



CUMBERLAND TOWNSHIP, PENNSYLVANIA MUNICIPAL SEPARATE STORM SEWER SYSTEM (MS4) PROGRAM OFFSITE COMPLIANCE REVIEW REPORT

Review Dates: May 13-17, 2021

Report Date: June 25, 2021

Unique Project Identifier: 3E21WN047A

**U.S. Environmental Protection Agency, Region III
Water Protection Division
Office of NPDES Enforcement (3WP42)
1650 Arch Street
Philadelphia, PA 19103**

Report Prepared by:

A handwritten signature in black ink, appearing to read "Steven Chase", is written over a horizontal line.

Steven Chase
PG Environmental

June 4, 2021

Date

EPA Region III Official:

Stacie Pratt
Chief, NPDES Section
Enforcement and Compliance Assurance Division

Date

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Table 1. Summary of Permit Requirements and Review Observations

Program Element	Observations
Overall Program Management	No areas of concern noted.
MCM 3 (Illicit Discharge Detection and Elimination (IDDE))	Observation 1. The Township had not fully developed and implemented a written Illicit Discharge Detection and Elimination (IDDE) plan. Observation 2. The Township’s GIS-based MS4 mapping did not appear to be complete at the time of the review. Observation 3. The Township’s dry weather screening activities were not conducted at the frequency described by Township representatives. Observation 4. The Township does not conduct targeted outreach for specific audiences regarding illicit discharge detection and elimination.
MCM 5 (Post-Construction Stormwater Management)	Observation 5. The Township uses maintenance covenants to require maintenance of post-construction stormwater controls, but no procedures were in place to ensure operations and maintenance (O&M) activities were occurring at post-construction stormwater management controls. Observation 6. The Townships post-construction stormwater control inventory did not contain all of the required elements.
MCM 6 (Pollution Prevention and Good Housekeeping)	Observation 7. The Township had not developed a written O&M program for the Township facilities and operations but instead relied on institutional processes. Observation 8. The Township had not conducted annual training for all relevant employees and contractors.
Pollutant Reduction Plan (PRP)	Observation 9. The Townships PRP was approved by the Pennsylvania Department of Environmental Protection (DEP) in 2017. The Township made updates to the PRP in 2019 but had not solicited public comments on the updates or resubmitted the PRP to the Pennsylvania DEP for approval.

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INTRODUCTION

On May 13, 14 and 17, 2021, staff from U.S. Environmental Protection Agency (EPA) Region 3 and EPA's contractors, PG Environmental (hereinafter, EPA Review Team) conducted an offsite compliance review of the municipal separate storm sewer system (MS4) program of Cumberland Township, Pennsylvania (hereinafter, Township or Permittee). Representatives of the Pennsylvania Department of Environmental Protection (PADEP) also attended the offsite review. Discharges from the Township's MS4 are regulated by the National Pollutant Discharge Elimination System (NPDES) General Permit for Stormwater Discharges from Small Municipal Separate Storm Sewer Systems (PAG133748, hereinafter, the Permit), effective July 1, 2018 – July 1, 2023. A copy of the Permit is included as Appendix A.

The purpose of this review was to obtain information to assist EPA in assessing the Townships' compliance with the requirements of the Permit, as well as the implementation status of its current MS4 program. The presentation of observations in this report does not constitute a formal compliance determination or notice of violation.

The review focused on the following Permit components:

- Overall Program Management
- Illicit Discharge Detection and Elimination (IDDE)
- Post Construction Stormwater Management (PCSM)
- Pollution Prevention/Good Housekeeping
- TMDL Pollutant Reduction Plan (PRP)

The EPA Review Team obtained its information through a records review and a series of interviews via conference calls with Township representatives. A copy of the EPA records request and review agenda is included in Appendix B. The following primary representatives were involved in the review:

Township
Representatives: Mr. Ben Thomas – Township Manager
Mr. Brandon Guiher – Consultant, KPI Technologies

EPA Representatives: Ms. Ingrid Hopkins – EPA Region 3

State Representatives: Ms. Leah Staley – PADEP
Mr. Jake Rakowsky – PADEP
Ms. Sarah Wriglesworth – PADEP

EPA Contractors: Mr. Kevin Stockton – PG Environmental
Mr. Steven Chase – PG Environmental
Mr. Taylor Fontaine – PG Environmental

CUMBERLAND TOWNSHIP BACKGROUND

The Township encompasses approximately 33.6 square miles of land in Adams County in southern Pennsylvania. The Township is adjacent to Gettysburg National Military Park and the Borough of Gettysburg. The 2010 U.S. Census population total for the Township was 6,162. The Township's 2010 U.S. Census urbanized areas are located within the Marsh Creek and Rock Creek watersheds, which are sub-watersheds of the Chesapeake Bay Watershed. The Township is primarily a residential community with no heavy industrial land use and very little commercial land use.

