Pennsylvania
Department of
Environmental Protection

February 21, 2025
VIA ELECTRONIC MAIL

Larry Stepansky
Lower Paxton Township Dauphin County
425 Prince Street
Harrisburg, PA 17109-3054
lstepansky@lowerpaxton-pa.gov

Re: Draft NPDES Permit- MS4
Lower Paxton Township Dauphin County MS4
Application No. PAI133540
Authorization ID No. 1514604
Lower Paxton Township, Dauphin County

Dear Permittee:

The Department of Environmental Protection (DEP) has prepared the enclosed draft NPDES permit for your review and comment.

Also enclosed is a copy of a public notice that, in accordance with DEP regulations at 25 Pa. Code § 92a.82(b), you are required to post near the entrance to your premises and, if the facility or discharge location is remote from these premises, at the entrance to the facility or at the discharge location. These postings shall remain for 30 days.

DEP will publish notice of the draft permit in the Pennsylvania Bulletin in the near future. You may provide written comments on the draft permit up to 30 days following publication of this notice. Following the 30-day public comment period (which may be extended by 15 days at DEP's discretion), DEP will consider any comments received and make a decision on whether to issue a final permit.

If you have any questions, please contact me at 717.705.4918 or jrakowsky@pa.gov.

Sincerely,

Jacob S. Rakowsky

Jacob S. Rakowsky, E.I.T.
Project Manager
Clean Water Program

Enclosures

cc: Anderson Deutschman, Herbert Rowland & Grubic Inc.
adeutschman@hrg-inc.com

Pennsylvania Department of Environmental Protection

COMMONWEALTH OF PENNSYLVANIA
DEPARTMENT OF ENVIRONMENTAL PROTECTION
BUREAU OF CLEAN WATER

NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM (NPDES) INDIVIDUAL PERMIT TO DISCHARGE STORMWATER FROM SMALL MUNICIPAL SEPARATE STORM SEWER SYSTEMS (MS4s)

NPDES PERMIT NO. PAI133540

In compliance with the provisions of the Clean Water Act, 33 U.S.C. Section 1251 et seq. ("the Act") and Pennsylvania's Clean Streams Law, as amended, 35 P.S. Section 691.1 et seq.,

Lower Paxton Township Dauphin County
425 Prince Street
Harrisburg, PA 17109-3054

is authorized to discharge from a regulated small municipal separate storm sewer system (MS4) located in **Lower Paxton Township, Dauphin County** to **Nyes Run (WWF, MF), Slotznick Run (CWF, MF), Unnamed Tributary of Paxton Creek (WWF, MF), Paxton Creek (WWF, MF), Unnamed Tributary to Paxton Creek (WWF, MF), Asylum Run (WWF, MF), Beaver Creek (WWF, MF), Spring Creek (CWF, MF), and Unnamed Tributary to Beaver Creek (WWF, MF)** in Watershed(s) **7-D and 7-C** in accordance with effluent limitations, monitoring requirements and other conditions set forth herein.

THIS PERMIT SHALL BECOME EFFECTIVE ON _____

THIS PERMIT SHALL EXPIRE AT MIDNIGHT ON _____

The authority granted by coverage under this Permit is subject to the following further qualifications:

1. The permittee shall comply with the effluent limitations and reporting requirements contained in this permit.

2. The application and its supporting documents are incorporated into this permit. If there is a conflict between the application, its supporting documents and/or amendments and the terms and conditions of this permit, the terms and conditions shall apply.

3. Failure to comply with the terms, conditions or effluent limitations of this permit is grounds for enforcement action; for permit termination, revocation and reissuance, or modification; or for denial of a permit renewal application. (40 CFR 122.41(a))

4. A complete application for renewal of this permit, or notice of intent to cease discharging by the expiration date, must be submitted to DEP at least 180 days prior to the above expiration date (unless permission has been granted by DEP for submission at a later date), using the appropriate NPDES permit application form (40 CFR 122.41(b), 122.21(d)). In the event that a timely and complete application for renewal has been submitted and DEP is unable, through no fault of the permittee, to reissue the permit before the above expiration date, the terms and conditions of this permit, including submission of the Annual MS4 Status Reports, will be automatically continued and will remain fully effective and enforceable against the discharger until DEP takes final action on the pending permit application. (25 Pa. Code §§ 92a.7(b), (c))

DATE PERMIT ISSUED _____ **ISSUED BY** _____

Maria D. Bebenek, P.E.
Environmental Program Manager
Southcentral Regional Office

PART A

EFFLUENT LIMITATIONS, REPORTING AND RECORDKEEPING REQUIREMENTS

I. EFFLUENT LIMITATIONS

A. This permit establishes effluent limitations in the form of implementation of a Stormwater Management Program (SWMP), as specified in Part C I of this permit, to reduce the discharge of pollutants from the regulated small MS4 to the maximum extent practicable. The permittee shall comply with Minimum Control Measures (MCMs) and best management practices (BMPs) in Part C I of this permit, which constitutes compliance with the standard of reducing pollutants to the maximum extent practicable.

B. All discharges from regulated small MS4s must comply with all applicable requirements established in accordance with 25 Pa. Code Chapters 91-96, 102, and 105 of DEP's rules and regulations. DEP may, upon written notice, require additional BMPs or other control measures to ensure that the water quality standards of the surface waters receiving stormwater discharges are attained.

II. DEFINITIONS

Best Management Practices (BMPs) means schedules of activities, prohibitions of practices, maintenance procedures and other management practices to prevent or reduce pollutant loading to surface waters of this Commonwealth. The term includes treatment requirements, operating procedures and practices to control plant site runoff, spillage or leaks, sludge or waste disposal, or drainage from raw material storage. The term includes activities, facilities, measures, planning or procedures used to minimize accelerated erosion and sedimentation and manage stormwater to protect, maintain, reclaim and restore the quality of waters and the existing and designated uses of waters within this Commonwealth before, during and after earth disturbance activities. (25 Pa. Code § 92a.2)

Clean Water Act (CWA) means the Federal Water Pollution Control Act, as amended, 33 U.S.C.A. §§ 1251 - 1387.

Cleaning Agent means any product, substance or chemical other than water that is used to clean the exterior surface of vehicles.

Designated Uses are those uses specified in 25 Pa. Code §§ 93.4(a) and 93.9a – 93.9z for each water body or segment whether or not they are being attained. (25 Pa. Code § 93.1)

Dry Weather means a condition in which there are no precipitation, snowmelt, drainage or other events producing a stormwater discharge for more than 48 consecutive hours.

Existing Permittee means any entity that has been designated as a regulated small MS4 and has previously obtained permit coverage under the PAG-13 Permit or obtained an Individual NPDES MS4 Permit.

Existing Uses are those uses actually attained in the water body on or after November 28, 1975, whether or not they are included in the water quality standards. (25 Pa. Code § 93.1)

Illicit Connection means any physical connection to a municipal separate storm sewer system that can convey illicit discharges into the system and/or is not authorized or permitted by the permittee.

Illicit Discharge means any discharge to a municipal separate storm sewer that is not composed entirely of stormwater, except non-stormwater discharges as described in the “Discharges Authorized by this Permit” section of this Permit. Examples of illicit discharges include dumping of motor vehicle fluids, household hazardous wastes, grass clippings, leaf litter, animal wastes, or unauthorized discharges of sewage, industrial waste, restaurant wastes, or any other non-stormwater waste into a municipal separate storm sewer system. Illicit discharges can be accidental or intentional.

Impaired Waters means surface waters that fail to attain one or more of its designated uses under 25 Pa. Code Chapter 93 and as listed in Categories 4 and 5 of Pennsylvania’s Integrated Water Quality Monitoring and Assessment Report.

Integrated Water Quality Monitoring and Assessment Report means the report published every other year by DEP to report on the conditions of Pennsylvania's surface waters to satisfy sections 305(b) and 303(d) of the CWA.

Intermittent Stream means a body of water flowing in a channel or bed composed primarily of substrates associated with flowing water, which, during periods of the year, is below the local water table and obtains its flow from both surface runoff and groundwater discharges. (25 Pa. Code § 92a.2)

Load Allocation means the portion of a surface water's loading capacity that is assigned or allocated to existing and future nonpoint sources and natural quality. (25 Pa. Code § 96.1)

Low Impact Development (LID) means site design approaches and small-scale stormwater management practices that promote the use of natural systems for infiltration, evapotranspiration, and reuse of rainwater. LID can be applied to new development, urban retrofits, and revitalization projects. LID utilizes design techniques that infiltrate, filter, evaporate, and store runoff close to its source. Rather than rely on costly large-scale conveyance and treatment systems, LID addresses stormwater through a variety of small, cost-effective landscape features located on-site.

Municipal separate storm sewer means a conveyance or system of conveyances (including roads with drainage systems, municipal streets, catch basins, curbs, gutters, ditches, man-made channels, or storm drains): (i) Owned or operated by a State, city, town, borough, county, parish, district, association, or other public body (created by or pursuant to State law) having jurisdiction over disposal of sewage, industrial wastes, stormwater, or other wastes, including special districts under State law such as a sewer district, flood control district or drainage district, or similar entity, or an Indian tribe or an authorized Indian tribal organization, or a designated and approved management agency under section 208 of the CWA that discharges to surface waters; (ii) Designed or used for collecting or conveying stormwater; (iii) Which is not a combined sewer; and (iv) Which is not part of a Publicly Owned Treatment Works (POTW) as defined at 40 CFR 122.2. (25 Pa. Code § 92a.32(a) and 40 CFR § 122.26(b)(8))

Municipal Separate Storm Sewer System (MS4) means all separate storm sewers that are defined as "large" or "medium" or "small" municipal separate storm sewer systems pursuant to 40 CFR §§ 122.26(b)(4), (b)(7), and (b)(16), respectively, or designated under 40 CFR § 122.26(a)(1)(v). (25 Pa. Code § 92a.32(a) and 40 CFR § 122.26(b)(18))

Municipality means a city, town, borough, county, township, school district, institution, authority or other public body created by or pursuant to State law and having jurisdiction over disposal of sewage, industrial wastes or other wastes. (25 Pa. Code § 92a.2)

New Permittee means any entity that has been designated as a regulated small MS4 and has not previously obtained permit coverage under the PAG-13 General Permit or obtained an Individual NPDES MS4 Permit.

Non-Municipal Permittee means a regulated small MS4 that is not a municipality, e.g., military bases, large hospital or prison complexes, and highways and other thoroughfares.

Non-Structural BMPs means actions that involve management and source controls such as: (1) policies and ordinances that provide requirements and standards to direct growth to identified areas, promote redevelopment, protect areas such as wetlands and riparian areas, maintain and/or increase open space, provide buffers along water bodies, minimize impervious surfaces, and minimize disturbance of soils and vegetation; (2) education programs for developers and the public about minimizing water quality impacts; (3) measures such as minimizing the percentage of impervious area after development, use of measures to minimize directly connected impervious areas, street sweeping, and source control measures such as good housekeeping, maintenance, and spill prevention; and other BMPs as referenced in Chapter 5 of the Pennsylvania Stormwater BMP Manual (363-0300-002).

Observation point means a location upstream of an outfall where a permittee must conduct dry weather screening in accordance with Part C I.B.3.d of this permit if the permittee determines that screening at an outfall is infeasible, and the point at which stormwater discharges to storm sewers owned or operated by an adjoining municipality where dry weather screening must be conducted.

Ordinance means a law enacted by the government of a municipality.

Outfall means a point source as defined by 40 CFR § 122.2 at the point where a municipal separate storm sewer discharges to surface waters and does not include open conveyances connecting two municipal separate storm sewers, or pipes, tunnels or other conveyances which connect segments of the same stream or other surface waters and are used to convey surface waters. (25 Pa. Code § 92a.32(a) and 40 CFR § 122.26(b)(9))

Owner or Operator means the owner or operator of any "facility" or "activity" subject to regulation under the NPDES program. (25 Pa. Code § 92a.3(b)(1) and 40 CFR § 122.2)

Permittee means the owner or operator of a regulated small MS4 authorized to discharge under the terms of this permit.

Point Source means a discernible, confined, and discrete conveyance, including, but not limited to, any pipe, ditch, channel, tunnel, conduit, well, discrete fissure, container, rolling stock, Concentrated Aquatic Animal Production Facility (CAAP), Concentrated Animal Feeding Operation (CAFO), landfill leachate collection system, or vessel or other floating craft from which pollutants are or may be discharged. (25 Pa. Code § 92a.2)

Pollutant means any contaminant or other alteration of the physical, chemical, biological, or radiological integrity of surface water which causes or has the potential to cause pollution as defined in section 1 of the Pennsylvania Clean Streams Law, 35 P.S. § 691.1. (25 Pa. Code § 92a.2)

Qualifying Development or Redevelopment Project means an earth disturbance activity that requires an NPDES permit for stormwater discharges associated with construction activity per 25 Pa. Code Chapter 102.

Regulated Small MS4 means any small MS4 that is covered by the federal Phase II stormwater program, either through automatic nationwide designation under 40 CFR § 122.32(a)(1) (via the Urbanized Area criteria) or by designation on a case-by-case basis by DEP pursuant to 40 CFR § 122.32(a)(2). "Regulated small MS4s" are a subset of "small MS4s" as defined in this section.

Riparian Forest Buffer means an area of permanent vegetation consisting of native trees, shrubs, forbs and grasses along surface water that is maintained in a natural state or sustainably managed to protect and enhance water quality, stabilize stream channels and banks, and buffer land use activities from surface waters.

Small Municipal Separate Storm Sewer System (Small MS4) means an MS4, as defined in this section, that is not a large or medium MS4 pursuant to 40 CFR §§ 122.26(b)(4) and 122.26(b)(7). The term small MS4 includes systems similar to separate storm sewer systems in municipalities, such as systems at military bases, large hospital or prison complexes, and highways and other thoroughfares. The term does not include separate storm sewers in very discrete areas, such as individual buildings. (25 Pa. Code § 92a.32(a) and 40 CFR § 122.26(b)(16))

Standard Operating Procedure (SOP) means a policy or set of procedures that are enacted by a non-municipal permittee to implement a stormwater management program.

Storm Sewershed means the land area that drains to an individual MS4 outfall from within the jurisdiction of the MS4 permittee. The term "combined storm sewershed" means the drainage areas of all MS4 outfalls that discharge to a specific surface water or to waters within the Chesapeake Bay watershed.

