

STORMWATER MANAGEMENT PROGRAM (SWMP)

for

EAST LAMPETER TOWNSHIP'S MUNICIPAL SEPARATE STORM SEWER SYSTEM (MS4) PERMIT

PERMIT #: PAG133541

PERMIT YEAR: April 1 to March 31

Prepared for:

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SWMP Prepared by:

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SWMP Preparation Date:

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Section 100

Stormwater Management Plan (SWMP) Certifications and Approval

100-1 Initial SWMP Certification

PROGRAM: EAST LAMPETER TOWNSHIP STORMWATER MANAGEMENT PROGRAM (SWMP)
PER NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM (NPDES) PHASE II
MUNICIPAL SEPARATE STORM SEWER SYSTEM (Small MS4) PERMIT

PERMIT #: PAG133541

"I certify under a penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to ensure qualified personnel properly gather and evaluate 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, to the best of my knowledge and belief, the information submitted is 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."

Signature

Date

Michael T. LaSala, CPMSM, CSI
Printed Name

717-627-4440
Phone Number

Senior MS4 Program Manager/Analyst
Title

100-2 SWMP Approval

The undersigned representative is the authorized representative of the township for approving the Stormwater Management Program (SWMP) on behalf of East Lampeter Township, PA. The SWMP was prepared for the township and submitted for review and approval to the authorized representative. The SWMP was prepared to assist East Lampeter Township with the implementation and enforcement of a program designed to reduce the discharge of pollutants from the Municipal Separate Storm Sewer System (MS4) to the Maximum Extent Practicable (MEP), to protect water quality, and to satisfy the appropriate water quality requirements of the Clean Water Act (CWA) (40 CFR 122.34(a)).

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Authorized Signature

Date

Printed Name

Phone Number

Title

100-3 Legal Authority

This section describes the township's legal authority to implement its SWMP and elements of the SWMP (minimum control measures or MCMs) where legal authority is required and outlined within the issued MS4 Permit. The permit requires permittees to adopt, implement, and enforce a stormwater management ordinance(s). East Lampeter Township maintains and enforces adequate legal authority within its jurisdiction to control polluted discharges into and from its regulated MS4 to address applicable sections of 40 CFR 122.34. The township has established a local ordinance to support its SWMP and MS4 Permit requirements. Legal authority and corresponding enforcement/remedies are provided in the following:

- Stormwater Management Ordinance No. 303 adopted April 7, 2014
 - Prohibits non-stormwater discharges as required by 40 CFR 122.34(b)(3)(ii)(B) per Section 801.B; and outlines appropriate enforcement actions per Sections 902 and 903
 - Outlines authorized discharges per Section 801.D
 - Requires erosion and sediment controls for construction site stormwater run-off control as required by 40 CFR 122.34 (b)(4)(ii)(A) per Section 301.E
 - Requires appropriate operations and maintenance of permanent post-construction stormwater best management practices (BMPs)/management facilities associated with new development and/or redevelopment as required by 40 CFR 122.34(b)(5)(ii)(B) per Article VI
 - Encourages low impact development (LID)-type approaches as outlined in PAG-133635, Appendix A, MCM #5, BMP #5 per Section 103

A copy of the ordinance covered by the certified letter(s) required to accompany the first annual report of the permit cycle for Illicit Discharge Detection and Elimination (IDD&E) and Post Construction Stormwater Management (PCSM) requirements are located in Attachment A.

100-4 Related Plans and Programs

The SWMP is intended to complement existing and/or proposed plans, in that the group of township plans and programs allows East Lampeter Township to meet regulatory obligations while preserving previously developed goals, objectives, or similar associated with other plans. The SWMP incorporates the following plans/programs into the document and for consideration during program implementation and facilitation:

- Growing Together: A Comprehensive Plan for Central Lancaster County, Pennsylvania Comprehensive Plan adopted April 2007
- Conestoga Valley Region Strategic Comprehensive Plan 2003 adopted August 19, 2003
- Envision Lancaster County Comprehensive Plan
- East Lampeter Township Zoning Ordinance No. 323 adopted May 16, 2016

- East Lampeter Township Property Maintenance Ordinance No. 315 adopted October 5, 2015 (and amended Ordinance No. 320)
- East Lampeter Township Subdivision and Land Development (SaLDO) Ordinance of 1980 (and subsequent amendments)
- East Lampeter Township Act 537 Plan approved February 16, 1989
- On-Lot Disposal System (OLDS) Mandatory Pumping Program (Ordinance No. 128 adopted April 3, 1989)
- East Lampeter Township Solid Waste & Recycling Program (East Lampeter Township Ordinance No. 258 adopted December 5, 2005)
- East Lampeter Township Waste Oil Collection Program

100-5 Annual Self-Certification

By June 21 of each year, East Lampeter Township shall assess the controls and effectiveness of the SWMP as referenced by 40 CFR 122.26(d)(2)(v) and 122.34(g). The annual assessments will be considered complete with the execution of the self-certification. The Annual Self-Certification form is included in Attachment I. Completed self-certifications can be found at the end of Section 100 in the SWMP binder.

Section 200

Amendments

200-1 Amendment Description and Approval

This SWMP shall be amended:

- whenever there is a change in pollutants of concern; or
- if any primary objective or goal will need to be revised; or
- if any condition or consideration substantially changes (e.g. change in the Urbanized Area (UA) boundaries, new Pollutant Reduction Plan (PRP) required, etc.); or
- if measurable goals (including interim milestones) have not been achieved; or
- when a substantial change within narratives of the SWMP occurs; or
- when deemed necessary by the Township Manager or appointed representative.

The following items will be included in the amendment:

- who requested the amendment,
- the location and/or reason (rationale) for the change, and
- a description of original conditions and revised conditions.

The amendment will be prepared on letterhead of the entity preparing the amendment, and will be done as directed by the MS4 Committee or appointed representative, and approved by an authorized representative. Any and all amendments shall be numbered sequentially, will be inserted in this section, and noted on the amendment log in Section 200-2. Pages and/or items removed from the SMWP via amendment are kept in a separate folder for reference as needed.

200-2 Amendment Log

PROGRAM: EAST LAMPETER TOWNSHIP STORMWATER MANAGEMENT PROGRAM (SWMP)
PER NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM (NPDES) PHASE II
MUNICIPAL SEPARATE STORM SEWER SYSTEM (Small MS4) PERMIT

PERMIT #: PAG133541

Amendment No.	Date	Brief Description	Prepared By

Section 300

Introduction and Township Description

300-1 Introduction to the Program

The purpose of this plan is to provide a master overarching document of East Lampeter Township's Stormwater Management Program (SWMP) in accordance with their Municipal Separate Storm Sewer System (MS4) Permit. MS4 Permits are required for municipalities within "Urbanized Areas" (UAs) as determined by the latest decennial Census, which in this case, is the 2010 U.S. Census. The SWMP is designed to reduce the discharge of pollutants from the regulated MS4 to the Maximum Extent Practicable (MEP).

Section 300 outlines the framework the township will operate within to facilitate a SWMP based on its primary design requirements. Furthermore, this section outlines information about municipal responsibilities related to the prioritization of efforts for SWMP implementation and facilitation, as well as delineated areas within the township's jurisdiction. Areas were delineated into individual sectors that adhere to, and/or result in, the following guiding parameters:

- Individual drainage areas are tied to a single outfall (or other similar type of discharge point). The individual areas are known as Municipal Separate Storm Sewersheds (MS3s).
- Prioritization of individual areas (or MS3s) provides the framework and focal points to dictate the level of municipal efforts and resources within individual MS3s to comply with permit requirements.

The SWMP was developed with assistance from LandStudies, Inc. located in Lititz, PA. A summary of the SWMP development process is located in Attachment G for reference. Section 300 includes descriptions and information (including program support processes) to allow the township to implement and facilitate the SWMP.

300-2 SWMP Purpose and Objectives

The SWMP will serve as the township's foundational program management tool for MS4 Permit facilitation, capturing the developed process, procedures, and implementation strategies for described elements, such as the MCMs. One primary purpose of this document is to present an integrated approach for reducing the discharge of pollutants from the MS4 to the MEP, to protect and improve the quality of water bodies in East Lampeter Township, and adhere to the appropriate water quality (WQ) standards requirements in the CWA. The following list of objectives has been established to set baseline guidance for overall program success:

- Develop and facilitate programmatic elements to ensure compliance with regulatory standards, conditions, and provisions outlined in the MS4 Permit.

- Integrate WQ protection and improvement strategies into and across local programs (e.g. zoning).
- Establish management processes and procedures to ensure accountability for SWMP actions and activities.
- Establish appropriate assessment and performance criteria to measure SWMP progress and effectiveness.
- Coordinate SWMP elements with performance criteria based on appropriate and rationale.
- Establish reasonable and supporting documents to facilitate SWMP implementation.
- Identify receiving waterbodies, stormwater infrastructure, and other supporting information.
- Address the identified impairments and established Total Maximum Daily Load (TMDL) for local receiving waterways to ensure the regulated system is neither causing nor contributing to impairments; or establish and implement a course of corrective action if discharges are reasonably found to be causing and/or contributing to an impairment.

The primary purpose of the SWMP, in conjunction with the guidance criteria, will be facilitated based on two primary programmatic objectives:

- Pollution prevention
 - is the observation and implementation of a set of activities and practices with the general intent to prevent pollution.
- Pollution reduction
 - is the implementation of a set of chosen activities and practices with the intent to reduce pollution encountered and observed.

The SWMP is designed so the township can focus on pollution reduction objectives based on real data and observations of issues and problems encountered, rather than allocating resources and efforts toward “ghost” issues used to check off a box in a report.

The SWMP will focus on an approximate five-year period (based on goals and permit cycle) from the date of certification and approval of the SWMP. It is anticipated this will include receipt of a new permit in 2018 from the Pennsylvania Department of Environmental Protection (PADEP). The township will submit a Notice of Intent (NOI) for coverage under the general permit. The SWMP includes focal points described in the draft 2018 general permit, and included here for consideration within the general permit. The long-term objective of the SWMP is to help ensure applicable receiving waterbodies are classified as “attaining uses.” The SWMP has evolved into a standard process that monitors and preserves attained uses and/or reacts if attained uses are jeopardized due to the nature of regulated discharges.

300-3 General Geographic Description

General Description

East Lampeter Township is geographically located in central Lancaster County, Pennsylvania. The township was established in 1841 through the division of Lampeter Township into east and west townships. However, settlements date back to the early 1700's in the region. The township covers approximately 20.1 square miles (12,864 acres). Per the 2010 census, 16,424 persons (including approximately 5,600 households and 3,800 families) reside within the township. The township is bordered by Leacock Township to the east, City of Lancaster and Lancaster Township to the west, Manheim and Upper Leacock Township to the north, and West Lampeter and Strasburg Township to the south. Five small villages known as Smoketown, Witmer, Bird-in-Hand, Soudersburg, and Ronks are located in the township as well. Attachment B includes a set of maps that visually represents the geographical and topographic conditions of the township.

The road system within the township covers approximately 99 miles (27.96 miles of State Roadway System) managed by the Townships Public Works Department. The state roadways are managed by the Pennsylvania Department of Transportation (PennDOT). PennDOT is subject to terms and conditions of its own MS4 Permit. It is important for the township to identify and locate PennDOT infrastructure for coordination and field investigations as the township's and PennDOT's systems interact. A PennDOT road system map is located in Attachment B.

Geographically, the township can be described as relatively flat with several gentle hills. The township is located in an area known for its karst geology (also referred to simply as karst). Karst is associated with certain rocks (e.g. limestone) that can dissolve due to erosion by water. Sinkholes are generally associated with karst areas.

Most of the developed areas of the township are served by public sewer and public water supplies. There are pockets of rural and rural residential areas with private wells and septic systems. The public water supply is provided by the City of Lancaster. Public sewer service is provided by the East Lampeter Township Sewer Authority.

Land Use

The primary land uses within East Lampeter Township are low and medium-density residential and agricultural. Pockets of regional commercial and industrial land uses are found in areas of the township, along with the Greenfield Business Park in the western portion of the township. A small local airport (Smoketown Airport) is located in the central-eastern portion of the township, which includes a set of Airport Hazard Overlay Zoning Districts. This land use determination was reached based on a desktop review of the township's zoning map. Copies of the most current Zoning Maps can be found in Attachment B.

Urbanized Areas (UA)

The EPA defines a UA as "a densely settled core of census tracts and/or census blocks that have a population of at least 50,000, along with adjacent territory containing non-residential

urban land uses as well as territory with low population density included to link outlying densely settled territory with the densely settled core.” Approximately 60% of the land cover in the township is located within the UA per the 2010 census map. The UA covers most of the central to northern areas with a small section in the southeastern section of the township. A copy of the UA map is located in Attachment B.

Watersheds

The EPA defines a watershed as “the area of land that drains to a common waterway, such as a stream, lake, estuary, wetland, or river.” Watersheds can then be divided into smaller subwatersheds. The 6th level subwatersheds within East Lampeter Township are all located within Hydrologic Unit Code (HUC) 02050306, per the United States Geological Survey (USGS), and drain into the Conestoga River or Pequea Creek, then to the Susquehanna River, and ultimately to the Chesapeake Bay. Following the USGS hierarchical system, the subwatersheds within East Lampeter Township are defined as:

HUC-2 (1 st level):	Mid-Atlantic Region
HUC-4 (2 nd level):	Susquehanna River Subregion
HUC-6 (3 rd level):	Lower Susquehanna Basin
HUC-8 (4 th level):	Lower Susquehanna Subbasin

HUC-10 (5 th level):	Conestoga River
HUC-12 (6 th level):	Muddy Run-Mill Creek Lower Conestoga River

HUC-10 (5 th level):	Pequea Creek
HUC-12 (6 th level):	Eshleman Run-Pequea Creek

The location of East Lampeter Township within both the Conestoga River and Pequea Creek watersheds can best be described as “mid-to-downstream of watershed.” The primary waterbodies within or along the borders of the township are the Conestoga River, Mill Creek, Pequea Creek, and Stauffer Run (a tributary to the Conestoga River).

Waterbodies and Designated Uses

Approximately 37 miles of streams and 35 acres of wetlands/ponds are found within or along the borders of the township. Based on the 02050306 identification code, a table of receiving waterbodies for both within and outside the UA (or those that receive discharges from the regulated system) and corresponding relevant information (e.g. reach identification code, impairments (if applicable), uses, etc.) is found at the end of Section 300. In addition, receiving waterbodies located outside of the jurisdictional boundaries of the township that receive discharges from MS3s within the township are listed in the table. Receiving waterbodies are those waterbodies with a defined reach code and/or common identifier, and found within the National Hydrography Dataset (NHD) and shown within the USGS database. PADEP WAVE Silverlight (www.dep.state.pa.us/wave) and/or eMapPA (www.dep.state.pa.us/eMapPA) online map viewers can be used to provide additional receiving waterbody information. The National Wetlands Inventory (NWI) may be used also to

locate jurisdictional wetlands that are treated as receiving waterbodies where discharge points (outfalls) are present.

Approximately 23 miles of streams and 22 acres of wetlands/ponds receive discharges or are located within the UA in the township. For these stream reaches and segments, impairments have been identified for the following lengths within the township:

- Pathogens: ~22.8 miles
- Nutrients: ~11.5 miles
- Siltation (sediment): ~22.5 miles

The NHD and NWI databases provide the baseline reference for identification of receiving waterbodies. It is anticipated that through SWMP implementation, the listing of receiving waterbodies may be modified based on encountered and documented field conditions to align receiving waterbodies with the United States Environmental Protection Agency (USEPA)/Army Corps of Engineers (ACOE) issued Clean Water Rule or changed permit definitions. Per Pa. Code Ch. 93.90, the following water uses for defined waterbody segments are protected within the small watersheds:

Waterbody	Type	Designated Uses
Conestoga River	Main Stem	WWF, MF
Stauffer Run	Basin	WWF, MF
UNTs Conestoga River	Basins	WWF, MF
Mill Creek	Basin	WWF, MF
Pequea Creek	Main Stem	WWF, MF
UNTs Pequea Creek	Basins	WWF, MF

WWF is “Warm Water Fishery.” MF is “Migratory Fishes.”

A map of the waterbodies within the township can be found in Attachment B.

Designated Uses are also known as “beneficial uses” and include public water supply, protection for aquatic life, and human uses such as recreation and industrial. The Designated Uses noted above are in addition to those noted in Pa. Code Ch. 93.4 (Statewide Water Uses), more commonly known as “Table 2.” The uses listed in Table 2 apply to all surface waters unless specified otherwise. In turn, all reach code-defined waterbodies within the township have the following uses in addition to (or reiteration of) the uses noted above:

- Aquatic Life
 - WWF
- Water Supply
 - PWS (Potable Water Supply)
 - IWS (Industrial Water Supply)
 - LWS (Livestock Water Supply)
 - WWS (Wildlife Water Supply)
 - IRS (Irrigation)
- Recreation
 - B (Boating)

- F (Fishing)
- WC (Water Contact Sports)
- E (Esthetics)

All the uses noted shall be considered during facilitation of the SWMP. However, the township's primary focus will be toward the uses noted as "protected" for each tributary within Pa. Code Ch. 93.9o.

Water Quality (WQ) Criteria

WWF and MF identified Designated Uses require consideration of the parameters shown in the table below (based on Pa. Code Ch. 93.7 (Specific WQ Criteria), more commonly known as "Table 3") for protection of uses.

	WWF	MF
Alkalinity	X	X
Ammonia-Nitrogen	X	X
Dissolved Oxygen (DO)	X	
Iron (Fe)	X	X
Osmotic Pressure (OP)	X	X
pH	X	X
Temperature	X	
Total Residual Chlorine (TRC)	X	X

Table 3 within Pa. Code Ch. 93 provides specific criteria for each parameter listed in the table above. The characterization of in-stream sample analysis for ambient monitoring activities associated with the Discharge Monitoring Program will consider these parameters, as appropriate. The township will rely further on ambient monitoring data found within the PADEP WAVE Silverlight and/or eMapPA, and volunteer monitoring to assess program implementation. Additionally, the SWMP is designed to address issues that may be encountered with the listed parameters if it is determined that discharges from the regulated system may jeopardize the protected uses due to discharges causing and/or contributing exceedances to WQ criteria.

300-4 Pequea Creek TMDL

Pequea Creek TMDL

A TMDL was established in 2001 (revised 2006) for all stream segments within two sub-basins located in the Pequea Creek watershed. Portions of East Lampeter Township located in the Pequea Creek watershed are within one of the identified sub-basins (Sub-basin 1). The cause of the impairments has been identified as Phosphorus and sediment. The TMDL only requires reductions associated with load allocations (LA). As defined by the EPA, LAs are best estimates of "the portion of a receiving water's loading capacity that is attributed either to one of its existing or future nonpoint sources of pollution or to natural background sources." However, the TMDL does have an established Waste Load Allocation (WLA) for point sources; but with no reductions required.

A TMDL can be described as a threshold and represents a calculation of the maximum amount of a pollutant that can occur in a waterbody, while also outlining the necessary pollutant reductions associated with existing conditions to meet the threshold. A TMDL is a planning tool that can be used to gauge the nature of discharges and outline the magnitude of pollution reduction approaches needed. A TMDL is generally represented by the following calculation:

$$\text{TMDL} = \text{WLA} + \text{LA} + \text{MOS}$$

“WLA” is the Waste Load Allocation. Waste loads are assigned to point sources (e.g. wastewater treatment plants, MS4s, and similar). “LA” is the Load Allocation, which is tied to non-point sources (e.g. agricultural areas, forests, open spaces, streambanks, and similar). “MOS” is a Margin of Safety, or contingency value, to allow room for adjustments.

The major components of the Pequea Creek TMDL (Sub-basin 1) are as follows:

Sediment

Components	Sediment (lbs/yr)
TMDL	7,248,622.0
WLA	0.0
MOS	724,862.2
LA	6,523,759.8

Phosphorus

Components	Phosphorus (lbs/yr)
TMDL	35,518.0
WLA	3,908.0
MOS	2,135.8
LA	29,474.2

The township’s MS4 Permit is not listed within the TMDL document. Facilitation of the SWMP will allow the township to identify and respond to potential issues associated with regulated discharges that may arise or be encountered that would jeopardize TMDL allocations. The Pequea Creek TMDL is addressed in the township’s Impaired Waters Plan.

A copy of the Pequea Creek TMDL is found in Attachment Q.

300-5 Catchments, MS3s, MS4s, and Outfalls

Catchments

Each of the waterbodies noted previously in Section 300 are found within small defined drainage areas. The smallest defined drainage areas within the township are classified as catchments (Edge Catchments). Defined Edge Catchment areas within East Lampeter Township (or a portion of the township is located within the catchment area) collect drainage

and discharge to a waterbody, a system transfer, or via incidental dispersion. A system transfer occurs when the flow within a stormwater conveyance system (pipes, swales, etc.) crosses into a neighboring municipality, where it then becomes their responsibility.

Most catchments have stream segments within the township, and receive discharges from the regulated system. Within these catchment areas, the township has various swales, culverts, and other stormwater infrastructure and facilities that manage stormwater run-off. A group of facilities and infrastructure that collects and conveys stormwater run-off within a catchment area and discharges at a single end point (either via outfall to a defined receiving waterbody/wetland, incidental dispersion/discharge, or connection to another MS4 or private facilities outside of the township's jurisdiction) is defined as a storm sewershed, or MS3. MS3 boundaries may cross catchment boundaries from time to time due to conventional storm sewer infrastructure (e.g. pipes) conveying across a catchment boundary. Understanding MS3 boundaries provides the township an ability to focus resources and efforts within small defined areas if discharge characterization results in an issue or polluted discharge.

Municipal Separate Storm Sewershed (MS3)

MS3s provide the smallest focal area for the township relative to SWMP efforts within regulated areas. Each MS3 is tied to a single discharge point (primarily outfalls) that can be monitored for polluted stormwater discharges. Several MS3s transfer to other regulated systems or discharge outside of the township's jurisdiction. If a polluted discharge or presence of pollutants in a segment of the system is encountered, efforts (e.g. public education, IDD&E monitoring, good housekeeping, Impaired Waters Plan, etc.) will be focused within the MS3 to improve conditions (e.g. meet the pollution reduction objective).

The SWMP development process included characterization of initial MS3s within a catchment area. The intent was to establish a process the township could follow to define MS3s within regulated areas. The development process found approximately 110 to 120 MS3s within the catchment areas with receiving waterbodies: several of which are very small drainage areas. This finding provided the basis for the development of an initial program goal to delineate all MS3s and develop the corresponding timelines and milestones for completion. A summary of the SWMP development process can be found in Attachment G.

MS3 boundaries are approximated and used to give the township a general idea of the extent of the properties within a given drainage area collected by the regulated system and discharged at a single endpoint. The boundaries of the MS3 follow property/parcel boundaries (except for certain special cases such as crossing railroad tracks or very large parcels (e.g. park areas, farms, or golf courses)) whether run-off is collected from the entire property, or a portion of it, by the regulated system. Initial delineation review depends on drainage boundaries. However, systems can convey (and do in the township) over topographic drainage boundaries and features, such as hills. A field investigation, comprised primarily of field tracing the system (e.g. walking the system to make observations of drainage patterns) with the System Map in-hand, is necessary to identify the extent of a system discharging at an appropriate end point (e.g. a receiving waterbody).

Parcel delineation allows the township to link parcels and properties to drainage end points (e.g. outfalls). Delineation of MS3s is an important tool and set of information that allows the township to implement and facilitate the SWMP, due to the fact that the township operates based on parcels (e.g. mail is sent to an address tied to a parcel). The process for determining MS3s is as follows:

- The System/Outfall Map is reviewed to further delineate and identify end points (e.g. outfalls, discharge points, etc.) for a portion of the regulated system.
 - Confirm that the map appropriately reflects waterbodies as determined in Section 300-3.
 - Conduct initial drainage boundaries assessment based on a topographic map review.
- A field review is conducted, which includes observations of general drainage conditions originating at the end point and then mapped to confirm that the System/Outfall Map reflects the accurate identification of outfalls.
- The field review continues by matching observed general drainage flows to the map (or determining that the regulated system (inlets, curb and gutter, etc.) tied to the end point adequately collects stormwater run-off from the individual parcels reviewed). This process involves a visual tracing against the System Map. The field review is supported by a condensed desk-top re-conformation analysis, where a topographic map or elevations of an aerial image (Google Earth or similar), as well as the System/Outfall Map, are reviewed to determine whether there are areas that should or should not be included in the MS3.
 - The map is “red-lined” (e.g. marked in ink) to capture the parcels that are collected into the system and discharge via the outfall. Map updates to incorporate the red-lined MS3s follow the map update procedures in Section 500, at a minimum.
- The MS3 is numbered and catalogued. The MS3 numbering system follows the outfall numbering system with “MS3” denoted (e.g. MS3-004 denotes the MS3 tied to MS4 Outfall 004).
 - The numbering system is used also for end points that may discharge via private outfalls or other systems. In that case, the MS3 numbers follow the outfall number designation sequence, but the outfall number in the inventory includes a denotation that the system is tied to a private outfall (e.g. 014P denotes the MS3 is tied to private outfall 014).
 - The inventory provides a reference to an outfall/MS3 designation in another jurisdiction where system transfer occurs.
- The Outfall-MS3 inventory is found in Attachment D.

The process may be refined over time as the township conducts its own investigations, or field conditions change, in order to complete the MS3 delineations. In turn, the results of annual assessments may dictate a field and desktop review of MS3s, and indicate the need for another round of delineations. Current maps of delineated MS3s are found in Attachment D.

