

BUREAU OF CLEAN WATER

Application Type	Renewal	
Facility Type	MS4	
Permit Type	Individual	

NPDES PERMIT FACT SHEET MS4s

Application No.	PAI139601		
APS ID	777403		
Authorization ID	1221010		

Applicant Name	Pennsylvania Department of Transportation (PennDOT)	Facility Name	PennDOT Statewide MS4
Applicant Address	Keystone Building, 400 North Street	Facility Address	Keystone Building, 400 North Street
	Harrisburg, PA 17120	_	Harrisburg, PA 17120
Applicant Contact	Daryl St. Clair	Facility Contact	Daryl St. Clair
Applicant Phone	717-787-9512	Facility Phone	717-787-9512
Client ID	134834	_ Site ID	760182
SIC Code	4952	Municipality	Harrisburg City
SIC Description	Trans. & Utilities - Sewerage Systems	County	Dauphin
Date Application Rec	eived January 12, 2016	_	
Date Application Acc	epted January 12, 2016		

Internal Review and Recommendations

On January 12, 2016, DEP received an application to renew the individual NPDES permit for the Pennsylvania Department of Transportation (PennDOT) to authorize continuation of stormwater discharges from its small regulated municipal separate storm sewer system (MS4). An individual permit has been historically required for PennDOT because DEP's General MS4 NPDES Permit (PAG-13) is not well suited to the nature of transportation agency activities such as those conducted by PennDOT. Despite these unique activities, PennDOT will be required to satisfy stormwater management responsibilities, which largely parallel those required of municipalities and other MS4 entities.

PennDOT was designated as an MS4 by EPA because of the potentially significant effect of its stormwater discharges on surface waters. The original PennDOT MS4 permit was issued for the period May 27, 2005 through May 25, 2010 and was administratively extended to July 14, 2011. The existing permit expired on July 14, 2016 and is administratively extended due to the submission of a timely renewal application.

PennDOT is responsible for approximately 40,000 miles of roads. This permit regulates the roads that are in Urbanized Areas. PennDOT is therefore a major generator of stormwater from the impervious surfaces of those roads. The Urbanized Areas used for this permit is as defined in the 2010 census generated by the U.S. Census Bureau.

PennDOT will provide Annual Reports to DEP to document ongoing compliance under this permit.

Individual Permit Requirements

Authorized Discharges

This permit authorizes stormwater discharges to surface waters of the Commonwealth 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:

Approve	Deny	Signatures	Date
Х		/s/ Sean Furjanic, Program Manager	February 1, 2021

- 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.
- 3. Non-contaminated irrigation water.
- 4. Water from lawn maintenance.
- 5. Flows from riparian habitats and wetlands.
- Diverted stream flows.
- 7. Springs.
- 8. Uncontaminated ground water.
- 9. Water from foundation and footing drains.
- 10. Water from crawl space pumps.
- 11. Air conditioning condensation.
- 12. Individual residential car washing where cleaning agents are not used.
- 13. Routine external building wash down which does not use detergents or other compounds.
- 14. Pavement wash waters where spills or leaks of toxic or hazardous materials have not occurred (unless all spilled material has been removed) and where detergents are not used.

The previous permit included dechlorinated swimming pool discharges as an authorized discharge. It was eliminated because of the potentially significant impact of pollutants in pool water in addition to chlorine. This permit also restricts individual residential car washing discharges to those in which cleaning agents are not used.

Minimum Control Measures

The six required Minimum Control Measures (MCMs) contained in PennDOT's draft permit have been customized to the unique activities and responsibilities of PennDOT as has been done throughout the history of PennDOT's permits and as discussed below.

1. Public Education and Outreach on Stormwater Impacts

The goal of this MCM is to disseminate information to the users of state roadways (travelers, general public, employees, contractors and consultants) about the impacts of stormwater pollution on surface waters, and the steps that all parties can take to reduce pollutants in stormwater runoff. To accomplish this goal, PennDOT will continue to maintain and implement its Public Education and Outreach Program, maintain lists of target audience groups, integrate stormwater pollution impact awareness into ongoing PennDOT activities, utilize general stormwater management educational material, and implement a Construction Stormwater Inspection Training Program to improve erosion and sediment control practices.