Stormwater means runoff from precipitation, snow melt runoff and surface runoff and drainage. "Stormwater" has the same meaning as "storm water." (25 Pa. Code § 92a.2)

Structural BMPs means stormwater storage and management practices including, but not limited to, wet ponds and extended detention outlet structures; filtration practices such as grassed swales, sand filters and filter strips; infiltration practices such as infiltration basins and infiltration trenches; and other BMPs as referenced in Chapter 6 of the Pennsylvania Stormwater BMP Manual (363-0300-002).

Surface Waters means perennial and intermittent streams, rivers, lakes, reservoirs, ponds, wetlands, springs, natural seeps and estuaries, excluding water at facilities approved for wastewater treatment such as wastewater treatment impoundments, cooling water ponds and constructed wetlands used as part of a wastewater treatment process. (25 Pa. Code § 92a.2)

Total Maximum Daily Load (TMDL) means the sum of individual waste load allocations for point sources, load allocations for nonpoint sources and natural quality and a margin of safety expressed in terms of mass per time, toxicity or other appropriate measures. (25 Pa. Code § 96.1)

Urbanized Area (UA) means land area comprising one or more places (central place(s)) and the adjacent densely settled surrounding area (urban fringe) that together have a residential population of at least 50,000 and an overall population density of at least 1,000 people per square mile, as defined by the United States Bureau of the Census and as determined by the latest available decennial census. The UA outlines the extent of automatically regulated areas.

Wasteload Allocation (WLA) means the portion of a surface water's loading capacity that is allocated to existing and future point source discharges. (25 Pa. Code § 96.1)

Water Quality Criteria means numeric concentrations, levels or surface water conditions that need to be maintained or attained to protect existing and designated uses. (25 Pa. Code § 93.1)

Water Quality Standards means the combination of water uses to be protected and the water quality criteria necessary to protect those uses. (25 Pa. Code § 92a.2)

III. MONITORING, REPORTING AND RECORDKEEPING

A. Where samples are collected and analyzed or measurements are taken under this permit, the permittee shall assure:

1. Samples and measurements taken for the purpose of monitoring shall be representative of the monitored activity. (25 Pa. Code § 92a.3(c) and 40 CFR § 122.41(j)(1))

2. Records of monitoring information shall include (25 Pa. Code § 92a.3(c) and 40 CFR § 122.41(j)(3)):

   a. The date, exact place, and time of sampling or measurements.
   b. The individual(s) who performed the sampling or measurements.
   c. The date(s) analyses were performed.
   d. The individual(s) who performed the analyses.
   e. The analytical techniques or methods used.
   f. The results of such analysis.

3. Monitoring must be conducted according to test procedures approved under 40 CFR Part 136 unless another method is required under 40 CFR Subchapters N or O. (25 Pa. Code § 92a.3(c) and 40 CFR § 122.41(j)(4))

B. Records Retention – All records of monitoring activities and results, copies of all plans and reports required by this Permit, and records of all data used to complete the application for this Permit shall be retained by the permittee for at least 5 years from the date of the sample measurement, report or application. Such records must be submitted to DEP upon request or as required for annual reports. The permittee must make records available to the public at reasonable times during regular business hours. (25 Pa. Code § 92a.3(c), 40 CFR §§ 122.34(g)(2) and 122.41(j)(2))

C. Proper Operation and Maintenance (O&M) – The permittee shall at all times properly operate and maintain all facilities and systems of treatment and control (and related appurtenances), including stormwater BMPs, that are installed or used by the permittee to achieve compliance with the conditions of this permit. (25 Pa. Code § 92a.3(c) and 40 CFR § 122.41(e))

D. Reporting and Fee Requirements

1. The permittee shall submit a complete Annual MS4 Status Report using DEP's annual report template (3800-FM-BCW0491) to the DEP regional office that issued Permit coverage approval by September 30 of each year.

   a. For existing permittees, the first annual report submitted to DEP under this permit shall have a reporting period starting from the end of the latest annual or progress report period (under the

previous permit) to June 30, (Enter Year - One Full Year After Issuance). The first annual report is due by September 30, (Enter Year - One Full Year After Issuance). For new permittees, the first annual report is due by September 30 following the first year of Permit coverage.

b. Following the first annual report, the reporting period shall thereafter be July 1 - June 30, and the report shall be due by September 30.

2. Permittees shall pay an annual fee of $2,500 in accordance with 25 Pa. Code § 92a.62. Annual fees are due on each anniversary of the effective date of the most recent new or reissued permit issued prior to August 28, 2021. Payment for annual fees shall be remitted to DEP at the address below by the anniversary date. Checks should be made payable to the Commonwealth of Pennsylvania.

   PA Department of Environmental Protection
   Bureau of Clean Water
   Re: Chapter 92a Annual Fee
   PO Box 8466
   Harrisburg, PA 17105-8466

3. The permittee shall submit the Annual MS4 Status Report and annual fee to DEP electronically upon receipt of written notification from DEP.

4. Unanticipated Non-Compliance or Potential Pollution Reporting

   a. Immediate Reporting - The permittee shall immediately report any incident causing or threatening pollution in accordance with the requirements of 25 Pa. Code §§ 91.33 and 92a.41(b) listed below:

      (i) If, because of an accident, other activity or incident a toxic substance or another substance which would endanger users downstream from the discharge, or would otherwise result in pollution or create a danger of pollution or would damage property, the permittee shall immediately notify DEP by telephone of the location and nature of the danger. Oral notification to the Department is required as soon as possible, but no later than 4 hours after the permittee becomes aware of the incident causing or threatening pollution.

      (ii) If reasonably possible to do so, the permittee shall immediately notify downstream users of the waters of the Commonwealth to which the substance was discharged. Such notice shall include the location and nature of the danger.

      (iii) The permittee shall immediately take or cause to be taken steps necessary to prevent injury to property and downstream users of the waters from pollution or a danger of pollution and, in addition, within 15 days from the incident, shall remove the residual substances contained thereon or therein from the ground and from the affected waters of this Commonwealth to the extent required by applicable law.

   b. The permittee shall report any non-compliance which may endanger health or the environment in accordance with the requirements of 40 CFR § 122.41(l)(6). These requirements include the following obligations:

      (i) 24 Hour Reporting - The permittee shall orally report any non-compliance with this permit which may endanger health or the environment within 24 hours from the time the permittee becomes aware of the circumstances.

      (ii) Written Report - A written submission shall also be provided within 5 days of the time the permittee becomes aware of any non-compliance which may endanger health or the environment. The written submission shall contain a description of the non-compliance and its cause; the period of non-compliance, including exact dates and times, and if the non-compliance has not been corrected, the anticipated time it is expected to continue; and steps taken or planned to reduce, eliminate, and prevent reoccurrence of the non-compliance.

      (iii) Waiver of Written Report - DEP may waive the written report on a case-by-case basis if the associated oral report has been received within 24 hours from the time the permittee becomes

aware of the circumstances which may endanger health or the environment. Unless such a waiver is expressly granted by DEP, the permittee shall submit a written report in accordance with this paragraph. (25 Pa. Code § 92a.3(c) and 40 CFR § 122.41(l)(6)(iii))

5. Other Non-Compliance

The permittee shall report all instances of non-compliance not reported under paragraph D.4 of this section at the time Annual Reports are submitted, on the Non-Compliance Reporting Form (3800-FM-BPNPSM0440). The reports shall contain the information listed in paragraph D.4.b.(ii) of this section. (25 Pa. Code § 92a.3(c) and 40 CFR § 122.41(l)(7))

6. Signatory Requirements

a. Completed Annual Reports and all other reports, applications, and information submitted to DEP shall be signed and certified by either of the following applicable persons, as defined in 25 Pa. Code § 92a.22:

- For a corporation - by a principal executive officer of at least the level of vice president, or an authorized representative, if the representative is responsible for the overall operation of the facility from which the discharge described in the NPDES form originates.
- For a partnership or sole proprietorship - by a general partner or the proprietor, respectively.
- For a municipality, state, federal or other public agency - by a principal executive officer or ranking elected official.

b. If signed by a person other than the above, the person must be a duly authorized representative of the permittee. A person is a duly authorized representative only if:

- The authorization is made in writing by a person described in paragraph a., above, and submitted to DEP.
- The authorization specifies either an individual or a position having responsibility for the operation of the regulated system, facility or activity, such as the position of manager, operator, superintendent, or position of equivalent responsibility, or an individual or position having overall responsibility for environmental matters for the company. A duly authorized representative may thus be either a named individual or any individual occupying a named position.

c. Changes in Signatory Authorization - If an authorization is no longer accurate because a different individual or position has responsibility for the overall operation of the system or facility, a new authorization satisfying the requirements of paragraphs 6.a and 6.b, above, must be submitted to DEP prior to or together with any reports, information or NOI to be signed by an authorized representative.

PART B

STANDARD CONDITIONS

I. MANAGEMENT REQUIREMENTS

A. Compliance

The permittee must comply with all conditions of this Permit. Any permit non-compliance constitutes a violation of the Clean Water Act and is grounds for enforcement action; for permit termination, revocation and reissuance, or modification; or denial of a permit renewal application. (25 Pa. Code § 92a.3(c) and 40 CFR § 122.41(a))

B. Permit Modification, Termination, or Revocation and Reissuance

1. Permit coverage may be modified, terminated, or revoked and reissued during its term in accordance with Title 25 Pa. Code §§ 92a.72 and 92a.74 and 40 CFR § 122.41(f).

2. The filing of a request by the permittee for a permit modification, revocation and reissuance, or termination, or a notification of planned changes or anticipated non-compliance, does not stay any Permit condition. (25 Pa. Code § 92a.3(c) and 40 CFR § 122.41(f))

C. Duty to Provide Information

1. The permittee shall furnish to DEP, within a reasonable time, any information which DEP may request to determine whether cause exists for modifying, revoking and reissuing, or terminating coverage under this Permit, or to determine compliance with this Permit. (25 Pa. Code § 92a.3(c) and 40 CFR § 122.41(h))

2. The permittee shall furnish to DEP, upon request, copies of records required to be kept by this Permit. (25 Pa. Code § 92a.3(c) and 40 CFR § 122.41(h))

3. Other Information - Where the permittee becomes aware that it failed to submit any relevant facts in an NOI, or submitted incorrect information in an NOI or in any report to DEP, it shall promptly submit the correct and complete facts or information. (25 Pa. Code § 92a.3(c) and 40 CFR § 122.41(l)(8))

4. The permittee shall give advance notice to the DEP office that approved permit coverage of any planned physical alterations or additions to the regulated small MS4. Notice is only required when: 1) the alteration or addition to a permitted facility may meet one of the criteria for determining whether a facility is a new source in 40 CFR § 122.29(b), or 2) the alteration or addition could significantly change the nature or increase the quantity of pollutants discharged. (25 Pa. Code § 92a.3(c) and 40 CFR § 122.41(l))

D. Duty to Mitigate

The permittee shall take all reasonable steps to minimize or prevent any discharge in violation of this permit that has a reasonable likelihood of adversely affecting human health or the environment. (25 Pa. Code § 92a.3(c) and 40 CFR § 122.41(d))

E. Termination of Permit Coverage (25 Pa. Code § 92a.74 and 40 CFR 122.64)

1. Notice of Termination (NOT) – If the permittee plans to cease operations or will otherwise no longer require coverage under this permit, the permittee shall submit DEP's NPDES Notice of Termination (NOT) for Permits Issued Under Chapter 92a (3800-BCW-0410), signed in accordance with Part A III.D.6 of this permit, at least 30 days prior to cessation of operations or the date by which coverage is no longer required.

2. Where the permittee plans to cease operations, NOTs must be accompanied with an operation closure plan that identifies how tankage and equipment will be decommissioned and how pollutants will be managed, as applicable.

3. The permittee shall submit the NOT to the DEP regional office with jurisdiction over the county in which the facility is located.

II. PENALTIES AND LIABILITY

A. Violations of Permit Conditions

1. Any person violating Sections 301, 302, 306, 307, 308, 318 or 405 of the CWA or any permit condition or limitation implementing such sections in a permit issued under Section 402 of the Act is subject to civil, administrative and/or criminal penalties as set forth in 40 CFR § 122.41(a)(2).

2. Any person or municipality, who violates any provision of this Permit; any rule, regulation or order of DEP; or any condition or limitation of any permit issued pursuant to the Clean Streams Law, is subject to criminal and/or civil penalties as set forth in Sections 602, 603 and 605 of the Clean Streams Law.

B. Falsifying Information

Any person who does any of the following:

- Falsifies, tampers with, or knowingly renders inaccurate any monitoring device or method required to be maintained under this permit, or

- Knowingly makes any false statement, representation, or certification in any record or other document submitted or required to be maintained under this permit (including monitoring reports or reports of compliance or non-compliance)

Shall, upon conviction, be punished by a fine and/or imprisonment as set forth in 18 Pa.C.S.A. § 4904 and 40 CFR §§ 122.41(j)(5) and (k)(2).

C. Liability

1. Nothing in this Permit shall be construed to relieve the permittee from civil or criminal penalties for non-compliance pursuant to Section 309 of the CWA or Sections 602, 603 or 605 of the Clean Streams Law.

2. Nothing in this Permit shall be construed to preclude the institution of any legal action or to relieve the permittee from any responsibilities, liabilities or penalties to which the permittee is or may be subject to under the CWA and the Clean Streams Law.