Municipal Separate Storm Sewer System (MS4)

The MS4 incorporated into the SWMP for program implementation and facilitation is the system of conveyances that:

- is owned by East Lampeter Township, or
- is privately-owned but maintained by East Lampeter Township, or
- is an MS4 owned by another public body (e.g. PennDOT) that is maintained by East Lampeter Township, and
- is designed and/or used for collecting and conveying stormwater, and
- is not a combined sewer or component of a Publicly Owned Treatment Works (e.g. Wastewater Treatment Plant (WWTP)).

Additionally, references are provided within the SWMP for other MS4s owned by another public body (e.g. PennDOT, East Lampeter Township, etc.) that are present within or immediately adjacent to the township's jurisdiction, but are not maintained by East Lampeter Township. A coordination plan is developed for each of these other MS4s. More information can be found in Section 900 regarding coordination plans.

The System Map includes delineations of other regulated systems (e.g. PennDOT MS4) within the township. The System Map is found in Attachment C.

Outfalls

An MS3 (and corresponding regulated MS4) can discharge via MS4 Outfall, private outfall, other NPDES Outfall (e.g. PennDOT MS4 outfall, neighboring jurisdiction MS4 outfall), and incidental dispersion. The township has the highest ability to monitor the nature of discharges associated with an individual MS3 through their MS4 Outfalls. However, this does not negate efforts associated with other types of discharge points (including observation points) not owned or operated by the township in which the regulated system may be connected. There are several conditions with discharge end points other than the township's MS4 Outfalls unique to the township, which are addressed within other sections of the SWMP (primarily through plans described in Sections 800 and 900).

The SWMP clarifies the permit definition of Outfall and defines an applicable Outfall as:

- the point where the regulated conveyance or system of conveyances that disposes stormwater that are owned or operated by the township; and is designed or used for collecting or conveying stormwater to a defined and discernible point owned and from which pollutants are or may be discharged—and that discharges to Waters of the United States/Surface Waters of the Commonwealth is an Outfall.

Outfalls (including MS4 Outfalls) are defined as discernible points for discharging stormwater only at the defined receiving waterbodies listed in Section 300-3. Discharge points (including outlets, end-walls, etc.) are discernable points where stormwater run-off may transfer to a different system type (e.g. closed pipe to open swale) or to another system. Observation points are the closest and most "up-stream" access point for a discharge point (e.g. manhole) that is generally inaccessible (e.g. private property or discharge point is a

closed pipe where transfer to another system occurs) to allow for monitoring and screening to occur.

The System Map in Attachment C includes identification of outfalls, discharge points, and observation points. An inventory of outfalls is included in the MS3 inventory (Outfall-MS3 Inventory spreadsheet) found in Attachment D.

300-6 System Map/Priority Areas

System Map

As part of East Lampeter Township's SWMP, the township has updated and continues to maintain an MS4 map that displays the MS4 Permit-required information and SWMP facilitation information listed below. The System Map (with outfalls) is included in Attachment C. The System Map is kept in a GIS format known as CSDatum.

Attachment D reflects MS3 delineations. The maps include, but are not limited to, the following types of information:

- all MS4 segments owned, operated, and/or maintained by the township, and that includes MS4 Outfalls
- locations and names of all surface waters (reach code defined waterbodies and defined wetlands) and other receiving waterbodies that receive discharges
- all known locations of inlets (or entry points) that discharge and/or collect runoff into or convey to the township's MS4
- all known locations (including connections with other MS4s) of MS4s not owned or operated by the township (e.g. PennDOT MS4s)
- all known locations of MS4 outfalls and private outfalls that discharge runoff collected from regulated areas within the township's jurisdiction
- all known locations of discharge points, system transfer points, and observation points (outlets, end-walls (defined as outfall-type structures that do not meet the SWMP definition of an outfall), assigned manhole access, and similar))
- private and public permanent BMPs and stormwater facilities that discharge to the regulated MS4 or are a component of the MS4 (e.g. green infrastructure (GI))
- discharge monitoring locations ("sampling/monitoring roster")
- MS3 delineations
- municipal boundaries
- municipal facilities (inventory)

The System Map includes unique color and numeric codes for individual infrastructure identification. Text includes names of receiving waterbodies and streets, as well as other features. A comprehensive set of information (map legend) for features located on the System Map(s) is found at the end of Section 300.

Map development and updating is a continuous process. However, there is a single annual checkpoint to ensure a complete update is conducted. SWMP goals described in Section 500 include milestones for full map re-development and/or updates to include all the

information noted above and the map legend included at the end of Section 300. The process and procedures for System Map updates are found in Section 500-4.

Priority Areas

Determination of Priority Areas is a critical process to help ensure the success of the SWMP overall and assist with IDD&E investigations, as applicable. Priority Areas determine locations and general areas to focus township efforts to ensure compliance with the terms and conditions of the MS4 Permit. Priority Areas are inherently tied to MS3s. MS3s are not listed within a Priority Area classification until completion of an MS3 delineation process for a given area within a catchment. Upon completion of the MS3 delineation process, an individual MS3 is reviewed against a set of screening factors to prioritize the investigation process of all MS3s and ultimately classify an area. MS3s shall, at a minimum, consider the following screening factors (in order) for prioritization of the investigation process and/or revisiting classified Priority Areas during new permit cycles:

- existing and known information (past complaints, reports (e.g. IDD&E reports, wet weather screening reports, etc.), areas where known improvements or a need for improvements (e.g. removal of a remaining illicit connection) is required
- historic and/or active Combined Sewer Systems (CSS), where the combined system has been separated into sanitary sewer and storm sewer
- age of corresponding development and infrastructure within the MS3. Areas with development (specifically industrial) where the sanitary sewer is greater than 50 years old can be considered as having a high illicit connection potential.
- sewer conversion areas, which are areas once serviced by septic systems, but have been converted to sanitary sewer connections
- poor receiving waterbody WQ
- dry weather flows observed
- presence of environmentally sensitive areas
- MS3s with a high density of “generating sites,” which are large industrial, institutional, manufacturing, and similar sites that generally can be called “campuses”
- MS3s with a high density of industrial/commercial zones and corresponding sites (car washes, gas stations, car dealers, manufacturing facility, etc.)
- high density of aging septic systems (greater than 30 years old) in residential areas

Prioritization ranking is numeric and organizes the order of investigations of individual MS3s for Priority Area classification. Results of the screening process will determine applicable investigation processes (wet weather screening, field investigation, IDD&E processes, etc.). Once an investigation is complete, an MS3 is assigned a Priority Area classification based on the results (illicit discharges are present, elevated pollutants in stormwater discharges, dry weather flows, etc.). The results may require additional investigation or a different investigation process. In turn, those areas would be classified as a “Problem Area.”

There are four classifications of Priority Areas:

1) High Priority Area

- These are MS3s that collect stormwater runoff and are discharging to an area of concern to public health due to proximity of recreational areas, drinking

water supplies, fish acquisition areas, or similar; and dry weather screening and/or wet weather screening has indicated the presence of elevated parameters discharging and are detrimental to the protected designated uses of the receiving waterbodies and/or poses a public health hazard.

- An illicit connection (i.e. one that has measurable flow during dry weather that contains pollutants and/or pathogens) to the regulated system has been identified and has not been eliminated. This is considered a High Priority Area until the illicit connection is eliminated and polluted discharges are confirmed as no longer observed.

2) Problem Area (active investigation category)

- These are MS3s and/or MS4 Outfalls with known or suspected contributions of illicit discharges and/or polluted wet weather discharges. Problem Areas are dictated by existing information. However, Problem Areas will be further investigated under the Discharge Monitoring Program and/or IDD&E Program to categorize the MS3 more appropriately (High Priority, Low Priority, or Excluded).
- If dry weather flows are encountered for an uncharacterized area, the general area is identified as a Problem Area until MS3 delineation and corresponding program investigation mechanisms (IDD&E Plan) are completed to properly categorize the Problem Area.
- Known and delineated MS3s that are classified as Low Priority Areas may become Problem Areas if regular field investigations reveal changed conditions (e.g. dry weather flows in a location that historically did not have dry weather flows or excessive staining on infrastructure). Re-categorization will occur after completion of the applicable investigation process.

3) Low Priority Area

- Low Priority Areas include MS3s that are not discharging to an area of concern to public health; no dry weather flows are observed; wet weather screening has indicated the absence of elevated parameters; and/or illicit connections have been determined to be absent from the corresponding regulated system.

4) Excluded Area

- MS3s and/or areas within the UA with no potential for illicit or polluted discharges via outfall or system transfer fall into the Excluded Area.
- Example areas include roadway drainage in undeveloped areas, areas with no dwellings and/or sanitary sewer systems, undeveloped green space, and undeveloped land(s) in general.

Elements of the SWMP (e.g. MCMs, Impaired Waters Plan, etc.) will focus on High Priority Areas and Active/Problem Areas, as applicable, in conjunction with the goals and objectives of the SWMP overall.

IDD&E investigation processes are found within the IDD&E Plan (MCM 3) and further described in Section 800. The Discharge Monitoring Program is found in Section 600. Field investigation processes are further described in Section 500 and within the O&M Plan (MCM 6) noted within Section 800.

Attachment F includes the results of investigations to determine the classification of Priority Areas. A template is also included to facilitate the classification process. The Outfall-MS3 Inventory found in Attachment D includes a denotation of the Priority Area classification for each MS3. A Guidance Flowchart for Priority Areas is located at the end of Section 300.

300-7 Discharges to WQ Impaired Waters

Most of the waterbodies referenced in Section 300-3 are 303(d) listed for impairments as either Category 2 (attaining some uses), Category 4a (TMDL approved), and Category 5 waterbodies (i.e. pollutants requiring a TMDL). Most of these reaches, and several others with no 303(d) listing, include active data impairments where it is reasonable to assume they will be assigned a Category 5 rating associated with pathogens. The receiving waterbodies list found at the end of Section 300 reveals assigned categories, and also outlines the impairments (use-source-cause) for each waterbody receiving discharges from the township's regulated system.

Section 900-3 describes the processes for the SWMP Impaired Waters Plan to outline:

- how discharges of Pollutants of Concern will be controlled,
- how the township will ensure discharges will not cause and/or contribute to exceedances of WQ standards, and
- measures and BMPs that will control these discharges.

A primary focus of the Impaired Waters Plan is to outline approaches based on the defined MS3s and corresponding outfalls. Developed Impaired Waters Plans focus primarily on structural BMPs and facilities to control discharges where a concern is validated. However, the primary approach and guiding objectives for controlling discharges is through the development of a SWMP goal (see Section 500).

300-8 Contact Information/Responsibilities (Organizational Chart)

The primary representative for the township is:

NAME: Charles Thomas, Public Works Director
PHONE: 717-393-1567
ADDRESS: East Lampeter Township
2250 Old Philadelphia Pike
Lancaster, PA 17602

Management and implementation of the East Lampeter Township's SWMP is centralized in the Stormwater Department; however personnel from various township departments, consultants, and other agencies are involved in the implementation of the SWMP. Recommendations and analyses regarding SWMP development, implementation, and facilitation—along with implementation of the elements of the SWMP (MCMs, PRPs, etc.) and annual assessments—are provided by an MS4 Committee. The members of the MS4 Committee are:

- Charity Kadwill, SWM Coordinator
- Ralph Hutchison, Township Manager
- Tara Hitchens, Director of Planning/Zoning Officer
- Charles Thomas, Public Works Director
- Alex Wasilewski, Stormwater Technician
- Scott Hain (DM/A), Township Engineer

Primary responsibilities of the MS4 Committee are to:

- act as a township representative (or appoint a member for specific activities) in watershed and regional activities
- assist with ensuring enforcement of legal authority
- assist with drafting informal agreements
- assist with education of various audiences such as residents, developers, and businesses
- promote identified watershed-based WQ improvement projects and activities the public may participate in
- develops SWMP goals based on appropriate rationale
- analyzes monitoring and field investigation information against the rationale, requirements, and goals of the SWMP
- all members ensure the MS4 is protected from polluted run-off from construction, development, maintenance, or similar activities
- contribute to education and outreach for the construction/developer audience
- develop recommendations/solutions regarding issues and concerns that may arise or require attention and are not addressed in the SWMP

The MS4 Committee meets on a bi-weekly cycle. The SWMP schedule outlines meeting timeframes. Notes and/or minutes associated with MS4 Committee meetings are found in Attachment U.

The township's Stormwater Management Program Manager is:

NAME: Charity Kadwill, SWM Coordinator
PHONE: 717-464-3731
ADDRESS: East Lampeter Township
852 Village Road
Lampeter, PA 17537

The Program Manager serves as the primary program administrator and facilitator.

An organizational chart is presented at the end of Section 300. The following is a comprehensive list of roles and responsibilities for township personnel, departments, or supporting entities that conduct or support stormwater related activities. Additional roles and supporting activities are found within individual elements of the SWMP (e.g. MCM Plans).

Board of Supervisors

- adopt ordinance(s) and or ordinance(s) revisions to carry out new MS4 Permit requirements or support program elements
- secure fiscal resources and approve budgets
- provide public participation at board meetings
- review and approve related policies and plans, as needed
- enter into formal agreements, as applicable, with appropriate entities to facilitate the SWMP. Such agreements will define management structure, responsibilities, cost sharing, and decision making procedures for implementation of the MS4 Permit.
- approve NOI forms and the SWMP (initial and renewal)
- one member serves on the MS4 Committee

Solicitor

- draft and/or approve ordinances or revisions, as needed
- ensure and certify adequate legal authority and corresponding documents
- review and recommend formal agreements
- assist with drafting formal agreements with partners that support the SWMP
- assist with legal issues associated with the SWMP

Public Works Director (Primary Representative)

- approves NOI and related forms
- sign and certify reports and/or forms submitted to PADEP
- ability to access and update the system map
- assist with field investigations
- assists with the Discharge Monitoring Program
- conduct and report discharge monitoring and field investigation activities
- responsible for PennDOT coordination
- **oversees IDD&E monitoring and investigations (3-4)**
- participates in pre-construction meetings
- conducts inspections of construction sites regarding erosion and sediment controls
- assist with ensuring contractors (or identified owner/operator of a construction site) are implementing and maintaining the site Erosion and Sediment (E&S) Control Plan during construction
- assist with the construction site inventory
- ensures public projects meet development standards
- assist with reviews of development and/or re-development (or similar) applications and plans
- assist with development/review and approval of required maintenance activities for permanent BMP O&M Agreements
- assists with design, review, and approval of all publicly-owned and maintained storm sewer infrastructure
- **responsible for implementation and facilitation of the O&M Plan (MCM 6) (6-1)**

- maintains and updates SOPs
- implements and maintains WQ protection BMPs that compliment SOPs
- **maintains the O&M inventory (6-2)**
- tracks and inspects maintenance activities and facilities, including both temporary and permanent public BMPs and facilities
- responsible for operation and maintenance of the storm sewer/storm drain system and corresponding controls and supporting infrastructure
- responsible for operation and maintenance of municipal facilities, equipment, and supporting infrastructure
- administers the street sweeping program
- manages pesticides, herbicides, and fertilizers, as applicable
- **develops and conducts employee and contractor training relative to municipal operations (6-3)**
- responds to sewage or other spills and containment, or ensures clean-up, to prevent or minimize discharge to the MS4
- assist with septic system inspections and/or follow-ups for issues encountered
- provides information relative to responsibilities for annual SWMP assessment and annual reports
- serves on the MS4 Committee

Township Manager

- assist with approval of drafted NOI forms and related documents
- draft formal agreements
- ensures administration of board actions necessary to support the SWMP
- facilitates processing of public record requests related to the MS4 Permit and SWMP
- **ensures public notice and opportunities for the public to provide input prior to adoption of plans, ordinances, etc. (2-2)**
- provides information relative to responsibilities for annual SWMP assessments and annual reporting

SWM Coordinator (Program Manager)

- serves as the township's Stormwater Management Program Manager
- acts as township representative for SWMP and associated documents approval
- drafts NOI and related forms
- signs and certifies reports and forms submitted to PADEP
- enforces legal authority
- responsible for SWMP amendments
- maintains the SWMP and monthly documentation reviews
- maintains records applicable to previous and current SWMP implementation activities
- manages SWMP renewal
- coordinates and drafts the PADEP Annual Report
- conducts and administers the Annual SWMP Review and Assessment
- administers the annual self-certification

- **maintains the system map (including updates) (3-2 and 3-3)**
- responsible for MS3 delineations
- conducts field investigations
- conducts Priority Area classification investigations
- responsible for the Discharge Monitoring Program
- oversees, conducts, and reports monitoring activities
- responsible for coordination plans
- manages the Impaired Waters Plan
- manages the Chesapeake Bay Pollution Reduction Plan (CBPRP) and Nutrients/Sediment Pollutant Reduction Plan(s)
- manages the Pathogens Pollutant Control Measures (PCMs)/PRP
- **responsible for the implementation and facilitation of the PEOP (MCM 1) (1-1)**
- **maintain Target Audience Group (TAG) lists (1-2)**
- **manages outreach material generation and distribution (1-3 and 1-4)**
- assist with education for various audiences such as residents, developers, and businesses
- **responsible for the implementation and facilitation of the PIPP (MCM 2) (2-1)**
- **responsible for soliciting and/or promoting involvement from TAGs (2-3)**
- promotes identified watershed-based WQ improvement activities the public may participate in
- **responsible for the implementation and facilitation of the IDD&E Plan (MCM 3) (3-1)**
- conducts IDDE& training
- oversees IDD&E enforcement and hotline response
- **provides IDD&E educational outreach (3-6)**
- assist with the implementation and facilitation of the Construction Site Run-off Control Plan (MCM 4)
- participates in pre-construction meetings
- assists with review and approval of E&S Plans required by municipal ordinance
- maintains the construction site inventory
- assist with ensuring contractors (or identified owner/operator of a construction site) are implementing and maintaining the site Post Construction Stormwater Management (PCSM) Plan during construction
- assist with ensuring contractors (or identified owner/operator of a construction site) are implementing and maintaining the site Preparedness, Prevention, and Contingency (PPC) Plan during construction
- track and maintain information related to received complaints and follow-up activities associated with construction sites
- reports non-compliant sites to LCCD
- inspects permitted development and/or re-development (or similar) stormwater facilities and/or BMPs to verify proper installation
- responsible for implementation and facilitation of the PCSM Plan (MCM 5)
- receives and reviews development and/or re-development (or similar) applications and plans

- assist with development/review and approval of required maintenance activities for permanent BMP O&M Agreements
- maintain the permanent (public and private) BMP and stormwater facility inventory
- **conduct and report inspections relative to operations and maintenance of permanent BMPs and stormwater facilities (5-3)**
- assists with the implementation and facilitation of the O&M Plan (MCM 6) and associated activities and requirements
- provides information relative to responsibilities for annual SWMP assessments and annual reporting
- serves on the MS4 Committee

Planning Director/Zoning Officer

- assist with drafting and approval of NOI and related forms
- **ensures the SWM Ordinance is current and adopted to enforce the SWMP (3-5, 4-3, and 5-1)**
- drafts and “executes” informal agreements, statements of understanding, service agreements, and other documents with partners
- develops and facilitates the SWMP budget
- acts a representative in township watershed and regional activities
- ability to access and update the system map
- **ensures NPDES permit is issued for construction sites prior to issuing a building permit (4-1)**
- **notifies LCCD within five (5) days of receipt of an application involving earth disturbance activities (4-2)**
- participates in pre-construction meetings
- assist with inspections of construction sites regarding erosion and sediment controls
- responsible for ensuring that land uses in the township comply with municipal code, policies, and state requirements
- files approved and executed permanent BMP O&M Agreements
- primary for receipt and review of development and/or re-development (or similar) applications and plans
- provides information relative to responsibilities for annual SWMP assessments and annual reporting
- serves on the MS4 Committee

Assistant Zoning Officer

- assist with reviews development and/or re-development (or similar) applications and plans
- assist with filing approved and executed permanent BMP O&M Agreements

Stormwater Technician

- assist the SWM Program Manager and Stormwater Department with all assigned SWM Coordinator responsibilities (as assigned)

Sewage Enforcement Officer

- Responsible for septic system inspections and/or follow-ups for issues encountered

Township Engineer

- ability to access and update the system map
- ensures the MS4 is protected from polluted run-off from construction, development, maintenance, or similar activities
- responsible for the implementation and facilitation of the Construction Site Run-off Control Plan (MCM 4)
- participates in pre-construction meetings
- conducts inspections and regulates construction sites regarding erosion and sediment controls
- reviews and approves all E&S plans required by municipal ordinance
- ensures contractors (or identified owner/operator of a construction site) are implementing and maintaining the site Erosion and Sediment (E&S) Control Plan during construction
- assist with maintaining the construction site inventory
- ensures contractors (or identified owner/operator of a construction site) are implementing and maintaining the site Post Construction Stormwater Management (PCSM) Plan during construction
- ensures contractors (or identified owner/operator of a construction site) are implementing and maintaining the site Preparedness, Prevention, and Contingency (PPC) Plan during construction
- assist with reporting non-compliant sites to LCCD
- primary for inspections of permitted development and/or re-development (or similar) stormwater facilities and/or BMPs to verify proper installation
- receives and reviews plans and applications associated with land development, building permits, etc. to ensure proposed activities and permanent stormwater facilities and BMPs meet the goals and requirements of the SWMP, MS4 Permit, township, and state/federal regulations both during construction and post-construction
- assist with ensuring public projects meet development standards
- **review and approves proposed Low Impact Development (LID) approaches in development and redevelopment (or similar) applications and plans (5-2)**
- develops/reviews and approves required maintenance activities for permanent BMP O&M agreements
- responsible for design, review and approval associated with publicly-owned and maintained storm sewer system infrastructure
- provides information relative to responsibilities for annual SWMP assessments and annual reports
- serves on the MS4 Committee

MS4 Program Consultant

- certifies the SWMP

- assist with administration of the Annual SWMP Review and Assessment

Lancaster County Conservation District (LCCD)

- conducts inspections and regulates construction sites regarding erosion and sediment controls
- reviews and approves all E&S Plans required by municipal ordinance
- issues NPDES permits for construction
- conducts pre-construction meetings
- ensures contractors (or identified site owner/operator of a permitted construction site) are implementing and maintaining the E&S Control Plan
- assists with ensuring contractors (or other site owner/operators) are implementing and maintaining the site PCSM Plan during construction
- assists with ensuring contractors (or other site owner/operators) are implementing and maintaining the site PPC Plan
- serves as a repository for all E&S Control Plans, permit applications, inspection reports, and similar, and makes them available to the township
- provides information relative to responsibilities for annual SWMP assessments and MS4 Permit Annual Reports

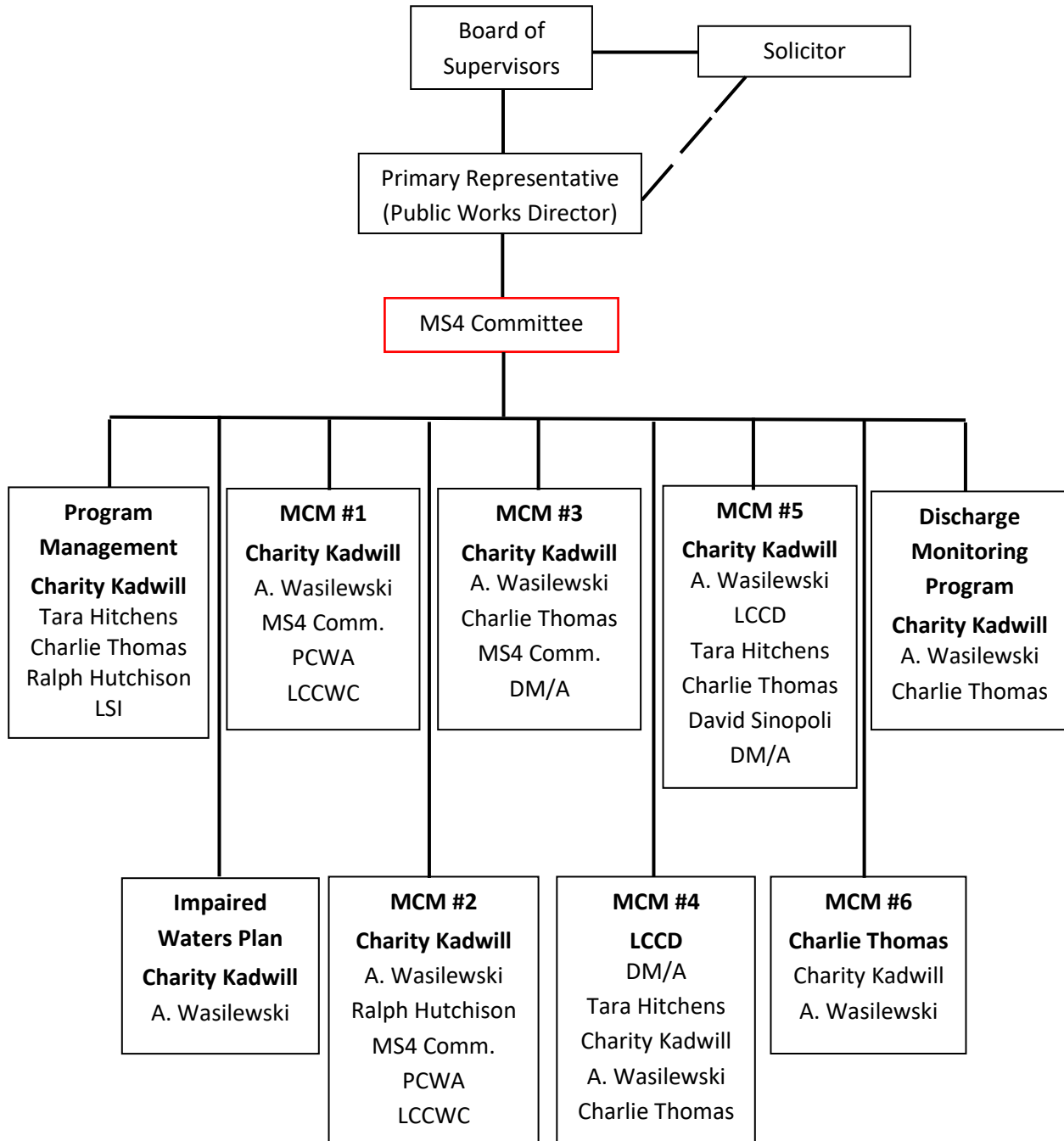
Pequea Creek Watershed Association

- contributes to education for various audiences such as residents, developers, and businesses
- identifies and facilitates watershed-based WQ improvement activities the public may participate in on an annual basis
- reports WQ improvement projects benefiting the watershed
- provides information relative to responsibilities for annual SWMP assessments and MS4 Permit Annual Reports

Lancaster County Clean Water Consortium (LCCWC)

- contributes to education for various audiences such as residents, developers, and businesses
- conducts training and education activities for municipalities and supporting industries (e.g. engineers, consultants, etc.)
- provides information relative to responsibilities for annual SWMP assessments and MS4 Permit Annual Reports

Organizational Chart



300-9 Formal Training and Qualified Personnel

The CWA includes “qualified person” language relative to NPDES permits, such as an MS4 Permit. Individuals responsible for managing or implementing a program (or components of a program) are required to demonstrate a level of qualifications to perform such duties. The CWA does not include specific requirements to meet the “qualified person” language. However, previous and acceptable precedent for demonstrating qualifications is through documented training related to the SWMP and elements of the SWMP (e.g. certification).

