19, 2017. The Pollutant Reduction Plan proposes a minimum reduction of 81,901 pounds of sediment resulting from storm water flows through the Township=s Municipal Separate Storm Sewer System within the Cocalico Creek, Con-estoga River, and Groff Creek planning areas. These reductions in sediment loading to local waterways are planned to be achieved through the construction of best management practices during the 2018 National Pollutant Discharge Elimination System permit cycle. The Pollutant Reduction Plan is available for public inspection at the West Earl Township Municipal Building, 157 West Metzler Road, Brown-

stown. Pennsylvania, Mondays through Fridays from 8:00 a.m. until 4:00 p.m. The public review period will conclude on July 19, 2017, during which period comments may be submitted in person at the West Earl Township Municipal Building, by United States mail to the Township at P.O. Box 787, Brownstown, Pennsylvania, or by e-mail to Township Manager Candie Johnson at cjohnson@westearltwp.org. Comments may also be made during the public comment period at the Board of Supervisors meeting on July 10, 2017, at the West Earl Township Municipal Building at 7:00 p.m. All comments will be considered by the Township Board of Supervisors at a public meeting to be held on Monday, July 24, 2017, at the Township Municipal Building at 7:00 p.m. Candie Ł. Johnson, Township Manager

Curry R. Afrif. (Signature)

### COPY OF NOTICE OF PUBLICATION

Sworn and subscribed to before me this 16<sup>TH</sup> DAY OF JUNE 2017 Iffur Adduced Notary Public

COMMO	NWEALTH OF PENNSYLVANIA
ľ	NOTARIALSEAL
Jeffr	ey J. Hollinger, Notary Public
Cityo	f Lancaster, Lancaster County
My Cor	nmission Expires June 10, 2021
MEMBER, P	ENNSYLVANIA ASSOCIATION OF NOTABLED

### Appendix B

Map B1. West Earl Township Land Use Types and Planning Areas; Map B2. West Earl Township MS4 PRP Map



# Map B1. West Earl Township Land Use Types and Planning Areas



# Map B2. West Earl Township MS4 PRP Map

PRP1 Eagleview Estates Basin Retrofit



Appendix C Baseline Load Calculations and Existing BMP Load Reductions



### EXISTING LOAD DEP SIMPLIFIED METHOD SUMMARY TABLE

### Statewide MS4 Land Cover Estimates for West Earl Township

UA % Impervious	29%
UA % Pervious	71%
Non-UA %Impervious	11%
Non-UA % Pervious	89%

### PRP Instructions (05/2016) Attachment B - Developed Land Use Loading Rates for PA Counties - Lancaster County

	Sediment	N	D(lb(ac/ur))
	(lb/ac/yr)	(lb/ac/yr)	P (ID/ac/yr)
UA Impervious Loading	1480.43	38.53	1.55
UA Pervious Loading	190.93	22.24	0.36
Undeveloped (Non UA) Loading	234.6	10	0.33

			Urbar	n Area	Nor	Non-UA Existing Baseline Load Reductions <sup>1</sup>		Reductions - Existing BMPs			Final Existing Load							
Planning Area Name	UA Acreage <sup>1</sup>	non-UA aceage <sup>2</sup>	Acres Impervious	Acres Pervious	Acres Impervio us	Acres Pervious	Sediment Load (lbs)	N Load (lbs)	P Load (Ibs)	Sediment Load (lbs)	N Load (lbs)	P Load (lbs)	Sediment Reductions (Ibs)	N Reductions (lbs)	P Reductions (lbs)	Sediment Load (lbs)	N Load (lbs)	P Load (lbs)
Cocalico Creek Planning Area	760.95		220.68	540.28			429,850.37	20,518.39	536.55	4,403.82	2 114.61	4.61	17,873.49	343.90	16.33	403,169.23	20,059.87	515.61
Conestoga River Planning Area	571.75		165.81	405.94			322,973.00	15,416.72	403.14	16,629.43	3 432.80	17.41				306,343.57	14,983.92	385.73
Groff Creek Planning Area	193.84		56.21	137.63			109,497.31	5,226.72	136.68							109,497.31	5,226.72	136.68
Planning Areas Total Acreage:	1,526.54													Planning	g Areas Total:	819,010.11	40,270.52	1,038.02
																		Í
<sup>1</sup> Reductions shown here are for 14.2 acres of PENNDOT roads that could not otherwise be extracted from the Planning Area acreage; All other Excluded Area acreage has already been																		

extracted from the Planning Area acreage

Site	RR or ST	Runoff Storage (RS) (ac ft)	Impervio us Area (IA) (ac)	(RS)(12)/IA (Min=0, Max=2.5)	Pervious Area (ac)	Sediment Removal %**	Sediment Load (Ib)	Sediment Removal (Ib)	Sediment Removal (T)
Cloverbrook Detention Basin	ST	1.63	13.81	1.42	17.10	0.75	23709.64	17,873.49	8.94
Cocalico Creek Planning Area Existing BMP									

Loading Rates from DEP PRP Instructions, Attachement B "Developed Land Loading Rates for PA Counties" May, 2016;									
	Ν	Р	TSS						
Pervious Surface Loading (lb/ac/yr) =	22.24	0.36	190.93						
Impervious Surface Loading (lb/ac/yr)=	38.53	1.55	1,480.43						

\* Based on Recommendations of the Expert Panel to Define Removal Rates for Urban Stormwater Retrofit Projects. Chesapeake Stormwater Network. January 20, 2015

\*\* From Retrofit Adjustor Curves, p 14, 15 - Forumulas form Peft Standards and Retrofits\_FAQ Document\_090913

Appendix D Proposed BMP Load Reduction Calculations



West Earl Township Proposed Urban BMPs - Sediment and Nutrient Reduction Calculations\*