D. Need to Halt or Reduce Activity Not a Defense

It shall not be a defense for the permittee in an enforcement action that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the conditions of this Permit. (25 Pa. Code § 92a.3(c) and 40 CFR § 122.41(c))

III. OTHER RESPONSIBILITIES

A. Right of Entry

Pursuant to Section 5(b) of Pennsylvania's Clean Streams Law (35 P.S. § 691.5(b)), 25 Pa. Code Chapter 92a and 40 CFR § 122.41(i), the permittee shall allow authorized representatives of DEP and EPA, upon the presentation of credentials and other documents as may be required by law:

1. To enter upon the permittee's premises where a regulated facility or activity is located or conducted, or where records must be kept under the conditions of this Permit; (25 Pa. Code § 92a.3(c) and 40 CFR § 122.41(i)(1))

2. To have access to and copy, at reasonable times, any records that must be kept under the conditions of this Permit; (25 Pa. Code § 92a.3(c) and 40 CFR § 122.41(i)(2))

3. To inspect at reasonable times any facilities, equipment (including monitoring and control equipment), practices or operations regulated or required under this Permit; and (25 Pa. Code § 92a.3(c) and 40 CFR § 122.41(i)(3))

4. To sample or monitor at reasonable times, for the purposes of assuring permit compliance or as otherwise authorized by the Clean Water Act or the Clean Streams Law, any substances or parameters at any location. (25 Pa. Code § 92a.3(c) and 40 CFR § 122.41(i)(4))

B. Transfer of Permits

1. Transfers by modification. Except as provided in paragraph B.2 of this section, permit coverage may be transferred by the permittee to a new owner or operator only if this Permit coverage has been modified or revoked and reissued, or a minor modification made to identify the new permittee and incorporate such other requirements as may be necessary under the Clean Water Act. (25 Pa. Code § 92a.3(c) and 40 CFR § 122.61(a))

2. Automatic transfers. As an alternative to transfers under paragraph 1 of this section, any NPDES permit may be automatically transferred to a new permittee if:

   a. The current permittee notifies DEP at least 30 days in advance of the proposed transfer date in paragraph 2.b. of this section; (25 Pa. Code § 92a.3(c) and 40 CFR § 122.61(b)(1))

   b. The notice includes the appropriate DEP transfer form signed by the existing and new permittees containing a specific date for transfer of permit responsibility, coverage and liability between them; (25 Pa. Code § 92a.3(c) and 40 CFR § 122.61(b)(2))

   c. DEP does not notify the existing permittee and the proposed new permittee of its intent to modify or revoke and reissue coverage under this permit, the transfer is effective on the date specified in the agreement mentioned in paragraph 2.b. of this section; and (25 Pa. Code § 92a.3(c) and 40 CFR § 122.61(b)(3))

   d. The new permittee is in compliance with existing DEP issued permits, regulations, orders and schedules of compliance, or has demonstrated that any non-compliance with the existing permits has been resolved by an appropriate compliance action or by the terms and conditions of the permit (including compliance schedules set forth in the permit), consistent with 25 Pa. Code § 92a.51 (relating to schedules of compliance) and other appropriate DEP regulations. (25 Pa. Code § 92a.71)

3. In the event DEP does not approve transfer of coverage under this permit, the new owner or controller must submit a new NOI.

C. Property Rights – The approval of coverage under this Permit does not convey any property rights of any sort, or any exclusive privilege. (25 Pa. Code § 92a.3(c) and 40 CFR § 122.41(g))

D. Duty to Reapply – If the permittee wishes to continue an activity regulated by this permit after the expiration date of this permit, the permittee must apply for a new permit. (40 CFR 122.41(b))

E. Severability – The provisions of this permit are severable. If any provision of this permit or the application of any provision of this Permit to any circumstance is held invalid, the application of such provision to other circumstances and the remainder of this permit shall not be affected.

PART C

SPECIAL CONDITIONS

I. STORMWATER MANAGEMENT PROGRAM (SWMP)

A. The permittee must develop, implement, and enforce an SWMP designed to reduce the discharge of pollutants from the MS4 to the maximum extent practicable, to protect water quality, and to satisfy the appropriate water quality requirements of the Clean Water Act and Pennsylvania Clean Streams Law, as described in paragraph B, below. There are six Minimum Control Measures (MCMs) that comprise the SWMP. Specific BMPs are identified under each MCM. The permittee shall demonstrate compliance with the SWMP through the submission of Annual MS4 Status Reports due by September 30 each year.

B. Minimum Control Measures (MCMs)

1. **MCM #1**: Public Education and Outreach on Stormwater Impacts. (25 Pa. Code § 92a.32(a) and 40 CFR § 122.34(b)(1))

The permittee shall implement a public education program to distribute educational materials to the community or conduct equivalent outreach activities about the impacts of stormwater discharges on water bodies and the steps that the public can take to reduce pollutants in stormwater runoff.

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

(1) For new permittees, a written Public Education and Outreach Program (PEOP) shall be developed and implemented within one year following issuance of this permit, and shall be re-evaluated each year thereafter and revised as needed.

(2) For existing permittees, the existing PEOP shall be reviewed annually and revised as necessary.

The permittee's PEOP shall be designed to achieve measurable improvements in the target audience's understanding of the causes and impacts of stormwater pollution and the steps they can take to prevent it.

b. **BMP #2**: Develop and maintain lists of target audience groups that are present within the areas served by the permittee's regulated small MS4. In most communities, the target audiences shall include residents, businesses (including commercial, industrial and retailers), developers, schools, and municipal employees.

(1) For new permittees, the lists shall be developed within one year following issuance of this permit, and reviewed and updated as necessary every year thereafter.

(2) For existing permittees, the lists shall continue to be reviewed and updated annually.

c. **BMP #3**: The permittee shall annually publish at least one issue of a newsletter, a pamphlet, a flyer, or a website that includes general stormwater educational information, a description of the permittee's SWMP, and/or information about the permittee's stormwater management activities. The list of publications and the content of the publications must be reviewed and updated at least once during each year of permit coverage. Publications should include a list of references (or links) to refer the reader to additional information (e.g., DEP and EPA stormwater websites, and any other sources that will be helpful to readers). The permittee must implement at least one of the following alternatives:

- Publish and distribute in printed form a newsletter, a pamphlet or a flyer containing information consistent with this BMP.

- Publish educational and informational items including links to DEP's and EPA's stormwater websites on the permittee's website.

(1) For new permittees, stormwater educational and informational items shall be produced and published in print and/or on the Internet no later than one year following issuance of this permit.

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

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

d. **BMP #4**: Distribute stormwater educational materials and/or information to the target audiences using a variety of distribution methods, including but not limited to: displays, posters, signs, pamphlets, booklets, brochures, radio, local cable TV, newspaper articles, other advertisements (e.g., at bus and train stops/stations), bill stuffers, presentations, conferences, meetings, fact sheets, giveaways, and storm drain stenciling.

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

2. **MCM #2**: Public Involvement / Participation. (25 Pa. Code § 92a.32(a) and 40 CFR § 122.34(b)(2))

The permittee shall comply with applicable state and local public notice requirements when implementing a public involvement / participation program.

a. **BMP #1**: Develop, implement and maintain a written Public Involvement and Participation Program (PIPP) which describes various types of possible participation activities and describes methods of encouraging the public's involvement and of soliciting the public's input.

The PIPP for new permittees shall be developed and implemented within one year following issuance of this permit. All permittees shall reevaluate the PIPP annually and make revisions as necessary.

The PIPP shall include, at a minimum:

(1) Opportunities for the public to participate in the decision-making processes associated with the development, implementation, and update of programs and activities related to this permit.

(2) Methods of routine communication to groups such as watershed associations, environmental advisory committees, and other environmental organizations that operate within proximity to the permittee's regulated small MS4s or surface waters receiving the permittee's discharges.

(3) Making Annual MS4 Status Reports and all other plans, programs, maps and reports required by this permit available to the public on the permittee's website, at the permittee's office(s), or by mail upon request.

b. **BMP #2**: The permittee shall advertise to the public and solicit public input on the following documents prior to adoption or submission to DEP:

- Stormwater Management Ordinances (for municipalities); and
- Standard Operating Procedures (SOPs) (for non-municipal entities).

For Ordinances and SOPs, the permittee shall provide notice to the public; provide opportunities for public comment; document and evaluate the public comments; and document the permittee's responses to the comments prior to finalizing the documents. The permittee shall provide this documentation to DEP upon request.

c. **BMP #3**: Regularly solicit public involvement and participation from the target audience groups using available distribution and outreach methods. This shall include an effort to solicit public reporting of suspected illicit discharges. Assist the public in their efforts to help implement the SWMP.

(1) The permittee shall solicit public involvement and participation from target audience groups on the implementation of the SWMP. The solicitation can take the form of public meetings or other events. The public shall be given notice in advance of each meeting or event. During the meetings or events, the permittee should present a summary of progress, activities, and accomplishments with implementation of the SWMP, and the permittee should provide opportunities for the public to provide feedback and input. The presentation can be made at specific MS4 events or during any other public meeting. Existing permittees shall conduct at least one public meeting that includes information on SWMP implementation by March 15, 2028; new permittees shall conduct at least one public meeting within 5 years following issuance of this permit.

(2) The permittee shall document and report instances of cooperation and participation in MS4 activities; presentations the permittee made to local watershed organizations and conservation organizations; and similar instances of participation or coordination with organizations in the community.

(3) The permittee shall also document and report activities in which members of the public assisted or participated in the meetings and in the implementation of the SWMP, including education activities or organized implementation efforts such as cleanups, monitoring, storm drain stenciling, or others.

3. **MCM #3**: Illicit Discharge Detection and Elimination (IDD&E). (25 Pa. Code § 92a.32(a) and 40 CFR § 122.34(b)(3))

The permittee shall develop, implement and enforce a program to detect and eliminate illicit discharges into the permittee's regulated small MS4.

a. **BMP #1**: The permittee shall develop and implement a written program for the detection, elimination, and prevention of illicit discharges into the regulated small MS4. The program shall include the following:

- Procedures for identifying priority areas. These are areas with a higher likelihood of illicit discharges, illicit connections or illegal dumping. Priority areas may include areas with older infrastructure, a concentration of high-risk activities, or past history of water pollution problems.

- Procedures for screening outfalls in priority areas. The program shall include dry weather field screening of outfalls for non-stormwater flows, and sampling of dry weather discharges for selected chemical and biological parameters. Test results shall be used as indicators of possible discharge sources.

- Procedures for identifying the source of an illicit discharge when a contaminated flow is detected at a regulated small MS4 outfall.

- Procedures for eliminating an illicit discharge.

- Procedures for assessing the potential for illicit discharges caused by the interaction of sewage disposal systems (e.g., on-lot septic systems, sanitary piping) with storm drain systems.

- Mechanisms for gaining access to private property to inspect outfalls (e.g., land easements, consent agreements, search warrants) and for investigating illicit connections and discharges.

- Procedures for program documentation, evaluation and assessment. Records shall be kept of all outfall inspections, flows observed, results of field screening and testing, and other follow-up investigation and corrective action work performed under this program.

- Procedures for addressing information or complaints received from the public.

(1) For new permittees, the IDD&E program shall be developed during the first year following issuance of this permit and shall be implemented and evaluated each year thereafter.

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

b. **BMP #2**: The permittee shall develop and maintain map(s) that show permittee and urbanized area boundaries, the location of all outfalls and, if applicable, observation points, and the locations and names of all surface waters that receive discharges from those outfalls. Outfalls and observation points shall be numbered on the map(s).

(1) For new permittees, the map(s) must be developed and submitted to DEP as an attachment to an Annual MS4 Status Report by September 30, (Enter Year - Four Years After Issuance) or the fourth (4th) Annual MS4 Status Report following issuance of this permit, whichever is later.

(2) For existing permittees, the existing map(s) shall be updated and maintained as necessary during each year of coverage under this permit.

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

(1) For new permittees, the map(s) must be developed and submitted to DEP as an attachment to an Annual MS4 Status Report by September 30, (Enter Year - Four Years After Issuance) or the fourth (4th) Annual MS4 Status Report following issuance of this permit, whichever is later.

(2) For existing permittees, the existing map(s) shall be updated and maintained as necessary during each year of coverage under this permit.

d. **BMP #4**: The permittee shall conduct dry weather screenings of its MS4 outfalls and observation points to evaluate the presence of illicit discharges. If any illicit discharges are present, the permittee shall identify the source(s) and take appropriate actions to remove or correct any illicit discharges. The permittee shall also respond to reports received from the public or other agencies of suspected or confirmed illicit discharges associated with the storm sewer system, as well as take enforcement action as necessary. The permittee shall immediately report to DEP illicit discharges that would endanger users downstream from the discharge, or would otherwise result in pollution or create a danger of pollution or would damage property, in accordance with Part A III.D.4 of this permit. An observation point must be established by the permittee at a location upstream of any discharge of stormwater into storm sewers owned or operated by an adjoining municipality.

(1) For new permittees, all of the identified regulated small MS4 outfalls shall be screened during dry weather at least twice within the 5-year period following issuance of this permit.

(2) For existing permittees, each of the identified regulated small MS4 outfalls shall be screened during dry weather at least once by (Enter Expiration Date). 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. This includes any outfalls discharging flows from areas that were identified as suspected source areas for the pollutants identified in Appendices A, B and C during the previous permit term.

(3) If a discharge is observed from any outfall during dry weather screenings, the discharge shall be inspected for color, odor, floating solids, scum, sheen, and substances that result in observed deposits in the surface waters. In addition, the discharge cannot contain substances that result in deposits in the receiving water or produce an observable change in the color, odor or turbidity of the receiving water.

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

(4) Each time an outfall is screened, the permittee shall record outfall observations, regardless of the presence of dry weather flow. All outfall inspections shall be documented on the MS4 Outfall Field Screening Report form (3800-FM-BCW0521), or equivalent. The report must be signed by the inspector and be maintained by the permittee in accordance with Part A III.B of this permit. If an outfall flow is determined by the permittee to be illicit, the actions taken to identify and eliminate the illicit flow shall also be documented.

(5) The permittee shall summarize the results of outfall inspections and actions taken to remove or correct illicit discharges in Annual MS4 Status Reports.

(6) If the permittee determines that an outfall cannot be accessed due to safety or other reasons, the permittee shall establish an "observation point" at an appropriate location prior to the outfall where outfall field screening shall be performed. If observation points are established by the permittee, such points shall be identified on the map required under BMP #2 of this section.

(7) Permittees must ensure that outfalls are properly maintained in accordance with Part C I.B.6.b of this Permit.

e. **BMP #5**: Enact a Stormwater Management Ordinance or SOP to implement and enforce a stormwater management program that includes prohibition of non-stormwater discharges to the regulated small MS4.

(1) New municipal permittees shall submit a copy of an ordinance that is consistent with DEP's 2022 Model Stormwater Management Ordinance (3800-PM-BCW0100j) as an attachment to an Annual MS4 Status Report by September 30, (Enter Year - Four Years After Issuance). Existing municipal permittees shall continue to implement and enforce an existing ordinance.

(2) New permittees that lack the authority to enact ordinances (non-municipal permittees) shall develop and adopt an SOP that prohibits non-stormwater discharges consistent with this permit, and shall submit a copy of the SOP as an attachment to an Annual MS4 Status Report by September 30, (Enter Year - Four Years After Issuance). Existing non-municipal permittees shall continue to implement and enforce an existing SOP.

(3) Notice must be provided to DEP of the approval of any waiver or variance by the permittee that allows an exception to non-stormwater discharge provisions of an ordinance or SOP. This notice shall be submitted in the next Annual MS4 Status Report following approval of the waiver or variance.

f. **BMP #6**: Provide educational outreach to public employees, business owners and employees, property owners, the general public and elected officials (i.e., target audiences) about the program to detect and eliminate illicit discharges.