The SWMP was prepared by the program consultant and certified by Michael T. LaSala of LandStudies, Inc. This person has received the following formal training relative to stormwater and NPDES Permits:

- Certified Professional in Municipal Stormwater Management (CPMSM) (formerly CMS4S), Cert #341, EnviroCert International, Lancaster, PA, October 2015
- Certified Stormwater Inspector (CSI), National Stormwater Center, Harrisburg, PA, July 2015
- 24 hours Stormwater Pollution Prevention (SWPPP) Training (SWPPP Preparation, Management and Administration), Shasta College, San Diego, CA, January 2005

Copies of certificates (or similar) reflecting the formal training is located in Attachment H.

Section 400

Sharing Responsibility

400-1 Qualifying Local Program

East Lampeter Township relies on the Pennsylvania Department of Environmental Protection (PADEP) Qualifying Local Program (QLP) for issuing National Pollutant Discharge Elimination System (NPDES) Permits for Stormwater Discharges Associated with Construction Activities to satisfy requirements of Minimum Control Measure (MCM) #4 and a portion of MCM #5 as described in the PAG-13 in Appendix A. This is the only QLP the township relies on. A description of the QLP from PADEP Form 3800-PM-BPNPSM0200m Rev. 4/2013 “EPA Fact Sheet” is as follows:

Construction Site Stormwater Runoff Control

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

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

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

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

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

PADEP is responsible for implementation of the statewide program for issuing NPDES Permits for Stormwater Discharges Associated with Construction Activities; therefore, permittees may rely on PADEP's QLP to satisfy all requirements under this MCM. In the application for an NPDES MS4 Individual Permit, permittees can indicate whether they will rely on PADEP's QLP to satisfy this MCM #4 (and the requirements that correspond to the first three BMPs under MCM #5 in PADEP's version of the Stormwater Management Program) or whether they will operate their own program to meet all applicable requirements under this MCM #4 (and MCM #5).

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

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

- a. Develop, implement, and enforce an ordinance or other regulatory mechanism to require E&S controls, as well as sanctions to ensure compliance, to the extent allowable under state or local law;
- b. Require construction site operators to implement appropriate E&S control BMPs;
- c. Develop, implement, and enforce requirements for construction site operators to control waste at the construction site that may cause adverse impacts to water quality (WQ). These wastes can include discarded building materials, concrete truck washout, chemicals, litter, and sanitary waste;

- d. Develop and implement procedures for site plan review, which incorporate consideration of potential WQ impacts;
- e. Develop and implement procedures for receipt and consideration of information submitted by the public; and
- f. Development and implement procedures for site inspections and enforcement of control measures.

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

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

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

DEP's implementation of Pennsylvania's statewide program for NPDES Permits for Stormwater Discharges Associated with Construction Activities also includes requirements for PCSM statewide. Persons proposing or conducting earth disturbance activities are required to develop, submit for approval, and implement a PCSM Plan containing BMPs to manage the net change in stormwater runoff volume, rate and quality. PADEP's QLP and its associated BMPs satisfy the requirements that correspond to BMPs #1 through #3 under this MCM #5 in PADEP's version of the Stormwater Management Program (Post-Construction Stormwater Management in New Development and Redevelopment) in the federal NPDES Phase II storm water regulations. All permittees must ensure that all requirements under this MCM are met either by PADEP's QLP or by the permittee's own programs.

PADEP is responsible for implementation of the statewide program for issuing NPDES Permits for Stormwater Discharges Associated with Construction Activities. Since this NPDES permitting program requires a PCSM plan to be included with the plan for construction activities, NPDES MS4 permittees may rely on PADEP's QLP to satisfy the requirements that correspond to BMPs #1 through #3 under this MCM #5 in PADEP's version of the Stormwater Management Program. In the permitting package, permittees must indicate whether or not they will rely on PADEP's program to satisfy the BMPs corresponding to BMPs #1 through #3 under this MCM #5 in PADEP's version of the Stormwater Management Program (and all requirements under MCM #4); or whether they will operate their own program to meet all applicable requirements under this MCM #5 (and MCM #4).

Permittees may rely on PADEP's statewide program for issuing NPDES Permits for Stormwater Discharges Associated with Construction Activities to meet the federal regulatory requirements established at 40 CFR §122.34(b)(5) for post-construction storm water management in new

development and redevelopment. The state program is established in state regulations at 25 Pa. Code Chapter 102. The state regulations and program are designed to address storm water runoff from all new development and redevelopment projects that disturb greater than or equal to one acre, including projects less than one acre that are part of a larger common plan of development or sale. The state regulations and associated permitting programs ensure that controls are in place to prevent or minimize water quality impacts during and after regulated construction activities. The following table lists the regulatory requirements for this MCM #5 and the corresponding components of the state construction stormwater regulations and permitting program that satisfy each of the requirements.

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

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

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

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

Permittees who rely on PADEP's statewide permitting program for Stormwater Discharges Associated with Construction Activities to satisfy requirements that correspond to BMPs #1 through #3 under this MCM #5 in PADEP's version of the Stormwater Management Program still must implement a written program that includes BMPs to satisfy those requirements under this MCM #5 that are not satisfied by PADEP's statewide NPDES permitting for Stormwater Discharges Associated with Construction Activities.

The ordinance enactment BMP requires permittees to either:

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

East Lampeter Township conducted a review of applicable 40 CFR regulations for requirements of an MS4 permittee and NPDES-permitted construction activities against the QLP and current Memorandum of Understanding (MOU) with the LCCD. The township determined there are deficiencies within the QLP and MOU for addressing all requirements: specifically, activities supporting development and implementation of procedures for site inspections and enforcement of control measures (40 CFR 122.34(b)(4)(ii)(F)) associated with ensuring waste controls (PPC Plan inspections) on sites and PCSM inspections. These items have been included in East Lampeter Township's Stormwater Management Program (SWMP), and responsibilities for oversight and administration are described in Section 300-8.

400-2 Partners

East Lampeter Township has established partners (with both formal and informal roles and responsibilities) for facilitation of the SWMP. Partners that facilitate a specific MS4 Permit requirement are denoted as a "Sharing Responsibility Partner." The partners include:

- **LCCD (Sharing Responsibility Partner)**
1383 Arcadia Road
Lancaster, PA 17601
717-299-5361
- **Blakinger Thomas (Township Solicitor)**
28 Penn Square
Lancaster, PA 17603
717-925-7808
- **David Miller Associates (DM/A) (Township Engineer)**
1076 Centerville Road
Lancaster, PA 17601
717-898-3402

- LandStudies, Inc. (MS4 Program Consultant)
315 North Street
Lititz, PA 17543
717-627-4440
- Pequea Creek Watershed Association
P.O. Box 21
New Providence, PA 17560
- Lancaster County Clean Water Consortium (LCCWC)
1383 Arcadia Road
Lancaster, PA 17601
717-299-7254 Ext. 243

Roles and responsibilities for each partner are described in Section 300-8. Memorandum(s) of Understanding (MOUs), agreements, Statement(s) of Understanding, and/or similar between the township and each partner can be found in Attachment M.

Section 500

Body of SWMP

500-1 Introduction

The Body of SWMP provides and describes the hierarchical processes for program implementation and facilitation. The section includes over-arching program goals, processes associated with key facilitation tasks, and performance criteria.

The concept of Maximum Extent Practicable (MEP) is an important principle and tool of the Body of SWMP and for developing goals, monitoring progress, and facilitating the program. MEP will be applied against goals associated with specific reductions assigned against MS4 Outfalls or discharges entering the MS4. Progress towards achieving the established goals to the MEP will be assessed annually, and the process is outlined within the Body of SWMP. The township describes MEP as follows:

- MEP is the fundamental and numeric link between a municipality's MS4 stormwater discharges and the stream's water quality threshold. Numerically defining MEP is a detailed process that generally requires sampling (or characterization of stormwater discharges) of individual MS4 outfalls and the receiving streams. There are two ways to conceptually describe MEP:
 - The amount of actual reductions necessary to quantitatively confirm MS4 discharges are no longer causing and/or contributing to an impairment.
 - The maximum amount of reductions that can actually occur.

East Lampeter Township has developed the SWMP to:

- Address specific water quality problems and/or requirements in the area;
- Protect the water and natural resources in the area;
- Build upon and assist existing municipal activities and overall objectives/goals; and
- Outline processes and corollary considerations to meet permit, state, and federal regulations and requirements.

500-2 Pollutants of Concern

The primary purpose of the SWMP is to reduce the discharge of pollutants from the MS4 to the Maximum Extent Practicable (MEP), to protect and improve the quality of water bodies in East Lampeter Township, and adhere to the appropriate water quality standards requirements in the CWA (designated uses, water quality criteria for uses, and the anti-degradation policy).

The Pollutants of Concern are identified based on the following:

- Included on the current 303(d) list.
- Included within data found on PADEP WAVE or eMapPa.
- Encountered through the SWMP Development exercise.

- Encountered through two or more monitoring cycles within the established Discharge Monitoring Program.
- Listed as a concern within the issued MS4 Permit by the permitting authority (PADEP).
- A parameter of consideration of the water quality criteria associated with the Designated Uses of receiving waterbodies within the Urbanized Area (UA) (or the regulated system drains to the receiving waterbody).
- Determined as a concern by East Lampeter Township based on appropriate rationale.

The Pollutants of Concern for East Lampeter Township and corresponding reasoning for listing are:

- Alkalinity
 - Parameter associated with WWF and MF Designated Uses
- Ammonia-Nitrogen
 - Parameter associated with WWF and MF Designated Uses
- Dissolved Oxygen (D.O.)
 - Parameter associated with WWF Designated Uses
- Iron (Fe)
 - Parameter associated with WWF and MF Designated Uses
- **Nutrients (Nitrogen and Phosphorus) (primary pollutant of concern)**
 - Chesapeake Bay TMDL
 - 303(d) listed impairment for receiving waterways
 - Listed as a concern within the issued MS4 Permit
- Osmotic Pressure (OP)
 - Parameter associated with WWF and MF Designated Uses
- **Pathogens (Bacteria) (primary pollutant of concern)**
 - 303(d) listed impairment for receiving waterways
- pH
 - Parameter associated with WWF and MF Designated Uses
- **Sediment (siltation) (primary pollutant of concern)**
 - Chesapeake Bay TMDL
 - Listed as a concern within the issued MS4 Permit
 - 303(d) listed impairment for receiving waterways
- Temperature
 - Parameter associated with WWF Designated Uses
- Total Residual Chlorine
 - Parameter associated with WWF and MF Designated Uses

Primary pollutants are selected based on local impairments and/or encountered pollutants with reasonably determined elevated concentrations in stormwater discharges.

A guidance flowchart regarding Pollutants of Concern and resulting activities associated with incorporating the pollutants into the entire SWMP is located at the end of this section.

500-3 SWMP Goals

A set of over-arching and guiding goals has been established to facilitate the SWMP and achieve the primary purpose of the SWMP. The goals are further considered guiding objectives and/or references during the Annual SWMP Review and Assessment. SWMP goals are assessed annually. Two types of goals are established within the Body of SWMP: 1) Qualitative (Narrative) and 2) Quantitative (Numeric).

Qualitative (narrative) goals are best described as development goals. Development goals are associated with establishing an understanding, baseline, information, and so on that is necessary to have in place to facilitate the program and adhere to permit requirements. Qualitative goals can be further described as supporting pollution prevention objectives. Examples of qualitative goals are as follows:

- Complete MS3 delineations within the Urbanized Area
- Establish a baseline understanding of the nature and public's understanding of sediment-laden discharges
- Collaborate, support, and work towards local streams attaining all uses.

Quantitative (numeric) goals are better described as pollutant reduction goals identified based on information generated during program facilitation and/or outlined in the permit. MEP is identified and established with each quantitative goal, and annual assessments (based on criteria outlined within the Body of SWMP) dictate modifications, changes, etc. that may be required to achieve MEP (the iterative process). Examples of quantitative goals are as follows:

- Reduce the sediment loading in discharges from Outfall 001 by 10% in five (5) years
- Reduce the observed and averaged concentration of sediment in discharges from Outfall 001 by 60 NTUs in three (3) years
- Improve observed private facility maintenance by 40%

All SWMP goals include the following information:

- Description of the goal
- Target goal date
- Rationale behind the goal
- Measurement of the goal (including interim milestones)
- BMPs that will be used to support facilitation of the goal
- Denotation if the goal is a "Quantitative Goal."

Qualitative goals will also include a description of the "Anticipated Influence on the SWMP and Elements of the SWMP." This is additional supporting rationale to describe the ultimate purpose of the information, data, baseline, etc. the goal will result in for future program facilitation.

Quantitative goals will also include a target numeric value (reduction goal) based on MEP. The goal will also include the set of BMPs selected (including BMPs within the MCMs) that will be used to progress towards the target value. Annual assessments may result in maintaining the goal, modifying the goal, or eliminating the goal. Section 500-5 outlines the criteria for assessing performance associated with the goal.

The Body of SWMP includes a set of initial and qualitative goals to assist the township with establishing the platform required to adhere to the requirements of the permit. The intent of the initial goals is to assist with building a compliant program where effectiveness and performance will be more readily apparent against the primary purpose of the SWMP. The following initial goals with supporting rationale have been established as the basis of the SWMP:

Qualitative SWMP Goals

- **Complete MS3 delineations and conduct initial wet-weather discharge characterization for applicable outfalls initiated during the SWMP development process, and to ensure compliance with the 2018 MS4 Permit Authorization to Discharge, General Permit Discharges Not Authorized by the General Permit, Item 6 (Discharges that would cause or contribute to instream exceedances of water quality standards) against receiving waterways identified on the 303(d) list.**
 - **Target goal date:** August 2020
 - **Roles and Responsibilities:** Stormwater Coordinator (primary), Stormwater Tech (support), Public Works (support)
 - **Rationale:** The Authorization to Discharge and corresponding conditions and limitations is the purpose of an MS4 Permit. The conditions are primarily grounded in the three water quality standards requirements of the CWA: 1) all waterways are provided a designated use and/or existing use; 2) water quality criteria are outlined within Pa. Code Ch. 93 for uses; and 3) an anti-degradation policy is in place to protect waterways with an existing use. Instream exceedances of water quality standards are “reported” on the state-issued 303(d) list (a CWA requirement). As an MS4 permittee, the township must ensure that discharges from regulated outfalls are not causing and/or contributing to the instream exceedances reported and/or encountered based on MS4 Permit coverage and limitations. This goal additionally contemplates the following:
 - Discharge points will be segregated into five (5) individual groups, and based on geographical groupings (per current grouping areas) and the completed MS3 delineations.
 - Sampled parameters will involve (at a minimum) the primary Pollutants of Concern (noted in Section 500-2) and parameters listed as current impairment causes.
 - **Anticipated Influence on the SWMP and Elements of the SWMP**
 - Will dictate priority MS3s, outfalls, and areas for focus of the SWMP and elements of the SWMP (establish initial Priority Area classifications)
 - Will establish the sampling locations roster (and placed at the end of Section 600-Discharge Monitoring Program).
 - Increased wet-weather monitoring to gauge effectiveness of implemented measures to reduce the discharge of pollutants (to establish and support MEP as applicable).

- Identification and implementation of specific educational outreach materials based on the discharged pollutant under MCM 1.
- Categorization of the outfall (or other applicable structure) as a Priority Area (or “hotspot”) (including under MCM 3 for illicit discharges).
- Increase and/or changes to municipal operations and maintenance activities (including inspections) within the MS3 and corresponding MS4 under MCM 6.
- Targeted BMP implementation within the MS3 and/or receiving waterway addressing the impairment and/or source (if identified) under the Impaired Waters Plan, applicable PRP, or similar.
 - It is anticipated the characterization exercise will dial-in Pathogens PCMs (PRP) development focus areas for the investigation requirements of Appendix B of the issued permit.
- Discharges that are determined to be causing and/or contributing to instream exceedances, will result in development of a specific SWMP goal (and influence on the elements of the SWMP) with milestone goal achievement dates and a measurable reduction goal of the Pollutant(s) of Concern. The goal will be required to describe:
 - how discharges of pollutants will be controlled,
 - how the township will ensure discharges will not cause and/or contribute to exceedances of water quality standards, and
 - measures and BMPs that will control the discharges.
- **Measurement:** Complete all MS3 delineations and conduct initial discharge characterizations for all outfalls by August 2020. Interim milestones include:
 - MS3 delineations (based on approximately 2-4 delineations/month)
 - Group (“Quadrant”) 1 area: October 2017
 - Group (“Quadrant”) 2 area: July 2018
 - Group (“Quadrant”) 3 area: May 2019
 - Group (“Quadrant”) 4 area: November 2019
 - Group (“Quadrant”) 5 area: May 2020
 - Conduct and complete characterizations of discharges for each group by:
 - Group 1: January 2018
 - Group 2: September 2018
 - Group 3: August 2019
 - Group 4: March 2020
 - Group 5: August 2020
- **Update and adjust System Map coding based on the Map Legend (Section 300) to correctly identify outfalls, MS3s, system components, PCSM facilities, etc. including all inlets connected to the regulated MS4.**
 - **Target goal date:** June 2020
 - **Roles and Responsibilities:** Stormwater Coordinator (primary), Stormwater Tech (support), Public Works (support)
 - **Rationale:** : Appropriate identification of outfalls and system components allows the township to operate within the primary requirements of the NPDES

and permit requirements, while providing the basis for MS3 delineations, discharge monitoring, and related SWMP processes. Outfalls only exist at receiving waterbodies defined in Section 300, and currently referenced in the Outfall-MS3 Inventory (Attachment D). Proper System Map coding reflects conditions more accurately and provides a more “friendly” field tool for ascertaining conditions during investigations.

- Recoding efforts will be conducted in conjunction with MS3 delineations. Applicable field information will be captured during delineation exercises to allow recoding within the System map platform to subsequently occur.
- **Anticipated Influence on the SWMP and Elements of the SWMP**
 - Will assist with illicit discharge source tracing under MCM 3 for potential illicit discharges encountered in the system (2nd level IDD&E) and at an outfall (3rd level IDD&E), along with identifying ownership of facilities based on coding references.
 - Will assist with identification of system components that may require “protection” from active construction projects under MCM 4.
 - Will assist with identification and planned system maintenance and/or improvements under MCM 6.
 - Where discharges are in violation of the primary purpose of the SWMP:
 - Development of a SWMP goal and milestone to reduce the discharge of pollutants and protect water quality will be tied to delineated area.
 - Communication(s) of the concern to partners with a request for assistance through partner focus of the area (especially for MS3s that cross jurisdictional boundaries).
 - Delineated and defined field investigation area (and corresponding coded system components) to monitor conditions and respond to issues.
 - Categorization of the MS3 and corresponding discharge point (or other applicable structure) as a priority area under (including “hotspots” under MCM 3) with the completion of Priority Area Screening Forms found in Attachment F.
 - Elevated stormwater facility and site inspections and enforcement of construction sites within the MS3 under MCM 4.
 - Focused inspections and activities on permanent stormwater facilities and BMPs discharging directly or indirectly to the regulated MS4 to ensure proper operations and functionality under MCM 5.
 - Increase and/or changes to municipal operations and maintenance activities (including inspections) within the MS3 and corresponding MS4 under MCM 6.
- **Measurement:** Total coding adjustments and system map update by April 2020 (in conjunction with MS3 delineations). Interim milestones include:
 - Existing outfall inventory recoding completed by May 2017

- Group (“Quadrant”) 1 recoding: November 2017
 - Group (“Quadrant”) 2 recoding: August 2018
 - Group (“Quadrant”) 3 recoding: June 2019
 - Group (“Quadrant”) 4 recoding: December 2019
 - Group (“Quadrant”) 5 recoding: June 2020
- **Complete the re-development of SWMP element plans for Minimum Control Measures (MCMs) including the PEOP (MCM #1), PIPP (MCM #2), IDD&E Plan (MCM #3), Construction Site Runoff Control Plan (MCM #4), PCSM Plan (MCM #5), and O&M Plan (MCM #6).**
 - **Target goal date:** February 2018
 - **Roles and Responsibilities:** :Stormwater Coordinator (primary), Stormwater Tech (support), DM/A (support), Public Works (support)
 - **Rationale:** The element plans are necessary components of the SWMP document to facilitate the program based on one of the two programmatic objectives (pollution prevention and/or pollution reduction). The MCM Plans primarily outline the township’s approach for non-structural BMP implementation. Additionally, established plans based on the USEPA “Protocol” not only provides a level of compliant documentation required, but also provides the platform for a coherent and rational program that can be more readily coordinated across elements and township departments. A new permittee generally has one year from the date of approved coverage to establish individual MCM plans. This goal contemplates development commencing in March 2018.
 - The SWMP development process resulted in certain tools being provided, and associated with individual MCMs. The tools are intended to improve the functionality and effectiveness of the program; while consolidating documentation tasks to help eliminate unnecessary documentation steps.
 - **Anticipated Influence on the SWMP and Elements of the SWMP**
 - The element plans will be primarily summary documents reflecting chosen processes and activities for a given permit year (for the MCM Plans).
 - Each MCM Plan includes referenced or developed tools for selecting activities, focus areas, and organization of information necessary for facilitating the program (e.g. PCSM facility inventory, outreach matrix, etc.)
 - Two MCM Plans (IDD&E Plan (MCM #3) and the O&M Plan (MCM #6)) will include more detailed processes above and beyond the summary sections as required by federal regulations and the USEPA “Protocol.”
 - Section 800 outlines the necessary processes for development and incorporation into the two plans.
 - Organized element plans of the SWMP allow for greater coordination and singular focus points across the plans to support the SWMP and the programmatic objectives.