Site	BMP ID	RR or ST	BMP Acreage	Runoff Storage (RS) (ac ft)	Impervio us Area (IA) (ac)	(RS)(12)/IA (Min=0, Max=2.5)	Pervious Area (ac)	Sediment Removal %**	Sediment Load (Ib)	Sediment Removal (lb)	Sediment Removal (T)
Eagleview Estates Detention Basin Retrofit	PRP1	ST	1.06	0.53	12.00	0.53	59.87	0.54	29196.14	15,726.72	7.86
Anglesea Detention Basin Retrofit	PRP2	ST	1.01	0.50	18.27	0.33	36.59	0.40	34033.20	13,669.89	6.83
Millway Acres Detention Basin Retrofit	PRP3	ST	0.63	0.31	4.99	0.75	8.28	0.64	8968.25	5,705.65	2.85
Main Street Bioswale	PRP4	ST	0.48	0.24	1.45	1.99	3.55	0.78	2824.43	2,207.61	1.10
School Lane Farms Detention Basin	PRP5	ST	0.56	0.28	8.99	0.37	22.01	0.44	17511.44	7,631.35	3.82
Industrial Road Detention Basin	PRP6	ST	1.03	0.51	8.44	0.73	20.66	0.63	16438.15	10,336.62	5.17
										Proposed BMP Load Reductions***:	10% Requirement:
Conestoga River Planning Area Proposed BMPs										71,398.83	30,634.36
Cocalico Creek Planning Area Proposed BMPs										16,042.27	40,316.92
Groff Creek Planning Area Proposed BMPs									13,669.89	10,949.73	
						Total Propo	sed BMP Red	uctions for We	st Earl Twp:	101,110.99	81,901.01

Loading Rates from DEP PRP Instructions, Attachement B "Developed Land Loading Rates for PA Counties" May, 2016; Lancaster County values used			
	Ν	Р	TSS
Pervious Surface Loading (lb/ac/yr) =	22.24	0.36	190.93
Impervious Surface Loading (Ib/ac/yr)=	38.53	1.55	1,480.43

\* Based on Recommendations of the Expert Panel to Define Removal Rates for Urban Stormwater Retrofit Projects. Chesapeake Stormwater Network. January 20, 2015

\*\* From Retrofit Adjustor Curves, p 14, 15

\*\*\*Includes Load Reductions from Stream BMPs identifed on other page

#### West Earl Township Proposed Stream BMPs - Sediment and Nutrient Reduction Calculations\*

Site	BMP ID	Length (ft)	BMP Area (ac)	Area Treated (ac)	Imp. Area (ac)	Perv. Area (ac)	Imp. Area TSS Loading (Ibs/ac/yr)**	Perv. Area TSS Loading (lbs/ac/yr)**	Sediment Removal (Ibs)
West Earl Community Park Riparian Buffer	PRP7A	350	0.28	1.12	0.33	0.80	482.94	152.49	317.72
West Earl Community Park Extended Riparian Buffer	PRP7B	1050	0.84	3.37	0.98	2.40	1448.82	457.47	953.15
West Metzler Road Channel Stabilization	PRP8	1000							44,880.00

\* Based on PADEP's BMP Effectiveness Values (3800-PM-BCW0100m), 5/2016

**Loading Rates from DEP PRP Instructions, Attachement B "Developed Land Loading Rates for PA Counties" Ma	ay, 2016; Lancaster Co	unty values used	
	Ν	Р	TSS
Pervious Surface Loading (lb/ac/yr) =	22.24	0.36	190.93
Impervious Surface Loading (Ib/ac/yr)=	38.53	1.55	1,480.43
Undeveloped (Non UA) Surface Loading (lb/ac/yr)=	10	0.33	234.60

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# **Attachment A - Municipal Inventory List**

• West-Earl-Facilities-List.pdf

### West Earl Township Facilities List & Description

Municipal Drive Complex; 157 W. Metzler Rd Ephrata Pa 17522 (Building are fenced in)

Office Building

- Twp offices & Meeting Rooms
- Police offices & cruiser bays
- Public Works Garage & Shops

Pole Shed

- Cold Storage
- 4 bay garage
- Stand by generator
- Police evidence storage
- On the N/W end of the building 2 bays for stone storage

### Salt Shed

- 3 sided pole shed with 3 bays
- Raw salt storage
- Mix storage
- Cold patch storage

### Municipal Drive Park

- Baseball Field
- Tennis Court
- Basket Ball Court
- Pavilion & Bleachers
- Storage shed for ball field equipment

Compost Facility 161 Locust Street Leola Pa 17540 (storage site)

- Brush pile
- Yard waste pile
- Yard waste composting windrows
- Single ground mulch pile
- Double ground mulch pile
- Humus pile
- Topsoil pile
- Fill pile
- Asphalt millings pile
- Firewood pile
- Pole shed to house the compost turner
- 3 sedimentation ponds
- 13 acres total, (7 blacktop & 5 grass and ponds)

Sewer Treatment Plant facility 161 Locust Street Rear Leola Pa 17540 (treatment facility)

- 2 SBR units with a blower room
- Control building
- In ground sludge storage
- Twin clear wells
- UV Channel
- Influent wet well
- 4.5 Acres

Sewer Lift Stations (various locations)

- Eagle Drive
- Cocalico Creek Road.
- Newport Road.
- Oregon Pike
- Church Street

The lift stations typically consist of block control buildings with a diesel generator for backup power. Influent wet well with pumps that transfer the sewage toward the main sewer treatment plant.

Water Treatment Plant (potable)

- Main control building for Nolt's Well
- Main control building for two additional booster stations and two tanks.
- Nitrate reduction and disinfection control process for the Nolt's well is at this location.

Oregon Pike Booster Station

- Pump building for the main interconnect with Lancaster City.
- Disinfection boost
- Diesel Generator for back up power

Main Metering Pit

- Dual Metering pit for the city tie in.
- Located at the West Earl Township / Manheim Township Line on Oregon Pike

### Hilltop Tank

- 350000 gallon Hydro Piller
- 100000 gallon standpipe
- Detention basin for overflow

Akron Booster Station

- Main Booster Station for the Akron zone
- Disinfection boost
- No generator on site, direct service from the PPL substation.
- 1/5<sup>th</sup> acre lot

### Akron Hill Tank

- 250000 gallon elevated reservoir
- 1 Acre lot

Stone Quarry Rd Park

- Open field, 13 acres
- Walking trails (gravel)
- Parking lot (gravel)

### Lions Park

- 20 acre park
- Paved walking trail and parking lot
- Tot-lot, restrooms and pavilion

### Eagle View Park

• 10 acres in design stages.