Modifications from the previous permit include 1) conducting surveys to measure the effectiveness of pollution impact awareness efforts; 2) upgrading PennDOT's public website to include comprehensive information on its MS4 program; and 3) training construction inspectors on how to properly conduct construction stormwater inspections (of erosion and sediment pollution controls).

2. Public Involvement / Participation

The goal of this MCM is to provide for public involvement in the MS4's stormwater program. To accomplish this goal PennDOT will issue an MS4 Coordination Letter to municipal associations which provides information on where municipalities can find information on PennDOT stormwater activities, provide a PennDOT contact for municipalities concerning Illicit Discharge Detection and Elimination (IDD&E, see MCM #3) coordination with PENNDOT, and invite municipalities to collaborate with PennDOT on Pollutant Reduction Plan (PRP) Best Management Practices (BMPs).

3. Illicit Discharge Detection and Elimination

The goal of this MCM is to reduce the discharge of illicit discharges to surface waters. To accomplish this goal PennDOT will implement Chapter 8 of its Publication 23, which is a written program for the detection, elimination and prevention of illicit discharges to the MS4 system. PennDOT will maintain and improve its maps of outfalls and observation points and make those maps available to municipalities upon request. PennDOT will also improve the maps of its storm sewer collection system and conduct dry weather screenings of its MS4 outfalls and observation points. Due to the significant work associated with mapping outfalls, observation points, and the storm sewer system across 40,000 miles of roads, milestones are established in the draft permit to ensure measurable progress in mapping these resources.

In addition to planned inspections, Publication 23 requires all PennDOT personnel to be alert to and to report suspected illicit discharges at all times. That policy is applied statewide, despite the fact that the MS4 permit only regulates Urbanized Areas. PennDOT will conduct dry weather screenings of its outfalls and observation points to identify illicit discharges in accordance with PennDOT's Publication 23. Screenings will be done at least once within the permit term. All screenings will be documented regardless of whether illicit discharges are detected. Discharges that exhibit indicators of illicit discharges will be evaluated, and action will be taken to eliminate illicit discharges. PennDOT must also provide routine training on how to detect and eliminate illicit discharges to employees who perform roadway maintenance, conduct construction inspections, and/or inspect outfalls and stormwater control measures. DEP must approve changes to Publication 23.

4. Construction Site Stormwater Runoff Control

The goal of this MCM is to minimize erosion and sedimentation from construction sites. PennDOT compliance will be demonstrated through satisfaction of requirements in Chapter 102 permits, and documented through inspections by DEP and/or county conservation districts (see Section 8.8 of PennDOT's Publication 23).

5. Post-Construction Stormwater Management (PCSM)

The goal of this MCM is to construct and maintain PCSM Best Management Practices (BMPs). To accomplish this goal, PennDOT will develop PCSM Plans and obtain permits and install BMPs required by Chapter 102 when necessary for construction projects. A BMP inventory must be maintained, and continued operation will be confirmed through inspections and/or agreements with municipalities. The permit requires implementation of PennDOT's Publication 888. DEP must approve changes to Publication 888.

6. Pollution Prevention / Good Housekeeping

The goal of this MCM is to prevent stormwater pollution from PennDOT operations. PennDOT must maintain an inventory of its operations and implement a written operation and maintenance program for each operation, which is contained in Publication 752, Strategic Environmental Management Program (SEMP) Manual. The previous permit referred to ISO 14001 registration. PennDOT has replaced ISO 14001 with a compliance-based Environmental Management System (EMS).

PennDOT will conduct inspections of the operations and training will be provided to employees. PennDOT must implement and maintain its good housekeeping program for the permittee's maintenance facilities, stockpiles, and rest areas that have the potential for generating pollution in stormwater runoff to the regulated small MS4 including building maintenance; vehicle operation, fueling, washing, and maintenance; and material transfer operations.

PennDOT will take actions to minimize pollution from salt storage and distribution facilities to ensure that they are covered and that during weather events salt is exposed only as much as necessary.