- For pollution reduction objectives: tools, activities, etc. are selected under each element plan to support a singular reduction effort outlined as a SWMP goal.
 - For pollution prevention objectives: tools, activities, etc. are selected under element plans to either meet minimum permit requirements (where a requirement has not been selected for a pollution reduction objective), or to focus on a singular aspect where an issue may not be present but appropriate rationale has determined it is necessary for focus.
- **Measurement:** Initiate and finalize the incorporation of select tools and information into existing MCM plan elements (including information necessary in individual plans (e.g. PCMS BMP inventory under MCM #5) by February 2018. Interim milestones include:
 - O&M Plan (MCM #6) re-development: November 2017
 - IDD&E Plan (MCM #3) development: December 2017
 - Construction Site Runoff Control Plan (MCM #4) development: January 2018
 - PCSM Plan (MCM #5) development: January 2018
 - PEOP (MCM #1) development: February 2018
 - PIPP (MCM #2) development: February 2018
- **Outline the framework and facilitate plan generation for the development of SWMP element plans for Impaired Waters including the Impaired Waters Plan, Chesapeake Bay Pollutant Reduction Plan (CBPRP), Nutrient/Sediment Pollutant Reduction Plan, and Pathogens PCMs (PRP).**
 - **Target goal date:** October 2017
 - **Roles and Responsibilities:** :Stormwater Coordinator (primary), Stormwater Tech (support)
 - **Rationale:** The element plans are necessary components of the SMWP document to facilitate the program based on one of the two programmatic objectives (pollution prevention and/or pollution reduction). The IWP Plans primarily outline the township's approach for structural BMP implementation, and are required by the permit. Additionally, established plans based on the USEPA "Protocol" not only provides a level of compliant documentation required, but also provides the platform for a coherent and rational program that can be more readily coordinated across elements and township departments. The current SWMP schedule contemplates development and facilitation of the CBPRP and Nutrient/Sediment PRP for submission with the Notice of Intent (NOI) in September 2017. The IWP framework will be generated with the CBPRP and Nutrient/Sediment PRP development. The balance of the goal contemplates development of the Pathogens PCMs framework that will need to be in place to capture the right information in time for the March 2020 informational submission required by the permit, and guide discharge characterization/MS3 delineation exercises to build a source inventory.
 - **Anticipated Influence on the SWMP and Elements of the SWMP**

- The Impaired Waters Plan is the over-arching guidance document for addressing waters that have been identified as impaired, or where SWMP facilitation has identified potential issues with discharges that may reasonably lead to impaired waters.
 - Individual PRPs are developed with respect to the pollutant of concern for development and implementation and strategies and controls to address impairments and/or discharges.
- The 2018 PADEP MS4 Permit Requirements Table outlines a requirement associated with pathogens impairments called “Pathogens Pollutant Control Measures (PCMs).” While this different term is being used within the permit, the township will organize the plan as a PRP to maintain consistency with the organization of the SWMP.
- Organized element plans of the SWMP allow for greater coordination and singular focus points across the plans to support the SWMP and the programmatic objectives.
 - For pollution reduction objectives: tools, activities, etc. are selected under each element plan to support a singular reduction effort outlined as a SWMP goal.
 - For pollution prevention objectives: tools, activities, etc. are selected under element plans to either meet minimum permit requirements (where a requirement has not been selected for a pollution reduction objective), or to focus on a singular aspect where an issue may not be present but appropriate rationale has determined it is necessary for focus.
- **Measurement:** Organize the IWP plan elements by October 2017. Interim milestones include:
 - Submission of the CBPRP and Nutrient/Sediment PRP with the NOI in September 2017
 - “Final” map for PRP generation by early March 2017
 - Baseline loadings and required reductions by mid-March 2017
 - BMP project identification by late-March 2017
 - Project selection for incorporation into PRP by late April 2017
 - Draft CBPRP/PRP complete for approval and public comment by end of May 2017
 - Public comment period completed by mid-July 2017
 - Final revisions and approval by late August 2017
 - Pathogens PCMs (PRP) approach framework and schedule by October 2018 (tied with completion of the first MS3 delineation group and prior to first grouping of initial discharge characterizations to guide investigations and ensure capture of appropriate information for permit-required information to be submitted).

Quantitative SWMP Goals

- **Enforce and improve required operations and maintenance of both privately-owned and publicly-owned Post-Construction Stormwater Management facilities and BMPs with the intent to reduce the long-term use of township resources to conduct field investigations and inspections.**
 - **Target goal date:** December 2023
 - **Target numeric goal:** 95% return rate of O&M Verification Forms
 - **Roles and Responsibilities:** Stormwater Coordinator (primary), Stormwater Tech (support), Planning Director/Zoning Officer (support), DM/A (support), Public Works (support)
 - **Rationale:** Ensuring functionality and performance of PCSM facilities and BMPs is not only a listed permit requirement, but is also important for helping reduce the potential for polluted discharges due to the facilities and BMPs generally providing a water quality improvement function. PCSM facilities and BMPs include required maintenance activities and frequencies with designs (with several that have been implemented with recorded BMP O&M Agreements). The township is responsible to ensure such facilities and BMPs are operating as intended and maintained as required.
 - This goal requires implementation of tools within the non-structural elements of the SWMP (MCMs).
 - Progress of the goal will be measured annually per the SWMP requirements and outlined processes for the Annual SWMP Review and Assessment. Initial supporting processes described in the next section may be modified at that time. Additional supporting processes may be added as outlined by the SWMP.
 - **Support from Elements of the SWMP**
 - MCM #1 (public education – passive education)
 - General PCSM Requirements informational handout/pamphlet
 - Provide the handout/pamphlet for all existing (and any new) PCSM facility/BMP owners
 - Provide the handout/pamphlet as an attachment to mailed O&M Verification Forms on an annual basis
 - LCCWC – Homeowner’s Guide for PCSM BMP Maintenance
 - Implement signage that can be viewed by the general public at select publicly-owned facilities/BMPs that describes O&M requirements and the specific O&M being conducted at the facility/BMP
 - MCM #2 (public involvement – active education)
 - Meet individually (or small groups) with HOA’s at least once to communicate requirements and reinforce educational information provided
 - MCM #5 (PCSM)
 - Update the PCSM Inventory that captures all facilities/BMPs and references the appropriate maintenance required

- Initiate and facilitate the O&M verification and PCSM inspection process as required and described in Section 800 of the SMWP and within the PCSM Plan for MCM #5
- Document inspections with appropriate checklists based on individual BMP/SWM facility types
- Confirm operations and maintenance of all PCSM facilities/BMPs at least once during the goal timeframe (and whether an O&M Verification Form has been returned or not)
- Contract and/or self-perform repairs of PCSM facilities/BMPs where proper maintenance is not occurring if the facility/BMP owner fails to respond to notifications generated from inspection activities
- MCM #6 (Municipal O&M)
 - Ensure a BMP O&M plan is developed (or built from designs) for each publicly-owned facility/BMP. Incorporate each BMP O&M plan into the MCM #6 O&M Plan
 - Include/outline maintenance activities for each facility/BMP in the O&M schedule, and ensure maintenance activities have been completed through documentation
- **Measurement & Schedule:** This goal requires implementation of multiple activities, information, and tasks that will ultimately be measured by the return rate of issued O&M Verification Forms that includes a physical confirmation during the goal implementation that actual maintenance activities are being conducted. This provides a level of assurance that future O&M Verification Forms are appropriately reflecting maintenance activities. **The final target return rate of O&M Verifications Forms is 95% by December 2023.** Interim milestones and activities include:
 - Update the PCSM Inventory (all known facilities/BMPs) and capture required maintenance information: September 2017
 - Denote which facilities/BMPs are owned/operated by HOAs
 - Generate/acquire general PCSM requirements informational handout/pamphlet and LCCWC-Homeowner's Guide for PCSM BMP Maintenance: October 2017
 - Issue general PCSM requirements handout/pamphlet and LCCWC-Homeowner's Guide to PCSM BMP Maintenance to all existing PCSM facility/BMP owners in the inventory: November 2017
 - Update the PCSM Plan with inspection forms and checklists based on facility/BMP types: January 2018
 - Generate/develop O&M Verification Forms based on facility/BMP types: January 2018
 - Issue meeting notice with all HOAs to review PCSM requirements and educational information: February 2018
 - Develop/acquire BMP O&M plans for all publicly-owned facilities/BMPs and incorporate into the MCM #6 O&M Plan: March 2018
 - Select a publicly-owned facility/BMP for educational signage related to O&M activities and requirements: April 2018

- Issue O&M Verification Forms and general PCSM requirements handout/pamphlet to Group (“Quadrant”) 1 PCSM facility/BMP owners: April 2018
 - Issue general PCSM requirements handout/pamphlet to all other groups
- Implement educational signage at publicly-owned facility/BMP: August 2018
- Complete HOA meetings: October 2018
- **2018 O&M Verification Form target return rate (Group 1): 33%**
- Issue O&M Verification Forms and general PCSM requirements handout/pamphlet to Groups (“Quadrant”) 2 and 3 PCSM facility/BMP owners: March 2019
 - Issue general PCSM requirements handout/pamphlet to groups 4 and 5
 - Issue general PCSM requirements handout/pamphlet and Notice of Inspection to group 1
- Complete Group 1 inspections: August 2019
- **2019 O&M Verification Form target return rate (Groups 2 & 3): 33%**
- Issue O&M Verification Forms and general PCSM requirements handout/pamphlet to Groups (“Quadrant”) 1, 4 and 5 PCSM facility/BMP owners: March 2020
 - Issue general PCSM requirements handout/pamphlet and Notice of Inspection to groups 2 and 3
- Complete groups 2 and 3 inspections: August 2020
- **2020 O&M Verification Form target return rate (Groups 1, 4 & 5): 50%**
- Issue O&M Verification Forms and general PCSM requirements handout/pamphlet to Groups (“Quadrant”) 1, 2 and 3 PCSM facility/BMP owners: March 2021
 - Issue general PCSM requirements handout/pamphlet and Notice of Inspection to groups 4 and 5
- Complete groups 4 and 5 inspections: August 2021
- **2021 O&M Verification Form target return rate (Groups 1, 2 & 3): 66%**
- Issue O&M Verification Forms and general PCSM requirements handout/pamphlet to all Groups (“Quadrant”) (1, 2 3, 4 & 5) PCSM facility/BMP owners: March 2022
- **2022 O&M Verification Form target return rate (all groups): 80%**
- Issue O&M Verification Forms and general PCSM requirements handout/pamphlet to all Groups (“Quadrant”) (1, 2 3, 4 & 5) PCSM facility/BMP owners: March 2023
- **2023 O&M Verification Form target return rate (all groups): 95%**

The elements of the SWMP (MCMs, PRPs, etc.) in conjunction with programmatic processes established in the SWMP will be used to facilitate the program towards achieving the established goals. Goals will remain unchanged, modified, or removed during the Annual SWMP Review and Assessment process. Rationale will be provided within the review and

assessment document why the goal remains unchanged, was modified, or was removed; along with a description and rationale if interim milestones are being met and if the goal was, was not, is anticipated, or is not anticipated to be achieved.

500-4 SWMP Development, Facilitation & Implementation

This section describes the processes and protocols behind facilitating the tasks and activities associated with the SWMP, goals, and primary considerations (permit-required activities) within elements of the SWMP. See Section 500-6 for schedule considerations associated with activities.

Annual SWMP Review and Assessment

- See Section 500-7

Annual self-certification

- Self-certification is completed by the Stormwater Coordinator.
- Self-certification form located in Attachment I is completed.
- A completed form is inserted in Section 100-5 of the SWMP.
- The self-certification is conducted after completion of the Annual SWMP Review and Assessment; completion of the PADEP Annual Report; and the assessment indicated compliance with the MS4 Permit, the SWMP, and applicable regulations of Pa. Code Ch. 92a and 40 CFR (or noted changes or modifications will result in compliance).
- The self-certification provides a documented checkpoint that all required SWMP processes have been reviewed, assessed, and completed.

Annual Report for submission to PADEP

- Annual report data entry is completed by the Stormwater Coordinator.
- The PADEP Annual Report form is located at <http://www.elibrary.dep.state.pa.us/dsweb> (latest version used). Current version is Form 3800-FM-BPNPSM0491 Rev. 4/2014.
- PADEP Annual report instructions (found at <http://www.elibrary.dep.state.pa.us/dsweb>). The instructions and form are reviewed to note or identify any special conditions or submission requirements prior to completion of the form approximately one month prior to required submission (this allows time for outreach to gather “missing” materials or information if determined as such).
- The PADEP Annual Report form is completed in conjunction with the Annual SWMP Review and Assessment.
- Drafted annual reports are viewed and approved by the Primary Representative and/or MS4 Committee.
- Copies of completed PADEP Annual Reports are inserted into Attachment K of the SWMP.
- The completed PADEP Annual Report is sent via certified U.S. Mail by the Stormwater Coordinator.

Budget Development

- The annual budget is developed by the Planning Director/Zoning Officer.

- Budget development occurs in conjunction with normal township budget development during the latter half of the fiscal/calendar year.

Field Investigations

- Field investigations are conducted to support focus areas, goals, etc. of the SWMP. A primary intent of field investigations are to ascertain physical conditions and potential influences to the nature of stormwater discharges.
- Field investigations additionally support visual analysis of conditions due to implemented BMPs, facilities, changes, etc.
- A Field Investigation Report Form is located in Attachment F.
 - Completed reports are kept in Attachment F and reviewed during the Annual SWMP Review and Assessment, and by the MS4 Committee when deemed appropriate.
- The assigned field investigator(s) review conditions in an entire MS3 or portion of the MS3. Infrastructure (inlets, outfalls, endwalls, swales, pipes, etc.), system influencing conditions (properties adjacent to system inlets, areas that drain to regulated system, etc.), and other considerations are reviewed in the field.
- Field Investigations are conducted to support initial MS3 delineations and corresponding characterization of stormwater discharges.
- A primary purpose of field investigations is to ascertain the presence of pollutants, system functionality, sediment build-up, influences on system, and similar.
- Field Investigations are conducted to establish, support and/or monitor conditions in assigned Priority Areas.
 - High Priority classified areas are reviewed annually.
 - Problem areas/Active Investigation areas are reviewed at a minimum annually. The MS4 Committee will determine if additional field investigations are necessary.
 - Low Priority Areas are reviewed once a permit term (5-year cycle).
 - Excluded Areas are reviewed when determined appropriate by the MS4 Committee.
- Field Investigations are conducted when deemed appropriate by the MS4 Committee outside the normal investigation cycle outlined in the SWMP cycle; and can be triggered by complaints, known and changed conditions in an MS3, and similar.
- Field investigations may result in necessary corrective actions as a follow-up. The form in Attachment F provides further direction/instructions regarding corrective action considerations.
- A completed Field Investigation Report Form is submitted to the Stormwater Coordinator.

Monitoring Screening, Data Collection, and Analysis

- See Section 600.

Monthly program documentation review

- The Stormwater Coordinator conducts the monthly review.
- The Stormwater Coordinator incorporates documentation “in hold” for incorporation into the SWMP at this time (e.g. new partner agreement, monitoring report, amendment, etc.)

- The Stormwater Coordinator and/or MS4 Committee reviews the SWMP Activities Schedule to note upcoming activities, requirements, etc. Notice is provided to individuals, entities, etc. of the upcoming activity and corresponding timelines, needs, etc.
- The Stormwater Coordinator initials the monthly program documentation review check-off sheet located behind the SWMP Title Page and prior to the Contents section to denote completion of the task.

MCM Plans and PRP Reviews and Facilitation

Each control measure includes a set of BMPs to facilitate the SWMP and support the goals and objectives of the SMWP. The BMPs used in each MCM includes at a minimum:

- Measureable goal(s) for each BMP
- Time required to undertake/implement the BMP (including frequency of action and interim milestones)
- Person(s) and/or entities responsible for implementing/coordinating the BMP
- Rationale for selection of BMP and measurable goal(s)
- Assessment criteria for determining/measuring success of the BMP(s)

In general:

- Reviews conducted with the Annual SWMP Review and Assessment noted under Section 500-7.
- Specific activities associated with MCM Plans and PRPs are found within the individual plans.
- The Stormwater Coordinator updates the SWMP Activities Schedule (Section 500-6) with primary activities outlined within individual plans during the Annual SWMP Review and Assessment. Updates are incorporated as necessary based on the monthly program documentation review.
- Items that require specific denotation in the master SWMP schedule and noted within individual plans include:
 - MCM 1
 - annual PEOP review and update
 - master TAG list updated
 - outreach materials for corresponding permit year selected
 - outreach materials/methods distributed/implemented
 - stormwater information on website updated
 - MCM 2
 - annual PIPP review and update
 - date of annual public meeting selected
 - selection of activity or activities the township will promote for the permit year for public participation
 - MCM 3
 - annual IDD&E Plan review and update
 - selection of outfalls/discharge points for dry-weather screening
 - outfall/discharge point screening
 - MCM 4
 - Construction Site Run-off Control Plan review and update

- field inspections
- MCM 5
 - annual PCSM Plan review and update
 - selection of PCSM facilities for inspection
 - PCSM facility inspections
 - O&M requirements notice to owners/operators of private stormwater facilities and BMPs
- MCM 6
 - annual O&M Plan review and update
 - O&M schedule development
 - annual Employee Training Plan developments
 - primary employee training events
 - inventory/asset inspections
- Any other item deemed appropriate by a member of the MS4 Committee (e.g. BMP Implementation, public project, etc.).
- The schedule is updated for delivery activities after selections are conducted (e.g. dates for distribution of outreach materials, cleaning of inlets in a specific MS3, etc.).

MS4 Committee Meetings

- The MS4 Committee meets bi-weekly in the township conference room per the SWMP schedule.
- The standing agenda for committee meetings includes the primary responsibilities of the committee outlined in Section 300-7.
- Additional and specific standing meeting agenda items are also provided in Section 500-6.
- Notes are taken during each meeting and found in Attachment U.
- Any follow-up actions are assigned to individual persons with corresponding timelines for completed action.

Partner Agreements

- Initial annual review of all agreements is conducted in conjunction with the Annual SWMP Review and Assessment.
- Current partner agreements are located in Attachment M.
- The primary representative contacts the existing partner following the annual review and assessment to communicate any desired changes to agreements or if no changes are desired.
- The township's primary representative contacts potential new partners that may be identified following the annual review and assessment to communicate the desire for the partnership, objectives of the partnership, and type of partnership.
 - The agreement will outline (at a minimum) the roles and responsibilities of the partner relative to the MS4 Permit, primary contact persons, monetary considerations (if applicable), timeframes and schedules, required documentation, and general terms and conditions.
 - The agreement is drafted by the entity agreed upon between East Lampeter Township and the new partner, drafted and recommended by the solicitor (if applicable and requires council approval), reviewed and approved by the board (if applicable) and executed. A copy of the executed agreement is

inserted into Attachment M and applicable sections of the SWMP are updated and/or noted via Amendment in Section 200.

- Partners are listed in Section 400 with a specific denotation if East Lampeter Township is sharing responsibilities with the partner. If sharing responsibilities, an executed agreement and/or MOU requiring board approval will be determined by the appropriate township representative.
 - A simple statement of understanding (e.g. email communication) is the minimum necessary support documentation for informal partners.
- Roles and responsibilities of partners are listed in Section 300-8.

System Map Update

- The Stormwater Coordinator holds the “master” digital system map files (CSDatum).
- Current paper versions of the map(s) are found in Attachments C and D of the SWMP.
- Public Works keeps a set of working notes and hard copies outlining inaccuracies encountered in the field, needed changes to the map, and similar. This would include “red line” markings on the current version of a map denoting the change, modification, etc. that is required. Changes or modifications can include:
 - Re-designation (term) associated with a structure.
 - MS4 location.
 - Inlet location.
 - Private and/or other MS4 and structures deemed appropriate on the map.
 - MS3 delineation/considerations.
 - Prioritization notes and/or designations.
 - Items deemed appropriate by a member of the MS4 Committee.
- The Stormwater Coordinator, Public Works Director, Planning Director/Zoning Officer, Stormwater Technician, and Township Engineer update the master digital system map files to reflect changes and modifications.
- One hard copy of the system map is generated (for incorporation into the SWMP).
- A comprehensive review of the System Maps(s) is conducted during the Annual SWMP Review and Assessment as noted under Section 500-6.

A guidance flowchart providing an overview of the SWMP facilitation process in general is located at the end of this section.

500-5 SWMP Performance and Assessment Criteria

The criteria for measuring and assessing SWMP (and elements of the SWMP) performance and effectiveness is based on the United States Environmental Protection Agency (USEPA) Protocol for Conducting Environmental Compliance Audits under the Stormwater Program for Small MS4s (“Protocol”). The USEPA recommends municipalities subject to terms and conditions of an issued MS4 Permit conduct “self-audits” of their SWMP to ascertain the progress of program implementation against measurable goals. The recommendation is an approach to meet requirements of the Clean Water Act (CWA) and National Pollutant Discharge Elimination System (NPDES). 40 CFR 122.26(d)(2)(v) and 122.34(g) requires MS4s to assess controls and effectiveness of their SWMPs—and to document such assessments.

Assessing and measuring progress towards goals of the SWMP will provide East Lampeter Township with the ability to establish supporting rationale behind a determination if the program is effective (or progressing towards effectiveness) in achieving the purpose and objectives of the SWMP. A review checklist is used to ascertain performance on an annual basis, and allow the township to determine a level of effectiveness of the program, along with a reasonable assurance activities conducted are in line with permit requirements. The review checklist is located in Attachment J. The checklist provides the ability to outline rationale behind maintaining, modifying, changing and/or eliminating components of the SWMP, SWMP goals, and goals/activities of elements of the SWMP. It further provides the ability to narratively measure and describe program effectiveness.

Measuring specific goals of the SWMP will dictate modifications that may be necessary to components in the program management element and supporting elements of the SWMP. Once a SWMP goal is established, it may only be maintained, modified, or eliminated (goals and components of individual MCM Plans may also be changed – see Section 800). Assessment criteria for supporting decision rationale to maintain, modify, and/or eliminate a goal of the SWMP (or supporting components and activities) is based on the following:

- **MAINTAIN:** A SWMP goal (and supporting components) will be maintained if measurement (interim milestone, supporting data, or similar) associated with the established goal is:
 - being met (within 20 percent of the numeric measurement), or
 - exceeded, or
 - anticipated will be met (rationale will be provided if it is anticipated an established goal will be met); and/or
 - the purpose (rationale) of the goal will support long-term success of the program and future goals, and
 - the goal is associated with a Pollutant of Concern of the SWMP.
- **MODIFY:** A SWMP goal will be modified if an interim measurement associated with the established goal provides an indication the established goal will:
 - not be fully met (short by greater than 20 percent of the numeric measurement) , or
 - significant progress towards meeting the goal is perceived as not occurring (rationale will be provided if it is perceived significant progress is not occurring); and/or
 - a modification is necessary due to a change in Pollutants of Concern or a focal area of the SWMP.
- **ELIMINATE:** A SWMP goal will be eliminated (or removed) only if:
 - the goal no longer supports the purpose and objectives of the SWMP, or
 - the goal is no longer aligned with regulations or CWA requirements, or
 - it can be reasonably determined the goal is unattainable based on township resources, abilities, and similar, or
 - the goal has reached the end of its' life cycle and the goal has been achieved.

Assessments may result in changes to the SWMP or elements of the SWMP. In turn, amendments to the SWMP may be required. SWMP amendments are located in Section 200. The purpose of the amendment process is to provide a documented tracking of changes and ability to reference initial conditions, goals, and assumptions of the SWMP. The

over-arching guiding methodology for assessing goal progress and effectiveness is based on Maximum Extent Practicable (MEP) (see Section 600-4).

500-6 Activities and Schedule

A primary set of activities have been determined for SWMP facilitation, including overall implementation and review activities of the SWMP as a whole (individual and SWMP supporting MCM facilitation activities are located in individual plans as applicable). The following are a set of standing activities conducted on an annual basis:

- Annual SWMP Review and Assessment
 - The primary and comprehensive review of the entire program (including supporting elements (e.g. MCMs)). See Section 500-7 for more information.
 - Conducted in April-May of each year (after the end of the previous permit year).
- Annual self-certification
 - The final documented step of the Annual SWMP Review and Assessment.
 - Conducted to affirm the program is aligned with the permit and regulations.
 - Conducted in May of each year.
- Annual Report for submission to PADEP
 - The “official” report for submission summarizing activities of the previous permit year. Organized congruently with the Annual SWMP Review and Assessment.
 - Conducted in April-May of each year (required submission no later than June 8 of each year).
- Budget development
 - Organized to support planned activities for an upcoming fiscal year.
 - Conducted in October-November of each year.
- Partner Agreement renewal
 - Renewal and/or update to agreements with partners based on the Annual SWMP Review and Assessment.
 - Conducted by August-September of each year.
- System map update
 - Conducted to update inaccuracies that may have been encountered in the field and/or changes to the system, Urbanized Areas, and similar.
 - Annual checkpoint to ensure map is up to date.
 - Conducted in April of each year.

The following are a set of standing activities conducted annually, but multiple times during a given permit year:

- Field Investigations
 - High Priority Areas
 - Problem Areas/Active Investigation Areas
 - Low Priority/Excluded Areas (conducted once a permit cycle, the SWMP schedule identifies the Low Priority and Excluded Areas chosen for investigation for a given permit year).
- Monitoring screening, data collection, and analysis

- Conducted twice a year to provide supporting information for measuring quantitative SWMP goals.
- Generally conducted in combination with outlined activities requiring monitoring for elements of the SWMP (e.g. PRPs).
- Conducted to analyze the characterization of discharges from MS4 outfalls against the designated uses/water quality criteria for uses of receiving waterways.
- Frequency and time of year will be determined after discharge characterization exercises have been implemented, but no later than the end of the 2018-2019 permit year.
- Monthly program documentation review
 - Monthly review of SWMP and SWMP elements for the purpose of ensuring required and supporting documentation is incorporated into the SWMP.
 - Conducted monthly of each year.
- MS4 Committee Meetings
 - Conducted bi-weekly.
 - Specific standing agenda items for individual meetings:
 - January: actions that may be necessary to meet minimum permit requirements for the permit year
 - February: proposed WQ-treatment facility and BMPs
 - May: Annual SWMP Review and Assessment and Annual Report progress and/or results
- SWMP Goals
 - Based on individual program goal (outlined in Section 500-3).

A schedule in visual format is found in Attachment E reflecting the above activities, SWMP goals (and interim milestones), and primary activities noted and/or required for elements of the SWMP (e.g. MCMs, PRPs, etc.). The schedule includes planning and activity references over the course of the permit cycle (~5 years) as well.

The dates are primarily based on the issued “Approval of Coverage” and corresponding permit year. The schedule may be modified if the dates of “Approval of Coverage” issued by PADEP changes from the current March 10 permit year date.

500-7 Annual SWMP Review and Assessment

A comprehensive review and assessment of the SWMP is conducted on an annual basis. Both the performance of the previous permit year’s activities and outline of the required activities for the upcoming permit year are reviewed. The SWMP Performance and Assessment Criteria and corresponding review checklist are used for decision guidance to measure effectiveness and progress of SWMP implementation, SWMP goals (including progress to the MEP), and goals/requirements of the elements of the SWMP. An important aspect of the review is establishing appropriate rationale behind decisions to maintain, modify, eliminate, and/or change components based on the performance and assessment criteria. The checklist also provides checkpoints noting required documentation of planned activities for the upcoming permit year.