# **Attachment B - Annual Training & Education Plan**

• employee-training-records2017-2018.pdf

Appendix C

### WEST EARL TOWNSHIP ANNUAL EMPLOYEE TRAINING AND EDUCATION PLAN

Permit #:133535Permit Cycle Year:2017-2018Updated:February 22, 2017

Training Event	Target Employee	Planned Frequency	Topics
SWMP Review	All Staff	Annually	Updates on the SWMP
Illicit Discharge and Detection	All Staff	Annually	How to spot and report illicit discharges
Waste Disposal	Public Works Staff	Annually	Proper disposal of various materials
Salt & Materials Storage	Public Works Staff	Semi-annually	Proper storage of salt & other materials

# **Attachment C - Training Records**

- Watershed-conference\_2017.pdf
- PRP\_BMP-meeting.pdf
- PABCO-2017\_MS4\_training-session.pdf
- LandisHomes-MS4-training.pdf
- employee-training-3-5-2018.pdf
- certified-stormwater-inspector.pdf

# SEVENTH LEHIGH VALLEY WATERSHED CONFERENCE CONFLUENCE: CONFLUENCE OCTOBER 17, 2017 BETHLEHEM, PA Changing Communities and Changing D

Registration and Coffee (STEPS Building Atrium) 7:45 - 8:30 8:30 - 9:45 Welcome and Plenary Session

# Lehigh River, from Past to Today Gary Walters, Assessment Section Chief of the PADEP Presenting on the historical water quality data for the Lehigh River.

### 9:45 - 10:00 Break

### 10:00 - 11:15 Morning Course 1 (STEPS Building)

# Session A — 🔊

# A Moment of Science

Diane Husic, Moravian College Rebecca Kennedy, PENNVEST

Talking about complex scientific topics to the public in 2017 - an interactive conversation

Session B — When the Sewer Meets the Stream

Liesel Gross, Lehigh County Authority

The challenges facing wastewater authorities with sanitary sewer overflows

# Session C-

Are We Ready for the Big One?

Geoff Reese, LVPC

Planning for municipal infrastructure in a changing climate

### **Municipal Separate Storm** Sewer System Management Technical Track for Municipal Staff and Decisionmakers on Strategies and Tools for Addressing MS-4s in Your Community

### Session MS4 D —

## "Rain Tax" or Smart Planning?

Charlotte Katzenmoyer, PubWork City of Lancaster

Working with municipal stormwater fees

# Workshops: 🔊 🌭

**Explore Invasive Management** Two Hands-On Half-Day Workshops Suitable for landscapers, land managers, and anyone interested in learning how plants and animals from other continents are invading Lehigh Valley native landscapes, and how to best tackle the issues.

10:00 - 12:15 Workshop 1 ---Take It or Leaf It?\* Kathy Salisbury

# **Invasive Management: Plants**



U.S. Fish and Wildlife Service -Northeast Region

# 11:15 - 12:15 Morning Course 2 (STEPS Building)

# Session A — 🔊

The Buffer Brigade -**Riparian Restoration in** the Lehigh Valley

### Kate Ebel. Wildlands Conservancy

How local partners are cooperating to make an impact on streamsides on public and private property Session B —

## Synthetic Waters

Julie Lawson, Trash Free Maryland

How microplastics from our clothing and cosmetics are affecting our aquatic ecosystems and what can be done to help

Session C— 🔊 **Tick Talk and** Mosquito Buzz

Jeff Carroll, Penn State Ext. and Louise Bugbee, formerly of Penn State Ext.

Up-to-date information on everyone's favorite outdoor critters, the disSession MS4 D — Stormwater: Resource or Nuisance

Adrianne Vicari, HRG Rebecca Kennedy, PENNVEST

Is a Stormwater Authority right for your municipality?

eases they carry, and how to best stay clean and clear

### 12:15 - 1:30 Lunch Break

#### 1:30 - 2:30 Afternoon Course 1 (STEPS Building) 1:30 - 4:00 Workshop 2 ---Session C— Session B — 🐋 Session MS4 D ---Session A — What's Bugging You? \* Cougars on the Prowl Cutting Through the So You Want to be a Your Site or Mine? Emilie Swackhamer, Penn State Acronyms and Jargon Scientist? Michelle LaRue, Becki Douglas, Perkiomen Extension Cougar Network Watershed Conservancy to Action John Jackson, **Invasive Management: Insects** Stroud Water Research Effective website design The eastern expansion Mike Hickman, Center of the North American Tools/programs for citizen and online outreach for for Watershed Protection Cougar scientists, including DIY watershed groups Pollutant Reduction Plan and water testing equipment & Total Maximum Daily Load updates on the Delaware Implementation & Adaptive **River Watershed Initiative** Management 2:45 - 4:00 Afternoon Course 2 (STEPS Building) David Cappaert, Michigan State University Session C- ~ Session A - 🔊 Session B — 🐋 Session MS4 D -**Climate Change Comes** Greening the Gray The Nitty Gritty Not in My Backyard, \* ISA Certified Arborist, PCH, PDH, Yours Might Be Better Home Karen Pooley, Mike Hickman, Center Pesticide Credits and PA Landscape Lehigh University for Watershed Protection Vinnie Controne, PSU, Architect CEUs available. Dru Germanoski, Kathryn Semmens, Nurture Contact Emilie Swackhamer at Lafayette College The interface between Muncipal Separate Stormwater Nature Center, Diane Husic, exs33@psu.edu or 610-489-4315 cities and their natural Sewer System Program Plans The science and impacts Moravian College for more information. environment, and how and Standard Operating of pipelines planners are increasingly Procedures including how Impacts of a changing looking at cities' public to write plans, involve the public, climate in Lehigh Valley and implement good housespaces for environmental towns and backyards initiatives keeping practices A green leaf next to the title indicates that the presentation will be made on a basic level.

All other presentations will assume some background in subject matter.

Conference Organizers: Watershed Coalition of the Lehigh Valley

Lehigh University Department of Earth and Environmental Sciences, Environmental Initiative • Penn State Extension Northampton County Conservation District • Lehigh County Conservation District • Nurture Nature Center • Wildlands Conservancy









Pollutant Reduction Plan & BMP meeting February 14, 2018

### Attendees:

Keith Kauffman, Supervisor Butch Keppley, Supervisor Candie Johnson, Township Manager Ashley Martin, Assistant Roadmaster Jordan Levering, Road Department Sara Service, Stormwater Coordinator Cory Rathman, Township Engineer

**Discussion Items:** BMPs outlined in the Pollutant Reduction Plan

Hoover channel stabilization – work on design and permitting in 2018

Eagleview Estates – look into the Akron Borough stormwater that draining down into the Eagleview development.