(1) During each year of permit coverage, appropriate educational information concerning illicit discharges shall be distributed to the target audiences using methods outlined under MCM #1. The permittee shall establish and promote a stormwater pollution reporting mechanism (e.g., a complaint line with message recording) by the end of the first year of Permit coverage for the public to use to notify the permittee of illicit discharges, illegal dumping or outfall pollution. The permittee shall respond to all complaints in a timely and appropriate manner. The permittee

shall document all responses, including the action taken, the time required to take the action, and whether the complaint was resolved successfully.

(2) Educational outreach may include: distribution of brochures and guidance for target audiences including schools; programs to encourage and facilitate public reporting of illicit discharges; organizing volunteers to locate and visually inspect outfalls and to stencil storm drains; and implement and encourage recycling programs for common wastes such as motor oil, antifreeze and pesticides.

4. **MCM #4**: Construction Site Stormwater Runoff Control. (25 Pa. Code § 92a.32(a) and 40 CFR § 122.34(b)(4))

The permittee shall implement the BMPs identified below.

a. **BMP #1**: The permittee may not issue a building or other permit or final approval to those proposing or conducting earth disturbance activities requiring an NPDES permit unless the party proposing the earth disturbance has valid NPDES Permit coverage (i.e., not expired) under 25 Pa. Code Chapter 102.

In addition, prior to the issuance of building or other permits or final approvals for earth disturbance activities that do not require an NPDES permit, the permittee shall require that applicants of proposed earth disturbance activities obtain approval from DEP or a delegated conservation district prior to removing, modifying, or otherwise negatively impacting any existing post-construction stormwater management (PCSM) BMPs on the site.

b. **BMP #2**: A municipality or county which issues building or other permits shall notify DEP or a delegated county conservation district (CCD) within 5 days of the receipt of an application for a permit involving an earth disturbance activity consisting of one acre or more, in accordance with 25 Pa. Code § 102.42.

c. **BMP #3**: Enact, implement and enforce an ordinance or SOP to require the implementation and maintenance of E&S control BMPs, including sanctions for non-compliance, as applicable.

(1) New municipal permittees shall enact, implement, and enforce an ordinance to require the implementation of E&S control BMPs, including sanctions for non-compliance. New municipal permittees shall submit a copy of an ordinance that is consistent with DEP's 2022 Model Stormwater Management Ordinance (3800-PM-BCW0100j) as an attachment to an Annual MS4 Status Report by September 30, (Enter Year - Four Years After Issuance). Existing municipal permittees shall continue to implement and enforce an existing ordinance.

(2) New permittees that lack the authority to enact ordinances shall develop, implement and enforce an SOP to require the implementation and maintenance of E&S control BMPs by September 30, (Enter Year - Four Years After Issuance). Existing non-municipal permittees shall continue to implement and enforce an existing SOP.

5. **MCM #5**: Post-Construction Stormwater Management (PCSM) in New Development and Redevelopment. (25 Pa. Code § 92a.32(a) and 40 CFR § 122.34(b)(5))

The permittee shall implement the BMPs identified below.

a. **BMP #1**: Enact, implement and enforce an ordinance or SOP to require post-construction stormwater management from new development and redevelopment projects, including sanctions for non-compliance.

(1) New municipal permittees shall enact, implement, and enforce an ordinance to require the implementation of PCSM BMPs, including sanctions for non-compliance. New municipal permittees shall submit a copy of an ordinance that is consistent with DEP's 2022 Model Stormwater Management Ordinance (3800-PM-BCW0100j) as an attachment to an Annual MS4 Status Report by September 30, (Enter Year - Four Years After Issuance). Existing municipal permittees shall continue to implement and enforce an existing ordinance.

(2) Permittees that lack the authority to enact ordinances shall develop, implement and enforce an SOP to require the implementation and maintenance of PCSM BMPs and submit the SOP to DEP by September 30, (Enter Year - Four Years After Issuance). Existing non-municipal permittees shall continue to implement and enforce an existing SOP.

b. **BMP #2**: Develop and implement measures to encourage and expand the use of Low Impact Development (LID) in new development and redevelopment. Measures should also be included to encourage retrofitting LID into existing development. Guidance on implementing LID practices may be found on DEP's MS4 website, www.dep.pa.gov/MS4. Enact ordinances consistent with LID practices and repeal sections of ordinances that conflict with LID practices.

c. **BMP #3**: Ensure adequate O&M of all PCSM 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 and BMPs installed by the permittee to satisfy Pollutant Reduction Plan (PRP) and TMDL Plan obligations in prior permit terms.

An inventory of BMPs shall be developed by new permittees by the end of the first year of Permit coverage and shall be continually updated during the term of coverage under the 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 Permit. The permittee must track the following information in its 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.
- All BMPs installed to satisfy PRP and/or TMDL Plan obligations.
- The exact location of the BMP (e.g., latitude and longitude, with street address).
- Information (e.g., name, address, phone number(s)) for BMP owners and entities responsible for BMP O&M, if different from BMP owners.
- The type of BMP and the year it was installed.
- Maintenance required for the BMP type according to the Pennsylvania Stormwater BMP Manual or other manuals and resources.
- The actual inspection/maintenance activities conducted for each BMP.
- An assessment by the permittee if proper O&M has occurred during the year and if not, what actions the permittee has taken, or shall take, to address compliance with O&M requirements.

The permittee shall submit the BMP inventory to DEP with each Annual MS4 Status Report.

6. **MCM #6**: Pollution Prevention / Good Housekeeping. (25 Pa. Code § 92a.32(a) and 40 CFR § 122.34(b)(6))

The permittee must develop and implement an O&M program that includes a training component and has the ultimate goal of preventing and reducing pollutant runoff from operations, facilities and activities under the control of the permittee (collectively, "operations"). The program must include employee training to prevent and reduce stormwater pollution from activities such as park and open space maintenance, fleet and building maintenance, new construction and land disturbances, and stormwater system maintenance.

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

riparian buffers; and stormwater storage or treatment units (e.g., basins, infiltration/filtering structures, constructed wetlands, etc.).

(1) New permittees shall create an inventory of all operations and land uses that may contribute to pollution in stormwater runoff within areas of operations that discharge to the regulated small MS4 by the end of the first year of permit coverage, and review and update the inventory annually thereafter.

(2) All permittees must review and update the inventory each year of permit coverage, as necessary.

b. **BMP #2**: Develop, implement and maintain a written O&M program for all operations that could contribute to the discharge of pollutants from the regulated small MS4, as identified under BMP #1. This program shall address stormwater collection or conveyance systems within the regulated MS4. The written O&M program shall stress pollution prevention and good housekeeping measures, contain site-specific information, and include the following:

- Management practices, policies, and procedures shall be developed and implemented to reduce or prevent the discharge of pollutants to the regulated small MS4s. The permittee shall consider eliminating maintenance area discharges from floor drains and other drains if they have the potential to discharge to storm sewers.

- Maintenance activities, maintenance schedules, and inspection procedures to reduce the potential for pollutants to reach the regulated small MS4s.

- Controls for reducing or eliminating the discharge of pollutants from streets, roads, highways, municipal parking lots, maintenance and storage yards, waste transfer stations, fleet or maintenance shops with outdoor storage areas, salt / sand (anti-skid) storage locations and snow disposal areas. Controls for solid chemical products stored and utilized for the principal purpose of deicing roadways for public safety must be consistent with the BMPs for existing salt storage and distribution sites contained in the PAG-03 NPDES Permit for Stormwater Discharges Associated with Industrial Activity.

- Procedures for the proper disposal of waste, including dredge spoil, accumulated sediments, trash, household hazardous waste, used motor oil, street sweepings, and other debris.

(1) New permittees shall develop and implement a written O&M program by the end of the first year of permit coverage and review and update the program each year thereafter.

(2) All permittees must review and update the written O&M program each year of permit coverage, as necessary.

c. **BMP #3**: Develop and implement an employee training program that addresses appropriate topics to further the goal of preventing or reducing the discharge of pollutants from operations to the regulated small MS4. The program may be developed and implemented using guidance and training materials that are available from federal, state or local agencies, or other organizations. All relevant employees and contractors shall receive training (i.e., public works staff, building, zoning, and code enforcement staff, engineering staff, police and fire responders, etc.). Training topics shall include operation, inspection, maintenance and repair activities associated with any of the operations identified under BMP #1. Training must cover all relevant parts of the permittee's overall stormwater management program that could affect operations, such as illicit discharge detection and elimination, construction sites, and ordinance requirements.

(1) New permittees shall develop and implement a training program that identifies the training topics that will be covered and what training methods and materials will be used by the end of the first year of permit coverage.

(2) All permittees must review and update the training program each year of permit coverage, as necessary.

(3) Employee training shall occur at least annually and shall be documented in writing and reported in Annual MS4 Status Reports. Documentation shall include the date(s) of the training, the names of attendees, the topics covered, and the training presenter(s).

II. POLLUTANT REDUCTION PLANS

A. A Pollutant Reduction Plan (PRP) is a planning document prepared by the permittee which guides the selection and implementation of specific BMPs to reduce pollutant loading to surface waters. The objective of a PRP is to improve the condition of surface waters such that the waters eventually attain water quality standards and its designated and existing uses in accordance with 25 Pa. Code Chapter 93. In the prior permit term, the permittee may have been required to develop PRP(s) and submit the PRP(s) to DEP with the permit application if one or more of the following criteria are met:

1. At the time of the application submission, the permittee has at least one MS4 outfall that discharges to surface waters within the Chesapeake Bay watershed, or otherwise has at least one discharge to storm sewers owned or operated by a different entity within the Chesapeake Bay watershed.

2. At the time of the application submission, the permittee has at least one stormwater outfall that discharges to waters impaired for nutrients (i.e., nitrogen and/or phosphorus) and/or sediment (i.e., siltation), and a TMDL has not been approved for such waters, or a TMDL has been approved but no wasteload allocation (WLA) has been assigned by the TMDL for the permittee's discharge(s).

B. The permittee shall, where applicable, complete implementation of the permittee's approved PRP(s) to achieve the pollutant load reductions specified in the PRP(s) within 5 years following DEP's approval of the PRP(s). The permittee shall submit a report demonstrating implementation of the PRP(s) as an attachment to the first Annual MS4 Status Report that is due following completion of the permittee's 5th year of coverage under the prior permit.

III. TMDL PLANS

A TMDL Plan is a planning document prepared by the permittee which guides the selection and implementation of specific BMPs to reduce pollutant loading to surface waters and comply with the TMDL. The permittee shall, where applicable, complete implementation of the permittee's approved TMDL Plan(s) to achieve the pollutant load reductions specified in the TMDL Plan(s) within 5 years following DEP's approval of the TMDL Plan(s). The permittee shall submit a report demonstrating implementation of the TMDL Plan(s) as an attachment to the first Annual MS4 Status Report that is due following completion of the permittee's 5th year of coverage under the prior permit.

IV. OTHER REQUIREMENTS

A. Screenings and other solids collected by the permittee shall be handled, recycled and/or disposed of in compliance with the Solid Waste Management Act (35 P.S. §§ 6018.101 – 6018.1003), 25 Pa. Code Chapters 287, 288, 289, 291, 295, 297, and 299 (relating to requirements for landfilling, impoundments, land application, composting, processing, and storage of residual waste), federal regulation 40 CFR Part 257, The Clean Streams Law, and the Federal Clean Water Act and its amendments.

B. DEP may require monitoring of stormwater discharge(s) as may be reasonably necessary in order to characterize the nature, volume or other attributes of that discharge or its sources.

C. The permittee shall ensure that its SWMP, including its Stormwater Management Ordinance(s) or SOPs, is designed to prevent increased loadings of pollutants and to not cause or contribute to a violation of water quality standards by any discharge from its regulated small MS4.

D. The permittee shall develop and maintain adequate legal authorities, where applicable, and shall maintain adequate funding and staffing to implement this Permit, including the SWMP contained in Part C I of this Permit.

E. In accordance with 40 CFR § 122.35, the permittee may rely on another entity to satisfy NPDES permit obligations to implement a minimum control measure if: (1) the other entity, in fact, implements the control measure; (2) the particular control measure, or component thereof, is at least as stringent as the corresponding NPDES permit requirement; and (3) the other entity agrees to implement the control measure on the permittee's behalf. The permittee must specify in Annual MS4 Status Reports that it is relying on another entity to satisfy some of its NPDES permit obligations. The permittee remains responsible for compliance with permit obligations if the other entity fails to implement the control measure (or component thereof).

F. This permit authorizes the discharge of stormwater to surface waters from the permittee's regulated small MS4. In addition, the following non-stormwater discharges are authorized by this permit as long as such discharges do not cause or contribute to pollution as defined in Pennsylvania's Clean Streams Law:

1. Discharges or flows from firefighting activities.

2. Discharges from potable water sources including water line flushing and fire hydrant flushing, if such discharges do not contain detectable concentrations of Total Residual Chlorine (TRC).

3. Non-contaminated irrigation water, water from lawn maintenance, landscape drainage and flows from riparian habitats and wetlands.

4. Diverted stream flows and springs.

5. Non-contaminated pumped ground water and water from foundation and footing drains and crawl space pumps.

6. Non-contaminated HVAC condensation and water from geothermal systems.

7. Residential (i.e., not commercial) vehicle wash water where cleaning agents are not utilized.

8. Non-contaminated hydrostatic test water discharges, if such discharges do not contain detectable concentrations of TRC.

G. In the event existing outfall(s) are identified during the permit term that were not identified on maps submitted as part of the application (where required), the permittee shall identify the outfall(s) in the subsequent Annual MS4 Status Report that is submitted to the DEP office that approved permit coverage. In the event new stormwater outfalls are proposed, the permittee shall submit written notification to the DEP office that issued the permit at least 60 days prior to commencing a discharge.