The annual review and assessment will be conducted in accordance and based on the following:

- Conducted in the township conference room.
- Conducted by the Stormwater Coordinator with assistance from the MS4 Program Consultant (and any other individuals or entities invited by the primary representative or MS4 Committee).
- The agenda (or order of review) is the review checklist found in Attachment J.
 - Tools within the SWMP and elements of the SWMP will be used as guiding references throughout the assessment (e.g. flowcharts, matrices, etc.)
- The SWMP and plans of the elements of the SWMP will be reviewed. Goals associated with elements of the SWMP will be assessed for the corresponding permit year. Decisions and ability to track supporting rationale for maintaining, modifying, changing, or eliminating components or focal points of elements of the SWMP (MCM Plans, PRPs, etc.) for the next permit year (or cycle) is provided in the criteria checklist (with guidance also in Section 800) as well.
 - Examples of components include: Target Audience Groups, PCSM inspection checklist(s), Employee Training activities, IDD&E priority areas, and numeric/narrative goals (e.g. target value of improvement of knowledge of a TAG).
- A review summarizing the activities, perceptions of SWMP progress, and similar for the corresponding permit year will be conducted and noted in the review checklist.
- A review summarizing activities required for the upcoming permit year will be conducted and noted (e.g. Annual Employee Training Plan under MCM 6, low priority outfalls designated for screening under MCM 3, and so on).
- Monitoring reports/data and associated collected information (e.g. field investigations) will be compared against the goals of the SWMP and supporting elements of the SWMP to ascertain progress, effectiveness, and performance based on Maximum Extent Practicable (MEP) methodology for quantitative goals.
 - Monitoring reports will further allow the committee to determine if changes in Pollutants of Concern, priority areas, components of MCM Plans, etc. are required.
- Any changes or modifications (goals, processes, etc.) that will be required within the SWMP will be noted, along with timeframe for changes or modifications to take place, and who will complete the changes or modifications. The notes of changes or modifications will be attached to the completed review.
- The System Map (and corresponding supporting documents (e.g. MS3 map, data, etc.)) are reviewed to ensure the current version is up to date and any changes, modifications, or similar required by the last update have been incorporated. The map is further reviewed against requirements outlined within MCM 3 in the MS4 Permit to ensure the map reflects all required information. Verification the storm sewer map shows the location of the outfalls and names and location of receiving waters is completed.
- Partner agreements are reviewed and desired changes or clarifications to the agreements are noted for incorporation or follow-up. Desired changes or clarifications noted should support the SWMP, goals of the SWMP, and elements of

the SWMP (including proposed changes or modifications to the SWMP). Identification of new partners are identified and noted at this time.

- The ordinance is reviewed to identify any conflicts with the MS4 Permit, SWMP, and elements of the SWMP. Identified conflicts are noted within the review checklist with follow-up action required. Known conflicts with other ordinances are presented and noted in the review checklist with follow-up actions required.
- Any information or data deemed missing or absent will be addressed and noted. The notes will indicate follow-up required, who will follow-up, and when the follow-up will be completed. Any notes generated outside of the review checklist and requires follow-up actions will be attached to the completed review.
- Independent summary of the results of the review will be established for review by the MS4 Committee and for the purposes of:
 - Identification of follow-up actions that may be necessary.
 - Partner agreement changes, additions, etc.
 - Significant changes that may be required of the SWMP or information in the SWMP based on results.
 - Qualitative explanation of the progress of SWMP implementation, perceived level of compliance, and any other relevant considerations.

Completed reviews are found in Attachment J. A completed review (and corresponding changes and/or modifications to the SWMP or elements of the SWMP) results in the execution of the self-certification form if it is determined the program is effective (or progressing towards effectiveness), in compliance with the issued MS4 Permit, and in compliance with applicable regulations. Completed annual self-certifications are found in Section 100.

500-8 SWMP Renewal

The SWMP is a perpetual document, and was developed to allow the document to evolve and remain an applicable document for an “infinite” or perpetual lifetime. However, the SWMP will be modified and re-certified during each new permit cycle (~5 year permit cycles) or permit issuance to reflect changes in permit requirements, update facilitation processes, and reflect current conditions more appropriately.

Section 600

Discharge Monitoring Program

600-1 Introduction & Objectives

Discharge monitoring is conducted for two primary purposes to support permit requirements and facilitation of the SWMP:

- Characterization of wet weather discharges—primarily from MS4 Outfalls for support of assessment activities associated with SWMP goals and the primary requirements of the permit.
- Characterization of dry weather discharges to assist with Illicit Discharge Detection & Elimination (IDD&E) source identification processes per Minimum Control Measure #3.

Characterization of discharges is the process of establishing a numeric concentration of a particular parameter sampled (e.g. mg/L, NTUs, etc.) and/or establishing supportive reasoning based on visual monitoring. Characterization is the default level of analysis required by the SWMP, as characterization allows the township to reasonably determine if discharges contain elevated pollutants. From time to time, and based on unforeseen circumstances, the MS4 Committee may determine calculation of pollutant loadings may be required—specifically if a Waste Load Allocation (WLA) associated with an issued Total Maximum Daily Load (TMDL) has been issued and assigned to the township's MS4 Permit. The Discharge Monitoring Program would be amended via Section 200 of the SWMP if this is the case.

Section 600 outlines the processes to analyze sampling data and/or establish appropriate visual monitoring data that supports SWMP processes and goals. Attachment N includes a Quality Control document (Quality Assurance Project Plan (QAPP)) for the purposes of ensuring data outlined in laboratory analysis reports and/or field reports is reasonably valid by controlling visual monitoring, sampling and laboratory analysis procedures.

600-2 Sampling Locations and Parameters

Wet Weather Screening/Sampling

Wet weather sampling locations will be determined by Municipal Separate Storm Sewershed (MS3) priority area classification and the MS4 Committee. Additionally, the MS4 Committee may outline additional or other wet weather sampling locations in a SWMP goal in Section 500. Screening/sampling locations are generally MS4 Outfalls and tied to a Municipal Separate Storm Sewershed (MS3) that has been classified as:

- High Priority Area, or
- Problem Area

However, a wet weather sampling or screening location may also be a discharge point (e.g. surface flow to an MS4 inlet) depending on the physical characteristics of the MS3 and the operator of the outfall that flow discharges to a receiving waterbody. Other conditions may warrant additional sampling locations. The following itemizes potential considerations, but is not limited to, for additional sampling locations:

- MS4 Outfall and/or inlet that connects to the MS4 in an MS3 classified as Low Priority Area where a condition has changed within the MS3 (e.g. new and active construction site)
- A new impairment on a defined waterway has been issued or established (either through a newly issued 303(d) list or found on PADEP Wave Silverlight) where an MS4 Outfall (or other applicable discharge point that can be sampled) within a Low Priority Area classified MS3 discharges to the waterway.
- A previously unknown outfall has been identified, and the MS4 Committee determines wet weather sampling is warranted as a component of the system identification process.
- A previously identified outfall that was previously and incorrectly identified as a private (or other) outfall is an MS4 Outfall, and characterization is necessary to preserve and/or change the MS3 priority area classification tied to the outfall.

The MS4 Committee will determine if additional sampling locations are warranted outside the normal sampling locations roster. East Lampeter Township currently has an established SWMP goal to “re-designate” MS4 Outfalls, and further define discharge points and the system in general. Priority Area classification and field investigations will determine sampling locations. Location maps of each individual wet weather sampling location is found at the end of this section, and are considered the normal sampling locations roster.

The Discharge Monitoring/Screening Field Reports are completed for each outfall and/or discharge point screened/sampled during a wet weather discharge event. A report is completed whether samples are acquired or not, as screening may be limited to visual observations. Field report templates and completed reports are found in Attachment O.

Dry Weather Screening/Sampling

Dry weather sampling is conducted for the purposes of supporting the IDD&E Plan, and more specifically with assisting with source identification. Section 800 outlines IDD&E Plan considerations. However, Section 600 and Attachment N reference dry weather sampling for the purposes of establishing quality control and the potential for encountered pollutants in dry weather samples leading to and/or supporting a SWMP goal.

The Discharge Monitoring/Screening Field Reports are completed for each outfall and/or discharge point screened/sampled during dry weather screening. A report is completed whether samples are acquired or not, as screening may be limited to visual observations. Field report templates and completed reports are found in Attachment O. More information related to dry weather screening procedures are found in the IDD&E Plan.

Parameters

Parameters are screened visually and/or by sample acquisition. The QAPP (found in Attachment N) outlines the standard set of parameters for sampling/screening and is based on the Pollutants of Concern listed in Section 500-2. The parameters for sampling are for both wet weather and dry weather screening. The IDD&E Plan further outlines the rationale behind the selected parameters for dry weather screening.

The township will select screening by sample acquisition based on any of the following:

- The MS4 Outfall and/or discharge point is tied to a High Priority classified MS3, where
 - The township will acquire wet weather screening data to measure progress of pollutant reductions (concentration of pollutant(s)) against SWMP goals based on Maximum Extent Practicable (MEP) methodology (see Section 600-4).
- The MS4 Outfall and/or discharge point is tied to a Problem Area classified MS3, where
 - The township is attempting to ascertain the character of discharges during wet weather, and ultimately determine a classification of the MS3 (per Section 300); or
 - The township is attempting to confirm the character of discharges during wet weather as a follow-up to previous sampling; or
 - The township developing a SWMP goal based on MEP and is attempting to quantify a pollutant reduction (concentration of pollutant(s)) during wet weather.
- The MS4 Outfall and/or discharge point is tied to a Low Priority Area classified MS3, where
 - It is determined by the MS4 Committee that the periodic visual screening revealed a potential pollutant not previously observed may be discharging during wet weather, and chemical analysis would be appropriate for confirmation and/or characterization of discharges that may have resulted in the visual issue.
- A new outfall has been encountered, and the township has initiated the MS3 delineation process (see Section 300).
- A condition has changed in any MS3 (e.g. new construction site), and the township has selected sampling to confirm and/or monitor for changes in the character of discharges that may be attributed to the changed condition for both wet and dry weather.
 - This would include if during normal daily operations, a discharge is observed where it is visually evident that run-off contains a pollutant parameter.
- Dry weather flow is observed from an MS4 Outfall and/or discharge point, where
 - The township has initiated IDD&E Plan processes for characterization of the discharge of a new dry weather flow and source identification; or
 - The township is facilitating IDD&E Plan processes to confirm the character of the discharge of an existing dry weather flow, or ascertain of the character of the discharge has changed.

The township will conduct visual screening based on any of the following:

- The MS4 Outfall and/or discharge point is tied to a High Priority classified MS3, where
 - Previous wet weather screening by sampling revealed the pollutant parameter(s) can be visually observed (e.g. sediment) for annual monitoring activities, and sampling is only required periodically based on the SWMP goal.
- The MS4 Outfall and/or discharge point is tied to a Low Priority Area classified MS3, where
 - The township screens visually at least once a permit term to assess if conditions have changed.
- A condition has changed in any MS3 (e.g. new construction site), and the township has selected visual screening to confirm and/or monitor for changes in the character of discharges that may be attributed to the changed condition for both wet and dry weather.
 - This would include if during normal daily operations, a discharge is observed where it is visually evident that run-off contains a pollutant parameter.
- The township is facilitating the IDD&E Plan, and screening MS4 Outfalls and/or discharge points during dry weather.

A Pollutant Guidance Table is provided at the end of this section that outlines probable pollutants/parameters based on visual observations.

600-3 Monitoring and Sampling Schedule

The MS4 Committee determines the annual planned screening and sampling schedule per Section 500. Screening and sampling timeframes are included in the SWMP schedule. The following protocols guide screening/sampling activities:

- A minimum of 72 hours of dry weather will be used to distinguish between separate rain events that would cause a wet weather discharge.
- Screening/sampling acquisition shall only be conducted during daylight hours.
- Processes outlined in Section 2 of the QAPP (Attachment N) are followed for sample acquisition and handling.
- A minimum of two monitoring cycles (per the USEPA “Protocol”) is conducted to ensure valid data.

600-4 Results and Evaluations

General

All screening/sampling activities are reflected on completed Discharge Monitoring/Field Screening Reports, and found in Attachment O. Screening only activities are evaluated within one week of completion of the activity. Activities that include sampling with analysis by the certified laboratory are evaluated within one week of receipt of the lab reports. The Discharge Monitoring/Field Screening Reports provide a section to indicate the results of the immediate evaluation. Copies of the reports are provided to the primary representative

for incorporation into the SWMP and any recommended follow-up actions that may be necessary or were completed.

All Discharge Monitoring/Field Screening Reports are reviewed during the Annual SWMP Review & Assessment (see Section 500). The reports provide the primary information to ascertain progress with reducing polluted discharges against SWMP goals based on MEP.

Maximum Extent Practicable (MEP)

MEP is the fundamental and numeric link between the municipality's stormwater discharges and the stream's water quality threshold. Numerically defining MEP is a detailed process that generally requires sampling (or characterization of stormwater discharges) of individual MS4 outfalls and the receiving streams. There are two ways to conceptually describe MEP:

- (1) The amount of actual reductions necessary to quantitatively confirm MS4 discharges are no longer causing and/or contributing to an impairment.
- (2) The maximum amount of reductions that can actually occur.

The word "actual" is an important consideration of both descriptions. At times, there is a general breakdown between what the *actual* pollutant loadings of discharges are comprised of and the selection of BMPs. Based on conditions in the township (and with receiving waterbodies), the township will determine MEP based on what actually could be reduced and ultimately historical data associated with program performance after implementation of the SWMP.

Where discharge monitoring is conducted with sample acquisition, MEP is the primary program management tool used by East Lampeter Township to monitor progress towards established SWMP goals. However, MEP can be used for SWMP goals where visual screening is conducted. MEP is applied to discharge monitoring in the following manner for SWMP facilitation:

- A quantitative SWMP goal is established by the MS4 committee with a specific and numeric value and timeframe. This may be either a reduction in a pollutant or maintaining the character of a discharge. However, SWMP goals will generally be associated with a reduction and/or elimination of a pollutant parameter.
 - A quantitative baseline was established through previous efforts (MS3 delineation process, Priority Area classification processes, or other).
 - The SWMP goal outlines a set of BMPs for implementation and facilitation (e.g. public education campaign, increased dry weather screening, additional operations and maintenance activities, installed pollutant reduction facility (e.g. rain garden), etc.).
- After and during the implementation of the BMPs, discharge monitoring via sample acquisition is conducted to generate appropriate data.
- The discharge monitoring data (via field reports) is reviewed during the Annual SWMP Review & Assessment to gauge if reductions, same level, or increased concentrations of the pollutant(s) parameters has occurred over the previous year.
 - If a reduction is observed, the amount of reduction is "matched up" with an interim milestone or next assigned interim milestone to ascertain if progress with the reduction is following the established SWMP goal and timeline.

- If the reduction observed does match the SWMP goal, the goal and components (implemented or planned BMPs) are maintained.
- If the reduction observed does not match the SWMP goal (falls short, and as defined in Section 500), a minor adjustment is necessary (this may be an adjustment in the timeframe or tweaking an implemented/planned BMP).
 - If the same level is observed (as in no reduction observed), an adjustment to the SWMP goal and selected BMPs will be necessary and is determined by the MS4 Committee. This may include implementation of additional BMPs as well.
 - If increased concentrations are observed, a significant adjustment is necessary. This may include significant adjustments to the SWMP goal or establishing a completely new goal.
- For SWMP goals utilizing visual screening, individual BMP goals are monitored and reviewed more extensively during annual assessments to ascertain progress. In turn, measurements of individual BMP goals become more critical. Individual MCM Plans outline criteria for measuring effectiveness of individual BMPs selected and implemented.

600-5 Reports

All locations (MS4 Outfalls, discharge points, etc.) are documented individually on the Discharge Monitoring/Field Screening Report (PADEP Outfall Screening Form). A template is provided in Attachment O. All completed reports are placed into Attachment O. The report template is set up to conduct either wet weather screening/sampling or dry weather screening/sampling to support the IDD&E Plan. Reports include the following attachments:

- All lab analysis reports are attached to the Discharge Monitoring/Field Screening Reports.
- Photographs of the screened/sampled location (important if only visual screening is conducted).
- Any additional notes.
- Results of an IDD&E investigation (if applicable) including enforcement actions if taken.

Section 700

Reporting

700-1 Objectives

The objective of this section of the Storm Water Management Program (SWMP) is to outline requirements and considerations for permit-required reporting of activities as outlined in the Municipal Separate Storm Sewer System (MS4) Permit. A copy of the MS4 Permit and corresponding corollary documents (submitted Notice of Intent (NOI) and received Approval of Coverage (for actual approvals received)) are located in Attachment L. Only one report is required to be submitted on an annual basis to the PA Department of Environmental Protection (PADEP).

700-2 Annual Reports

The Authorization to Discharge, Part B (Standard Conditions), Section 3 (Monitoring, Reporting, and Record Keeping), sub-section d (Periodic Reports) requires the submission of an Annual Report by East Lampeter Township. This is required because the township is located within the Chesapeake Bay Watershed. The Annual Report should be filed with the PADEP no later than October 31 of each year.

The deadline for submitting annual reports will change during the 2018-2022 permit cycle. The change and corresponding report due date(s) will be outlined in the SWMP schedule updates in Attachment E.

Data entry for the Annual Report will be conducted congruently with the Annual SWMP Review and Assessment. This will allow the township to appropriately address the information requirements of the PADEP Annual Report, which include:

- i. status of compliance with the conditions of this General Permit and progress towards meeting the measurable goals of each Minimum Control Measure (MCM)
- ii. status of progress towards achieving the statutory requirements of reducing the discharge of pollutants to the Maximum Extent Practicable (MEP) and complying with water quality standards
- iii. assessment of the appropriateness of the Best Management Practices (BMPs)
- iv. steps to be taken to address any deficiencies in the BMPs or other aspects of the SWMP developed by the permittee
- v. results of information collected and analyzed during the reporting period
- vi. summary of stormwater activities planned during the next reporting cycle
- vii. any proposed changes to the permittee's SWMP, including changes to BMPs, measurable goals, or responsible parties
- viii. notices, intergovernmental agreements, and other relevant documents if the permittee is relying on another governmental entity to satisfy any of its permit obligations

- ix. progress with implementation of the MS4 Total Maximum Daily Load (TMDL) Plan, including a summary of implementation and monitoring data of all control measures and of all BMPs implemented in connection with the MS4 TMDL Plan
- x. for new permittees, a letter signed by a municipal official, municipal engineer, or the municipal solicitor as an attachment to the first year report certifying the enactment of either an ordinance from an Act 167 Plan approved by the Department in 2005 or later; enactment of the appropriate MS4 Stormwater Management Ordinance; or enactment of an ordinance(s) that satisfies all applicable requirements in a completed and signed MS4 Stormwater Management Ordinance Checklist

The Annual Report Form found on the PADEP's website (<http://www.elibrary.dep.state.pa.us/dsweb/View/Collection-11564>) will be used for submission. Copies of submitted reports are found in Attachment K.

700-3 Event Reporting

Event reporting includes "one-time" events and changes required to be reported to the PADEP based on conditions of the permit and regulations. Processes, procedures, and considerations associated with spills (or similar events) in which natural resources and streams are threatened are outlined in the Illicit Discharge Detection and Elimination (IDD&E) Plan.

System Changes

Physical changes, system/facility alterations, and similar occurrences may result in noncompliance with the issued MS4 Permit conditions and requirements (e.g. polluted discharges will result from such changes and alterations). If non-compliance has been determined and certain unknown conditions have been encountered, notification to the PADEP regional office is required, including the following considerations:

- Existing, but previously unknown outfalls are reported in the next subsequent annual report correlating to the permit year the outfall was discovered.
- Newly proposed outfalls require notification at least 60 days prior to commencing a discharge where:
 - it is determined the proposed discharge will result in compliance (meets the terms and conditions) with the issued permit.
- Newly proposed outfalls require a change in permit coverage (from general permit to an individual permit), and prior to commencing a discharge:
 - notification is provided to the PADEP and,
 - an individual permit application is submitted, and the individual permit coverage is obtained prior to discharge.
- Physical changes and alterations (new equipment, system changes, etc.) will result in the discharge of pollutants.

Emergency/Spill Events (Immediate Reporting/Non-compliance Reporting)

Part A, Section III (Monitoring, Reporting, and Recordkeeping), sub-section 4 of the 2018 General Permit correctly outlines immediate reporting requirements. An MS4 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). A primary consideration for immediate reporting includes the:

- notification of the PADEP immediately after an accident, activity, or incident causes the release of a toxic substance or other substance that would cause and/or create pollution in receiving waterbodies, and could create a danger of pollution to users downstream. Oral notification to the PADEP is required within four hours, and
- notification of downstream users of such an event immediately.

Section 800

Minimum Control Measures (MCMs)

800-1 Introduction

The MCMs are elements of the Storm Water Management Program (SWMP) that facilitate the program and achievement of the plan's purpose and goals. At a minimum, each MCM plan will include the following:

- measureable goal(s) for each Best Management Practice (BMP) listed in the plan
- time required to undertake/implement a BMP (including frequency of action and interim milestones)
- person(s) and/or entities responsible for implementing/coordinating a BMP
- rationale for selection of a BMP and measurable goal(s)
- assessment criteria for determining/measuring success of the BMP(s)

BMPs under individual MCMs are selected based on two primary objectives:

- Pollution prevention (passive approaches)
 - observation and implementation of a set of activities and practices with the general intent to prevent pollution
- Pollution reduction (active approaches)
 - implementation of a set of chosen activities and practices with the intent to reduce pollution encountered or observed

Pollution prevention is guided by general principles (e.g. general stormwater pollution awareness and information under MCM 1, protection of inlets during a specific operation under MCM 6, etc.). Pollution reduction is guided by specific encountered issues tied to a delineated MS3s (e.g. public outreach related to sediment reduction in a specific Municipal Separate Storm Sewershed (MS3) under MCM 1, increased system maintenance in a MS3 for sediment removal under MCM 6, etc.).

MCMs and corresponding BMPs are set in place to support the SWMP overall and achieve pollutant prevention and/or pollutant reduction. Sets of BMPs under individual MCMs are chosen to support and facilitate a SWMP goal and/or process. Individual MCM Plans outline the processes for implementing and facilitating a BMP chosen to support a SWMP goal and/or process. Individual implemented BMPs are measured by the township for effectiveness. However, the group of BMPs selected under a quantitative SWMP goal are based on Maximum Extent Practicable (MEP) methodology (see Section 600-4).

Each MCM Plan is a “stand-alone” plan. However, Section 800 incorporates each MCM Plan into the SWMP and outlines primary considerations, decision criteria, development processes, and guidance for individual plans that East Lampeter Township will follow. The criteria and guidance is based on the overall decision rationale guidance for the SWMP, with the addition of allowing the township to maintain, modify, change, or eliminate a component.

The decision to do so requires guiding assessment criteria when reviewing components. Components are the actual activities and information performed or utilized for facilitating the SWMP and elements of the SWMP. Every BMP within an individual MCM Plan has components to facilitate the plan.

Assessment criteria and decision rationale to maintain, modify, change, or eliminate a component is based on:

- **MAINTAIN:** A component will be maintained if the measurement (interim milestone, supporting data, or similar) associated with the established goal or processes is:
 - being met (within 15 percent of the numeric measurement), or
 - exceeded, or
 - anticipation that it will be met (rationale will be provided), and
 - the component supports an active goal(s) and Pollutants of Concern of the SWMP.
- **MODIFY:** A component will be modified if an interim measurement associated with the established goal provides an indication the established goal will:
 - not be fully met (short by 15 percent to 33 percent of the numeric measurement), or
 - significant progress towards meeting the goal is perceived as not occurring (rationale will be provided), or
 - the component does not fully reflect actual conditions or required considerations, and/or
 - a modification is necessary due to a change in goals, Pollutants of Concern, a condition, or a focal area of the SWMP.
- **CHANGE:** A component will be changed (or exchanged) with another component if an interim measurement associated with the established goal provides an indication the established goal will:
 - not be met (short by more than 33 percent of the numeric measurement), or
 - an appropriate measurement of effectiveness cannot be established, or
 - anticipation that it will not be met (rationale will be provided), or
 - the component is not fully appropriate with consideration to SWMP or MCM Plan facilitation; and/or
 - the component no longer supports a goal(s) or Pollutant of Concern of the SWMP.
- **ELIMINATE:** A component will be eliminated (or removed) only:
 - when the MS4 Permit dictates elimination, or
 - regulations dictate elimination, or
 - the MS4 Committee deems the component “excessive” and other components support the goals of the SWMP and requirements of the MS4 Permit, or
 - the component is not appropriate or reflects actual conditions, or
 - the component has reached the end of its life cycle and a goal has been achieved.

The decision to maintain, modify, change, or eliminate a component will be outlined during the Annual SWMP Review and Assessment (Section 500-7) and reached during individual plan updates performed in conjunction with the annual assessment.

800-2 MCM 1 – Public Education and Outreach Plan (PEOP)

Education is an important step in working toward improving receiving water quality, both locally and regionally. By increasing public awareness and encouraging a change in the general public's approaches to reducing stormwater pollution, the township may reduce, eliminate, or prevent stormwater pollution caused by common daily activities. The PEOP is the portion of the SWMP related to public education and outreach efforts. It describes relevant results of the decision process and procedures for program development and implementation. The plan is a stand-alone summary that supports SWMP focal areas and goals.