The Township's MS4 program was established in 2016, when the Township was originally designated as an MS4. The Township Manager is responsible for overseeing implementation of the program. Multiple Township Departments (e.g., Maintenance Department) are responsible for implementing various MS4 program activities at the direction of the Township Manager. Additionally, the Township has hired a contract engineer, KPI Technologies (KPI), for assistance with fulfilling the requirements of the Permit. On behalf of the Township, KPI develops MS4 program documents and procedures, compiles annual reports, conducts outfall screening, maintains the Township's MS4 mapping in GIS, provides employee trainings, and designs publicly owned stormwater controls.

The Township collaborates with neighboring communities on the implementation of some Permit-required activities. For instance, the Township has an informal agreement with the Borough of Gettysburg for conducting street sweeping on Township roads. The Township recently collaborated with the neighboring communities of Strabane Township and Gettysburg Borough to develop the Central Adams Joint Comprehensive Plan. Elements of the plan that relate to stormwater management include development, land use, utilities, natural resources. The Township also has established an agreement with the Adams County Conservation District for conducting erosion and sediment control plan reviews, inspections, and enforcement at construction sites in the Township.

The Township has a document titled "Minimum Control Measures for MS4 NPDES", which was developed by KPI and contains procedures for implementing the MS4 program. For the purposes of this report, the document is referred to as the Township's Stormwater Management Program (SWMP). The SWMP contains sections for each minimum control measure as described in the Permit and describes the procedures that will be implemented by the Township to comply with the requirements of the Permit. The Township's *Stormwater Management Ordinance* was adopted to provide the Township with the necessary legal authority to implement the MS4 program. The provisions of the Township's Stormwater Ordinance appear consistent with PADEP's 2022 Model Stormwater Management Ordinance (3800-PM-BCW0100j).

The Township funds the MS4 program through the General Fund. The Township does not have a stormwater fee or tax. The MS4 program's operating budget, as well as any additional capital investments, must be approved by the Township Board of Supervisors. The Township is actively exploring additional funding options to help fund MS4 program activities related to post-construction stormwater management and the Township's pollutant reduction plan (PRP; further described in the report).

INFORMATION OBTAINED RELATIVE TO PERMIT REQUIREMENTS

The EPA Review Team provided the Township with a written list of requested records on April 21, 2021 (refer to Appendix B). The Township made numerous documents available electronically to the EPA Review Team. Following the discussions with Township representatives, the EPA Review Team requested additional program documentation via e-mail on May 17, 2021. The Township provided the requested documents to the EPA Review Team electronically on May 21, 2021.

During the review, the EPA Review Team obtained documentation and other supporting evidence regarding compliance with the Permit. Referenced documentation used as supporting information is provided in Appendix C, Exhibit Log.

The following sections of this report describe the Township's approach to implementing specific minimum control measures, the relevant Permit requirements, and observations made during the review.

MINIMUM CONTROL MEASURE 3: ILLICIT DISCHARGE DETECTION AND ELIMINATION (IDD&E)

Permit Part C.I.B.3.a (IDD&E) states that all permittees must "develop and implement a written program for the detection, elimination, and prevention of illicit discharges into the regulated small MS4."

Observation 1: At the time of the review, the Township had not fully developed and implemented a written Illicit Discharge Detection and Elimination (IDDE) plan. Pages 4 and 5 of the Township's SWMP contain some IDDE procedures and there are forms and procedures attached to the SWMP for conducting IDDE activities (refer to Appendix C, Exhibit 1). The forms include an outfall field screening report, an IDDE plan checklist (including enforcement procedures), an illicit discharge tracking sheet, illicit discharge identification guidance, and a citizen complaint illicit discharge reporting form. However, other than the outfall screening form, none of these forms and procedures had been filled out or utilized by the Township at the time of the review. Additionally, the written procedures in the SWMP and attached forms do not include all elements of a written IDDE program as described in the Permit. Namely, the forms and procedures do not include procedures for identifying priority areas and screening outfalls specifically in those areas, procedures for assessing the potential for illicit discharges caused by the interaction of sewage disposal systems with storm drain systems, or mechanisms for gaining access to private property to investigate illicit discharges and connections (refer to Appendix C, Exhibit 2).