Pennsylvania Department of Environmental Protection

SOUTHCENTRAL REGIONAL OFFICE
CLEAN WATER PROGRAM

Application Type	**Renewal**	Application No.	**PAI133540**
Facility Type	**MS4**	APS ID	**956949**
MS4 Type	**Small**	Authorization ID	**1514604**

INDIVIDUAL MS4 CHECKLIST

Applicant and Facility Information

Applicant Name	**Lower Paxton Township Dauphin County**	Facility Name	**Lower Paxton Township Dauphin County MS4**
Applicant Address	425 Prince Street	Facility Address	425 Prince Street
	Harrisburg, PA 17109-3054		Harrisburg, PA 17109-3054
Municipality	Lower Paxton Township	County	Dauphin
Receiving Water(s)	Nyes Run (WWF, MF), Slotznick Run (CWF, MF), Unnamed Tributary of Paxton Creek (WWF, MF), Paxton Creek (WWF, MF), Unnamed Tributary to Paxton Creek (WWF, MF), Asylum Run (WWF, MF), Beaver Creek (WWF, MF), Spring Creek (CWF, MF), and Unnamed Tributary to Beaver Creek (WWF, MF)	Ch. 93 Class.	MF, WWF, and CWF
Date Application Received	January 30, 2025		

Checklist

		Completeness Item	Comments
☒	1.	One original and two copies of complete NOI (3800-PM-BCW0100b).	**Received via PUP 288882.**
☐	2.	One original and two copies of complete Waiver Application (3800-PM-BCW0100e) (optional).	**N/A**
☒	3.	Complete storm sewer system map (existing permittees) (note – new urbanized areas do not require mapping of entire storm sewer collection system).	
☐	4.	Topographic map or storm sewer system map (new permittees and existing waivers).	**N/A**
☒	5.	MOU or written agreement for third party MCM implementation (if applicable).	
☒	6.	Stormwater Management Ordinance (municipal applicants seeking renewed coverage only).	
☒	7.	Stormwater Management Ordinance Checklist (3800-PM-BCW0100g) (if applicable).	
☐	8.	SOPs (non-municipal applicants seeking renewed coverage only).	**N/A**
☐	9.	Chesapeake Bay PRP (Appendix D) and/or Impaired Waters PRP (Appendix E), where required.	**Previously approved 8/1/2020.**

Approve	Deny	Signature	Date
X		*Jacob S. Rakowsky* Jacob S Rakowsky, E.I.T. / Project Manager	2/21/2025
X		*Scott M. Arwood* Scott M. Arwood, P.E. / Environmental Engineer Manager	2/21/2025

☐	9a.	PRP public participation requirements – the PRP contains a copy of the public notice advertising the PRP, a copy of all written comments received from the public to the PRP, and a copy of the permittee's record of consideration of all timely comment received in the public comment period.	**N/A**
☐	9b.	PRP contains a map that identifies land uses and/or impervious/pervious surfaces and the storm sewershed boundary(ies) (note – this map may be combined with item #3 for existing permittees).	**N/A**
☐	9c.	PRP contains a section that describes the pollutants of concern.	**N/A**
☐	9d.	PRP contains existing load calculations for pollutants of concern.	**N/A**
☐	9e.	PRP selects BMPs to achieve the minimum required reductions in pollutant loading	**N/A**
☐	9f.	PRP identifies funding mechanisms.	**N/A**
☐	9g.	PRP identifies responsible parties for operation and maintenance (O&M) of BMPs.	**N/A**
☐	9h.	For joint PRPs, a written agreement amongst the parties is attached (if applicable).	**N/A**
☐	10.	TMDL Plan (Appendix F), where required.	**Previously approved 8/1/2020.**
☐	10a.	TMDL Plan public participation requirements (see 9a).	**N/A**
☐	10b.	Plan contains a map that identifies land uses and/or impervious/pervious surfaces and the storm sewershed boundary(ies).	**N/A**
☐	10c.	Plan contains describes the pollutants of concern.	**N/A**
☐	10d.	Plan contains existing load calculations.	**N/A**
☐	10e.	Plan identifies wasteload allocations (WLAs).	**N/A**
☐	10f.	Plan contains an analysis of short- and long-term objectives.	**N/A**
☐	10g.	PRP selects BMPs to achieve the minimum required reductions in pollutant loading.	**N/A**
☐	10h.	PRP identifies funding mechanisms.	**N/A**
☐	10i.	PRP identifies responsible parties for O&M of BMPs.	**N/A**
☐	10j.	For joint PRPs, a written agreement amongst the parties is attached (if applicable).	**N/A**
☐	11.	Complete NOI packages for each co-applicant (joint NOIs only). **NOTE** – Each municipality served by an authority must also submit an NOI.	**N/A**

Other Comments:

Refer to Fact Sheet for Internal Review and Recommendations.

Pennsylvania Department of Environmental Protection

Southcentral Regional Office
CLEAN WATER PROGRAM

Application Type	**Renewal**	Application No.	**PAI133540**
Facility Type	**MS4**	APS ID	**956949**
Permit Type	**Individual**	Authorization ID	**1514604**

NPDES PERMIT FACT SHEET
MS4s

Applicant and Facility Information

Applicant Name	**Lower Paxton Township Dauphin County**	Facility Name	**Lower Paxton Township Dauphin County MS4**
Applicant Address	425 Prince Street	Facility Address	425 Prince Street
	Harrisburg, PA 17109-3054		Harrisburg, PA 17109-3054
Applicant Contact	Larry Stepansky	Facility Contact	Larry Stepansky
Applicant Phone	(717) 657-5600	Facility Phone	(717) 657-5600
Client ID	77433	Site ID	614826
SIC Code	9199	Municipality	Lower Paxton Township
SIC Description	Public Admin. - Genral Government, Nec	County	Dauphin
Date Application Received	January 30, 2025		
Date Application Accepted	February 13, 2025		

Purpose of Application: Renewal application for an individual MS4 NPDES Permit.

Internal Review and Recommendations

Per 40 CFR § 122.33, and PA Title 25 § 92a.3, Lower Paxton Township (the applicant) is required to seek coverage under an NPDES permit issued by the state of Pennsylvania. Due to the applicant's discharge to waters requiring a TMDL Plan, the applicant has submitted an application for coverage under an individual permit. Per PA Title 25 § 92a.54, the applicant is eligible for permit coverage.

The applicant discharges to the following waters: Nyes Run (WWF, MF), Slotznick Run (CWF, MF), Unnamed Tributary of Paxton Creek (WWF, MF), Paxton Creek (WWF, MF), Unnamed Tributary to Paxton Creek (WWF, MF), Asylum Run (WWF, MF), Beaver Creek (WWF, MF), Spring Creek (CWF, MF), and Unnamed Tributary to Beaver Creek (WWF, MF).

During the previous permit term, the applicant submitted a combined Local Impairment Reduction Plan, Chesapeake Bay Pollutant Reduction Plan, and TMDL Plan. The plan was a joint plan with Harrisburg City and Susquehanna Township and combines the Chesapeake Bay PRP and Paxton Creek Watershed TMDL Plan. The plan was approved on 8/1/2020 and expires 7/31/2025.

There are no unresolved violations associated with the applicant that would affect issuance of coverage.

It is recommended that individual permit coverage is granted in accordance with 40 CFR §123.35.

Public Participation

DEP will publish notice of the receipt of the NPDES permit application and a tentative decision to issue the individual NPDES permit in the *Pennsylvania Bulletin* in accordance with 25 Pa. Code § 92a.82. Upon publication in the *Pennsylvania Bulletin*, DEP will accept written comments from interested persons for a 30-day period (which may be extended for one additional 15-

Approve	Deny	Signatures	Date
X		*Jacob S. Rakowsky* Jacob S Rakowsky, E.I.T. / Project Manager	2/21/2025
X		*Scott M. Arwood* Scott M. Arwood, P.E. / Environmental Engineer Manager	2/21/2025

Internal Review and Recommendations
day period at DEP's discretion), which will be considered in making a final decision on the application. Any person may request or petition for a public hearing with respect to the application. A public hearing may be held if DEP determines that there is significant public interest in holding a hearing. If a hearing is held, notice of the hearing will be published in the *Pennsylvania Bulletin* at least 30 days prior to the hearing and in at least one newspaper of general circulation within the geographical area of the discharge.

Southcentral Regional Office

PAI133540, MS4, **Lower Paxton Township Dauphin County**, 425 Prince Street, Harrisburg, PA 17109-3054.

The application is for a renewal of an individual NPDES permit for the discharge of stormwater from a regulated municipal separate storm sewer system (MS4) to waters of the Commonwealth in Lower Paxton Township, **Dauphin County**. The receiving stream(s), Nyes Run (WWF, MF), Slotznick Run (CWF, MF), Unnamed Tributary of Paxton Creek (WWF, MF), Paxton Creek (WWF, MF), Unnamed Tributary to Paxton Creek (WWF, MF), Asylum Run (WWF, MF), Beaver Creek (WWF, MF), Spring Creek (CWF, MF), and Unnamed Tributary to Beaver Creek (WWF, MF), is located in State Water Plan watershed 7-D and 7-C and is classified for Warm Water Fishes, Migratory Fishes, and Cold Water Fishes, aquatic life, water supply and recreation. The applicant is classified as a small MS4.

You may make an appointment to review the DEP files on this case by calling the File Review Coordinator at 717-705-4732.

The EPA waiver is in effect for small MS4s, and is not in effect for large MS4s.

Close Window

NOTICES

DEPARTMENT OF ENVIRONMENTAL PROTECTION

Draft National Pollutant Discharge Elimination System General Permit for Stormwater Discharges from Small Municipal Separate Storm Sewer Systems (PAG-13)

[55 Pa.B. 601]
[Saturday, January 18, 2025]

The Department of Environmental Protection (Department) is announcing the availability of a draft National Pollutant Discharge Elimination System (NPDES) General Permit for Stormwater Discharges from Small Municipal Separate Storm Sewer Systems (PAG-13). To access the draft General Permit and related documents, visit the Department's eLibrary website at https://greenport.pa.gov/elibrary/ (select "Permit and Authorization Packages," then "Clean Water," then "Draft PAG-13 NPDES General Permit for Stormwater Discharges from Small Municipal Separate Storm Sewer Systems (MS4s)"). PAG-13 is intended to provide NPDES permit coverage to small municipal separate storm sewer systems (MS4) for stormwater discharges to surface waters.

The following significant changes are proposed in the draft PAG-13 General Permit in comparison to the PAG-13 General Permit that became effective on March 16, 2018 (2018 General Permit):

• As guided by the workgroup, the Department convened to develop changes to the PAG-13 (see 52 Pa.B. 6107 (September 24, 2022)), the Department is proposing a new approach in the draft PAG-13 for restoring surface waters that are impaired for reasons that may be related to urban stormwater, including the Chesapeake Bay. In recognition of the anticipated increase in runoff in this Commonwealth as a result of climate change, and the fact that the impact of excessive runoff through flooding is more easily understood by local officials and residents, the Department is proposing to focus the draft PAG-13 on the reduction or management of runoff volume, rather than directly on pollutant loads, with the strong scientific consensus that managing stormwater runoff volume also decreases loads of key pollutants, like nutrients and sediment.

• The Department is proposing to require MS4s to complete a Maximum Extent Practicable (MEP) Calculator Spreadsheet and submit the results with the Notice of Intent (NOI) for coverage under the reissued PAG-13 General Permit. The MEP Calculator Spreadsheet is intended to determine the volume of stormwater runoff management that is feasible for each MS4—based on the socioeconomic characteristics and opportunities for stormwater management within the MS4—in preparation for the development of a Volume Management Plan (VMP), which would be due by September 30, 2028. The MEP Calculator Spreadsheet also includes the option for MS4s to receive credits for collaboration with other MS4s; these credits can reduce an MS4's Volume Management Objective (VMO) in their VMP. The Department proposes to provide MS4s with 2 years to prepare VMPs. The VMP would replace the Pollutant Reduction Plan (PRP) requirement from the 2018 PAG-13 General Permit. Instructions for using the MEP Calculator Spreadsheet are provided in the draft PAG-13 NOI Instructions (3800-PM-BCW0100a) and the draft MEP Calculator Spreadsheet has been posted to the Department's MS4 website at www.dep.pa.gov/MS4. For VMPs, the

Department also proposes to provide an incentive, in the form of an additional 10% volume management credit when stormwater control measures (SCM) will be located in Environmental Justice (EJ) areas and when SCMs will help alleviate local flooding. More information on VMPs has been provided in the draft VMP instructions (3800-PM-BCW0100h) and draft PAG-13 Fact Sheet (3800-PM-BCW0100g).

- The Department is proposing to discontinue implementation of Pollutant Control Measures in the draft PAG-13 to provide time for the Department to evaluate the results of this effort.

- The Department is proposing two changes to eligibility requirements. First, the 2018 General Permit prohibits any MS4 that discharges to waters impaired for nutrients or sediment from using PAG-13 when the MS4 is required to achieve a wasteload allocation in a Total Maximum Daily Load. The Department is proposing to update the causes of impairment from nutrients or sediment to include turbidity, Total Suspended Solids, siltation, algae, eutrophication, nutrients, flow regime modification and habitat alterations. Second, if an MS4 discharges to waters impaired for the updated causes, the MS4 would not be eligible to use PAG-13 unless it identifies a VMO in the NOI and submits a VMP to the Department by September 30, 2028.

- The 2018 General Permit required MS4s to prepare and submit an update to their stormwater management ordinance by September 30, 2022, that is consistent with the Department's 2022 Model Ordinance. The Department is proposing changes to the 2022 Model Ordinance. The model ordinance would be renamed to the 2028 Model Ordinance and PAG-13 would require updates to local ordinances consistent with the 2028 Model Ordinance by September 30, 2028.

- The Department is proposing a requirement that any municipal permittees relying on a delegated county conservation district (CCD) to implement Minimum Control Measures (MCM) # 4 and # 5 of the PAG-13 General Permit attempt to enter into a Memorandum of Understanding or other written agreement with the CCDs to ensure clear understanding of roles and responsibilities for earth disturbance activities under MCMs # 4 and # 5.

- For the 2018 General Permit, coverage was approved without an expiration date and the submission of annual reports also served as an NOI to continue coverage each year. The Department is proposing to change this approach by requiring submission of a renewal NOI every 5 years rather than every year.

- For MCM # 2 (Public Involvement/Participation), the Department is proposing that if a permittee's jurisdiction contains EJ areas, the Public Involvement and Participation Plan must include targeted outreach for EJ areas.

- References to the 2010 census have been updated to the 2020 census. If an entity was automatically designated a small regulated MS4 due to the presence of urbanized areas according to the 2010 census but has no urban area according to the 2020 census, the entity will continue to be considered a small regulated MS4, although these entities may be eligible for a waiver if the permittee has satisfied its obligations in the prior permit term.

The proposed NOI fee of $2,500, paid in annual increments of $500, has not changed in comparison to the 2018 General Permit. The NOI fee is due annually by September 30.

The Department published notice at 52 Pa.B. 6107 that the PAG-13 General Permit had been extended to March 15, 2025. On May 18, 2024, The Department published notice at 54 Pa.B. 2693 (May 18, 2024) that the PAG-13 General Permit had been extended until the general permit is reissued. The Department anticipates that the final PAG-13 General Permit will become effective on October 1, 2026.