The following are the standard baseline considerations that need to be addressed within the PEOP, per the U.S. Environmental Protection Agency (EPA) "Protocol":

- plans to inform individuals/groups about involvement with the stormwater program
- target audiences and why they are selected
- plans to inform individuals/households about reducing stormwater pollution
- targeted pollutant sources
- how the measurable goals were selected
- the number of people expected to be reached by the strategy in the permit term and/or permit years
- who is responsible for management and implementation of the program/BMPs
- how the success of the minimum measure will be evaluated
- the outreach strategy and methods that will be used to reach target audiences

East Lampeter Township will review and update the PEOP throughout the Annual SWMP Review and Assessment process. The existing PEOP is reviewed and assessed with an outline of potential changes and modifications developed during the Annual SWMP Review and Assessment (based on Section 800-1, SWMP goals, and encountered conditions from the previous permit year). Following the annual review (and per the SWMP schedule), the outline is finalized and the PEOP is updated with primary activities updated/reflected in the SWMP schedule. Section 500-4 summarizes primary activities and items addressed during the PEOP update and reflected in the SWMP schedule.

The following outlines considerations, decision processes, and details, associated with the primary items updated during each annual PEOP revision:

- PEOP annual update
 - follows the Annual SWMP Review and Assessment, which is based on processes described in Sections 500, 800-1, and other section of the SWMP that may have been tied to an individual plan in the PEOP previously
 - includes:
 - results of the assessment(s)
 - master target audience groups (TAGs)

- basis of selection of outreach materials/methods
 - basis of stormwater information on the website
 - focus areas of SWMP goals, other MCM Plans, etc. the PEOP will support
 - PEOP is aligned with the USEPA “Protocol” and the issued permit
- Master TAG listed updated
 - General TAGs are established or carried over into a new permit year where:
 - an individual SWMP or PEOP goal is on-going and includes the General TAG,
 - appropriate rationale has been established to keep or generate a General TAG listed, or
 - a General TAG represents a larger and a broader audience associated with a Priority TAG.
 - Priority TAGs are established or carried over into a new permit year where:
 - a new SWMP goal specifically identifies the Priority TAG(s),
 - an individual SWMP goal is on-going that includes the Priority TAG, or
 - appropriate rationale has been established that may not be supported by a SWMP goal that requires a Priority TAG to assist with investigation and SWMP goal development.
 - The master TAG list is marked and noted during the Annual SWMP Review and Assessment for changes and rationale. Following the annual review, and with the PEOP update:
 - Changes and rationale are selected based on the overall review of the PEOP and finalized SWMP goals for the permit year (e.g. selected outreach materials, targeted pollutants and sources, etc.).
 - The list is updated and inserted into the PEOP.
 - A matrix (or similar) is updated to reflect selected outreach materials and methods associated with individual TAGs and inserted into the PEOP.
- Outreach materials/methods for corresponding permit year selected
 - The outline generated for the PEOP update during the Annual SWMP Review and Assessment will include notes regarding the need to carry over or establish new plans to inform groups, TAGs, and individuals, associated with:
 - Pollutants of Concern,
 - pollutant sources,
 - an on-going or new SWMP goal, or
 - a potential and general PEOP goal based on appropriate rationale.
 - The outline is used to establish or support on-going and new plans for the permit year during the PEOP revision process.
 - The SWMP schedule identifies the PEOP update timeframe and date outreach materials are selected. The date for selecting materials/methods is best described as shortly after the PEOP annual update.
 - One outreach method/material shall include IDD&E-related information.
 - Materials/methods selected for outreach can be:
 - existing templates, information, or activities available for use,

- existing templates, information, or activities available for use that have been modified to reflect local conditions, SWMP goal, etc. more accurately, or
 - new information or activities generated to reflect local conditions, SWMP goal, etc. more accurately.
 - Outreach materials/methods are “tagged” with the following considerations at a minimum as a basis for content:
 - pollutants selected from the Pollutants of Concern List in Section 500
 - targeted pollutant sources
 - General and/or Priority TAGs
 - The number of persons, households, businesses, others the outreach material/method will reach will be identified for the permit year.
 - Measurement of effectiveness will be identified or confirmed with each outreach material/method. Several outreach materials/methods may be combined with a single measurement. Measurement of effectiveness may be selected from any of the following:
 - survey (or similar) associated with the individual outreach method,
 - supported by the progress and measurement of effectiveness tied with a SWMP goal,
 - documented participation for an active outreach method/activity, or
 - any other method deemed appropriate and with supporting rationale.
 - Follow-up activities will be outlined for each outreach material/method. Follow-up activities are denoted in the SWMP schedule. Follow-up activities may include:
 - measuring effectiveness and/or progress
 - notes for modification for future use
 - The person(s) responsible for development, distribution, and follow-up for each outreach activity is identified.
 - Passive outreach methods are selected to support general goals and outreach to General TAGs.
 - Active and passive outreach methods are selected to support focused SWMP goals and outreach to Priority TAGs.
 - Results of the outreach materials/methods selection process are incorporated into the PEOP.
- Outreach materials/methods distribution/implementation
 - Based on the results of the selection of outreach materials/methods and corresponding PEOP update, the SWMP schedule will be updated either immediately or at the next consecutive monthly program documentation update to reflect distribution/implementation dates.
 - Additional development milestones may be identified for individual outreach materials/methods, and are reflected in the SWMP schedule.
 - Outreach materials/methods are itemized as individual activities in the SWMP schedule.
 - The matrix (or similar) is denoted when an outreach method, activity, or similar occurs.
 - Stormwater information on website is updated

- This is denoted on the SWMP schedule and follows the Annual SWMP Review and Assessment and PEOP revision.
 - The person(s) or entity(s) responsible for the website update is noted during the PEOP update process.
- The update occurs annually.
- The information to be included (or updated annually) on the website is outlined during the PEOP update. Information included on the website that may be updated on an annual basis includes, at a minimum:
 - SWMP goals
 - summary of focused efforts for the upcoming permit year
 - summary of events, results, etc. associated with SWMP goals, focused efforts, etc. from the previous permit year
 - annual public meeting date regarding SWMP implementation and progress
 - public participation activities
- Information that is generally found on the website on a continuous basis includes, at a minimum:
 - directions to report spills, dumping, illicit discharges, etc.
 - links to the PADEP and the USEPA websites
 - general stormwater pollution information
 - SWMP contact information for questions, inquiries, etc.
 - MS4 Permit requirements

The following are considered also with plan development, review, facilitation, and updates:

- SWMP goals will indicate public education and outreach BMPs that are/will be used for facilitation of the goal.
 - BMPs included in active SWMP goals will be assessed and measured per Section 800-1, based on the previously established individual measurement reference.
 - BMPs included in new or modified SWMP goals will include an individual measurement reference.
- Measurement references may be included in an overall numeric SWMP goal tied with discharge monitoring and MEP methodology.
- TAGs are divided into sub-groups:
 - Priority TAGs are tied to a specific identified and/or confirmed source within an MS3 (e.g. a specific residential sub-division, a specific commercial complex, a specific restaurant, etc.).
 - General TAGs are based on groups determined under “targeted pollutant sources” (e.g. private owners of PCSM facilities discharging to the regulated MS4, construction firms, restaurants, etc.).
- Active outreach involves direct communications, interaction, and activities. Passive outreach involves indirect communications (e.g. mailing a pamphlet or making a pamphlet available at municipal offices).
- An outreach activity may become available after the PEOP update and during the permit year (from an identified partner or similar). If the activity supports overall

program objectives and goals, it is defined per PEOP protocols and incorporated into the plan.

- Use the minimum MS4 Permit requirements for selection of BMPs to implement and facilitate a SWMP goal.
 - The MS4 Permit requires the following at a minimum:
 - BMP #1: written plan
 - BMP #2: list of TAGs
 - BMP #3: annually publish a newsletter, pamphlet, flyer or website that includes general stormwater educational information, a general description of the SWMP, and/or information about the township's stormwater management activities
 - BMP #4: distribute annually two stormwater educational materials and/or information to TAGs in addition to the newsletter, website, etc., including displays, posters, booklets, fact sheets, etc.
 - Example:
 - A delineated MS3 that is primarily comprised of residential land uses is classified as a High Priority Area due to elevated nutrients and sediment in discharges.
 - The residents (home owners) are a Priority TAG.
 - Distribute a pamphlet under BMP #4 that focuses on nutrients and sediment related to homeowners. Distribute to the Priority TAG (indicate number of households that will be reached by the effort).
 - Measure effectiveness annually through the measurement reference (e.g. public survey) or progress towards the overall SWMP goal (e.g. numeric reduction at the MS4 Outfall).
- IDD&E-related items are included in public outreach efforts (e.g. how to report a spill, what are illicit discharges, and so on).

800-3 MCM 2 – Public Involvement and Participation Plan (PIPP)

Public involvement and participation is essentially an extension of public education and outreach efforts because it provides additional educational exercises that may increase awareness, and/or assist the township with protecting/improving water quality and adhering to the water quality standards requirements of the Clean Water Act (CWA). The PIPP is the portion of the SWMP related to public involvement and participation efforts. It describes the relevant decision process and procedures for SWMP development and implementation. It is a stand-alone summary that supports SWMP focal areas and goals. It is acceptable to combine MCM 1 and MCM 2 into one plan.

The following are the standard baseline considerations that need to be addressed by the PIPP, per the USEPA "Protocol":

- how the public was involved in Notice of Intent (NOI) submittal and SWMP development
- the plan for public involvement in program development and implementation
- target audiences for the involvement program

- person(s) responsible for the management and implementation of the program/elements
- types of public involvement activities including, where appropriate:
 - citizen representatives on a local stormwater management panel
 - public hearings
 - citizen volunteers to educate other individuals about the program
 - volunteer monitoring
- how success of minimum measures is evaluated
- how measurable goals were selected

East Lampeter Township will review and update the PIPP throughout the Annual SWMP Review and Assessment process. The existing PIPP is reviewed and assessed with an outline of potential changes and modifications developed during the Annual SWMP Review and Assessment (based on Section 800-1, SMWP goals, and encountered conditions from the previous permit year). Following the annual review (and per the SWMP schedule), the outline is finalized and the PIPP is updated with primary activities updated/reflected in the SWMP schedule. Section 500-4 summarizes primary activities and items addressed during the PIPP update and reflected in the SWMP schedule.

The following outlines considerations, decision processes, and details associated with the primary items updated during each annual PIPP revision:

- PIPP annual update
 - follows the Annual SWMP Review and Assessment, which is based on processes described in Sections 500, 800-1, and other section of the SWMP that may have been tied to an individual plan in the PIPP previously
 - includes:
 - results of the assessment(s)
 - TAGs identified for public involvement
 - basis of selection of involvement activities
 - basis of annual public meeting content and attendees
 - focus areas of SWMP goals, other MCM Plans, etc. the PIPP will support
 - status or initial considerations for desired or implemented long-term public involvement activities (volunteer monitoring, etc.)
 - PIPP is aligned with the USEPA “Protocol” and the issued permit
- Date of annual public meeting selected
 - follows the PIPP update with the date selected denoted in the SWMP schedule
 - The date may be selected during the PIPP update process. However, the SWMP defaults to a later selection date to allow any set-up activities that may be required prior to date selection (e.g. confirming attendance of a speaker, the meeting should follow another public involvement activity that has yet to have a date confirmed, etc.).
- Selection of activity or activities the township will promote during the permit year for public participation
 - The outline generated for the PIPP update during the Annual SWMP Review and Assessment will include notes regarding carrying over or establishing new

activities for public participation and will include considerations associated with:

- NOI submission required for upcoming year,
 - targeted MS3s,
 - targeted audiences,
 - an on-going or new SWMP goal, or
 - a potential and general PIPP goal based on appropriate rationale.
- The outline is used to establish or support on-going and new plans for the permit year during the PIPP revision process.
 - The SWMP schedule identifies the PIPP update timeframe and date public involvement activities are selected. The date for selecting activities is best described as shortly after the PIPP annual update.
- Selected public participation activities can be:
 - an activity sponsored, facilitated, etc. by a partner listed in the SWMP
 - a standing annual event or activity facilitated by the township or partner that supports the overall objectives of the SWMP (e.g. annual stream clean-up, etc.)
 - a standing annual event or activity facilitated by the township or partner that supports the specific objectives and/or goals of the SWMP (e.g. volunteer monitoring, etc.)
 - a “special” event or activity that supports a targeted area and is based on a SWMP goal
 - an activity that supports SWMP development and/or facilitation
 - desired participation that will be supported by documented observations and reports for activities conducted by TAGs, businesses, or others that can be reasonably tied to proposed and implemented educational outreach efforts (or other MCMs, Impaired Waters Plan, etc.) being conducted
 - continuation of activities based on documented observations through field investigations, reports from TAGs/individuals/etc., or similar that reveals activities conducted by TAGs, businesses, or others that can be reasonably tied to successful educational outreach efforts (or other MCMs, Impaired Waters Plan, etc.) previously or currently being conducted
- Public participation/involvement activities are “tagged” with the following considerations, at a minimum, as a basis for content:
 - targeted areas
 - General and/or Priority TAGs
- The SWMP schedule is updated to reflect timeframes of selected activities.
- The number of persons, households, businesses, etc. that will be invited to participate will be identified for the permit year.
- Measurement of effectiveness will be identified or confirmed with each involvement activity. Several activities may be combined with a single measurement. Measurement of effectiveness may be selected from any of the following:
 - survey (or similar) associated with the activity,

- supported by the progress and measurement of effectiveness tied with a SWMP goal,
- documented participation for an active involvement activity, or
- any other method deemed appropriate and with supporting rationale.
- Follow-up activities will be outlined with each involvement activity. Follow-up activities are denoted in the SWMP schedule. Follow-up activities may include:
 - measuring effectiveness and/or progress
 - notes for modification for future use
- Indicate the person(s) responsible for development, distribution, and follow-up for each involvement activity.
- Results of the public involvement selection process are incorporated into the PIPP.

The following are considered also with plan development, review, facilitation, and updates:

- SWMP goals will indicate public involvement and participation BMPs that are/will be used for facilitation of the goal.
 - BMPs included in active SWMP goals will be assessed and measured per Section 800-1, based on the previously established individual measurement reference.
 - BMPs included in new or modified SWMP goals will include an individual measurement reference.
- Measurement references may be included in an overall numeric SWMP goal tied with discharge monitoring and MEP methodology.
- The Pequea Creek Watershed Association (PCWA) and Lancaster County Clean Water Consortium (LCCWC) will be contacted to outline events for the upcoming permit year that may support SWMP goals and/or other efforts.
- The township will schedule and conduct one public meeting annually, to include descriptions of SWMP development and implementation. Corollary considerations for the public meeting include:
 - Priority TAGs will be invited.
 - The general public and/or General TAGs will be invited.
 - A summary of the results of the most current Annual SWMP Review and Assessment will be provided.
 - A summary of planned activities and focal areas for the current/upcoming permit year will be provided.
 - An inquiry of concerns will be completed and noted for potential future follow-up.
 - A notice of events will be provided that allows the public to participate (e.g. stream clean-up, road clean-up, tree planting, etc.).
 - IDD&E requirements will be presented.
- Public notice will be provided regarding the development of an NOI for a new permit cycle and corresponding planned meeting for approval by the township board. The public will be afforded the opportunity to comment on the NOI prior to and during the public meeting where NOI approval is scheduled for council vote.
- An involvement activity may become available after the PIPP update and during the permit year (from an identified partner or similar). If the activity supports overall

program objectives and goals the activity is defined per PIPP protocols and incorporated into the plan.

- Public notice will be provided regarding the draft SWMP and subsequent permit cycle SWMP renewals, as well as the corresponding planned public meeting for approval of the SWMP by the Board of Supervisors. A copy of the SWMP will be available at township offices for review by the public. The public will be afforded the opportunity to comment on the SWMP prior to and during the public meeting where SWMP approval is scheduled for board vote.
- Use the minimum MS4 Permit requirements for selection of BMPs to implement and facilitate a SWMP goal.
 - The MS4 Permit requires the following, at a minimum:
 - BMP #1: written plan
 - BMP #2: public notice prior to adoption of any relevant ordinance
 - BMP #3: solicit public involvement and participation from TAGs (including effort to solicit public reporting of suspected illicit discharges)
 - Example
 - A delineated MS3 that is comprised primarily of residential land uses is classified as a High Priority Area due to elevated nutrients and sediment in discharges.
 - Schedule a road clean-up to sweep up sediment, and invite the Priority TAG to participate.
 - Communicate to the watershed alliance the issue and corresponding receiving waterway with a request to assist with development and facilitation of a stream clean-up. If accepted by the watershed alliance, provide notice to the Priority TAG (and others if applicable) of the event.
 - Provide a summary of the activity at the annual public meeting.

The township provides adequate public notice for meetings and/or adoption of the NOI and SWMP per Pennsylvania code. Copies of notices are kept in the PIPP.

800-4 MCM 3 – Illicit Discharge, Detection, and Elimination (IDD&E)

Illicit discharge detection and elimination is a crucial element of the SWMP to protect receiving waterways from concentrated pollutants that may result in the regulated system causing and/or contributing to an impairment. Elimination and/or control of illicit discharges will allow the township to focus on stormwater run-off efforts to protect and/or improve the water quality of receiving waterways. The IDD&E Plan is the portion of the SWMP related to illicit discharge, detection, and elimination efforts. It describes the relevant decision process and procedures for program development and implementation. It is a stand-alone summary that supports SWMP focal areas and goals.

The following are considered the standard baseline considerations that need to be addressed by the IDD&E Plan, per the USEPA “Protocol”:

- how a storm sewer map is or will be developed and how it will be updated

- the regulatory mechanism that will be used to prohibit discharges (i.e., ordinance), including:
 - why the mechanism was chosen
 - a description of the plan to develop the mechanism or copy of relevant sections if already developed
 - a description of the plan to ensure compliance of this regulatory mechanism through enforcement procedures and actions
- a plan to detect and address illicit discharges, including:
 - dry weather screening for non-stormwater flows
 - field tests of selected chemical parameters
 - a mechanism to address on-site sewage disposal systems that flow into the storm drainage system
- procedures for:
 - locating priority areas
 - tracing source of discharges (including techniques)
 - removing the source of the illicit discharges
 - program evaluation and assessment
- a plan to inform public employees, businesses, and the general public of the hazards of illegal discharges and improper disposal (including how this will coordinate with public education, pollution prevention/ good housekeeping)
- person(s) responsible for management and implementation of the program/BMPs
- how success of minimum measures is evaluated
- how measurable goals were selected

East Lampeter Township will review and update the IDD&E Plan in throughout the Annual SWMP Review and Assessment process. The existing IDD&E Plan is reviewed and assessed with an outline developed of potential changes and modifications during the Annual SWMP Review and Assessment (based on Section 800-1, SMWP goals, and encountered conditions from the previous permit year). Following the annual review (and per the SWMP schedule), the outline is finalized and the IDD&E Plan is updated with primary activities updated/reflected in the SWMP schedule. Section 500-4 summarizes primary activities and items addressed during the IDD&E Plan update and reflected in the SWMP schedule. The following outlines considerations, decision processes and details associated with the primary items updated during each annual IDD&E Plan revision:

- IDD&E Plan annual update
 - follows the Annual SWMP Review and Assessment, which is based on processes described in Sections 500, 800-1, and other section of the SWMP that may have been tied to an individual plan or process described in the IDD&E Plan previously
 - includes:
 - results of the assessment(s)
 - System Map that correctly identifies dry screening locations
 - ordinance that correctly lists prohibited discharges and enforcement actions

- IDD&E Plan that correctly outlines first-level processes for detecting and eliminating potential illicit discharges and/or pollutants prior to entry into the regulated system, and includes:
 - reporting forms capturing identification and corrective actions and results
 - consideration of construction sites (or similar) that have the potential to discharge to entry points into the regulated system
 - IDD&E Plan that correctly outlines second-level processes when illicit discharges, potential pollutants, dry-weather flows, etc. are encountered in the system (inherently tied to MCM 6 and the O&M Plan), and includes:
 - investigation/reporting forms capturing tracing, identification, and corrective actions and results
 - processes/indicators for tracing
 - IDD&E Plan that correctly outlines third-level (“back-stop”) processes for dry weather screening at outfalls and discharge points when evidence of illicit discharges and dry-weather flows are encountered, and includes:
 - field and laboratory parameters for testing and corresponding indicators to assist tracing and source identification (tied to the Discharge Monitoring Program)
 - processes/indicators for tracing
 - investigation/reporting forms that capture tracing, identification, and corrective actions and results
 - outfall selection for dry-weather screening criteria
 - minimum dry weather period prior to allowing screening activities (e.g. 72 hours)
 - independent goals of the IDD&E Plan (e.g. decreased encounter of potential illicit discharges prior to entry to the regulated system)
 - including measurement thresholds
 - IDD&E Plan is aligned with the USEPA “Protocol” and the issued permit
- Selection of outfalls/discharge points for dry-weather screening.
 - This follows the IDD&E Plan update with the date(s) selected denoted in the SWMP schedule.
 - The date may be selected during the IDD&E Plan update process. However, the SWMP defaults to a later selection date to allow any set-up activities that may be required prior to date selection (e.g. Priority Area investigation and re-classification based on results of the annual review).
 - High Priority Area/Problem Area outfalls/discharge points are dry-weather screened once annually.
 - Low Priority Area outfalls/discharge points are dry-weather screened once a permit cycle.
 - The list (dry weather screening inventory) of outfalls/discharge points selected and/or confirmed for screening (and corresponding priority area classification) for the upcoming permit year is updated and inserted into the IDD&E Plan.

- The SWMP schedule is updated to reflect timeframes for dry-weather screening.
- Outfall/discharge point dry-weather screening
 - The PADEP Outfall Screening Form is used.
 - The dry-weather screening inventory is updated to reflect the following for individual outfalls/discharge points for dry-weather screening:
 - Pending
 - denotes dry-weather screening has yet to occur
 - Completed
 - denotes dry-weather screening has been completed, and:
 - no follow-up (Priority Area reclassification, tracing, etc.) is required, and
 - follow-up activities have been completed.
 - Active
 - denotes dry-weather screening has been completed, and follow-up activities are required or in progress (e.g. tracing investigation, lab results, enforcement, etc.).
 - Excluded
 - denotes the group of outfalls/discharge points within Low Priority Areas is excluded from the current permit year dry-weather screening activities.
 - The screening scheduling process outlined in Section 600 (Discharge Monitoring Program) is followed prior to execution of screening activities.

The following is considered also with IDD&E Plan development, review, and updates:

- SWMP goals will indicate IDD&E BMPs that are/will be used for facilitation of the goal.
 - BMPs included in active SWMP goals will be assessed and measured per Section 800-1, based on the previously established individual measurement reference.
 - BMPs included in new or modified SWMP goals will include an individual measurement reference.
- Measurement references may be included in an overall numeric SWMP goal tied with discharge monitoring and MEP methodology.
 - Successful identification and removal of an illicit discharge (or enforcement) is considered an indicator of an effective IDD&E Plan.
- The map is up to date and shows the locations of outfalls and names and locations of receiving waterbodies.
- MS4 Outfalls and/or applicable discharge points are screened once annually for systems in High Priority Areas or Problem Areas.
- MS4 Outfalls and/or applicable discharge points are screened at a minimum of once a permit cycle in Low Priority Areas.
- Applicable outfalls (if existing) and/or applicable discharge points are screened at a minimum of once a permit cycle in Excluded Areas.
- The IDD&E Plan references SWMP Discharge Monitoring Program (Section 600) for screening and sampling procedures.

- Use the minimum MS4 Permit requirements for selection of BMPs to implement and facilitate a SWMP goal.
 - The MS4 Permit requires the following at a minimum:
 - BMP #1: written plan
 - BMP #2: develop and maintain a map of the regulated system (including all inlets connected to the regulated system) and outfalls
 - BMP #3: update the map
 - BMP #4: screen MS4 Outfalls
 - BMP #5: enact an ordinance that prohibits non-stormwater discharges
 - BMP #6: provide educational outreach to public employees, businesses, property owners, etc. about the IDD&E Plan
 - Example:
 - A delineated MS3 that is primarily comprised of residential land uses is classified as a High Priority Area due to elevated nutrients and sediment in discharges.
 - Indicate in public outreach materials to the Priority TAG the process to report observed sediment at inlets, on roads, or at the outfall/discharge point.
 - Screen the MS4 Outfall and/or discharge point annually during dry weather for dry weather flows, but schedule the next dry weather screening for a different time of the year in the next permit cycle. Complete a field report for each screening.
 - Post a summary of the IDD&E Plan on the website.
 - Discharge monitoring (wet weather screening/sampling) will determine the presence of nutrients and sediment in the system that is being flushed out to receiving waterbodies during rain events.
 - Ensure the System Map reflects field conditions of the High Priority Area.
 - Ensure public educational materials include IDD&E information, and the Annual Employee Training Plan (under MCM #6) includes IDD&E Plan review.

800-5 MCM 4 – Construction Site Run-off Control

Construction sites (especially with Disturbed Soil Areas (DSAs)) are well-known sediment run-off generation sites when they do not have properly installed and maintained controls. Additionally, construction sites have an increased potential for generating non-stormwater discharges or polluting stormwater run-off through normal construction activities (paving, saw-cutting, waste, stored materials, and similar). The Construction Site Run-off Control Plan is related to efforts for reducing polluted run-off in stormwater from construction activities. It is the portion of the SWMP describing the relevant decision process and procedures for program development and implementation. It is a stand-alone summary that supports SWMP focal areas and goals.