Permit Part C.I.B.3.b (IDD&E) states that all permittees must “develop and maintain map(s) that show permittee and urbanized area boundaries, the location of all outfalls and, if applicable, observation points, and the locations and names of all surface waters that receive discharges from those outfalls. Outfalls and observation points shall be numbered on the map(s).”

Permit Part C.I.B.3.c (IDD&E) states, “In conjunction with the map(s) created under BMP #2 (either on the same map or on a different map), the permittee shall develop and maintain map(s) that show the entire storm sewer collection system within the permittee’s jurisdiction that are owned or operated by the permittee (including roads, inlets, piping, swales, catch basins, channels, and any other components of the storm sewer collection system), including privately-owned components of the collection system where conveyances or BMPs on private property receive stormwater flows from upstream publicly-owned components.”

Observation 2: The Township’s GIS-based MS4 mapping did not appear to be complete at the time of the review. The MS4 mapping was generated by KPI and shows the urbanized areas, storm sewer piping, storm drain inlets, observation points, outfalls, drainage areas and waterbodies. However, there are many sections of storm drain inlets and conveyances that do not eventually connect to an outfall or post-construction control, indicating that some conveyances and outfalls may be unmapped (refer to [Appendix C, Exhibit 3](#)).

Permit Part C.I.B.3.d(2) (IDD&E) states, “for existing permittees, each of the identified regulated small MS4 outfalls shall be screened during dry weather at least once by March 15, 2023. For areas where past problems have been reported or known sources of dry weather flows occur on a continual basis, outfalls shall be screened annually during each year of permit coverage.”

Observation 3: The Township’s dry weather screening activities were not conducted at the frequency described by Township representatives. During the review, Township representatives stated that all 32 outfalls and 21 observation points in the Township are screened for dry weather flow once per year by KPI, which is more frequent than required by the Permit. The EPA review Team requested copies of the Township’s 2020 screening forms. In response, Township representatives provided 17 outfall screening forms (dated September 2020) and no observation point screening forms (refer to [Appendix C, Exhibit 4](#)). It should be noted that the Township has until March 15, 2023 to complete dry-weather screenings at all MS4 outfalls and observation points.

Permit Part C.I.B.3.f (IDD&E) states that all permittees must “provide educational outreach to public employees, business owners and employees, property owners, the general public and elected officials (i.e., target audiences) about the program to detect and eliminate illicit discharges.”

Observation 4: Township representatives explained that stormwater outreach is rather general and intended for all audiences. The Township provided one example outreach

material for homeowners generally explaining stormwater but not necessarily illicit discharges. The Township does not conduct targeted outreach for specific audiences regarding illicit discharge detection and elimination.

MINIMUM CONTROL MEASURE 5: POST CONSTRUCTION STORMWATER MANAGEMENT (PCSM) IN NEW DEVELOPMENT AND REDEVELOPMENT

Permit Part C.I.B.5.c (Post Construction Stormwater Management) states that all permittees must “Ensure adequate O&M of all post-construction stormwater management BMPs that have been installed at development or redevelopment projects that disturb greater than or equal to one acre, including projects less than one acre that are part of a larger common plan of development or sale.”

Observation 5: The Township requires operation and maintenance (O&M) of post construction stormwater controls through O&M agreements established with property owners and homeowner associations. The agreements are recorded through the county Planning Department and are a covenant on the property when a change of ownership occurs. However, Township representatives explained that there are no procedures in place to ensure O&M activities were occurring. Similarly, there was no way to ensure that when a property changed ownership, the new owners are made aware of the O&M obligations.

Permit Part C.I.B.5.c (Post Construction Stormwater Management) states “An inventory of PCSM BMPs shall be developed by new permittees by the end of the first year of General Permit coverage and shall be continually updated during the term of coverage under the General Permit as development projects are reviewed, approved, and constructed. Existing permittees shall update and maintain its current inventory during the term of coverage under the General Permit. The permittee must track the following information in its PCSM BMP inventory:

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

Observation 6: The Township provided their PCSM inventory to the EPA Review Team. The inventory is included as a part of the Township’s Chesapeake Bay Watershed PRP and was developed in 2017. At the time of the review, the inventory

included 46 PCSM BMPs. It was unclear to the EPA Review Team if the Township had continued to update the inventory as projects were completed.

The EPA Review Team reviewed the PCSM inventory and found it contained many but not all the elements required by the Permit (refer to Appendix C, Exhibit 5). Specifically, the PCSM inventory did include the following:

- Information (e.g., name, address, phone number(s)) for BMP owners and entities responsible for BMP O&M, if different from BMP owners;
- Maintenance required for the BMP type according to the Pennsylvania Stormwater BMP Manual or other manuals and resources;
- The actual inspection/maintenance activities conducted for each BMP; and
- An assessment by the Permittee if proper O&M has occurred during the year and if not, what actions the permittee has taken, or shall take, to address compliance with O&M requirements.