The Department anticipates that MS4s seeking to obtain new coverage under PAG-13 or continue existing coverage will need to submit an NOI to the appropriate Department regional office by September 30, 2026. If a small MS4 has existing PAG-13 coverage and has not complied with the terms and conditions of the existing PAG-13 General Permit, including the requirement to submit a final report documenting implementation of an approved PRP (as applicable), the Department anticipates that the MS4 will need to submit an application for an individual NPDES permit by September 30, 2026.

Written Comments: Interested persons are invited to submit written comments regarding the draft PAG-13 General Permit and associated documents through Wednesday, March 19, 2025. Commentators are encouraged to submit comments using the Department's online eComment system at www.ahs.dep.pa.gov/eComment. Written comments can also be submitted by email to ecomment@pa.gov or by mail to the Department of Environmental Protection, Policy Office, Rachel Carson State Office Building, P.O. Box 2063, Harrisburg, PA 17105-2063. Comments, including comments submitted by email, must include the originator's name and address.

Written comments submitted during the 60-day comment period will be retained by the Department and considered in finalizing the General Permit. The Department will provide an opportunity for any interested person or group of persons, any affected state, any affected interstate agency, the United States Environmental Protection Agency or any interested agency, to request or petition for a public hearing with respect to the proposed General Permit. The request or petition for public hearing, which must be filed within the 60-day period allowed for filing of written comments, must indicate the interest of the party filing the request and the reasons a hearing is warranted. A hearing will be held if there is significant public interest.

JESSICA SHIRLEY,
Acting Secretary

[Pa.B. Doc. No. 25-90. Filed for public inspection January 17, 2025, 9:00 a.m.]

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COMMONWEALTH OF PENNSYLVANIA
DEPARTMENT OF ENVIRONMENTAL PROTECTION
BUREAU OF CLEAN WATER

INSTRUCTIONS FOR USING THE MEP CALCULATOR SPREADSHEET

Draft, January 2025

Introduction

DEP has developed the Maximum Extent Practicable (MEP) Calculator Spreadsheet to standardize the determination of MEP volume management objectives (VMOs) for the PAG-13 General Permit. One of the objectives of PAG-13 is for MS4s to manage the volume of stormwater runoff from impervious surfaces to the MEP. A lookup chart has been developed by DEP to identify the VMO for the 2026-2031 PAG-13 General Permit term as a function of total impervious area within the Census-designated Urban Area (UA) of a municipality or other designated MS4 entity and the percentage of the total impervious area that is treated by stormwater control measures (SCMs).

Each MS4 must complete the MEP Calculator separately. The lookup chart is used to establish the annualized VMO for the MS4. The VMO may be reduced by calculating a feasibility index and by collaborating with other MS4s to achieve collective volume management objectives. The total impervious area is that which was determined under the 2010 Census supplemented with any additional impervious area identified by the 2020 Census.

Questions on the use of the spreadsheet can be directed to DEP's Bureau of Clean Water at **RA-EPPAMS4@pa.gov**.

General Information

The spreadsheet was designed using the latest version of Microsoft Excel® and is in Excel macro-enabled workbook (XLSM) format. If prompted by Excel after opening the spreadsheet, enable editing and macros. *Note that you may need to add additional Trusted Locations in the Trust Center Settings of Excel in order to run the macros*. These locations may include server drives and/or locations where you intend to save the file for use. The following steps may be taken:

1. File > Excel Options > Trust Center > Trust Center Settings > Trusted Locations
2. Check the box to "Allow Trusted Locations on my network"
3. Select "Add new location"
4. Browse to select the folder (or server) where the file will be saved, check the "Subfolders of this location are also trusted" box, and then OK.

In addition, if you receive a message that your operating system has blocked macros from executing in the spreadsheet, you will need to unblock the file (in general, right click on the file, select "Properties," and check the box for "Unblock").

The spreadsheet contains two primary worksheets: MEP Calculator and SCM Types. The SCM Types worksheet allows the user to select the type of SCMs that the MS4 would like to report in their SCM Inventory. The SCM Inventory must be populated in order to determine the percentage of total impervious area treated, which is needed to determine the VMO. If the SCM Inventory is not completed, it is assumed that 0-5% of the impervious area is treated. The SCM Inventory includes five different worksheets: Floodplain Restoration, Stream Restoration, Retrofits, Volume SCMs, and Other SCMs.

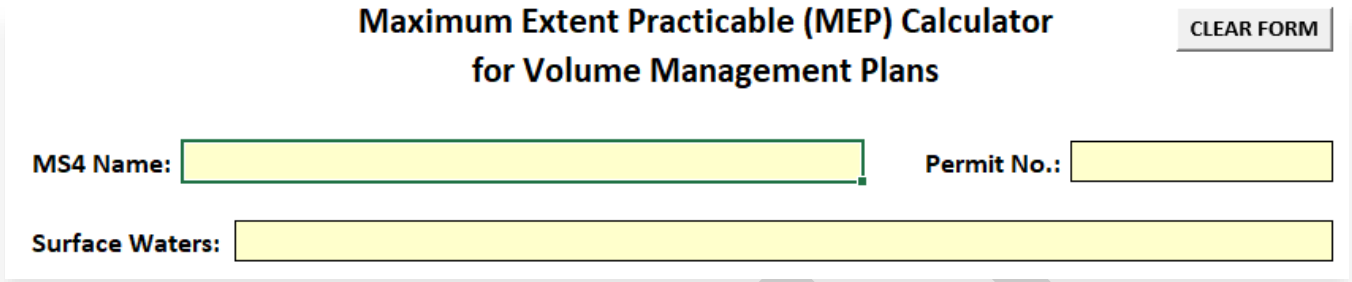
At the top of the MEP Calculator and SCM Inventory worksheets there is a "Clear Form" button. The user may click the "Clear Form" button at any time to delete **all** data from the worksheet.

All cells available for data entry or selection from a drop-down menu are highlighted. The user may use the Tab, arrow, or Enter keys to move from cell to cell.

Throughout the spreadsheet, cells are formatted to display a set number of decimal places. As such, the number displayed in a cell is not necessarily the exact number that is stored by the spreadsheet (e.g., the displayed number

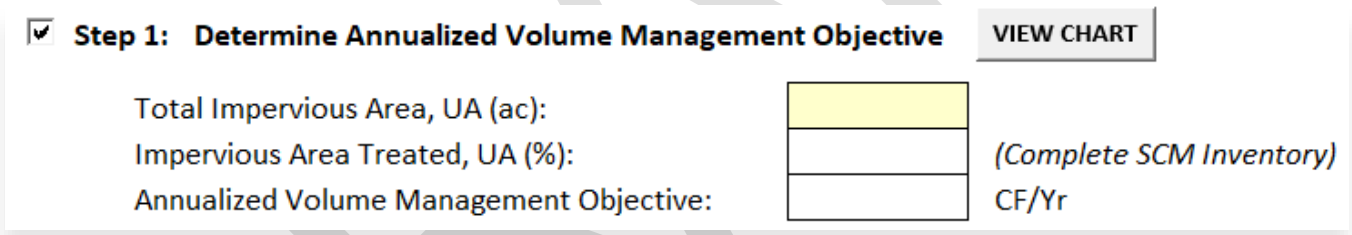
may be rounded up from the exact number stored in the spreadsheet). Therefore, users may not be able to replicate a calculated value using only the numbers displayed in the cells due to the spreadsheet's rounding of input values to meet formatting requirements.

Completing the MEP Calculator Worksheet



- **MS4 Name** – Enter the name of the MS4 entity as identified on page 1 of the NPDES permit.
- **Permit No.** – Identify the NPDES Permit Number(s) held by the MS4.
- **Surface Waters** – List the impaired surface waters covered by the MEP analysis. For MS4s within the Chesapeake Bay watershed, include any local impaired waters as well as "Chesapeake Bay."

Step 1: Determine Annualized Volume Management Objective



- **View Chart Button** – See the discussion below on the Volume Management Chart.
- **Total Impervious Area, UA (ac)** – Select the range representing the Total Impervious Area within the UA in acres. All impervious area in the UA must be reported; no parsing is allowed. Report the total impervious area using the 2010 census map overlain by the 2020 census map. Report the total impervious within the combined 2010 and 2020 UA area.

  Do not include impervious area that drains to a combined sewer system (CSS) or impervious area that is on properties owned by another entity with NPDES permit coverage for MS4 discharges (like counties or state agencies). Do include all other impervious areas (including areas covered by an NPDES permit for industrial stormwater discharges), both publicly and privately owned. Impervious areas are areas meeting criterion 1 and either 2, 3, or 4, below:

  1. Land covers that do not allow for infiltration and contain the term "impervious" in the description under the Natural Resources Conservation Service (NRCS) Publication TR-55. Compacted gravel areas and bodies of water, including surface waters and pools, should be considered impervious. Elevated structures, such as decks where pervious surfaces exist beneath them, should not be considered impervious; and

  2. Areas mapped as impervious by the MS4 using high-resolution aerial photography or LIDAR or is field verified in preparing the MEP Calculator Spreadsheet; or

3. In the absence of municipal-scale mapping, it is acceptable to use the latest National Land Cover Database (NLCD) to estimate impervious areas. If this is done, the permittee must assume that percent impervious for developed lands are as follows: Developed Open Space – 19% impervious; Developed Low Intensity – 49% impervious; Developed Medium Intensity – 79% impervious; and Developed High Intensity – 100% impervious. Impervious areas are expected to be field verified before the Volume Management Plan (VMP) is submitted to DEP; or

4. Permittees located in the Chesapeake Bay watershed may use the most current Chesapeake Conservancy high-resolution land cover classification data set. If this data set is used, all areas shown as impervious and tree canopy over impervious must be considered impervious. Impervious areas are expected to be field verified before the VMP is submitted to DEP.

- **Impervious Area Treated, UA (%)** – The range that represents the percentage of impervious area within the UA that is treated will be calculated and displayed upon completion (or partial completion) of the SCM Inventory. Treated impervious area is that in which at least the first inch of runoff is captured by an SCM that reduces volume by infiltration and/or evapotranspiration (ET) or manages volume through a Managed Release Concept (MRC) SCM, with certain exceptions. The SCM must be maintained and functional to be counted toward treatment of impervious surface. Additional information is provided below for the SCM Inventory.

From the user's entries the Annualized VMO is derived from the Volume Management Chart and is displayed in cubic feet per year (CF/Yr).

Step 2: Calculate Feasibility Index

A feasibility index is calculated using multiple factors that estimate the MS4's ability to achieve the Annualized VMO calculated in Step 1. MS4s that are not municipalities should skip factors A through D. Numbers in parentheses correspond to input parameters in the MEP Calculator Spreadsheet.

Financial / Socioeconomic Factors

A. **Ratio, Municipal:PA LQI, 2020**: Enter the Lowest Quintile Household Income (LQI) for the municipality ***(2)***. This value is divided by the Pennsylvania LQI of $14,400 ***(1)*** to determine the ratio of the municipal LQI to the Pennsylvania LQI. To determine LQI for the municipality the following steps should be taken:

1. Access the American Community Survey (ACS) 5-Year Estimates Subject Table for Mean Household Income of Quintiles.

2. Select "Geos" in the table header.

3. In the Select Geography window, scroll to select "County Subdivision" from the list of All Geographies and select Pennsylvania for the state.

4. Select the appropriate county and click in the check box for the municipality, then close the Geography window.

5. Enter the value displayed for Lowest Quintile into the MEP Calculator Spreadsheet.

B. **Ratio, Municipal:PA Poverty Rate**: Enter the municipal poverty rate based on the latest available published data ***(4)***. This value is divided by the Pennsylvania poverty rate of 12% ***(3)*** to determine the ratio of the municipal poverty rate to the Pennsylvania poverty rate. DEP recommends that the following steps be taken to determine the municipal poverty rate:

1. Go to the Small Area Income and Poverty Estimates tool on the U.S. Census Bureau's website.

2. Filter by state, county, and school district for all ages. Select the school district that is located within the municipality's urban area. If there are multiple school districts the average poverty rate should be used.

C. **Ratio, Municipal:PA Unemployment Rate (UR), current**: Enter the Pennsylvania ***(5)*** and municipal ***(6)*** URs, as of the time of the analysis, to determine the ratio of the municipal UR to the Pennsylvania unemployment rate. It is recommended that data published on the Pennsylvania Department of Labor and Industry website be used for Pennsylvania and the municipality. The latest Pennsylvania Civilian Labor Force Data by City / Borough / Township of Residence report is recommended for municipal UR. Locate the most recent report by clicking on Monthly News Releases under the Workforce Statistics (CWIA) heading and clicking the button for View the Civilian Labor Force Packet. County unemployment data may be used if no other local data are available or applicable. Report unadjusted unemployment rates.

D. **Ratio, Municipal:Standard Utility Bill**: Enter the total annual utility bill for the average household in the municipality ***(7)***. Include water, sewer, and stormwater fees (do not include electric, gas, refuse, etc.). The ratio of the annual utility bill to the municipal LQI ***(2)*** is calculated and displayed ***(8)***. This value is divided by a standard utility bill of 8% of LQI ***(9)*** to obtain the ratio of the municipal to standard utility bill as a percentage of LQI. The 8% standard was derived by using a statewide average utility bill of approximately $1,200/year divided by the LQI for Pennsylvania ($14,400).

E. **Long-Term Affordability Indicator**: Enter the total revenues received in the prior year ***(10)***; the total debt as of December 31 of the prior year ***(11)***; and the fund balance/retained earnings as of December 31 of the prior year ***(12)***. For municipalities, this information is reported to the Pennsylvania Department of Community and Economic Development (DCED). The long-term affordability indicator is calculated by subtracting total debt ***(11)*** from the fund balance/retained earnings ***(12)*** and dividing by total revenues ***(10)***, where the minimum and maximum values of the indicator are 0.5 and 1.5, respectively.

SCM Opportunities

This indicator takes into consideration several MS4-specific factors to qualitatively assess the potential for SCM opportunities.

F. **SCM Opportunity Indicator**: The SCM Opportunity Indicator is calculated as the product of ***(13)*** through ***(17)***. The higher the value, the lower the estimated opportunities for SCMs.

