



BOROUGH OF CARLISLE

"Committed To Excellence in Community Service"

**Borough of Carlisle,
Cumberland County, PA**

Annual Report

For

Municipal Separate Storm Sewer System (MS4)

September 2017

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MUNICIPAL SEPARATE STORM SEWER SYSTEM (MS4) ANNUAL/PROGRESS REPORT

For the Reporting Period: May 1, 2016 to April 30, 2017

☒ Annual Report ☒ Progress Report
☒ New Permittee ☐ Renewal Permittee

Due Date: July 31, 2017

GENERAL INFORMATION

Permittee Name:	Borough of Carlisle	NPDES Permit No.:	PAI133517
Mailing Address:	53 W. South Street	Effective Date:	May 1, 2015
City, State, Zip:	Carlisle, PA, 17013	Expiration Date:	April 30, 2020
MS4 Contact Person:	Mark Malarich	Renewal Due Date:	November 2, 2019
Title:	Public Works Director	Admin. Extended?	☐ Yes ☒ No
Phone:	717-240-6932	Municipality:	Borough of Carlisle
Email:	mmalarich@carlislepa.org	County:	Cumberland
Co-Permittees (if applicable): N/A			

WATER QUALITY INFORMATION

Are there any discharges to waters within the Chesapeake Bay Watershed? ☒ Yes ☐ No

Identify all surface waters that receive stormwater discharges from storm sewers within the MS4 urbanized area and provide the requested information (see instructions).

Receiving Water Name	Ch. 93 Class.	Impaired?	Cause(s)	TMDL?	WLA?
Letort Spring Run	HQ-CWF	No			
Conodoguinet Creek	WWF	No			

Identify any Wasteload Allocations (WLAs) identified in TMDLs for the MS4, if applicable. Identify the pollutant(s) and mass load(s):

N/A

GENERAL MINIMUM CONTROL MEASURE (MCM) INFORMATION

Have you completed all MCM activities required by the permit for this reporting period? ☒ Yes ☐ No

Provide current contact name and phone number information for the required MCMs (if same as page 1, leave blank):

MCM	Contact Name	Phone
#1 Public Education and Outreach on Storm Water Impacts		
#2 Public Involvement/Participation		
#3 Illicit Discharge Detection and Elimination (IDD&E)		
#4 Construction Site Storm Water Runoff Control		
#5 Post-Construction Storm Water Management in New Development and Redevelopment		
#6 Pollution Prevention / Good Housekeeping		

MCM #1 – PUBLIC EDUCATION AND OUTREACH ON STORM WATER IMPACTS

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

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

1. For new permittees only, attach the written PEOP or a summary thereof to the first report submitted to DEP.

2. If you are not a new permittee, did you complete and submit your written PEOP to DEP? ☒ Yes ☐ No
If Yes, provide the latest submission date: **October 2016 with first annual report**

3. Date of last evaluation of or revision to the PEOP: **May 2017**

4. What were the plans and goals for public education and outreach for the reporting period?

Borough staff was to reviewed status and success of PEOP with ALLARM Stormwater Committee and update plan as needed

5. Did the MS4 achieve its goal(s) for the PEOP during the reporting period? ☒ Yes ☐ No

Explain the rationale for your answer:

Borough staff and ALLARM Stormwater Committee reviewed and updated plan in May 2017. See Attachment 1 for copy of updated Plan.

6. Identify specific plans and goals for public education and outreach for the upcoming year:

Borough staff will reviewed status and success of PEOP with ALLARM Stormwater Committee and update plan as needed

BMP #2: Develop and maintain lists of target audience groups present within the areas served by your MS4

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

1. For new permittees only, attach your target audience list(s) to the first report submitted to DEP.

2. If you are not a new permittee, did you complete and submit your target audience list to DEP? ☒ Yes ☐ No
If Yes, provide the latest submission date: **October 2016**
3. Date of last review or revision to target audience list(s): **May 2017**

BMP #3: Annually publish at least one educational item on your Stormwater Management Program