Township staff explained that the information regarding BMP owners and contact information was readily available to staff but not maintained within the inventory itself.

Township staff further explained that the Township had no procedures for verifying or ensuring that O&M was occurring at privately owned PCSM BMPs or tracking O&M activities for each PCSM BMP. At the time of the review, the Township did not have any publicly owned PCSM BMPs but was in the process of designing and securing funding for several as a part of the implementation of the PRP.

MINIMUM CONTROL MEASURE 6: POLLUTION PREVENTION / GOOD HOUSEKEEPING

Permit Part C.I.B.6.b (Pollution Prevention / Good Housekeeping) states that the Permittee must “Develop, implement and maintain a written O&M program for all operations that could contribute to the discharge of pollutants from the regulated small MS4, as identified under BMP #1. This program shall address stormwater collection or conveyance systems within the regulated MS4.”

Observation 7: Township representatives stated that the Township had not developed a written O&M program for the Township facilities and operations. Township representatives described to the EPA Review Team an institutional process by which O&M activities were conducted including storm sewer system maintenance and street sweeping which are both conducted annually in the spring. Street sweeping is conducted by the Gettysburg Borough through an informal “handshake” agreement. Storm sewer system maintenance is conducted by Township staff. However, the institutional practices described

by Township representatives had not been compiled in a written O&M plan as required by the Permit.

Permit Part C.I.B.6.c (Pollution Prevention / Good Housekeeping) states that all permittees must “Develop and implement an employee training program that addresses appropriate topics to further the goal of preventing or reducing the discharge of pollutants from operations to the regulated small MS4. The program may be developed and implemented using guidance and training materials that are available from federal, state, or local agencies, or other organizations. All relevant employees and contractors shall receive training (i.e., public works staff, building, zoning, and code enforcement staff, engineering staff, police and fire responders, etc.). Training topics shall include operation, inspection, maintenance, and repair activities associated with any of the operations identified under BMP #1. Training must cover all relevant parts of the permittee’s overall stormwater management program that could affect operations, such as illicit discharge detection and elimination, construction sites, and ordinance requirements.

1. New permittees shall develop and implement a training program that identifies the training topics that will be covered and what training methods and materials will be used by the end of the first year of General Permit coverage.
2. All permittees must review and update the training program each year of General Permit coverage, as necessary.
3. Employee training shall occur at least annually and shall be documented in writing and reported in Annual MS4 Status Reports. Documentation shall include the date(s) of the training, the names of attendees, the topics covered, and the training presenter(s).”

Observation 8: The Township had not conducted annual training for all relevant employees and contractors as required by the Permit. During the review, the Township provided the EPA Review Team with an outline of an MS4 training that occurred November 18, 2019. In reviewing the attendance sheet provided by the Township, the EPA Review Team noted that only five staff attended the training and that the training had not been provided to all relevant staff. Township representatives stated they were hoping to host a larger training in the future but had not formalized any plans to do so at the time of the review.

Upon reviewing the training materials provided by the Township, the EPA Review Team also noted that the training did not cover the requirements of the Township’s ordinance as required by the Permit (refer to Appendix C, Exhibit 6).

POLLUTANT CONTROL MEASURES AND POLLUTANT REDUCTIONS PLANS

Permit Part C.II requires the Permittee to develop a PRP since the MS4 has “at least one MS4 outfall that discharges to surface waters within the Chesapeake Bay watershed, or otherwise has at least one discharge to storm sewers owned or operated by a different entity within the Chesapeake Bay watershed.”

Observation 9: The Township plans to meet its goals through stream restoration and the installation of PCSM BMPs. At the time of the review, the Township was on track to meet its goals of completing all approved measures by 2023. The Township was currently in the design phase for many of the projects and was actively working to secure funding for installation. The Township had estimated a cost of \$500,000 for the installation and ongoing operation and maintenance of the PCSM BMPs. The Township plans to apply for funding through PENNVEST financing to fund the projects.

Township representatives provided the most recent version of the PRP to the EPA Review Team. The PRP was originally developed in 2017 by KPI Technologies on behalf of the Township. DEP subsequently approved the 2017 PRP. Township representatives stated that they had revised the PRP in 2019 following consultation with Clauser Environmental, LLC but had not solicited public comments on the updates or resubmitted the PRP to DEP for approval. The current version of the PRP is available to the public through the Township’s website.