Set up meeting with Homeowners' Associations to discuss BMP maintenance and the pollutant reduction plan.

BMP ID	BMP Project	Sediment Load
		Reduction (lbs)
PRP1	Eagleview Estates Detention Basin	15,727 HOA DWDS
	Retrofit	
PRP2	Anglesea Detention Basin Retrofit	13,670 HOA OWNS
PRP4	Main Street Bioswale	2,208
PRP5	School Lane Farms Detention Basin	7,631
PRP7A/7B	West Earl Community Park Riparian	318 / 953
	Buffer / Extended Riparian Buffer	
PRP8	West Metzler Road Channel	44,880 Jan Hanger
	Stabilization 2018/2019 ?	

Table 4. Summary of Proposed BMPs for the Middle Conestoga RiverSubwatershed

### BMP PRP1: Eagleview Estates Detention Basin Retrofit Project - HOA

Eagleview Estates is an existing detention basin, built in 2003, that receives drainage from 59.9 acres of pervious area and 12 acres of impervious area. This privately-owned basin is proposed to be retrofitted to increase the capacity of stormwater detained in the basin. The total area of the basin retrofit is 1.06 acres. This BMP will serve as a Stormwater Treatment practice (as defined by the Expert Panel) for the Conestoga River Planning Area (part of the Middle Conestoga River Basin). Load reductions for this BMP were calculated based on procedures from the Expert Panel. Calculation details are included in Appendix D. - Look into Akron Boro Stormwater drawing into development.

#### BMP PRP2: Anglesea Detention Basin Retrofit Project ~ HOA

The Anglesea housing development has an existing detention basin, built in 2004, that receives drainage from 36.6 acres of pervious area and 18.3 acres of impervious area. This privately-owned basin is proposed to be retrofitted to increase the capacity of stormwater detained in the basin. The total area of the basin retrofit is 1.01 acres. This BMP will serve as a Stormwater Treatment practice for the Groff Creek Planning Area (part of the Middle Conestoga River Basin). Load reductions for this BMP were calculated based on procedures from the Expert Panel. Calculation details are included in Appendix D.

#### BMP PRP4: Main Street Bioswale / Channel Stabilization

There is an eroded channel on the south side of Main Street that receives drainage from 3.55 acres of pervious area and 1.45 acres of impervious area. This channel conveys stormwater to the Conestoga River during storm events. West Earl Township proposes stabilizing this channel by creating an approximately 700 ft x 30 ft bioswale to reduce sediment erosion discharging to the river during storm events. This BMP will serve as a Stormwater Treatment practice for the Conestoga River Planning Area (part of the Middle

West Earl Township Pollutant Reduction Plan July 24, 2017



Conestoga River Basin). Load reductions for this BMP were calculated based on procedures from the Expert Panel. Calculation details are included in Appendix D.

#### BMP PRP5: School Lane Farms Detention Basin Retrofit Project

The School Lane Farms housing development has an existing detention basin that receives drainage from 22.01 acres of pervious area and 8.99 acres of impervious area. This privately-owned basin is proposed to be retrofitted to increase the capacity of stormwater detained in the basin. The total area of the basin retrofit is 0.558 acres. This BMP will serve as a Stormwater Treatment practice for the Conestoga River Planning Area (part of the Middle Conestoga River Basin). Load reductions for this BMP were calculated based on procedures from the Expert Panel. Calculation details are included in Appendix D.

#### BMP PRP7A/7B: West Earl Community Park Riparian Buffer Project

West Earl Township proposes to create a riparian buffer along a drainage channel / unnamed stream that runs through the West Earl Community Park (publicly owned) and ultimately connects to the Conestoga River. The proposed buffer is 350 in length and 35 feet wide on both sides of the stream. The buffer will treat a drainage area that is 0.8 pervious acres and 0.33 impervious acres within the Conestoga River Planning Area (part of the Middle Conestoga River Basin). As an additive alternative (BMP ID# PRP7B), the riparian buffer could be extended onto the other side of Route 772 for an additional 700 linear feet to the confluence with the Conestoga River. This alternative buffer would treat a drainage area that is 2.40 acres of pervious area and 0.98 acres impervious area. The additional length of buffer would require coordination with a private landowner. Load reductions were calculated using the BMP effectiveness values for Forest Buffers (see BMP Effectiveness Values). Calculation details are included in Appendix D.

### BMP PRP8: West Metzler Road Channel Stabilization Project - John Hoover

West Earl Township proposes to create a channel stabilization project along an unnamed tributary to the Conestoga River off of West Metzler Road. The proposed project is intended to stabilize 1,000 linear feet of stream running through a privately owned agricultural field within the UA. The channel stabilization will treat the drainage area within the Conestoga River Planning Area (part of the Middle Conestoga River Basin). The length of channel stabilization could be reduced depending on site specifics and the amount of load reduction achieved from the implementation of other BMPs. Sediment load reductions for a channel stabilization project are calculated at 44.88 lbs/ft/yr based on the BMP effectiveness values for Stream Restoration (see BMP Effectiveness Values). Calculation details are included in Appendix D. - Work on design & permitting in 2018. Tritial evaluation

in March? Of Moving forword? If all of the above BMPs are implemented, the sediment load reduction in the Middle Conestoga River Basin would be 85,069 lbs/yr which is above the minimum 10% sediment reduction requirement.



West Earl Township Pollutant Reduction Plan July 24, 2017 To meet the pollutant load reduction requirements for the Cocalico Creek Planning Area, West Earl Township proposes the implementation of the following BMPs summarized in Table 5:

BMP ID	BMP Project	Sediment Load Reduction (Ibs)
PRP3	Millway Acres Detention Basin Retrofit	5,706
PRP6	Industrial Road Detention Basin Retrofit	10,337

### BMP PRP3: Millway Acres Detention Basin Retrofit Project

Millway Acres is an existing detention basin, built in 2004, that receives drainage from 8.28 acres of pervious area and 4.99 acres of impervious area. This privately-owned basin is proposed to be retrofitted to increase the capacity of stormwater detained in the basin. The total area of the basin retrofit is 0.63 acres. This BMP will serve as a Stormwater Treatment practice for the Cocalico Creek Planning Area. Load reductions for this BMP were calculated based on procedures from the Expert Panel. Calculation details are included in Appendix D.