The following are the standard baseline considerations that need to be addressed by the Construction Site Run-off Control Plan, per the USEPA “Protocol”:

- the regulatory mechanism that will be used to require erosion and sediment (E&S) controls at construction sites (i.e., ordinance), including:
 - why this mechanism was chosen
 - a description of plan to develop the mechanism or copy of relevant sections, if already developed
 - a description of the plan to ensure compliance of this regulatory mechanism through sanctions and enforcement
 - description of procedures for when certain sanctions are used
- requirements for operators to implement E&S control BMPs and control waste at construction sites that may impact water quality (concrete truck washout, chemicals, litter, etc.)
- procedures for site plan review incorporating consideration of potential water quality impacts including:
 - description of procedures and rationale for identifying sites for plan review (if not all reviewed)
 - estimated number and percentage of sites with plan review
- procedures for receipt and consideration of information submitted by the public
- procedures for site inspection and enforcement of control measures, including prioritization of sites for inspection
- person(s) responsible for management and implementation of the program/BMPs
- how success of minimum measures is evaluated
- how measurable goals were selected

East Lampeter Township will review and update the Construction Site Runoff Control Plan throughout the Annual SWMP Review and Assessment process. The existing plan is reviewed and assessed with an outline developed of potential changes and modifications during the Annual SWMP Review and Assessment (based on Section 800-1, SMWP goals, and encountered conditions from the previous permit year). Following the annual review (and per the SWMP schedule), the outline is finalized and the Construction Site Runoff Control Plan is updated with primary activities updated/reflected in the SWMP schedule. Section 500-4 summarizes primary activities and items addressed during the plan update and reflected in the SWMP schedule.

The following outlines considerations, decision processes and details associated with the primary items updated during each annual Construction Site Runoff Control Plan revision:

- Construction Site Runoff Control Plan annual update
 - follows the Annual SWMP Review and Assessment, which is based on processes described in Sections 500, 800-1, and other section of the SWMP that may have been tied to the Construction Site Runoff Control Plan previously
 - includes:
 - results of the assessment(s)
 - process associated with applicants obtaining permit coverage (grading, National Pollutant Discharge Elimination System (NPDES), or other) is

correctly described (and includes reference to Lancaster County Conservation District (LCCD) for issuing permits)

- process associated with plan review, and includes:
 - reference that all plans are reviewed
 - checklist for review of plans
 - communication of the conditions and status of the corresponding MS3 (e.g. priority classification, concerns, etc.)
 - identification of entry points to the regulated system that may receive discharge from the site
 - communication of expectations and requirements for protecting entry points to the regulated system
 - communication of requirements and expectation of an E&S Control Plan, Post Construction Stormwater Management (PCSM) Plan, and Preparedness, Prevention, and Contingency (PPC) Plan for NPDES permitted construction sites
 - inventory of all upcoming, active, and recently closed (within past three years) construction sites
- process for receiving and addressing public complaints, and includes:
 - inventory (spreadsheet) of complaints and status of complaint (pending, active, and closed/resolved)
- process for site inspections (including prioritization of sites for inspection), and includes:
 - checklist(s) for site inspections
 - prioritization of inspections:
 - High Priority Areas, Problem Areas, and sites that may discharge to entry points of the regulated system are afforded first priority.
 - Sites that will not discharge to entry points of the regulated system are afforded lower priority.
 - First priority sites are inspected as follows:
 - Entry points to the regulated system are inspected weekly during active earth disturbance activities, and monthly during other construction activities.
 - Sites are inspected monthly (or at least once for projects with shorter earth disturbance durations) during active earth disturbance activities.
 - A site is inspected when a complaint is received.
 - Lower priority sites are inspected when a complaint is received.
 - Lower priority sites are converted to first priority sites with the installation of storm sewer that is connected to the regulated system.
 - enforcement and follow-up protocols:
 - first-time offenders offered guidance and/or education
 - second-time offenders provided written warning

- enforcement provided for repeat offenders and/or repetitive violations
 - construction site inventory sheet includes denotation of site operators and corresponding offenses to track level of enforcement.
- process for follow-up of captured and/or unknown sites operating without a permit
- independent goals of the plan (e.g. no repetitive deficiencies for a site inspected)
 - including measurement thresholds
- Construction Site Runoff Control Plan is aligned with the USEPA “Protocol” and the issued permit
- Field inspections:
 - Checklist(s) documenting inspections and follow-up activities (if required) are used and catalogued.
 - System entry point inspection checklist includes the following considerations:
 - Inlet protection devices (if required) are operational and sound.
 - Sediment, debris, or similar build-up is observed at entry point or between the construction site and entry point.
 - Staining is observed at entry point or between the construction site and entry point.
 - Site inspection checklist includes the following considerations:
 - Ensure the E&S Control Plan, PCSM Plan (for during construction), and PPC Plan are implemented and maintained by the site operator for NPDES-permitted sites.
 - E&S controls (silt fence, preserved vegetation, entrance, sediment basins, etc.) are operational and sound, and in appropriate locations.
 - Waste controls (dumpsters, concrete washout, stored materials, portable toilets, etc.) are operational and sound, and in appropriate locations.
 - Permanent SWM facilities installed are protected (or will be “cleaned” for facilities used during construction) from construction operations.

The following is considered also with plan development, review, facilitation, and updates:

- SWMP goals will indicate control BMPs that are/will be used for facilitation of the goal.
 - BMPs included in active SWMP goals will be assessed and measured per Section 800-1, based on the previously established individual measurement reference.
 - BMPs included in new or modified SWMP goals will include an individual measurement reference.
- Measurement references may be included in an overall numeric SWMP goal tied with discharge monitoring and MEP methodology.
- Ensure the Memorandum of Agreement (MOA) with the LCCD is current and up-to-date regarding issuing NPDES permits for construction activities.

- The township does not issue building permits until the NPDES permit has been issued.
- The Construction Site Run-off Control Plan includes a log summarizing inspection activities by LCCD, the township, and any other applicable agency.
- The Construction Site Run-off Control Plan includes a log summarizing considerations (including complaints) submitted by the public.
- An appointed township representative attends all pre-construction meetings to communicate:
 - general expectations (controls for E&S Plan, controls for PCSM Plan, and waste controls (PPC Plan), and the expectation by the township that the owner/operator will facilitate these plans.
 - expectation of the township that the site operator will not discharge polluted stormwater or non-stormwater to the regulated system (protect inlets) (reference ordinance)
 - status of the area the work will be conducted in (e.g. High or Low Priority Area, associated SWMP goals, issues currently under investigation, etc.)
 - planned inspections by the township
 - planned activities by the township in the area (both planned SWMP activities and activities that are a result of the proposed construction)
- Reference the minimum MS4 Permit requirements for selection of BMPs to implement and facilitate a SWMP goal.
 - The MS4 Permit requires the following, at a minimum:
 - BMP #1: written plan
 - BMP #2: ordinance requiring implementation of E&S control BMPs
 - BMP #3: requirements for construction site operators to control waste that may impact water quality
 - BMP #4: procedures for receipt and consideration of public inquiries and concerns
 - Example:
 - A delineated MS3 that is primarily comprised of residential land uses is classified as a High Priority Area due to elevated nutrients and sediment in discharges.
 - Provide information and direct an applicant to LCCD for an earth disturbance permit (NPDES Permit).
 - Attend pre-construction meeting and communicate relevant information (see above) regarding expectations and township's activities.
 - Inspect surrounding area and system weekly when DSAs exist.
 - Inspect the construction site at least once during earth disturbance activities to ensure site operator is facilitating the E&S Plan, PCSM Plan, and PPC Plan.
 - Communicate to the site operator (and notify LCCD) the nature of any inquiries and complaints, and request the site operator indicate how site conditions associated with a valid complaint will be remedied.

- Request a summary of inspection activities by LCCD upon completion of the construction project (or annually if a multi-year project is underway).

800-6 MCM 5 – Post-Construction Stormwater Management (PCSM)

PCSM facilities provide both water quality and water quantity control functions. Appropriately maintained PCSM facilities are necessary to preserve the water quality treatment function that will be incorporated into an MS3 (or to create a new MS3). Additionally, PCSM facilities may provide increased water quality control function that may assist the township with a SWMP goal tied to an area. The PCSM Plan is the portion of the SWMP related to efforts for controlling, preventing, or minimizing water quality impacts from permanent PCSM facilities and BMPs in new development and redevelopment. It describes the relevant decision process and procedures for program development and implementation. It is a stand-alone summary that supports SWMP focal areas and goals.

The following are the standard baseline considerations that need to be addressed by the PCSM Plan, per the USEPA “Protocol”:

- specific priority areas to be addressed in the program
- how the program is specifically tailored to the local community (minimize water quality impacts, maintain pre-development conditions)
- structural (wet ponds, filtration practices, infiltration practices, etc.) and non-structural (policies or ordinances, educational programs, etc.) BMPs included in the program
- the mechanism that will be used to address post-construction runoff (i.e., ordinance), including:
 - why the mechanism was chosen
 - a description of plan to develop the mechanism or copy of relevant sections if already developed
- how the long-term operation and maintenance (O&M) of BMPs will be ensured
- person(s) responsible for management and implementation of the program/BMPs
- how success of minimum measures are evaluated
- how measurable goals were selected

East Lampeter Township will review and update the PCSM Plan throughout the Annual SWMP Review and Assessment process. The existing plan is reviewed and assessed with an outline developed of potential changes and modifications during the Annual SWMP Review and Assessment (based on Section 800-1, SWMP goals, and encountered conditions from the previous permit year). Following the annual review (and per the SWMP schedule), the outline is finalized and the PCSM Plan is updated with primary activities updated/reflected in the SWMP schedule. Section 500-4 summarizes primary activities and items addressed during the PCSM Plan update and reflected in the SWMP schedule.

The following outlines considerations, decision processes and details, associated with the primary items updated during each annual PCSM Plan revision:

- PCSM Plan annual update

- follows the Annual SWMP Review and Assessment, which is based on processes described in Sections 500, 800-1, and other section of the SWMP that may have been tied to the PCSM Plan previously
- includes:
 - results of the assessment(s)
 - inventory of PCSM and permanent SWM (including water quality treatment) facilities and BMPs is up to date and accurate
 - includes denotation for “active” inspection facilities
 - includes accurate MS3 tag
 - current age of facility with denotation of expected life cycle
 - includes information outlined below in additional considerations section
 - communication process for proposed new development and/or redevelopment relating to MS3 characterization, and corresponding controls, focus, etc. the development will need to consider
 - New facilities and storm sewer infrastructure are incorporated into the System Map.
 - selection process for inspecting PCSM facilities and BMPs (including date/timeframe for selecting PCSM facilities and BMPs for inspection)
 - description of the inspection process (including checklists for each facility and BMP type), notification requirements and thresholds, remedial actions (if necessary), and follow-up actions (including results of inspections)
 - independent goals of the plan (e.g. all O&M Verification Forms returned for a given permit year)
 - including measurement thresholds
 - PCSM Plan is aligned with the USEPA “Protocol” and issued permit
- Selection of PCSM facilities for inspection
 - Follows the PCSM Plan update with the date(s) selected denoted in the SWMP schedule.
 - The date may be selected during the PCSM Plan update process. However, the SWMP defaults to a later selection date to allow any set-up activities that may be required prior to date selection (e.g. PCSM Plan review required updates to the inventory prior to selection of facilities and BMPs for inspection).
 - The outline generated for the PCSM Plan update during the Annual SWMP Review and Assessment will include notes regarding carrying over or establishing new activities for PCSM inspections or focus areas and will include considerations associated with:
 - changes to a priority area classification for an MS3
 - PCSM facilities and BMPs in newly listed High Priority and Problem Area classified areas are listed for inspection.
 - Facilities and BMPs installed three years or less are selected for inspection.

- Facilities and BMPs “flagged” for deficient maintenance are inspected for two years following remediation and/or corrective actions.
 - Facilities and BMPs where the O&M Verification Form was not returned are selected for inspection.
 - Remaining facilities and BMPs are distributed between five groups. The groups are rotated during each permit year for inspection to allow all PCSM facilities and BMPs inspections to occur in a permit cycle.
- The SWMP schedule is updated to reflect timeframe of PCSM facility and BMP inspections.
- The SWMP schedule is updated to reflect distribution of the O&M Requirements Notice (and applicable O&M Verification Forms). The schedule includes a denotation of the last day for receipt of verification forms.
 - Notice is provided to owners/operators of PCSM facilities and BMPs of scheduled inspections.
- PCSM facility and BMP inspections
 - Checklist(s) is used that corresponds to facility and BMP type (e.g. separate checklists used for detention basins, rain gardens, etc.), and is based on the intended design and function of the facility and/or BMP.
 - Inspections are conducted during dry-weather.
 - Results of inspections are summarized and forwarded to the owner/operator of the facility and/or BMP.
 - The SWMP schedule is updated with follow-up actions that are required and a result of an inspection.
- O&M requirements notice to owners/operators of PCSM facilities and BMPs
 - Notice regarding expected and required maintenance of PCSM facilities and/or BMPs (including water quality treatment facilities and/or BMPs) are provided annually to all owners/operators.
 - Notices will provide a denotation if the specific facility and/or BMP will be inspected by the township during the permit year.
 - For PCSM facilities and/or BMPs not scheduled for inspection during the permit year, an O&M Verification Form will be provided with the notice.
 - The owner/operator is required to return the form verifying the PCSM facility and/or BMP is operating as intended and maintenance is being performed.
 - Owners/operators of new PCSM facilities and/BMPs are provided a more detailed summary of the PCSM Plan and corresponding obligations and requirements of the new owner/operator to maintain the facility and/or BMP.

The following is considered also with plan development, review, facilitation, and updates:

- SWMP goals will indicate control BMPs that are/will be used for facilitation of the goal.
 - BMPs included in active SWMP goals will be assessed and measured per Section 800-1 based on the previously established individual measurement reference.
 - BMPs included in new or modified SWMP goals will include an individual measurement reference.

- Measurement references may be included in an overall numeric SWMP goal tied with discharge monitoring and MEP methodology.
- Plan references Section 400 of the SWMP regarding the Qualifying Local Program (QLP).
- Ensure the MOA with the LCCD is current and up-to-date regarding issuing NPDES permits for construction activities – specifically requirements associated with PCSM Plans required by an issued NPDES Construction Permit.
- An appointed township representative communicates to a developer, designer, or similar for a proposed development and/or re-development:
 - status of the area the development and/or re-development will be conducted in (e.g. High or Low Priority Area, associated SWMP goals, issues currently under investigation, etc.)
 - planned activities by the township in the area (including pollutant reductions (if applicable) the township is working towards
 - reference to the ordinance and PCSM requirements (including state BMP manuals)
 - If a PCSM facility and/or BMP will be transferred to a new owner upon completion of construction (e.g. facility/BMP is located on a property with a new home within a new residential subdivision), ensure the developer, designer, and others understand that the long-term operation and maintenance requirements need to be communicated to the new owner.
- Ensure inventory of PCSM facilities and BMPs (including township-owned facilities and implemented BMPs) is up-to-date and accurate. The inventory should indicate:
 - general information (owner, the party responsible for maintenance, and so on)
 - location of the facility and/or BMP
 - type of facility and/or BMP
 - projected performance of the BMP
 - summary of required maintenance to maintain performance
 - an indication if the facility and/or BMP is considered a Low Impact Development (LID) practice.
- New PCSM facilities are inspected annually for three years by the township. The MS4 Committee will determine adjustments to the inspection frequency after three years, and primarily based on if the maintenance of the facility and/or BMP is occurring.
- A letter from the owner/operator of the PCSM facility and/or BMP is provided annually confirming the owner/operator is maintaining the PCSM facility and/or BMP as required (O&M Verification Form).
 - applies where the owner/operator has demonstrated consistent ability to maintain the facility and/or BMP as intended
- The PCSM Plan includes a log summarizing inspection activities of PCSM facilities and/or BMPs (along with a denotation if annual letter has been provided by the owner/operator regarding maintenance).
- Reference the minimum MS4 Permit requirements for selection of BMPs to implement and facilitate a SWMP goal.
 - The MS4 Permit requires the following at a minimum:
 - BMP #1: written plan

- BMP #2: require implementation of structural and/or non-structural BMPs, and that the implemented BMPs comply with the ordinance
- BMP #3: ensure controls are installed
- BMP #4: enact an ordinance to address PCSM run-off
- BMP #5: encourage and expand LID practices in development and re-development
- BMP #6: ensure adequate O&M of all PCSM facilities and/or BMPs
- Example:
 - A delineated MS3 that is primarily comprised of residential land uses is classified as a High Priority Area due to elevated nutrients and sediment in discharges.
 - Provide information and direct an applicant to LCCD for an earth disturbance/construction permit (NPDES Permit).
 - Communicate relevant information (see above) regarding expectations and township's activities.
 - If the operation and maintenance of the new facility and/or BMP is transferred to a new owner, confirm it was communicated to the new owner their obligations, requirements, and similar.
 - If it was not, communicate requirements.
 - Monitor the existing outfall and/or discharge point tied to the area the new facilities and/or BMPs are located in to ascertain any changes to the character of discharges, or
 - Monitor the new outfall and/or discharge point tied to the area the new facilities and/or BMPs are located to ascertain the character of discharges.
 - See Section 700 regarding reporting for additional considerations.
 - Potentially ascertain if the new facilities and/or BMPs have helped the township progress towards a quantitative SWMP goal for pollutant reductions, or
 - Confirm the new facilities and/or BMPs have significantly altered the monitored trend of pollutant reductions associated with the SWMP goal.
 - Inspect the new facilities and/or BMPs annually for the first three years to ensure appropriate maintenance is occurring.

800-7 MCM 6 – Good Housekeeping for Municipal Operations

Municipal operations are generally the largest endeavors undertaken by a municipality. Therefore, operations have the greatest potential to pollute run-off. However, appropriately managed operations have the greatest potential to protect water quality at the same time. Selecting appropriate BMPs under MCM 6 can provide the most impact associated with pollution reduction where issues are encountered. The O&M Plan is the portion of the SWMP related to efforts to prevent or reduce pollutant run-off from municipal operations. It describes the relevant decision process and procedures for program development and

implementation. It is a stand-alone summary that supports SWMP focal areas and goals. The O&M Plan is generally the most comprehensive plan of the stand-alone MCM plans.

The following are the standard baseline considerations that need to be addressed by the O&M Plan, per the USEPA “Protocol”:

- a description of the O&M program to prevent or reduce pollutant runoff from municipal operations including:
 - municipal operations impacted by the O&M program
 - a list of municipally-owned industrial facilities discharging to the MS4 that are subject to industrial stormwater permitting (including permit number or industrial NOI)
- any government employee training program used to prevent/reduce stormwater pollution from municipal activities, including:
 - a description of exiting materials used
 - a description of how the training program is coordinated with public information and illicit discharge minimum measures
- a program description addressing:
 - maintenance activities, schedules, and long-term inspection procedures for controls to reduce floatables/ pollutants to the MS4
 - controls for reducing or eliminating discharges from streets, parking lots, storage yards, etc.
 - procedures for proper disposal of waste removed from MS4 and municipal operations
 - procedures to ensure flood management projects are assessed for impacts on water quality and existing projects are assessed for incorporation of additional water quality protection
- person(s) responsible for management and implementation of the program/BMPs
- how success of minimum measures are evaluated
- how measurable goals were selected

The USEPA “Protocol” further provides a verification requirement that “the training program for the municipal staff achieves the intended goal of educating staff associated with reducing pollutant runoff from municipal operations.” An annual training plan is developed as a component of the annual SWMP review and corresponding O&M Plan review.

East Lampeter Township will review and update the O&M Plan throughout the Annual SWMP Review and Assessment process. The existing O&M Plan is reviewed and assessed with an outline developed of potential changes and modifications during the Annual SWMP Review and Assessment (based on Section 800-1, SWMP goals, and encountered conditions from the previous permit year). Following the annual review (and per the SWMP schedule), the outline is finalized and the O&M Plan is updated with primary activities updated/reflected in the SWMP schedule. Section 500-4 summarizes primary activities and items addressed during the plan update and reflected in the SWMP schedule.

The following outlines considerations, decision processes and details associated with the primary items updated during each annual O&M Plan revision:

- O&M Plan annual update

- follows the Annual SWMP Review and Assessment, which is based on processes described in Sections 500, 800-1, and other section of the SWMP that may have been tied to the O&M Plan previously
- includes:
 - results of the assessment(s) (including documented confirmation of the previous permit year training plan)
 - The inventory captures and reflects all township facilities and activities conducted (including activities that are contracted out (e.g. roadway repaving, painting, installation of storm sewer pipe, mowing, etc.)) that have the potential to generate pollution or pollute runoff.
 - Activities are “assigned” to each facility.
 - Individual facilities include a denotation if an impact assessment has been conducted. All facilities in the regulated area are subject to an impact assessment.
 - The SWMP schedule is updated to reflect the timeframe of any assessments yet to be completed or required due to a changed condition.
 - Impact assessments occur once, but additional assessments are conducted as a result of modifications and changes to the facility.
 - Sub-facilities are noted for primary facilities (e.g. fueling station, salt storage and loading, etc. at the Public Works yard).
 - Standard Operating Procedures (SOPs) are provided (or referenced) within the O&M Plan for each activity listed in the inventory.
 - Water quality protection BMPs are assigned to each activity and relevant facilities.
 - Implementation and observation of water quality protection BMPs inherently follow the pollution prevention objectives of the overall program.
 - BMPs implemented are controls to reduce and/or prevent polluted discharges from facilities and activities.
 - The inventory correctly reflects activities and corresponding facilities, along with assigned water quality protection BMPs for the activities.
- Maintenance and/or operational activities selected for the incoming permit year are selected and outlined.
 - Selected activities are based on any of the following:
 - regular maintenance for a facility
 - MS3 field investigations revealed deficiencies requiring attention and maintenance
 - A master list from the previous permit year is maintained of encountered deficiencies from field investigations for incorporation into the schedule for upcoming permit year. However, emergency activities (e.g. sinkhole) are repaired immediately.
 - Dry-weather screening revealed deficiencies requiring attention and maintenance.

- Inspections of township-owned facilities and BMPs revealed deficiencies requiring attention and maintenance.
- A SWMP goal requires a specific activity or set of activities to support facilitation of the goal (pollution reduction objectives).
- any other activities deemed appropriate by the MS4 Committee
- The SWMP schedule is updated to reflect selected and/or regularly occurring maintenance activities.
- Plan processes described
 - Inspection procedures
 - Inspections are conducted to serve two primary purposes:
 - Ascertain if implemented water quality BMPs are performing as intended and reducing and/or preventing the discharge of pollutants.
 - Periodically ensure facilities (and select activities) are operating as intended and are structurally sound with the intent to ascertain if pollutants are being generated (e.g. leaking fuel pump, stormwater run-off interaction with stored materials, etc.).
 - Individual BMP sheets outline inspection procedures for the specific controls.
 - The O&M Plan outlines frequency of inspections: both regular and event inspections.
 - Regular inspections are periodic inspections. Frequency is based on a priority level of probability to discharge pollutants or pollute stormwater runoff for facilities.
 - Temporary-type BMPs (e.g. inlet protection during road work operations) are included in the regular inspection frequency only for the BMPs implemented at that time.
 - Event inspections are driven by defined conditions, and include all facilities and implemented BMPs. Event inspections are triggered by rain events forecasted at 1 inch of rain or greater.
 - Event inspections are conducted prior to the forecasted rain, during the event for every 24 hours of continuous rain, and after the rain event.
 - Checklist(s) contained within the O&M Plan are used for inspections (and outline procedures in conjunction with individual BMP sheets for follow-up based on encountered deficiencies). Completed inspections are logged and inserted into the O&M Plan.
 - Waste disposal procedures
 - Waste disposal procedures are incorporated into the O&M Plan via an established sub-plan (Waste Management Plan).
 - The Waste Management Plan includes consideration of waste removed from streets, the MS4, and from discharge points.