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

1. For new permittees only, attach your published stormwater educational or informational materials to the first report submitted to DEP.
2. If you are not a new permittee, did you complete and submit your published stormwater educational or informational materials to DEP? ☒ Yes ☐ No
If Yes, provide the latest submission date: **October 2016**
3. Do you have a municipal newsletter? ☒ Yes ☐ No
If Yes, how often was it published during the reporting period and what MS4-related material did it contain?
Newsletter published twice during reporting period. See Attachment 2 for copies of excerpts from Fall 2016 and Spring/Summer 2017 newsletters with articles on stormwater related topics
4. Do you have a municipal website? ☒ Yes ☐ No (URL: <http://www.carlislepa.org/>)
If Yes, what MS4-related material does it contain?
See Attachment 3 for printout of current content
5. Describe any other method(s) used during the reporting period to provide information on stormwater to the public:
Stormwater related topics discussed during monthly Borough Council workshop meetings
6. Date of most recent review and/or update to published stormwater educational materials: **May 2017**
7. Identify specific plans for the publication of stormwater materials for the upcoming year:
Update the stormwater page on the Borough website to include this annual report, notification about status of "Carlisle Green Street" project, information related to potential stormwater utility fee, and to identify any changes to MS4 program implemented since May 2017. Publish article in Carlisle Gazette on stormwater related topic.

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

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

Identify the two additional methods of distributing stormwater educational materials during the previous year (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).

ALLARM posters throughout the Borough advertisign its Adopt a Storm Drain Program.

ALLARM posters and social media outreach on its Lawns & Letort presentation at Bosler Public Library (See Attachment 4)

Gave presentation at April 5, 2017 Borough Council Workshop meeting on status of Borough's MS\$ program and proejects completed or underway during permit year to address stormwater management (See Attachment 5 for meeting agenda, minutes, and presentation slides)

MCM #2 – PUBLIC INVOLVEMENT/PARTICIPATION

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

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

- a. Opportunities for the public to participate in the decision-making processes associated with the development, implementation, and update of programs and activities related to this General Permit.
 - b. Methods of routine communication to groups such as watershed associations, environmental advisory committees, and other environmental organizations that operate within proximity to the permittee's regulated small MS4s or their receiving waters.
 - c. Making your periodic reports available to the public on your website, at your municipal offices, or by US Mail upon request.
1. For new permittees only, attach your written PIPP or a summary thereof to the first report submitted to DEP.
 2. If you are not a new permittee, did you complete and submit your written PIPP or summary to DEP? ☒ Yes ☐ No
If Yes, provide the latest submission date: **October 2016**
 3. Date of last review and/or update to the PIPP: **May 3, 2017**
 4. Explain how your PIPP addresses items a, b and c of the Measurable Goal:
 - a. Borough Council meetings are publically advertised and generally held twice per month. Presentations are made by Borough staff on stormwater related issues and public comments are solicited at meetings.
 - b. Borough Public Works staff attend regular meetings of ALLARM Stormwater Committee to discuss plans for public education and outreach. ALLARM helps update and implement PEOP and PIPP included as Attachment 1. See Attachment 6 for summary of ALLARM activities during reporting period.
 - c. Annual report from last year published on Borough website under stormwater page.

BMP #2: Prior to adoption of any ordinance (municipal permittees) or SOP (non-municipal permittees) required by the permit, provide adequate public notice and opportunities for public review, input, and feedback.

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

1. Was an MS4-related ordinance or SOP developed during the reporting period? ☐ Yes ☒ No
2. If Yes, describe how you advertised the draft ordinance and how you provided opportunities for public review, input and feedback:
3. If an ordinance or SOP was enacted/developed or amended during the reporting period, provide the following information:

Ordinance No. / SOP Name	Date of Public Notice	Date of Public Hearing	Date Enacted

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

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

1. Date of the public meeting(s): **4/5/17 Borough Council Workshop Meeting and 1/27/17 Public Open House Meeting on Stormwater Park**
2. How were meeting(s) advertised to the public? **yes**
3. Indicate where the meeting(s) were held and the number of attendees:
Borough Hall. 4/5/17 workshop meeting had about 30 attendees, including Carlisle Sentinel reporter. Open House has about 25 attendees.
4. What types of MS4-related activities did you solicit public involvement and participation for?
Solicited comments on proposed content of Fairground avenue stormwater park (See Attachment 7 for newspaper article on open house.
5. What MS4-related activities did the public participate in?
Variety of ALLARM sponsored events including Adopt a Storm Drain Program, Rain Barrel Workshop, Lawns and Letort Presentation, and Letort Hike. (See Attachment 6)