### BMP PRP6: Industrial Road Detention Basin Retrofit Project

Industrial Road is the location of an existing detention basin that receives drainage from 20.66 acres of pervious area and 8.44 acres of impervious area. This privately-owned basin is proposed to be retrofitted to increase the capacity of stormwater detained in the basin. The total area of the basin retrofit is 1.03 acres. This BMP will serve as a Stormwater Treatment practice for the Cocalico Creek Planning Area. Load reductions for this BMP were calculated based on procedures from the Expert Panel. Calculation details are included in Appendix D.

If the above BMPs are implemented, the sediment load reduction in the Cocalico Creek subwatershed would be 16,042 lbs/yr, which is less than the minimum 10% sediment reduction requirement for this particular area. This portion of the subwatershed within West Earl Township boundaries has limited opportunities for stormwater BMP implementation.

Based on guidance from DEP, West Earl Township plans to utilize additional load reductions from proposed BMPs implemented within the Middle Conestoga River subwatershed to satisfy the overall 10% load reduction requirements for the municipality.

### G. Funding Mechanism Identification

In order to install and maintain the BMPs listed in Section E, West Earl Township proposes the following sponsors/partners and funding sources:



West Earl Township Pollutant Reduction Plan July 24, 2017

## PENNSYLVANIA ASSOCIATION OF BUILDING CODE OFFICIALS

PABCO

"Helping to Build a Safer Pennsylvania"

MEMBERSHIP DEPARTMENT PO Box 202 Roaring Spring, PA 16673 Pabco4871@aol.com

### 4th Annual Pennsylvania Municipal Code Enforcement Conference

Location and Date:	Wednesday, October 4 <sup>th</sup> , 2017	Clarion Hotel & Conference Center 148 Sheraton Drive I-83 & PA Turnpike – New Cumberland 717-774-2721	
Time:	7:30 AM – 8:30 AM Registration and Full Continental Breakfast 8:30 AM – 4:30 PM Conference Program		
Directions:	Will be sent with confirmation		
Cost:	\$65.00 pre-registered / PABCO members & sponsors (add \$20 for on-site registration)		
	\$95.00 pre-registered / non-members (Join PABCO and have \$30.00 applied	(add \$20 for on-site registration) d to your membership dues)	
	\$15.00 per hour for UCC Continuing I Education Units (optional)	Education Credits / ICC Continuing	
	Includes hot lunch, continental break	fast and conference materials	
Continuing Education:	6.0 UCC Continuing Education Credits / 0 .6 ICC Continuing Education Units are available (optional pricing) PABCO is an <u>Approved UCC Training Provider</u> and is an <u>ICC Preferred Provider</u>		
Planned Program/ Schedule	Several plenary sessions are planned, including:   ✓ Land Banking   ✓ Blighted Property Enforcement Processes   ✓ Municipal Separate Storm Water Systems (MS4)   There will be three optional sessions throughout the day, with two topics to choose from in each session:   ○ Property Maintenance – From Ordinance to Abatement   ○ Wireless Communications Facilities Zoning Ordinances   ○ Mold – What Is It and When Is It A Hazard   ○ Carbon Monoxide – Enforcement and Best Practices   ○ Abatement of Property Maintenance Complaints   ○ Act 133 Real Estate Transactions – Certificates of Occupancy		



### STATEWIDE MUNICIPAL CODE ENFORCEMENT CONFERENCE OCTOBER 4, 2017 NEW CUMBERLAND, PA CLARION HOTEL AND CONFERENCE CENTER

8:30 AM	Plenary Session	Welcome and Introductions Overview of Today's Schedule	Donald C Forry President, PABCO	
8:45 AM	Plenary Session (45 min.)	Blighted Properties – Effective Abatement Strategies David Patton, Codes Administrator City of Harrisburg Department of Public Safety		
9:30 AM	Choose One (45 min.)	Land Banking - Everything You Need to Know and More Justin Eby, Dir. of Housing and Community Development at Lancaster County Redevelopment	Hoarding - Understanding the Mental Disorder and Fire Safety Hazards Effective Abatement Strategies Matt Paxton, Co-Founder and CMO of Legacy Navigator	
10:15 AM	Break	Break	Break	
10:30 AM	Choose One (1hr.)	Property Maintenance Ordinances - Adoption, Enforcement, Abatement Tim Knisely, Centre Region Code Senior Fire and Housing Inspector	Wireless Communication Facilities in Right-Of-Way - Ordinances Bethany Emkey, Esquire Hartman Valeriano Magovern Lutz	
11:30 AM	Plenary Session (1hr.)	Hot Buffet Lunch	Hot Buffet Lunch	
12:30 PM	Plenary Session (1hr.)	City of Jeannette's Fight Against Blighted Properties A City's Inspiration, Reinvention and Keys to Success Michael Nestico, Esquire, Jeannette City Manager		
1:30 PM	Choose One (1hr.)			
		Municipal Separate Stormwater Systems (MS4) Nick Johnson, PE Great Valley Consultants	Liability & Negligent Inspection Lawsuits Chad Michaelson, Esquire Meyer Unkovic and Scott	
2:30 PM	Break	Municipal Separate Stormwater Systems (MS4) Nick Johnson, PE Great Valley Consultants Break	Liability & Negligent Inspection Lawsuits Chad Michaelson, Esquire Meyer Unkovic and Scott Break	
2:30 PM 2:45 PM	Break Choose One (45min.)	Municipal Separate Stormwater Systems (MS4) Nick Johnson, PE Great Valley Consultants Break Effective Abatement of Property Maintenance Complaints Randy B. Maurer, ICC MCP Associated Building Inspections	Liability & Negligent Inspection Lawsuits Chad Michaelson, Esquire Meyer Unkovic and Scott Break Act 133 - Real Estate Transactions Certificates of Occupancy Stacey Morgan, Esquire Brubaker Connaughton Goss & Lucarelli	
PABCO Conference

10/3/2017



Nicholas R. Johnson, P.E. Great Valley Consultants

#### **Primary Goals**

- History of Stormwater Management
- How it impacts you
- New Regulations





n <sup>l</sup> aster	

#### MS4

"Municipal Separate Storm Sewer Systems"
1999 – Large Municipalities (Few in PA Qualified)
2003 – Small Municipalities (about 970)
Six Minimum Control Measures (MCMs)