- **Percent of impervious area that is owned by the permittee**: Enter the percent of the Total Impervious Area, UA reported in Step 1 for the MS4 that is owned by the permittee ***(13)***. If the entered percent is greater than or equal to 20%, a value of 0.5 is assigned. If the percent is greater than or equal to 15% but less than 20%, a value of 0.75 is assigned. If the percent is greater than or equal to 10% but less than 15%, a value of 1 is assigned. If the percent is greater than or equal to 5% but less than 10%, a value of 1.25 is assigned. If the percent is less than 5%, a value of 1.5 is assigned. The higher the percent, the higher the estimated opportunity for SCMs (and the lower the assigned value).

- **Percent of public impervious that is untreated**: Enter the percent of the publicly owned impervious area (reported in ***13***) that is untreated by stormwater SCMs ***(14)***. If the entered percent is greater than or equal to 80%, a value of 1.5 is assigned. If the percent is greater than or equal to 60% but less than 80%, a value of 1.25 is assigned. If the percent is greater than or equal to 40% but less than 60%, a value of 1 is assigned. If the percent is greater than or equal to 20% but less than 40%, a value of 0.75 is assigned. If the percent is less than 20%, a value of 0.5 is assigned. The higher the percent, the lower the estimated opportunity for SCMs (and the higher the assigned value).

- **Localized flooding problem in the municipality?** Indicate (Yes or No) whether there is a localized flooding problem in the municipality ***(15)***. If Yes, a value of 0.75 is assigned, otherwise a value of 1 is assigned. If Yes is selected, the permittee should keep on file documentation of localized flooding issues. Relevant documentation may include site photographs, public works maintenance reports, and records of any state or federal level flood mitigation assistance provided within the permittee's jurisdiction.

- **No. development/redevelopment projects/year**: Report the average number of development and redevelopment projects that have occurred over the previous three years ***(16)***. If the number is greater than or equal to 10, a value of 0.5 is assigned. If the number is greater than or equal to 7 but less than 10, a value of 0.75 is assigned. If the number is greater than or equal to 4 but less than 7, a value of 1 is assigned. If the number is greater than or equal to 2 but less than 4, a value of 1.25 is assigned. If the number is less than 2, a value of 1.5 is assigned. The higher the number, the higher the estimated opportunity for SCMs (and the lower the assigned value).

- **Is there an ordinance requiring PCSM < 1 acre?** Indicate (Yes or No) whether there is a local ordinance that requires PCSM for projects with less than 1 acre of disturbance ***(17)***. If Yes, a value of 0.75 is assigned, otherwise a value of 1 is assigned.

Feasibility Index: The Feasibility Index is calculated as the product of A through F, where the minimum value is 1. The higher the Feasibility Index, the lower the estimated opportunities for SCMs.

Step 3: Determine MEP

Adjusted Annualized VMO – The Annualized VMO that is determined in Step 1 is divided by the Feasibility Index calculated in Step 2, rounded to the nearest 100 CF/Yr.

Collaboration credit:

- **Number of additional MS4s collaborating in VMP** – Enter the number of additional MS4s collaborating in the development and implementation of the VMP (if any). MS4s that have been granted a waiver may participate in a collaborative VMP as long as the permittee that was granted a waiver completes the MEP Calculator Spreadsheet and the VMO of the waived MS4 is included in the total VMO of the collaborative VMP. A 1% credit is applied for each MS4 that is collaborating, up to a 50% maximum credit. For example, if a VMP is being developed and implemented by 10 MS4s, a 10% credit will be applied. Non-MS4s including but not limited to non-profit organizations, and municipalities that do not need an NPDES permit or waiver, may participate in a collaborative VMP but may not be included in the number of MS4s collaborating in the VMP.

- **Are the collaborating MS4s co-permittees?** As an incentive for those MS4s that are collaborating in the development and implementation of PRPs to also be co-permittees, an additional credit is provided for co-permittees. If the response is Yes, 10% is added to the credit calculated above for the number of additional MS4s collaborating in the VMP. For example, if a VMP is being developed and implemented by 10 MS4s, and they will be co-permittees, an additional 20% credit (10% for the 10 collaborating MS4s + 10% for the 10 MS4s being co-permittees) will be applied.

The collaboration credit is the product of the two credits described above, up to a maximum of 50%. For example, if a VMP is being developed and implemented by 10 MS4s, a 10% credit will be applied and a value of 0.9 is assigned (1 – 0.1). If the collaborating MS4s will be co-permittees, a 20% credit will be applied and a value of 0.8 is assigned (1 – 0.2). The product of 0.9 and 0.8 is 0.72 or 72%. That product is then subtracted from 100% to calculate the collaboration credit (100% - 72% = 28%).

The **MEP Annualized VMO**, in CF/Year, is the Adjusted Annualized VMO minus the collaboration credit, rounded to the nearest 1,000 CF/Yr. The minimum value is 1,000 CF/Year (unless the Volume Management Objective determined in Step 1 is 0). Report this value in the Volume Management Plan section of the NOI.

The **Volume Management Objective for 2026-2031 Permit Term** is two times the MEP Annualized VMO, representing two years' worth of volume management efforts under PAG-13. Report this value in the Volume Management Plan section of the NOI.

SCM Inventory Worksheets

Report all functional and maintained SCMs that treat impervious surfaces within the UA in this worksheet, as long as they are able to capture and treat, through infiltration and/or ET, at least one inch of runoff (including MRC

SCMs), with certain exceptions. Existing SCMs do not necessarily need to be designed to current DEP standards. The purpose of the SCM Inventory is to establish a baseline of the impervious area treated within the urban area.

NOTE – Users cannot paste into the SCM Inventory Worksheets. Entries must be made manually. DEP has disabled pasting functions to ensure that cell-specific validations are not bypassed.

The qualifications for SCMs to be identified in the SCM Inventory are discussed below.

1. The SCM could have been constructed at any time, for any size project, and regardless of whether the SCM was installed to meet regulatory or permit compliance (such as Chapter 102 Post-Construction Stormwater Management (PCSM), SCMs constructed for Pollutant Reduction Plans (PRPs), etc.).

2. The SCM should have been designed to capture and manage at least one inch of runoff from impervious surfaces in the contributing drainage area. All structural PCSM SCMs implemented for compliance with Chapter 102 can be assumed to meet this criterion. If there is no available information on the design of the SCM, the MS4 may make observations of the SCM during a 1.2-inch/2-hour storm event (producing approximately one inch of runoff from impervious surfaces) or greater to determine whether the SCM qualifies. If there is no overflow from the SCM during or following this storm event, and stormwater recedes to the SCM surface within 72 hours, the SCM qualifies. If it is determined that the SCM qualifies, documentation on how the SCM was evaluated must be kept on file by the permittee and may be requested by DEP.

3. SCMs that capture and manage less than one inch of runoff from impervious surfaces may qualify for the SCM Inventory, but the impervious area treated must be decreased in proportion with the runoff managed. For example, SCMs that treat 10 acres of impervious but only manage 0.1 inch and 0.5 inch of runoff can be identified in the SCM Inventory as treating 1 and 5 acres of impervious, respectively.

4. All SCMs reported in the SCM Inventory must have been inspected by the permittee or owner of the SCM within the past two years (that is, no later than two years prior to submission of the NOI). The SCMs must be considered functional, meaning no significant maintenance or repairs are necessary to manage runoff (or such maintenance or repairs were completed prior to reporting the SCM in the SCM Inventory). SCM design documentation and calculations do not need to be submitted with the MEP Calculator; however, it is expected that permittees will maintain this information on file and update the file when SCMs are inspected. DEP may request additional SCM documentation during review of the NOI or during an inspection. It is recommended that MS4s utilize someone who is trained and experienced in SCM performance to evaluate the functionality of SCMs.

5. Historical street sweeping, inlet or storm drain cleaning, and related non-structural sediment removal activities do not qualify for the SCM Inventory. Street sweeping and inlet or storm drain cleaning may however receive credit for future activities when proposed in a VMP.

6. Wet and dry detention basins designed primarily to reduce peak flow rates generally do not provide a volume management function and do not qualify for reporting in the SCM Inventory. However, retrofits of rate control or flood control SCMs to improve infiltration and/or sediment capture may qualify for the SCM Inventory. Where a retrofit of a rate control or flood control SCM was completed to improve sediment capture or other pollutant removal but did not improve infiltration capabilities, 50% of the impervious area in the SCM's drainage area may be claimed.

7. Vegetated channels and swales designed primary for stormwater conveyance generally do not provide a volume management function and do not quality for reporting in the SCM Inventory. However, if the design of the swale includes check dams this will increase infiltration and ET. These swales can be reported in the SCM Inventory under the SCM name of "Vegetated Conveyance with Check Dams".

8. Historical soil amendments on individual lots do not qualify for the SCM Inventory unless a certified soil scientist demonstrates through soil characterization testing that the amended soils continue to provide a volume management benefit in relation to soils that have not been amended on the same or adjacent lots. Other on-lot SCMs such as dry wells, rain gardens, rain barrels, etc. may qualify if designed to capture and manage at least one inch of runoff from impervious surfaces.

9. Stream restoration projects with a floodplain restoration component will qualify for the SCM Inventory. The impervious area treated is that which is within the drainage area of the restored floodplain (that is, contributing stormwater perpendicular to the floodplain within the permittee's jurisdiction), not the drainage area of the surface water at that location.

10. Stream restoration projects without a floodplain restoration component qualify only if these projects accomplished a sediment load reduction exceeding the reduction required under the 2018 PAG-13 General Permit for PRPs. To determine the credit, in terms of area of impervious treated, complete the following calculation and attach documentation to the MEP Calculator Spreadsheet supporting the credit:

    Stream Restoration Credit (Equivalent Impervious Treated, Acres) = ((TC / TR) x (TR – RR)) / $200,000

    Where:

    TC = Total Cost to implement all PRP projects (provide documentation);
    TR = Total Pounds (lbs) of Sediment Reduced for PRP (provide documentation, such as, Final Report);
    RR = Required Reduction (lbs) of Sediment for PRP (as identified in the approved PRP).

    Note that TC is the total cost to the permittee; any grant funding received towards PRP implementation should not be included in TC.

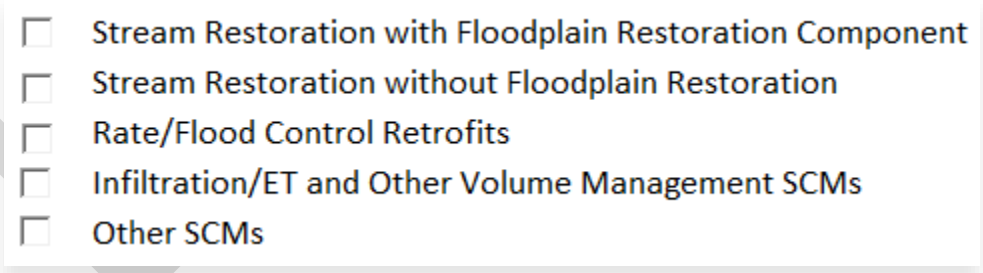
    The calculation uses an estimate of $200,000 to account for all costs associated with treating one inch of runoff from one acre of impervious surfaces using infiltration and ET. If an MS4 can document a lower cost, its research may be submitted for justification (although DEP will not approve costs lower than $100,000 per acre).

    For example, if an MS4 was required to reduce 500,000 lbs of sediment, and a stream restoration project was implemented that achieved a reduction of 1,000,000 lbs at a cost to the permittee of $2.5 million (with no grant funds received), the equivalent impervious acres treated would be as follows:

    (($2,500,000 / 1,000,000 lbs) x (1,000,000 lbs – 500,000 lbs)) / $200,000/acre = 6.25 acres

SCM Types Worksheet

Check the appropriate boxes to indicate the types of SCMs within the MS4's SCM Inventory. Checking the box activates the corresponding SCM worksheet.



Floodplain Restoration Worksheet

- Select the number of floodplain restoration projects or locations from the drop-down list ("No. SCMs:").
- Enter the name of the surface water whose floodplain was restored.
- Enter the latitude and longitude coordinates at the center of the restored area, in decimal degrees. Report coordinates to six decimal places. Use a negative ("-") symbol to report longitude.

- Enter the name of the owner of the project, typically the landowner.

- Enter the restoration area, in acres. Include only the restored floodplain area, not area associated with streambank restoration or stabilization, if completed.

- Select "One" or "Both" from the drop-down menu to indicate the side(s) of the stream that were restored.

- Enter the impervious area that is located within the restored area's drainage area, perpendicular to the restored floodplain. A validation warning is shown if the value entered exceeds 25 acres. If the value entered is more than two times the size of the restored area, the cell will turn red to indicate that the entered value exceeds the expected treatment capacity of the restored floodplain. DEP may require additional information to justify values in cells highlighted in red.

- Select "Yes" or "No" from the drop-down menu to indicate whether the SCM was installed to comply with Chapter 102 Post-Construction Stormwater (PCSM) requirements for a project site.

- Select the year the SCM was installed (completed) from the drop-down list.

- Select the year the SCM was last inspected from the drop-down list.

- When all data have been entered for a row, and assuming the SCM was inspected within the past 2 years, the impervious areas treated are summed.

Stream Restoration Worksheet

The purpose of this worksheet is to provide an equivalent impervious area treatment credit for stream restoration SCMs that did not include a floodplain restoration component. Only use this worksheet if the MS4 exceeded their sediment reduction objective during the previous permit term using stream restoration (and other SCMs, if applicable). If an MS4 implemented stream restoration project(s) during the previous permit term, but the amount of the sediment load reduction achieved did not exceed the sediment reduction objective of a Pollutant Reduction Plan (PRP), the project(s) should not be reported. See examples below.

- Enter the name of the surface water whose streambanks were restored.

- Enter the latitude and longitude coordinates at the center of the restored area, in decimal degrees. Report coordinates to six decimal places. Use a negative ("-") symbol to report longitude.

- Enter the name of the owner of the project, typically the landowner.

- Enter the total cost to the MS4 to implement the PRP (all projects completed for the PRP). Exclude costs that were paid for by grants. Provide documentation to support the value entered.

- Enter the total sediment reduction achieved for all projects implemented under the PRP. This value should be consistent with the value identified in the final report submitted to document PRP implementation activities.

- Enter the total sediment reduction required to meet the objective of the PRP (i.e., minimum 10% reduction in existing sediment load).

- An estimate of $200,000 per acre of impervious area treated is listed by default. This is considered an average cost to treat impervious area through infiltration and evapotranspiration (ET) throughout the state. If a lower cost per acre is entered, attach documentation to support the lower cost. The lowest value that can be entered is $100,000.