MCM #3 – ILLICIT DISCHARGE DETECTION AND ELIMINATION (IDD&E)

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

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

1. For new permittees only, attach your written IDD&E program to the first report.
2. If you are not a new permittee, did you complete and submit your written IDD&E program to DEP? ☒ Yes ☐ No
If Yes, provide the latest submission date: **October 2016**
3. Date of last review and/or update to IDD&E program: **May 2017**

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

Measurable Goals: For new permittees, develop the map(s) of your regulated small municipal separate storm sewer systems and the information on all outfalls from your regulated small MS4 by the end of the fourth (4th) year of permit coverage. For renewal permittees, the existing map(s) of your regulated small MS4 shall be updated and maintained as necessary during each year of coverage under the permit.

1. Have you completed a map(s) of all outfalls and receiving waters of your storm sewer system? ☐ Yes ☒ No

2. For new permittees only, attach the completed map to the 4th year Annual Report.
3. Date of last update or revision to map(s): **May 2017**
4. Total number of discharge points in your storm sewer system that:
Discharge directly to surface waters (outfalls): **24**
Discharge to storm sewers owned by others: **0**
5. Total number of outfalls that are mapped at this time: **24**

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

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

1. Have you completed a map(s) that includes roads, inlets, piping, swales, catch basins, channels, basins, municipal boundaries and watershed boundaries? ☐ Yes ☒ No
2. If Yes, is the map(s) on the same map(s) as for outfalls and receiving waters? ☐ Yes ☐ No
3. For new permittees only, attach the completed map to the 4th year Annual Report.

4. If you are not a new permittee, did you complete and submit your map to DEP? ☐ Yes ☐ No
If Yes, provide the latest submission date:
5. Date of last update or revision to map:

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

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

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

1. For new permittees only, were at least 40% of all outfalls screened during dry weather? ☒ Yes ☐ No

If Yes for #1, indicate the number screened and the percent of all outfalls it represents. If No for #1, indicate reason(s) why this was not completed:
13 screened, 54% of total. See Attachment 7 for completed inspection forms

Are you on pace to screen all outfalls twice during the permit term? ☒ Yes ☐ No
2. For renewal permittees, indicate the percent of outfalls screened during the reporting period: %

Are you on pace to screen all outfalls once during the permit term? ☐ Yes ☐ No

3. For all permittees, indicate the percent of outfalls screened that revealed dry weather flows: **0%**
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 "Outfall Reconnaissance Inventory / Sample Collection Field Sheet" provided in the permit?

☒ Yes ☐ No

If No, attach a copy of your monitoring form.

BMP #5: Enact a stormwater management ordinance (municipal entities) or develop an SOP (non-municipal entities) to implement and enforce a stormwater management program that includes prohibition of non-stormwater discharges to the regulated small MS4.

Measurable Goal: Within the first year of coverage under the permit, new permittees shall enact and implement an ordinance from an Act 167 Plan approved by the Department in 2005 or later, the MS4 Stormwater Management Ordinance; or an ordinance that satisfies all applicable requirements in a completed and signed MS4 Stormwater Management Ordinance Checklist. (For non-municipal permittees, new permittees shall develop and implement a Standard Operating Procedure (SOP) within the first year of coverage).

Renewal permittees must continue to maintain, update, implement, and enforce a Stormwater Management Ordinance that satisfies all applicable requirements. (For non-municipal permittees, the SOP satisfies this requirement. If no existing SOP exists, it should be developed during the first year of coverage).

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

1. Do you have an ordinance (municipal) or SOP or other mechanism (non-municipal) that prohibits non-stormwater discharges? ☒ Yes ☐ No

If Yes, indicate the date of the ordinance or SOP: **3/11/2011**

2. For new permittees only, attach an ordinance (or SOP) and letter from an official, engineer or solicitor that prohibits non-stormwater discharges to the first report submitted to DEP.