- Spill response and control procedures
 - Spill response and control procedures are incorporated into the O&M Plan via an established sub-plan (Spill Control Plan).
- O&M schedule development
 - This is conducted in conjunction, and as a result of, the O&M Plan review and update, and specifically with the maintenance and/or operational activities selected for the incoming permit year.
 - This is outlined in a chart format (or similar) to include the timeframes of planned activities.
 - includes milestone if public notices are required for development and distribution
 - includes reference, time, or actual activity associated with implementing and/or maintaining water quality protection BMPs
 - The schedule includes O&M Plan supporting inspections.
 - Timeframes selected for inspections are based on activities of the given timeframe. The annual assessment will provide denotation of improvements to certain activities that should be inspected.
 - The assessment will further provide an indication if an inspection will provide support for measuring the progress of a goal (e.g. repetitive trainings associated with a common activity that has been found deficient can be measured for effectiveness based on results of inspections).
 - Primary activities planned for the year are reflected in the master SWMP schedule.
 - Contracted activities are included in the schedule, along with the contracted entity.
 - Water quality protection BMPs and associated training that has been planned for the year are communicated to the contractor. Contracted entities are invited to relevant training where training is focused on respective activities of the contracted entity.
 - The schedule is reviewed monthly and necessary changes/modifications are conducted as an update to the schedule.
- Annual employee training plan development
 - This is denoted in the SWMP schedule and includes:
 - inventory review and update
 - selection of maintenance and/or operational activities for the permit year
 - identified deficiencies based on review of previous permit year inspection records
 - The annual training plan focuses on training municipal staff (and contractors are invited for operations performed by contractors on behalf of the township) related to:
 - maintenance and operational activities that have the potential to pollute and conducted by the township and corresponding water quality protection BMPs
 - IDD&E considerations (including spill response and control)

- maintenance of stormwater infrastructure
 - maintenance of implemented structural BMPs
- Selected training topics are based on:
 - deficiencies encountered in previous permit cycles where training has been selected to improve performance and reduce and/or prevent the discharge of pollutants
 - infrequent activity selected for the permit year where training has been selected to prepare for the activity
 - common activities where requirements may have changed or a “refresher” has been selected
 - a polluted discharge occurred with a given activity, where training has been selected to improve the prevention and/or reduction of the discharge of pollutants for similar activities in the future
- All proposed training events are included in the training plan. Events where the training materials have yet to be finalized will have a denotation on the SWMP schedule for finalizing training materials.
- The SWMP schedule is updated with a denotation of primary training events, and the training plan is inserted into the O&M Plan, with copies distributed to staff.
- Prioritization of scheduled training events are based on scheduled activities, as in training is conducted prior to the scheduled operational activity.
- Contracted activities are invited to training (including applicable “toolbox talks” type training events).
 - Water quality protection BMPs and associated training that has been planned for the year are communicated to a contractor. Contracted entities are invited to relevant training where training is focused on respective activities of the contracted entity.
- Primary employee training events
 - Primary employee training events are exercises where:
 - multiple departments, divisions, etc. are involved in the training event
 - outside consultants, contractors, etc. are invited to the training
 - is an IDD&E-focused training event
 - Training is not limited to primary employee training events. Primary training approach includes:
 - “one-on-one” training with selected personnel conducting certain activities
 - “tail-gate” or “toolbox” talks conducted in-house

The following is considered also with plan development, review, facilitation, and updates:

- SWMP goals will indicate control BMPs associated with Standard Operating Procedures (SOPs) that are/will be used for facilitation of the goal.
 - BMPs included in active SWMP goals will be assessed and measured per Section 800-1 based on the previously established individual measurement reference.
 - BMPs included in new or modified SWMP goals will include an individual measurement reference.

- Measurement references may be included in an overall numeric SWMP goal tied with discharge monitoring and MEP methodology.
- The O&M Plan includes two primary sub-plans incorporated into the plan:
 - Waste Management Plan
 - Spill Response and Control Plan
- An annual training plan is developed each year outlining the planned training activities and information that will be reviewed. Training will occur monthly.
 - One of the training sessions is focused on IDD&E activities.
 - Businesses contracted by the township to conduct township operations will be invited to relevant trainings (e.g. mowing contractor would be invited to training focused on open space BMPs).
 - Trainings would involve considerations for the SOP itself and the set of BMPs (water quality protection BMPs) that are assigned to the SOP to protect water quality.
 - Training shall be designed specifically for different departments and their duties and daily operations and how those duties and operations relate to stormwater management. The township will document training activities, employees in attendance, and other applicable information. The objective is to train municipal employees on stormwater management and the various ways to minimize or prevent pollutant discharges. Training shall be designed to include the following:
 - annual training to public works personnel in the recognition and reporting of illicit discharges
 - annual training to public works personnel in good housekeeping and pollution prevention practices that are to be employed during road, street, and parking lot maintenance
 - annual training to public works personnel in good housekeeping and pollution prevention practices that are to be employed in and around maintenance and public works facilities
 - annual training to public works personnel in good housekeeping and pollution prevention practices that are to be employed in and around recreational facilities
 - public works personnel shall have training in spill response
 - office and public works personnel shall have training in how to respond to a complain regarding an illicit discharge
- An SOP (with focus on the actual activity – no reference to water quality considerations at first) exists for every activity conducted by the township.
 - A set of controls (or BMPs) designed to protect water quality and reduce the potential for polluted run-off is assigned to each SOP.
 - The sets of BMPs will be taken from, and modified to reflect the township more appropriately, the Lancaster Inter-municipal Committee (LIMC) Good Housekeeping Guidance and BMP Manual.
 - Modifications to the SOP may be conducted to better incorporate a control or BMP.

- An inventory of township-owned facilities and township conducted activities (both self-performed and contracted) is reviewed annually to ensure it is up-to-date and accurate.
 - The inventory indicates areas (MS3s) where facilities are located, and where activities will be performed.
 - A documented “Water Quality Impact Assessment” is conducted for each facility to prioritize facilities from higher potential to pollute receiving waterways to very low potential to pollute receiving waterbodies. The assessment is revisited if conditions or activities change at the facility.
 - An intent of the assessment is to further outline physical controls or BMPs that may be necessary to protect water quality.
- A schedule will be maintained outlining timeframes and durations that standard activities will be conducted.
 - Timeframes and durations may be increased for a specific area (e.g. High Priority Area) where an increase may be necessary to assist, or was determined it is required to support, an established SWMP goal.
- Primary objective of good housekeeping is pollution prevention for “normal” and “every-day” activities. Certain activities or changes in frequency of activities (e.g. increased system maintenance for removal of sediment for areas encountered during an inspection) are selected to help achieve the pollution reduction objective generally supported by an overall SWMP goal.
- Reference the minimum MS4 Permit requirements for selection of BMPs to implement and facilitate a SWMP goal.
 - The MS4 Permit requires the following at a minimum:
 - BMP #1: facilities and activities inventory
 - BMP #2: written plan (O&M Plan)
 - BMP #3: employee training program
 - Example:
 - A delineated MS3 that is primarily comprised of residential land uses is classified as a High Priority Area due to elevated nutrients and sediment in discharges.
 - A set of operational activities are planned (as a component of a SWMP goal) to reduce nutrients and sediment in discharges.
 - Street sweeping frequency is set for once a month to remove sediment build-up on streets.
 - Inlets, catch basins, etc. are cleaned twice a year to remove sediment build-up and reduce the potential for the sediment to be flushed via outfall during rain events.
 - The activity of applying turf fertilizers is removed from township facilities.
 - The annual training plan is completed, and training is conducted regarding street sweeping and system cleaning (along with considerations of water quality protection controls and BMPs).

- Discharge monitoring and screening activities will help determine if adjustments are necessary to the frequency of current activities or other activities are necessary.

Section 900

Pollutant Reduction Plans (PRPs) and Coordination Plan(s)

900-1 Introduction

The primary objective and purpose of this section is to outline and address the township's Impaired Waters Plan. Section 900 includes not only the guiding process for the Impaired Waters Plan, but also relevant sub-sections that support or help facilitate the Impaired Waters Plan and key sections of the plan.

Section 900 includes considerations for coordination plans, as such plans will generally support Stormwater Management Program (SWMP) efforts and goals associated with impaired waters and pollution prevention/reduction through partners and other entities operating in the township.

900-2 Coordination Plan(s)

A coordination plan defines the process, logistics, operations, and considerations by which East Lampeter Township will work and coordinate SWMP efforts with other entities that are subject to separate National Pollutant Discharge Elimination System (NPDES) requirements (or similar), and located within the jurisdictional boundaries of the township (e.g. PA Department of Transportation (PennDOT) Municipal Separate Storm Sewer System (MS4) Permit) or located adjacent to the township. The MS4 Committee will determine the extent of depth for any coordination plan, making sure it is also acceptable to the coordinating partner. A coordination plan can be very detailed and include an Intergovernmental Cooperation Agreement, or the coordination plan can be simple and outlined/confirmed in e-mail format.

Any coordination plan will address and include the following details at a minimum:

- contact information and responsible persons for each coordinating entity;
- purpose/background regarding the coordination;
- additional participants and/or effected entities as a result of the coordination;
- location(s) of the coordination efforts;
- costs associated with the coordination and responsibilities for costs;
- timelines or milestones associated with the coordination; and
- long-term considerations (e.g. maintenance responsibilities)

Coordination plans may be developed for the following conditions, but not limited to:

- regional and/or multi-municipal BMP or facility implementation and maintenance;
- facility and/or BMP implementation that provides benefit to the township and is located in an area that is affected or would affect discharges associated with the

township's MS4, and is implemented by a non-profit, non-governmental organization (NGO), private entity, or similar (e.g. watershed alliance);

- MS4 discharges connect to another entity's storm sewer system or facility, and are subject to terms and conditions of an issued NPDES permit under the Clean Water Act (CWA);
- another entity's storm sewer system or facility subject to terms and conditions of an issued NPDES permit under the CWA discharges to the township's MS4; or
- a "large" and private storm sewer system generally associated with large institutional facilities (whether subject to an NPDES permit or not) discharges to the township's MS4, and the conditions warrant a coordination plan to assist the facility with pollution prevention/reduction to protect the township's MS4 and discharges

It is important to note the SWMP goal(s) that the coordination plan will address: do so within the purpose/background section of the plan. If a quantitative goal exists, the coordination plan should outline the specifics of the goal(s) so that the coordinating entity understands what the township is trying to achieve. Copies of coordination plans can be found in Attachment P.

PennDOT Coordination

PennDOT is subject to the terms and conditions of an issued MS4 Permit. PennDOT's MS4 Permit outlines the following conditions:

- PennDOT MS4 System
 - These are the conveyance systems owned and/or operated by PennDOT, which are designated or used for collecting or conveying stormwater associated with PennDOT roads, highways, bridges, and related structures.
- PennDOT MS4 System Subject to the Permit
 - PennDOT MS4 System located in Urbanized Areas (UAs) of the United States as defined by 40 CFR §122.32(a)(1)
- Coordination with other MS4s
 - The post-construction requirements of this permit shall be coordinated with the local municipal MS4. All transfers of responsibilities for maintenance or operation of any BMP must be clearly defined and documented in writing in an agreement between PennDOT and the applicable municipal MS4.
- Transfer of Ownership or Control; Transfers to Municipalities
 - PennDOT's permit is not transferable to any person without notice to and approval by the PA Department of Environmental Protection (PADEP).
 - Any portion of the PennDOT MS4 system subject to this permit may be removed from the scope of this permit and be transferred to a local government unit as part of an agreement with the applicable municipality, provided that PennDOT shall make mutually-agreeable transfer arrangements with the municipality through a written agreement.

Some PennDOT roads are located within the jurisdictional boundaries of the township. Attachment B includes a PennDOT road map for the township. State roads in the township include:

- State Road 0023 (Walnut Street Extension/New Holland Pike)

- State Road 0030 (U.S. Route 30 By-Pass/Lincoln Highway)
- State Road 0340 (Old Philadelphia Pike)
- State Road 0462 (Lincoln Highway)
- State Road 0896 (Eastbrook Road/Hartman Bridge Road)
- State Road 1001 (Greenfield Road (Greenfield Rd/US 30 interchange))
- State Road 1003 (Horseshoe Road)
- State Road 1005 (Mount Sidney Road)
- State Road 2029 (Strasburg Pike)
- State Road 2034 (Windy Hill Road)
- State Road 2043 (Oakview Road)
- State Road 2045 (N. Ronks Road)
- State Road 3028 (Pitney Road)

There is significant interaction between the township's MS4 and PennDOT's road system/corresponding MS4. Section 300-8 outlines the person responsible for PennDOT coordination. Copies of coordination plans with PennDOT can be found in Attachment P.

Other Coordination

Other coordination is required for conditions where the township's system is inter-connected with an entity also subject to an NPDES Permit under the CWA umbrella (e.g. MS4 Permit, Industrial Stormwater Permit, etc.).

Private entities located within the township's jurisdiction are subject to NPDES Permits issued under the CWA. These entities are primarily subject to an Industrial Stormwater Permit (PAG-03) issued by the PADEP. Coordination is required to allow the township to understand the nature of each entity's permit conditions and discharge limits, where applicable. Additionally, the township's MS4 is inter-connected with several storm sewers of industrial/commercial entities or other municipalities subject to an NPDES Permit as well.

Coordination plans will generally involve the following entities:

- All Quality Alum Foundary (Industrial Stormwater)
- City of Lancaster (MS4 Permit/Major Sewage Facility with CSO)
- Conagra Foods-National Pretzel Lanc (Industrial Stormwater)
- FedEx Corp (Industrial Stormwater)
- High Associates Ltd (Joint Chapter 91.38 Pesticides Permit)
- High Steel Structures LLC (Industrial Stormwater)
- Leacock Township (MS4 Permit)
- McNeil Consumer Pharm Co (Industrial Stormwater)
- Rolling Frito Lay Sales LP (Industrial Stormwater)
- Schmitts Alum Foundary Inc (Industrial Stormwater)
- Treehouse Private Brands Inc (Industrial Stormwater)
- United Parcel Svc Inc (Industrial Stormwater)
- Upper Leacock Township (MS4 Permit)
- West Lampeter Township (MS4 Permit)
- Worley & Obetz Inc (PAG-05/PPCGRS)

Several facilities and entities subject to Discharge of Stormwater Associated with Industrial Activities (PAG-03) have been issued a No Exposure Certification. These entities include:

- Bosch Security Sys Inc
- RR Donnelley (Donnelley Financial LLC)
- Source Interlink

900-3 Impaired Waters Plan

The primary purpose of the Impaired Waters Plan is to outline:

- how discharges of Pollutants of Concern will be controlled,
- how the township will ensure discharges will not cause and/or contribute to exceedances of water quality standards, and
- measures and BMPs that will control these discharges.

The Impaired Waters Plan primarily focuses on structural Best Management Practices (BMPs) and facilities that are or will be implemented to provide a pollutant reduction and/or control. Types of structural BMPs and facilities the township may choose include, but are not limited to:

- rain gardens
- infiltration trenches
- naturalized landscape
- bio-swales
- riparian buffers
- wetlands
- stream/floodplain restoration
- stream stabilization
- basin retrofits
- batch basin inserts
- in-line ultraviolet (UV) bacteria treatment facility

The Impaired Waters Plan is considered active with receiving waterways where an impairment exists, and considered the response if a previously unimpaired waterway becomes impaired or a new impairment has been identified on any receiving waterway. Once developed, the full Impaired Waters Plan will be located in Attachment R. However, Section 900 incorporates the Impaired Waters Plan into the SWMP and outlines guidance, decisions and processes for development and implementation of the SWMP.

The SWMP itself is designed and operates to monitor if discharges will (or are) cause and/or contribute to exceedances of water quality standards. SWMP goals are developed, monitored, and assessed annually to reduce and/or prevent discharges with elevated Pollutants of Concern. Quantitative SWMP goals rely on multiple BMPs across the Minimum Control Measures (MCMs) and the Impaired Waters Plan to achieve pollutant reductions based on Maximum Extent Practicable (MEP) methodology.

The Impaired Waters Plan includes sub-plans based on either permit requirements or specific encountered conditions. The sub-plans serve as Pollutant Reduction Plans (PRPs). Sub-plans of the Impaired Waters Plan can include, but are not limited to a:

- Total Maximum Daily Load (TMDL) Plan
- Chesapeake Bay Pollutant Reduction Plan (CBPRP)
- Nutrient and/or sediment reduction PRP
- Pathogens PRP
- Metals PRP

TMDL Plans and/or PRPs include a public participation requirement for development, approval, and implementation. Public participation involves a copy of the plan made available for review and comment by the public, public notice regarding the plan, a 30 day public comment period, comments made during a public meeting regarding the plan, and responding to the comments on the plan.

Impaired Waters Plan Elements

Monitoring facilitated by the township may result in a determination that specific discharges may cause an impairment, or discharges may result in exceedance of water quality standards to a receiving waterway that:

- is attaining all or some uses, and no impairments are identified with the receiving waterway;
- parameters encountered in discharges are not associated with an impairment or exceedance of water quality standards already established on a receiving waterway, but the parameter(s) may result in additional impairments; or
- there is no specific permit requirement (e.g. CBPRP) identified or listed for the type of discharges encountered.

A SWMP goal will be established if the above conditions are encountered. BMPs selected under individual MCMs to facilitate the SWMP goal are detailed within the specific MCM Plans. Structural BMPs and/or facilities selected to facilitate the SWMP goal(s) are detailed in the Impaired Waters Plan (or a sub-plan). The SWMP goal(s) may initially identify structural BMPs and/or facilities for development and implementation to reduce polluted discharges, or the annual review (and corresponding iterative process) may result in adding a structural BMP and/or facility to achieve goal reductions.

The details of the structural BMP and/or facility will be outlined within the main part of the Impaired Waters Plan. Details will include:

- name provided to the BMP and/or facility
- description of the BMP and/or facility
- SWMP goal the BMP and/or facility is tied to
- location of the BMP and/or facility
- the corresponding MS3, outfall, and receiving waters
- the drainage and/or treatment area
- the pollutant reductions that the BMP and/or facility is intended to achieve
- timeframe for design and implementation (and associated corollaries (e.g. permits))

- maintenance requirements
- maintenance timeline (e.g. 20 years) before re-assessment
- names of individuals, entities, and others associated with design, implementation, and maintenance
- procedures for measuring performance of the BMP and/or facility after implementation

Sub-plans of the Impaired Waters Plan will address specific permit-related polluted discharges (e.g. TMDL Plan, Pathogens PRP, etc.). The sub-plans will provide similar details as noted above, but will be more specific to the impairment cause. However, the Impaired Waters Plan will include a master structural BMP and/or facility inventory that lists all BMPs and/or facilities planned, implemented, and maintained. New structural controls are reported annually in the PADEP Annual Report.

Coordination plans may be required for certain structural BMPs and/or facilities. The Impaired Waters Plan will note any coordination considerations for individual BMPs and/or facilities.

900-4 Pequea Creek TMDL Plan

A TMDL was established in 2001 (revised 2006) for all stream segments within two sub-basins located in the Pequea Creek watershed. Portions of East Lampeter Township located in the Pequea Creek watershed are within one of the identified sub-basins (Sub-basin 1). The cause of the impairments has been identified as Phosphorus and sediment. The TMDL only requires reductions associated with load allocations (LA). As defined by the EPA, LAs are best estimates of “the portion of a receiving water’s loading capacity that is attributed either to one of its existing or future nonpoint sources of pollution or to natural background sources.” However, the TMDL does have an established Waste Load Allocation (WLA) for point sources; but with no reductions required.

East Lampeter Township engaged the Lancaster Farmland Trust to ascertain conditions and opportunities within the agricultural community where water quality benefits may be realized. Due to the fact the Pequea Creek TMDL provides a focus on non-point source pollution and associated reductions, any assistance provided by the township to the agricultural community would be captured and outlined by the SWMP. Efforts will be outlined in a plan format suitable to the township with an emphasis on how the assistance is aligned with the Pequea Creek TMDL. Any plans associated with the agricultural community or outside the realm of the Nutrients/Sediment PRP is located in Attachment Q.

900-5 Nutrient/Sediment Pollutant Reduction Plans (PRPs)

The PADEP 2018 MS4 Permit (both for general and individual permits) outlines requirements for Nutrient/Sediment PRPs for any permitted municipalities with drainage to receiving waterbodies impaired by nutrients and/or sediment. Tributaries and reaches within both the Mill Creek, Pequea Creek, and Conestoga River watersheds include impairments to

waterbodies caused by nutrients and/or sediment. The Nutrients/Sediment PRP(s) is considered a sub-plan of the Impaired Waters Plan. However, the individual PRP(s) is located in Attachment S. The Nutrients/Sediment PRP(s) and CBPRP have been combined into a single document.

The Nutrient/Sediment PRP(s) will be organized into primary sections based on HUC-12 watersheds. Sub-sections will be developed based on primary tributaries within each HUC-12 watershed. For the township, the primary sections of the Nutrients/Sediment PRP(S) will be organized as follows:

- Lower Conestoga River
- Muddy Run-Mill Creek
- Eshleman Run-Pequea Creek

The township desires to implement structural BMPs and/or facilities within local MS3s where SWMP facilitation reveals potential nutrient and/or sediment discharge issues. In turn, this approach will address discharges that may cause and/or contribute to exceedances of water quality standards, while providing reductions that will benefit the local waterways. The receiving waterbodies list in section 300 outlines reaches and segments with nutrient/sediment impairments.

The Nutrients/Sediment PRP(s) will include details as required by the Impaired Waters Plan and itemized in Section 900-3. However, the following will be addressed by the PRP to additionally satisfy permit requirements (for the draft permit):

- 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. 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 cause of impairment is nutrients, a TP (5%) reduction must be achieved.
- 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.
- Where submission of a modified PRP to DEP is required, the permittee shall solicit public involvement and participation, as follows:
 - The permittee shall make a complete copy of the PRP available for public review.
 - 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.

- The permittee shall accept written comments for a minimum of 30 days from the date of public notice.
- 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.
- 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.
- Progress with achieving the required pollutant load reductions shall be reported in each Annual MS4 Status Report.

900-6 Chesapeake Bay Pollutant Reduction Plan (CBPRP)

The existing MS4 Permit and draft PADEP 2018 MS4 Permit conditions (both for general and individual permits) outline requirements for a CBPRP for any permitted municipalities with drainage ultimately received by the Chesapeake Bay. East Lampeter Township is located in the Chesapeake Bay drainage basin. The CBPRP is considered a sub-plan of the Impaired Waters Plan. However, the CBPRP is located in Attachment S. The Nutrients/Sediment PRP and CBPRP have been combined into a single document.

The township desires to implement structural BMPs and/or facilities within local MS3s where SWMP facilitation reveals potential nutrient and/or sediment discharge issues. In turn, this approach will address discharges that may cause and/or contribute to exceedances of water quality standards, while providing reductions that will benefit the Chesapeake Bay. The receiving waterbodies list in section 300 outlines reaches and segments with nutrient/sediment impairments.

The CBPRP will include details as required by the Impaired Waters Plan and itemized in Section 900-3. However, the following will be addressed by the CBPRP to additionally satisfy permit requirements (for the draft permit):

- The permittee shall achieve the pollutant load reduction(s) (lbs/year) proposed in its CBPRP within five years following the PADEP's approval of coverage under the General Permit. The minimum percent reduction for pollutant loadings of sediment, Total Phosphorus (TP), and Total Nitrogen (TN) shall be 10 percent, 5 percent, and 3 percent, respectively, over the five-year period following the PADEP's approval of coverage.
- 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 determines it cannot achieve a scheduled milestone in its CBPRP, or

decides to modify the proposed BMPs, the permittee shall submit an update to its CBPRP prior to the scheduled milestone date with the alternative schedule or BMPs.

- Modifications to CBPRPs shall solicit public involvement and participation, as follows:
 - The permittee shall make a complete copy of the CBPRP available for public review.
 - 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 permittee must accept written comments for a minimum of 30 days from the date of public notice.
 - The permittee must 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.
 - 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.
- Progress with achieving the required pollutant load reductions shall be reported in each Annual MS4 Status Report

Updated CBPRPs (and following the above requirements) are required to be submitted with the General Permit NOI. The township will develop the CBPRP in conjunction with the Nutrients/Sediment PRP.

900-7 Pathogens PRP (PCMs)

The draft PADEP 2018 MS4 Permit conditions outline requirements for Pollutant Control Measures (PCMs) for Pathogens for any permitted municipality with drainage to receiving waterways that have a pathogens impairment. Most tributaries and reaches within the Mill Creek, Pequea Creek, and Conestoga River watersheds have impairments caused by pathogens. Therefore, the township will develop and implement a set of Pathogens PCMs (PRP). The Pathogens PCM/PRP is a sub-plan of the Impaired Waters Plan. However, the Pathogens PCM/PRP is located in Attachment T.

The Pathogens PCM/PRP will include details as required by the Impaired Waters Plan and itemized in Section 900-3 for any structural BMPs and/or facilities, along with non-structural BMPs chosen to assist with reductions of pathogens. Pathogens PCM/PRP development requires more concentrated source identification exercises. In turn, the initial plan will only outline source identification procedures and processes, along with rationale and criteria for labeling a source and outlining source controls.

The Pathogens PCM/PRP will additionally satisfy the following permit requirements:

- Within one year following approval of coverage (“first year of coverage”), the permittee shall complete the following:

- The permittee shall develop map(s) (either a separate map or on the same map as developed for MCM #3) delineating the storm sewershed boundary for the surface waters identified in the PADEP's MS4 Requirements Table. The purpose is to identify the area the permittee is responsible for within its legal boundaries in developing a source inventory. The map(s) shall be submitted to the PADEP with the first Annual MS4 Status Report due following the first year of coverage.
- 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 shall be submitted to the PADEP with the first Annual MS4 Status Report due following the first year of coverage. The inventory must clearly identify whether the source is suspected or known, and the basis for this determination. The permittee shall also submit with the first Annual MS4 Status Report the proposed action(s) it plans to take during the permit term to control known sources.
- Within three years of completion of the inventory described above, the permittee shall complete an investigation of each suspected source. This investigation must include stormwater sampling if the investigation is done as part of implementing the IDD&E program under MCM #3 of the General Permit, and is otherwise voluntary. The results of the investigation of suspected sources shall be submitted to the PADEP with an Annual MS4 Status Report no later than four years following approval of coverage.
- All illicit and illegal discharges of sewage into the permittee's MS4 shall be eliminated. Anytime an illicit and illegal 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 remedial responses by the permittee.
- 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 a SOP that requires proper management of animal wastes on property owned by the permittee within three years following approval of coverage. If an existing ordinance or SOP exists that controls animal wastes, it must be attached to the first Annual MS4 Status Report due following the first year of coverage. If a new ordinance or SOP is enacted or developed, the new ordinance or SOP must be attached to the first Annual MS4 Status Report following enactment or development.
- 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.

The MS4 Permit does not require full PRP implementation requirements associated with pathogens. However, the SWMP organizes efforts associated with pathogens in a PRP format to provide consistency with other sub-plans of the Impaired Waters Plan. A public comment period is not required for the Pathogens PCM/PRP.