- The equivalent impervious area treated, in acres, is calculated and displayed once all data have been entered, assuming the SCM has been inspected within the past two years. If the value calculated exceeds 25 acres,

the cell will be highlighted in red. DEP may require additional information to justify values in cells highlighted in red.

- Select "Yes" or "No" from the drop-down list to indicate whether the stream restoration project was approved by DEP as part of a PRP project.
- Select the year the SCM was installed (completed) from the drop-down list.
- Select the year the SCM was last inspected from the drop-down list.
- When all data have been entered for the row, and assuming the SCM was inspected within the past 2 years, the total equivalent impervious area treated is displayed.

Example 1 – The sediment load reduction objective in a PRP is 100,000 lbs. One stream restoration project is completed on Blue Stream at a cost to the MS4 of $212,000 and resulted in a sediment reduction of 100,000 lbs. Since the sediment load reduction objective of the MS4's PRP was not exceeded, this SCM should not be identified in the SCM Inventory.

Example 2 – The sediment load reduction objective in a PRP is 100,000 lbs. One stream restoration project is completed on Blue Stream at a cost to the MS4 of $393,000 and resulted in a sediment reduction of 150,000 lbs. The equivalent impervious treated is determined to be 0.66 acre.

Surface Water Name	Latitude	Longitude	Owner Name	Total MS4 Cost to Implement PRP ($)	Total Sediment Reduced for PRP (lbs)	Total Sediment Reduction Required (lbs)	Impervious Treatment Cost Estimate ($/ac)	Equivalent Impervious Treated (ac)	Approved in PRP?	Year Installed	Year Last Inspected
Blue Stream	42.219921	-77.568212	Park Township	$393,000	150,000	100,000	$200,000	0.66	Yes	2022	2024
							TOTAL:	0.66			

Example 3 – An MS4 decides to implement two projects for its PRP; one involves the retrofit of a flood control basin and the other involves stream restoration on Muddy Creek. The sediment load reduction objective for the PRP is 300,000 lbs. Both the retrofit and stream restoration projects result in a sediment load reduction of 200,000 lbs (each) and the total cost to the MS4 of $725,000. The equivalent impervious treated is determined to be 0.91 acre.

Surface Water Name	Latitude	Longitude	Owner Name	Total MS4 Cost to Implement PRP ($)	Total Sediment Reduced for PRP (lbs)	Total Sediment Reduction Required (lbs)	Impervious Treatment Cost Estimate ($/ac)	Equivalent Impervious Treated (ac)	Approved in PRP?	Year Installed	Year Last Inspected
Muddy Creek	40.901020	-76.299200	Eagles Eye Golf Course	$725,000	400,000	300,000	$200,000	0.91	Yes	2023	2024
							TOTAL:	0.91			

Example 4 – An MS4 decides to implement two stream restoration projects for its PRP. The sediment load reduction objective for the PRP is 1,000,000 lbs. The restoration project on Clear Run cost $584,000 to the MS4 and resulted in a sediment load reduction of 698,000 lbs. The restoration project on Little River cost $845,000 overall, resulting in a sediment load reduction of 861,000 lbs. Fifty percent (50%) of the Little River project was paid for by the MS4. The Little River project was most recently completed and will be reported in the table. The equivalent impervious treated is determined to be 1.8 acres.

Surface Water Name	Latitude	Longitude	Owner Name	Total MS4 Cost to Implement PRP ($)	Total Sediment Reduced for PRP (lbs)	Total Sediment Reduction Required (lbs)	Impervious Treatment Cost Estimate ($/ac)	Equivalent Impervious Treated (ac)	Approved in PRP?	Year Installed	Year Last Inspected
Little River	41.865220	-77.945221	Little River Fish & Game	$1,006,500	1,559,000	1,000,000	$200,000	1.80	Yes	2023	2024
							TOTAL:	1.80			

Retrofits Worksheet

The Retrofits worksheet is intended for MS4s to report rate or flood control SCMs that were modified as a PRP project or for other purposes to improve infiltration capabilities and/or pollutant reductions. Do not report SCMs that were installed for Chapter 102 PCSM rate control purposes or other existing flood control basins that were not modified to improve infiltration and/or water quality treatment.

- Select the number of retrofit SCMs from the drop-down list ("No. SCMs:").
- Enter the name of the SCM as it is known locally. For example, "10th Street Flood Control Basin Retrofit".
- Enter the latitude and longitude coordinates at the center of the SCM, in decimal degrees. Report coordinates to six decimal places. Use a negative ("-") symbol to report longitude.
- Enter the name of the owner of the project, typically the landowner.
- Select the type of retrofit from the dropdown menu. Select "Infiltration and Water Quality Improvements" if the height of the lowest orifice was increased and soils were amended to enhance infiltration capabilities (preferably deep-rooted vegetation would also have been established). Select "Water Quality Improvements" if the height of the lowest orifice was not increased and/or a channel within a basin was removed to promote sheet or shallow concentrated flow rather than concentrated flow through the basin (preferably deep-rooted vegetation would also have been established).
- Describe the retrofits made in the space provided. Alternatively attach a more thorough description of the retrofits.
- Enter the SCM surface area, in square feet (SF). Include the bottom of the SCM only (not side slopes).
- Enter the depth to the lowest orifice within the SCM, in feet, measured from the SCM bottom to the invert of the first outlet. If the value is zero, enter "0.001". The value must be less than 10 feet. If the value exceeds 5 feet, the cell will be highlighted in red. DEP may require additional information to justify values in cells highlighted in red.
- Enter the SCM storage volume in CF. In general, the storage volume is the product of the depth to the lowest orifice and the SCM surface area. If the value exceeds 125% of the product of the depth to the lowest orifice and the SCM surface area, the cell is highlighted red and calculations should be attached to show how storage volume was computed.
- The area of impervious treated by the SCM is determined by the SCM storage volume that is entered. The storage volume is divided by a factor of 3,630 CF/acre to determine acres in which 1 inch of runoff is treated (43,560 ft^2/acre x 1 ft/12 inches x 1 inch runoff).
- Select "Yes" or "No" from the drop-down menu to indicate whether the SCM was installed to comply with Chapter 102 PCSM requirements for a project site.
- Select the year the SCM was installed (completed) from the drop-down list.
- Select the year the SCM was last inspected from the drop-down list.
- When all data have been entered for a row, and assuming the SCM was inspected within the past 2 years, the impervious areas treated are summed.

Volume SCMs

The Volume SCMs worksheet is used to report SCMs that have an infiltration, ET, or volume management function. Table 1 presents a list of SCMs that can be selected for this worksheet. Table 1 includes a crosswalk between the

SCM Names in the Volume SCMs worksheet and Chesapeake Bay Program best management practices (BMPs), which may have been used by MS4s for BMP inventories.

Note that wet and dry detention/retention basins are not in the drop-down list because they do not provide appreciable volume management benefits. However, naturalized detention basins, which are constructed similarly to a surface infiltration basin and have deep-rooted vegetation to promote ET, can be reported in the SCM Inventory (select Surface Infiltration Basin as the SCM name). Wet and dry detention/retention basins (i.e., rate and flood control basins) that are modified to provide infiltration and ET or water quality benefits should be reported in the Retrofits worksheet.

Table 1: SCMs Available in Volume SCMs Worksheet with Chesapeake Bay BMP Crosswalk

Volume SCMs	Equivalent Chesapeake Bay BMPs
Bioinfiltration	Bioretention/raingardens - A/B soils, no underdrain
Bioretention [1]	Bioretention/raingardens - all soils, underdrain
Engineered Stormwater Treatment Wetland	Wetland Creation – Floodplain or Headwater
Green Roof	N/A
Infiltration Trench	Infiltration Practices with and without Sand, Veg. - A/B soils, no underdrain
Managed Release Concept (MRC) SCM [1]	Bioretention/raingardens – all soils, underdrain
Permeable Pavement	Permeable Pavement with or without Sand, Veg. - all soils, with or without underdrain
Regenerative Step Pool Systems	N/A
Retentive Grading	Infiltration Practices with and without Sand, Veg. - A/B soils, no underdrain
Riparian Buffer	Forest Buffer
Stormwater Capture and Use	N/A
Surface Infiltration Basin	Infiltration Practices with and without Sand, Veg. - A/B soils, no underdrain
Underground Infiltration Basin	Infiltration Practices with and without Sand, Veg. - A/B soils, no underdrain
Vegetated Filter Strip	Bioswale, Filter Strip Stormwater Treatment, Filter Strip Runoff Reduction
Vegetated Conveyance with Check Dams	Bioswale, Filter Strip Stormwater Treatment, Filter Strip Runoff Reduction

1 Select MRC if the design includes an internal water storage (IWS) zone, typically created by the use of an upturned elbow on the underdrain, otherwise select Bioretention.

- Select the number of Volume SCMs from the drop-down list ("No. SCMs:").

- Select the name of the SCM from the drop-down list. If assistance is needed in selecting SCM Names, contact DEP's Bureau of Clean Water at RA-EPPAMS4@pa.gov.

- Enter the latitude and longitude coordinates at the center of the SCM, in decimal degrees. Report coordinates to six decimal places. Use a negative ("-") symbol to report longitude.

- Enter the name of the owner of the project, typically the landowner.

  Enter the SCM surface area, in square feet (SF), between 1 and 87,120 SF (2 acres). Include the bottom of the SCM only (not side slopes). For riparian buffers, enter only the area associated with buffers than have been designed, implemented and are being maintained as SCMs. Do not report existing vegetated areas adjacent to streams that were not implemented as SCMs.

- Enter the depth to the lowest orifice within the SCM, in feet, measured from the SCM bottom to the invert of the first outlet. If the value is zero, enter "0.001". The value must be less than 10 feet. If the value exceeds 5 feet, the cell is highlighted in red. DEP may require additional information to justify values in cells highlighted in red.

  For SCMs without a designed outlet structure (e.g., infiltration trenches, vegetated filter strips, retentive grading, etc.), enter a value corresponding to the height at the top of berm or grade.

- Enter the SCM storage volume in CF. In general, the storage volume is the product of the depth to the lowest orifice and the SCM surface area. If the value exceeds 125% of the product of the depth to the lowest orifice and the SCM surface area, the cell is highlighted red and calculations should be attached to show how storage volume was computed.

- The area of impervious treated by the SCM is determined by the SCM storage volume that is entered. The storage volume is divided by a factor of 3,630 CF/acre to determine acres in which 1 inch of runoff is treated (43,560 ft^2/acre x 1 ft/12 inches x 1 inch runoff).

- Select "Yes" or "No" from the drop-down menu to indicate whether the SCM was installed to comply with Chapter 102 PCSM requirements for a project site.

- Select the year the SCM was installed (completed) from the drop-down list.

- Select the year the SCM was last inspected from the drop-down list.

- When all data have been entered for a row, and assuming the SCM was inspected within the past 2 years, the impervious areas treated are summed.

Other SCMs Worksheet

This worksheet is used for SCMs that have a different method to calculate impervious area treated and includes tree planting and impervious area reduction. Other SCMs may be added in the future.

- **Tree Planting** – a volume management credit is provided for tree plantings since 2018 as follows:

  - 3 CF for every new native tree that is planted within an urban area with a caliper (the diameter at breast height of a tree) of less than 2 inches;

  - 6 CF for every new native deciduous tree that is planted within an urban area with a caliper of 2 inches or more; and

  - 6 CF for every new native evergreen tree with a height of at least 6 feet.

  If the number of trees entered exceeds 300, the cell is highlighted red. DEP may require additional information to justify values in cells highlighted in red. The volume management credit is summed and divided by a factor of 3,630 to determine the equivalent impervious area treated in acres.

  MS4s do not need to submit location, ownership, and inspection information for each tree listed on the Other SCMs worksheet; however, it is expected that permittees will keep this information on file and ensure that any trees that die are replaced or removed from the Tree Planting inventory. DEP may request this documentation during review of the NOI or during an inspection.

- **Impervious Area Reduction** – The change in land cover results in less runoff, which is quantified as a volume reduction and converted to equivalent impervious treated for one inch of runoff.

  - Enter the area converted from impervious to pervious within the urban area since 2018.

- Select a Hydrologic Soil Group (HSG) from the drop-down list for the ***land cover***. Soil groups are based on NRCS' National Engineering Handbook (Chapter 7, Hydrologic Soil Groups). The NRCS Web Soil Survey tool may be used to characterize soils present at a site (instructions on using the Survey tool to determine HSG are available – use this link); preferably a certified soil scientist will verify the HSG. For soils assigned dual soil groups (e.g., A/D, B/D, etc.), use the first group for your selection.

- The runoff volume reduction at the 1.2-inch/2-hour storm (i.e., a storm that results in one inch of runoff) is estimated assuming that the new land cover is "Open Space in Good Condition".

- The runoff volume reduction is converted to an equivalent impervious area treated by dividing by a factor of 3,630.

Volume Management Chart

This chart is used to determine the Volume Management Objectives for MS4s. The Volume Management Objectives have been calculated as follows:

- The long-term goal of MS4 Volume Management Plans is the treatment of 88% of impervious surfaces (i.e., only 12% of impervious surfaces are untreated). This goal is based on numerous studies estimating surface water degradation as a function of impervious area. See, for example, Impervious Surfaces and Water Quality: A Review of Current Literature and Its Implications for Watershed Planning. Based on consideration of these studies, DEP believes that the control of stormwater to a level equivalent to 12% (or less) imperviousness throughout a watershed or sub-watershed will, in most cases, result in attainment of state water quality standards. The 12% threshold has been used by DEP in other contexts including the PAG-01 General Permit for Discharges of Stormwater Associated with Small Construction Activities.

- The first step in calculating the Volume Management Objective is to find the total untreated impervious area, i.e., the difference between 88% treatment and the existing level of treatment. The midpoint of the range of total impervious and percentage of impervious area treated is used for the calculation.

  Example – An MS4 selects the range "100-199" for total impervious area in the UA and "6-10%" is calculated for the percentage of impervious area treated, based on the MS4's SCM Inventory. The untreated impervious area is determined as follows:

  (150 x 0.88) – (150 x 0.08) = 120 acres untreated

- Untreated impervious area is to be treated over 50 years, i.e., 2% per year. For the 120 acres that are untreated in the example above, each year 2.4 acres would need to be treated (120 acres x 0.02).

- To determine the equivalent volume for the annual impervious to be treated, one inch of runoff is used. One inch of runoff from one impervious acre equals 3,630 CF of volume. For the 2.4 acres that would need to be treated in the example above, 8,712 CF of runoff would need to be treated each year (rounded up to 9,000 CF).

Revision History

Date	Version	Revision Reason
1/2025	1.0	Draft