3. If you are not a new permittee, did you complete and submit your ordinance (or SOP) and letter from an official, engineer or solicitor that prohibits non-stormwater discharges to DEP? ☒ Yes ☐ No

4. Were there any violations of the ordinance during the reporting period? ☐ Yes ☒ No

If Yes, describe what enforcement actions were taken for each violation:

n/a

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.

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

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? **Illicit Discharge Citizen Complaint form via Borough website. Borough Gazette also referenced IDDE form**

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 #4 – CONSTRUCTION SITE STORM WATER RUNOFF CONTROL

Are you relying on PA's statewide program for stormwater associated with construction activities to satisfy this MCM?

☒ Yes ☐ No **(If No, complete all remaining questions for this MCM; if Yes, skip to MCM #5).**

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

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

For all permittees, your program shall be reviewed and updated during each year of permit coverage. The purpose of the written program is to establish clear roles and responsibilities for the implementation of the MCM #4 requirements. An agreement between the permittee, the CCD, and any other resources to be used by the permittee that clearly defines roles for each entity is recommended. If an agreement is made, you shall place and keep a written copy in your file, consistent with the Retention of Records requirements in this Permit. Please note that in accordance with Section A.2.h in Part A of the Authorization to Discharge, as the permittee you are responsible to ensure that implementation of all requirements under this Permit are fulfilled.

1. For new permittees only, attach the written stormwater associated with construction activities program to the first report submitted to DEP.
2. If you are not a new permittee, did you complete and submit your written stormwater associated with construction activities program to DEP? ☐ Yes ☐ No
If Yes, provide the latest submission date:
3. Date of last update or revision to the stormwater associated with construction activities program:

BMP #2: The permittee shall enact, implement, and enforce an ordinance to require the implementation of erosion and sediment control BMPs, as well as sanctions to ensure compliance.

Measurable Goal: Within the first year of coverage under the permit, new permittees shall enact and implement an ordinance that meets all applicable requirements of this permit. (Non-municipal permittees shall develop and implement an SOP).

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

1. For new permittees only, attach an ordinance (or SOP) and letter from an official, engineer or solicitor that addresses stormwater associated with construction activities to the first report submitted to DEP.
2. If you are not a new permittee, did you complete and submit your ordinance (or SOP) and letter from an official, engineer or solicitor that addresses stormwater associated with construction activities to DEP? ☐ Yes ☐ No
If Yes, provide the latest submission date:

BMP #3: Develop and implement requirements for construction site operators to control waste at the construction site that may cause adverse impacts to water quality. While sediment is the most common pollutant of concern for MCM #4, there are other types of pollutants that also can be a concern and the intent of this BMP is to address these other types of pollutants, such as, but not limited to, discarded building materials, washout from concrete trucks, chemicals, litter, and sanitary waste.

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

1. Identify the mechanism(s) in place to regulate construction site operators and wastes produced at construction sites:
2. During the reporting period what has been the results of implementing the mechanism(s) described above?

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

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

Describe the tracking system established for documenting public information concerning local construction activities and describe responses taken during the reporting period:

MCM #5 – POST-CONSTRUCTION STORM WATER MANAGEMENT IN NEW DEVELOPMENT AND REDEVELOPMENT

Are you relying on PA's statewide program for MCM #5 BMPs #1 - #3? ☒ Yes ☐ No

(If No, complete all remaining questions for this MCM; if Yes, skip to BMP #4)

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

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

1. For new permittees only, attach your written procedure for post-construction management to the first report.
2. If you are not a new permittee, did you complete and submit your written procedure for post-construction management to DEP? ☐ Yes ☐ No

If Yes, provide the latest submission date:

3. Date of last review or update of post-construction management procedure:

BMP #2: Require the implementation of a combination of structural and/or non-structural BMPs that are appropriate to the local community, that minimize water quality impacts, and that are designed to maintain pre-development runoff conditions. This requirement can be met by ensuring that the selected BMPs comply with the municipal Stormwater Management Ordinance that meets the requirements of the permit.

Measurable Goal: All qualifying development or redevelopment projects shall be reviewed to ensure that their post-construction stormwater management plans and selected BMPs conform to the applicable requirements. A tracking system (e.g., database, spreadsheet, or written list) shall be maintained to record qualifying projects and their associated BMPs. In your records, you shall note if there are no qualifying projects in a calendar year.