#### MCMs

- MCM 1 Public Education and Outreach
- MCM 2 Public Participation and Input
- MCM 3 Illicit Discharge Detection and Elimination
- MCM 4 Construction-Phase Stormwater Management
- MCM 5 Post-Construction Stormwater Management
- MCM 6 Good Housekeeping

#### MCMs (in English)

- MCM 1 "Teach the Public"
- MCM 2 "Listen to the Public"
- MCM 3 "Eliminate Pollution"
- MCM 4 "Stop Construction Run-off"
- MCM 5 "Long-term Run-off Controls"
- MCM 6 "Good Housekeeping"

#### MCMs (in English)

- MCM 1 "Teach the Public"
- MCM 2 "Listen to the Public"
- MCM 3 "Eliminate Pollution"
- MCM 4 "Stop Mud Run-off"\*
- MCM 5 "Long-term Run-off Controls"\*
- MCM 6 "Good Housekeeping"
- \* Most likely to involve Code Officials



#### Act 167/MS4

MS4 Permit requires adoption of a stormwater management (167) Ordinance

MCM 2/BMP 2 MCM 3/BMP 5

MCM 4/BMP 3

MCM 5/BMPs 1&2 MCM 6/BMP 3

#### Important to Outsider

- 5,000 square feet of disturbance Approved E&S Plan Required
- 43,560 square feet (1 acre) of disturbance NPDES Permit
- 500-1000 square feet\* additional impervious cover - Stormwater Management (SWM) Design

### SWM Design

• Stringency varies greatly







• Building a garage?

How will your Municipality Handle It?











#### Conflict with UCC

- Debate at Local Seminar
- Legality and Enforceability Concern

Who Inspects? On-Lot Stormwater Facilities PCSWM Facilities - 10 Years of Inspections must be inspected once every other year for O years + then as

#### Property/Civil Issues

- "Something Changed"
- Flooding and Neighbors

#### Authorized Discharges

- DISCHARGES AUTHORIZED BY THIS GENERAL PERMIT Except when specifically problem during the "Discharges like Authorized by the Convert Penmi" landow, the Oncert Penmi technicis he discharge of the "Discharges like Authorized by the Convert Penmi" landow following non-stormwater discharges we athorized by the Convert Penmi service as such discharges do not cause or combinate by policies an define if herwaynamic Claum Stream Law.
- Discharges or flows from firefighting activities.
   Discharges from potable water sources including water line fushing and fire hydrant flushing, if such di
   dio not occlane detectable concentrations of Total Residual Chlorine (TRC).
- Non-contaminated impactor water, water from lawn maintenance, landscape draikage and flows from riparian flubibits and vetlands.
- Overted stream flows and springs.
   Non-contaminated pumped ground valer and water from foundation and footing drains and crawl space pum
- Residential (i.e., not commercial) vehicle wash water where cleaning agents are not utilized.
   Non-contaminated hydrostatic test water discharges, if such discharges do not contain detectable concentra
   of TRC.
- c min. In the event existing outfailing are identified doining the form of General Permit coverage that were not identified on many advantified as part of the KO larlow required; the permittee that identify the outfail(s) is the subsequent downwere confisse proposed; he permittees while some where confidence is the DMC afford the targetment downwere confisse or provides that permittees while some where the confisse permittees where the contrast permittees and permittees and the contrast permittees and permittees as and disclarges available and the contrast permittees and the contrast permittees and and the contrast permittees and the c











10/3/2017





Capitie & Ash ULY Sara.



# Inspecting and Maintaining Your Stormwater BMPs

Hosted by the Lancaster County Clean Water Consortium (lccwc.com)

October 19 9 AM - 2:30 PM

Landis Homes 1001 E Oregon Rd Lititz, PA



Join the Chesapeake Stormwater Network for a one-day workshop on how to quickly and effectively inspect and maintain your stormwater management practices! Learn why maintaining your stormwater practices is so important for protecting the health of your local streams. Then, be introduced to CSN's Visual Indicators approach to learn how to rapidly assess the condition of your stormwater practices and diagnose any potential problems that could impact their performance.

#### Chesapeake Stormwater Network:

The Chesapeake Stormwater Network (CSN) is a small non-profit dedicated to providing high quality training and resources to their network of nearly 11,000 stormwater professionals across the Bay watershed.

Registration deadline is October 13: https://www.surveymonkey.com/r/inspect maintain Or call Kristen Kyler at 717-948-6609 \$10 for LCCWC Members \$25 for non-members  $\times 3 = \oplus 15$ Check or cash payment will be taken at the door. Checks should be made out to the "Lancaster County Clean Water Consortium"



#### Stormwater Inspection & Maintenance Workshop October 19, 2017 Landis Homes, Lancaster, Pennsylvania

9:00-9:15	Welcome and Introductions	ALL	
9:15 — 9:45	<b>Operation and Maintenance Guidebook</b> An introduction to the new Operation and Maintenance Guidebook released by the Lancaster County Clean Water Consortium.	LCCWC	
9:45 – 10:00	Break	Υ	
10:15 – 11:15	<b>Bioretention and The Visual Indicators</b> <b>Approach to Inspecting and</b> <b>Maintaining Stormwater BMPs</b> An introduction to the Visual Indicators inspection system for LID practices, with an emphasis on bioretention.	David Wood and Tom Schueler, CSN	
11:15 - 12:00	The Pond Protocols An overview of the simple visual indicators to rapidly assess dam safety and water quality functions of stormwater ponds.	Tom Schueler and David Wood, CSN	
12:00 – 1:00	<b>Lunch</b> Sponsored by David Miller/Associates, Inc.		
1:00 - 2:30	<b>Field Walk to Inspect LID Practices</b> A field visit to facility sites to test out the visual inspection approach.	ALL	
2:30	Adjourn		



Hosted by:

LANCASTER COUNTY CLEAN WATER CONSORTIUM Restoring the waters of Lancaster County and the Chesapeake Bay

unu chesapatestormuater. net

#### Lancaster County Clean Water Consortium Chesapeake Stormwater Network

"Inspecting and Maintaining Your Stormwater BMPs" workshop October 19, 2017 – 9am-2:30pm Landis Homes – 1001 E. Oregon Road, Lititz, PA 17543

Sara Service & Ashley Martin attended.

Notes from the workshop

#### **Bio-retention – visual inspection approach**

- Inlet obstruction Sediment, debris, sediment staining
- Inlet erosion
- Structural Integrity
- Size of the Surface Area does the surface area match the original design?
- Side Slope Erosion check design plan to confirm which vegetative plant is used to help stabilize soils
- Ponding Volume
- Sinking filter bed check underdrain or outfalls, test excavation, possible causes sinkhole, damaged pipe, and poor connection.
- Sediment deposition & caking determine sediment depth & it's probably source or its contributing drainage areas.
- Standing Water
  - Saturated soils
  - Inches of standing water 72 hours after rain
  - > Too much mulch? Evaluate materials
  - Check filter cloth
  - Compacted soil won't allow infiltration
- Ponding Depth
- Mulch Depth look at design on plan and remove any excess mulch
- Trash remove if there is any
- Bed Erosion changes over time original design should specify desired plants.

#### Infiltration – Visual indicators

- Inlet check the condition of the contributing drainage area
- Bed check for sinking pavement, sediment, standing water, staining
- Outlet check the condition of the overflow and underdrain

#### **Grass channels – visual indicators**

• Inlet – check condition of CDA, runoff capture, inflow erosion

- Perimeter check pavement edge, side slope erosion
- Bed check flow distribution, sediment, standing water, trash
- Vegetated cover check conditions
- Outlet check terminus

#### **Pond Management**

- Evaluate performance Is it not performing or under performing
- Water quality can you see visible sediment
- Short circuiting does inflow of pond flow directly to outlet with little to no dispersion water will not be fully treated
- High pool elevation are low flow pipes clogged? Look for riser staining
- Low pool elevation are sediments exposed? is there a structured sinkhole?
- Invasive plant species is there a large resident geese population?
- Hypertrophic pond conditions harmful algae blooms present, pool is stagnant, smells bad
- Erosion check downstream and upstream

#### Definitions

- **Outfall/Outlet** Point where water flows from a conduit, stream, pipe, or drain.
- **Inlet** A surface connection to a closed drain. The upstream end of any structure through which water may flow.

## WEST EARL TOWNSHIP MS4 PERMIT YEAR 2017-2018 EMPLOYEE TRAINING

March 5, 2018 "Stormwater Pollution Prevention Plan" training video American Training Resources https://www.americantrainingresources.com/ptv-227.aspx



#### **Employees Attended**

Sara Service Ashley Martin Candie Johnson Sylvan Fisher Rick Haverstick Jerry Howe Jordan Levering Robert Buckwalter Teresa Beever Missy Wallace Amy Carter



Certified Stormwater Inspector Harrisburg, June 5-6, 2017

> Presented by National Stormwater Center www.NPDES.com Email: info@npdes.com 1-772-288-6852





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### Paul E. Davis. P.E.

38 years – Tennessee Department of Environment & Conservation 24 years – Director, Water Pollution Control

TN Licensed PE Environmental Engineer

WEF National Stormwater Committee

BS - Engineering Physics/Science MS – Water Resources University of Tennessee

US Masters Swimmer

SYDAMING







#### Here's what I want us to accomplish

- I want you to know what federal and state law require MS4s to do and how inspection is part of that.
- We'll skim through your 3 permits and highlight what I think is particularly important for you.
- We'll discuss the art and science of stormwater management.
- We'll look at some pictures and enforcement situations and discuss how we see them.
- I expect us to enjoy these 2 days!



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	lt's Abou	t Dirt	
Texture Class	Water Capacity (inch per inch)	Infiltration Rate (inch per hour)	Grouping
Sand	0.35	8.27	А
Loamy Sand	0.31	2.41	Α
Sandy Loam	0.25	1.02	В
Loam	0.19	0.52	В
Silt Loam	0.17	0.27	с
Sandy Clay Loam	0.14	0.17	C
Clay Loam	0.14	0.09	D
Silty Clay Loam	0.11	0.06	D
Sandy Clay	0.09	0.05	D
Silty Clay	0.09	0.04	D
Clay	0.08	0.02	D





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#### in-spect 🗟 (īn-spēkt')

tr.v. in-spect-ed, in-spect-ing, in-spects
1. To examine carefully and critically, especially for flaws.
2. To review or examine officially: The commander inspected the troops.

How is this supposed to be? What will I do about it?













# HOMEWORK!

- Prepare 1 or more <u>SHORT</u> inspection issues, situations, ideas good and bad... for our discussion on Day 2.
- I'll give you some examples.
- Email to <u>pedh2o@gmail.com</u> by 10:00 PM or just bring to class.

# MORE HOMEWORK!

А

• Find yourself on <u>How's My Waterway</u> and determine what watershed you're in and check out the available info for that watershed. We'll do a demo today...



#### **Testing Made Easy**

- Read and answer the question
- Pick the best answer or answers
- Class will let us know if they disagree with your answer
- Passing grade is 75%
- Grade your test, put your name on it, leave it with me



## Course Graduation

CSI

Visible Recognition



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- Sticker (for Hard Hat)
- Professional Recognition Letter
  - "Qualified Inspector"
  - Certification for 5 Yrs. Renewable





# **Attachment D - Inspection Records**

## **Attachment E - Event Records**

## Attachment F - Good Housekeeping Activity Records

- equipment-storage-bldg.pdf
- street\_sweeping-w-weigh slips.pdf

In June 2018 the West Earl Township Public Works Department finished construction of a pole barn to house Township equipment. Keeping the equipment covered will help reduce the potential for stormwater runoff pollution.

Before and after pictures following.