1. Number of development or redevelopment projects in urbanized area during reporting period:
2. Describe the tracking system in place:
3. Describe the structural and/or non-structural BMPs that were required for these projects:

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

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

If there were development or redevelopment projects during the reporting period, attach documentation of inspections of PCSM BMPs to this report.

BMP #4: The permittee shall enact, implement, and enforce an ordinance (municipal) or SOP or other regulatory mechanism (non-municipal) to address post-construction stormwater runoff from new development and redevelopment projects, as well as sanctions and penalties associated with non-compliance, to the extent allowable under State or local law.

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

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

1. Do you have an ordinance (or SOP) to address post-construction stormwater runoff from new and redevelopment projects and does it include sanctions? ☒ Yes ☐ No
If Yes, indicate the date of the ordinance or SOP: **3/11/2011**
For new permittees only, attach a copy of the ordinance or SOP.
2. If you are not a new permittee, has the ordinance (or SOP) been submitted to DEP with a letter from an official, engineer or solicitor that certifies the enactment of an ordinance or SOP for PCSM activities? ☒ Yes ☐ No
3. Do you have authority to take enforcement action for failure to properly operate and maintain stormwater practices/facilities? ☒ Yes ☐ No

BMP #5: Develop and implement measures to encourage and expand the use of Low Impact Development (LID) in new and redevelopment. Measures also should be included to encourage retrofitting LID into existing development. DEP's Pennsylvania Stormwater Best Management Practices Manual provides guidance on implementing LID practices.

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

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

1. Identify ordinances enacted or updated during the reporting period to ensure consistency with LID practices:

No changes or amendments adopted to Borough ordinances during the reporting period

BMP 6: Ensure adequate operation and maintenance of all post-construction stormwater management BMPs installed at all qualifying development or redevelopment projects (including those owned or operated by the permittee).

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

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

- all PCSM BMPs that were installed to meet requirements in NPDES Permits for Stormwater Discharges Associated with Construction Activities approved since March 10, 2003;
- the exact location of the PCSM BMP (e.g., street address);
- information (e.g., name, address, phone number(s)) for BMP owner and entity responsible for BMP Operation and Maintenance (O&M), if different from BMP owner;
- the type of BMP and the year it was installed;
- maintenance required for the BMP type according to the Pennsylvania Stormwater BMP Manual or other manuals and resources;
- the actual inspection/maintenance activities for each BMP;
- an assessment by the permittee if proper operation and maintenance occurred during the year and if not, what actions the permittee has taken, or shall take, to address compliance with O&M requirements.

1. For new permittees only, attach the written inspection program to ensure that stormwater BMPs are properly operated and maintained.

2. If you are not a new permittee, did you complete and submit your written inspection program to ensure that stormwater BMPs are properly operated and maintained to DEP? ☒ Yes ☐ No

If Yes, provide the latest submission date: **October 2016**

3. How do you ensure that stormwater BMPs are properly operated and maintained? Explain if you rely on means other than municipal inspections to ensure adequate O&M (consistent with your stormwater ordinance).

rely on municipal inspections

4. Date that inspection program was last reviewed or updated: **May 2017**

5. Total number of sites with PCSM BMPs installed as of the date of this report: **See Attachment 8 for current list**

6. Total number of sites inspected during this reporting period: **2**

7. Number of sites found to have PCSM BMP deficiencies: **1**

8. Number of enforcement actions taken during this reporting period: **1**

MCM #6 – POLLUTION PREVENTION / GOOD HOUSEKEEPING

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

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

1. Have you identified all facilities and activities owned and operated by the permittee that have the potential to generate stormwater runoff into the MS4? ☒ Yes ☐ No
2. When was the inventory last reviewed? **May 2017**
3. When was it last updated? **May 2017**
4. How many new facilities and/or activities were added to this inventory during this reporting period? **2**

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

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

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

1. For new permittees only, attach the written O&M program to the first Annual Report.
2. If you are not a new permittee, did you complete and submit your written O&M program to DEP? ☒ Yes ☐ No
If Yes, provide the latest submission date: **October 2016**