STREET SWEEPING			
Louise Avenue	Valley View Drive		
Marlou Aveue	Concord Drive		
Evergreen Lane	Batten's Circle		
Locust Street	Highview Drive		
Stone Ridge Drive	Bareview Drive		
Cornerstone Way	Circleview Drive		
Briar Hill Lane	Countryside Lane		
Chapel Lane	Robindale Drive		
School Lane Avenue	Meadow View Drive		
N & S Church Street	Orchard View Drive		
Conestoga Avenue	E, W, N & S Farmersville Road		
Allen Road	Eagle Drive		
Wolf Circle	Hawk Lane		
Brown Road	Sparrow Lane		
Goldin Circle	Talon Drive		
Buchland Road	Pearl Avenue		
Walnut Drive	Pool Road		
Redwood Circle	N & S Conestoga View Drive		
Cedar Avenue	Dogwood Drive		
Greenwood Circle	White Street		
Mellinger Circle	Circle Rock Drive		
Municipal Drive	Gregory Court		
Dane Drive	Garland Lane		
Brian Drive	N & S State Street		
Industrial Road	E & W Main Street		
Zook's Mill Road	Groff's Drive		
Hilltop Drive	Millstone Drive		
Southview Drive	Waterwheel Drive		
Northview Drive	Cocalico Creek Road		
Stone Quarry Road	Millway Road		
	Hillside Drive		

SOURCE SEPARATED RE	STE, RESIDUAL WASTE & CYCLABLE MATERIALS	LCSWMA
A. GENERATOR INFORMATION	TRX #:	3049 River Rd Conestoga, PA 17516
Origin Number: 18	Generator Type (Check One): Residential [ Commercial/Institutional [ Industrial [	REMIT TO: PO Box 4425 Lancaster PA 1760 ] ] ]
Senerator Name:	bus waste according to federal and sta omposition as specifically approved lies.	
Signature & Title	Date	Pay Type: Account
B. TRANSPORTER INFORMATION (T CSWMA License Number: Transporter Company Name: Driver Name: (Please Print) certify this material was received from	the Generator identified above a	Carr: 231325/WEST EARL TOWNSHIP DEP: WH13826 Truck: 16423 Truck Type: TRIANS (160) NUE License: MG 3912E Origin: PA036118/West Earl Township Caid: WF0Working Face
Regulations.	Date $\frac{1}{2} = \frac{1}{2}$	Driver: COM/COBIMERCIAL
C. MATERIAL INFORMATION	Date <u>5 - 70 7</u>	Gross: 29000 LBS In Scale 1 Tare: 18300 LBS Out Scale 2
C. MATERIAL INFORMATION  Type Qua	DateDateDateDateDateDate	Gross: 29000 LBS In Scale 1 Gross: 29000 LBS Out Scale 2 Net: 10700 LBS TONS: 5.35
C. MATERIAL INFORMATION       Type         Quadratic	Date	Ind       Griss: 29000 LBS In Scale 1         Gross: 29000 LBS In Scale 1         Tare: 18300 LBS Out Scale 2         Net: 10700 LBS         Ims         Material: F-01/Refuse         Quantity: 5.35 TON
C. MATERIAL INFORMATION         Type         Qua         H         D. FACILITY INFORMATION	DateDateDateDate      Inity Units of Measure     Pounds, CuYd, Drums, Ite	Ind       Grid: WF/WORKing Face         Driver: COM/COMMERCIAL
C. MATERIAL INFORMATION  Type Qua  Type Qua  Frey Farm Landfill Frey Farm Staging Area Resource Recovery Facility Transfer Station Other (if delivered to non-LCSWMA Facility ID Number: Facility Name:	accordance with LCSWMA Rules a	Ind       Griss: 29000 LBS In Scale 1
C. MATERIAL INFORMATION  Type Qua  Type Qua  Frey Farm Landfill Frey Farm Staging Area Resource Recovery Facility Transfer Station Other (if delivered to non-LCSWMA Facility ID Number: Facility Name: Certify that the materials described above on this manifest and were processed, re CSWMA Rules and Regulations.	accordance with LCSWMA Rules a Date Date Date Date Pounds, CuYd, Drums, Ite were received by the Facility indica cycled or disposed in accordance v	Ind       Gross: 29000 LBS In Scale 1

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LCS	SWMA MANIFEST FORM	
REGULATED MUI SOURCE SEP/	NICIPAL WASTE, RESIDUAL WASTE & ARATED RECYCLABLE MATERIALS	LCSWMA
A. GENERATOR INFORM	TRX #:	3049 River Rd Conesioga PA 17516
Origin Number:/ &	Generator Type (Check One): Residential	REMIT TO: PO Box 4425 Lancaster PA 17604
Generator Name: (,) P S+	= ar.) → a (	
I certify this material is a RCRA regulations and is of the same LCSWMA for disposal at LCS	A nonhazardous waste according to federal and state e type and composition as specifically approved by SWMA Facilities.	Date: 5/8/2017 Time: 13:23:38 - 13:40:49 Direction: Inbound
Signature & Title	Date	Pay Type: Account
B. TRANSPORTER INFO	RMATION (To be completed by Transporter)	Cust: 231325/WEST EARL TOWNSHIP Carr: 231325/WEST EARL TOWNSHIP DEP: WH138 <sup>2</sup> 6
LCSWMA License Number: Transporter Company Name: Driver Name:		Truck: 16423 Truck Type: TRIAXLE/TRIAXLE License: MG 3912F
(Please Print) I certify this material was redelivered to the Facility ident	eceived from the Generator identified above and ified below in accordance with LCSWMA Rules and	Origin: PA036118/West Earl Township Grid: WF/Working Face
Regulations.	17 <sup>11</sup>	Driver: COM/COMMERCIAL
Driver's Signature Date	Date	
C. MATERIAL INFORMA	TION	Gross: 28520 LBS In Scale 1
Type	Quantity Units of Measure	Tare: 18240 LBS Out Scale 2 Net: 10280 LBS
<u> </u>	Pounds, CuYd, Drums, Items	TONS: 5.14
	Pounds, CuYd, Drums, Items Pounds, CuYd, Drums, Items	
	Pounds, CuYd, Drums, Items	Material: F-01/Refuse
	10N	Quantity: 5.14 TON \$73.00/TON
		Amount: \$ 375.22
Frey Farm Landfill     Frey Farm Staging Area     Resource Recovery Fac	a cility	Total Amount: \$ 375.22
Other (if delivered to no	n-LCSWMA Facility)	Weighmaster: Rob Dodson 77289
Facility ID Number:		Driver:
I certify that the materials des on this manifest and were p LCSWMA Rules and Regula	scribed above were received by the Facility indicated processed, recycled or disposed in accordance with tions.	AAM WATO
Signature & Title:	Date	
n na na a <del>ta</del> tata ya uk <del>ata</del> tana kukata ku	n an	***** INVOICE *****

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