3. Date of last review or update to O&M program: **May 2017**

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

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

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

1. For new permittees only, attach the written training program to the first Annual Report.
2. If you are not a new permittee, did you complete and submit your written training program to DEP? ☒ Yes ☐ No
If Yes, provide the latest submission date: **October 2016**
3. Date of last review or update to training program: **May 2017**
4. Identify the date(s) of employee training, the names of attendees, the topics covered, and the training presenters:
See Attachment 9

BEST MANAGEMENT PRACTICES (BMPs)

Provide an assessment of the appropriateness of the BMPs implemented to date, and identify any steps that will be taken to address deficiencies in the BMPs or make changes to BMPs or other aspects of the SWMP developed by the permittee.

MS4 TMDL Plan

Chesapeake Bay Pollutant Reduction Plan (CBPRP)

Is the permittee required to develop an MS4 TMDL Plan?

☐ Yes ☒ No

Is the permittee required to develop a CBPRP?

☒ Yes ☐ No

What is the status of the TMDL Design Details (if applicable)?

- ☐ Under Development (Due Date:)
☐ Submitted to DEP (Submission Date:)
☐ Approved by DEP (Approval Date:)

What is the status of the CBPRP (if applicable)?

- ☐ Under Development (Due Date:)
☒ Submitted to DEP (Submission Date: **5/13/2016**)
☐ Approved by DEP (Approval Date:)

For permittees with DEP-approved MS4 TMDL Plans and/or CBPRPs, describe progress with implementing BMPs and other activities identified in those plans:

N/A, CBPRP not yet approved. However, Borough did implement two BMPs listed on the BMP inventory table during the reporting period. These two BMPs were identified in the CBPRP that was submitted to DEP. The Borough of Carlisle is also participating with Dickinson College on the design and construction of several stormwater BMPs in and around the Dickinson College campus. Design work was initiated during reporting period with final design completion expected in fall 2017 and construction in Spring of 2018.

For permittees with DEP-approved MS4 TMDL Plans and/or CBPRPs, complete the section below. Identify the required pollutant reductions (for those with MS4 TMDL Plans) or pollutant reductions committed to by the permittee (for those with CBPRPs) and the cumulative reductions achieved through implementing the BMPs, as of the end of the reporting period:

N/A

BMP INVENTORY

List all new structural BMPs installed and ongoing non-structural BMPs implemented in the urbanized area during the reporting period that are being used toward achieving load reductions in the permittee's MS4 TMDL Plan and/or CBPRP. Provide a name or description for each BMP, the area, in square feet (sf) that drains to each BMP (drainage area (DA)) (if applicable), the location of the BMP (latitude and longitude), the name of the water body that receives discharges from the BMP (if applicable), the date the BMP was installed or implemented, and whether the BMP was completed pursuant to an NPDES permit for stormwater associated with construction activities or other NPDES permit (check box if done under an NPDES permit).

BMP Name / Description	DA (sf)	Latitude	Longitude	Receiving Waters	Date Installed or Implemented	NPDES Permit?
Borough Hall Parking Lot Subsurface Storage System	11,700	40°11'57"	77°11'28"	Letort Spring Run	April 2017	☐
E. Louther Street Parking Lot Infiltration Trench	18,100	40°12'09"	77°11'16"	Letort Spring Run	October 2016	☐
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OTHER REQUIRED REPORT ELEMENTS

Identify the progress towards achieving the statutory requirements of reducing the discharge of pollutants to the Maximum Extent Practicable (MEP) and complying with water quality standards.

N/A

Provide a summary of stormwater activities planned during the next reporting cycle (not identified previously in this report):

N/A

Provide a summary of notices, intergovernmental agreements and other relevant documents if the permittee is relying on another governmental entity to satisfy any of its permit obligations

N/A

CERTIFICATION

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gathered and evaluated the information submitted. Based on my inquiry of the person or persons who manage the system or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowledge of violations. See 18 Pa. C.S. § 4904 (relating to unsworn falsification).

Matthew H. Candland, Borough Manager

Name of Responsible Official

717-240-6920

Telephone No.

Signature

Date

9/20/17