Pollutant Load Reductions

Similar to the PAG-13 General Permit, DEP is establishing a requirement in PennDOT's permit to develop and implement Pollutant Reduction Plans (PRPs). PennDOT's PRPs will estimate the stormwater pollutant load generated from PennDOT roads in Urbanized Areas and identify BMPs to be constructed during the permit term to eliminate a portion of that pollutant load. Load calculations will not include roads in areas served by combined sewer systems.

PennDOT will seek collaborative arrangements with municipalities that also have PRP requirements. Municipalities that have shared responsibilities with other municipalities have benefited from the resultant economy of scale. DEP believes there is at least as much potential advantage in PennDOT/municipal collaboration. PennDOT projects are often of larger scale than what would typically be pursued by municipalities. PennDOT is, however, frequently constrained to the limited unpaved area available within its right-of-way. Collaborative arrangements may, for example, involve PennDOT construction of a BMP on land outside the right-of-way with maintenance to be the responsibility of the municipality. The terms of such arrangements are not constrained by this permit; they will be negotiated between PennDOT and the municipality.

DEP provides an incentive for PennDOT/municipal collaborations by allowing both parties to take full PRP credit for such projects. Such crediting is allowed when both the municipality and PennDOT roads are included the drainage area to the BMP as part of their existing load calculation.

A major challenge for PennDOT is the long planning period (often 10 years or more) that is typically required for road construction projects. Fortunately, PennDOT has anticipated the PRP requirement and has begun BMP planning in advance of permit issuance.

PennDOT has the option to construct standalone BMPs (which would not be tied to road construction projects), but for efficiency and budgeting reasons, implementing PRP BMPs as part of roadway construction projects is preferred. The load reductions to be credited to the PRP requirement will be those that are in addition to what is required for new construction under Chapter 102 PCSM requirements.

Municipal MS4s enjoy the option to plan their PRP load reductions on a local watershed scale because it is not practical to implement load reductions to every stream in a 5-year permit term. A similar logic will be applied for PennDOT, but at a larger scale. Roads are typically built or rebuilt with a planning period of 20-40 years. As such, it is not feasible to require load reductions for every stream or local watershed in a 5-year permit term. As a result, DEP is requiring PennDOT to prepare its PRPs on a major watershed scale. There will be separate PRPs by PennDOT for: 1) the Susquehanna River/Potomac River (Chesapeake Bay) watershed; 2) the Ohio River watershed; 3) the Lake Erie watershed; and 4) the Delaware River watershed. Each PRP have its own pollutant load calculation based on the road area in the Urbanized Area in that watershed, a load reduction based on that load calculation, and a list of BMPs to provide the pollutant load reductions in each watershed.

The proposed load reductions for the 5-year permit term take into account the relative basin priority and the long planning period needed for road projects. For the Chesapeake Bay watershed, which is a DEP and U. S. Environmental Protection Agency priority, reductions will be 10%, 5% and 3% for sediment, Total Phosphorus (TP) and Total Nitrogen (TN), respectively. For the Ohio River, Lake Erie, and Delaware River watersheds, 5% sediment and 2.5% TP load reductions will be required for each. The existing pollutant load in the Chesapeake Bay watershed will be calculated for all PennDOT property in the Urbanized Area. In the other watersheds, the load will be calculated on PennDOT property in local watersheds impaired due to sediment and/or TP and located in the Urbanized Area. In addition, PENNDOT will have the flexibility to shift the credit for load reductions, within limits, between the Ohio River, Lake Erie, and Delaware River watersheds. That flexibility will result in more overall reductions than would otherwise be achievable by PennDOT because of the limited opportunities for BMP installation which results from the extended planning period for major highways. No credit shift will be allowed for the reductions required in the Chesapeake Bay watershed. PennDOT will provide a report of actual load reductions achieved at the end of the permit term for each PRP.

Each PRP will be subject to public participation requirements. The PRPs will be available for review on the PennDOT website and notice of the availability of draft PRPs will be published in the *Pennsylvania Bulletin* for public comment. All comments received will be provided to DEP along with a PennDOT evaluation of each comment.

There is no requirement in the permit for an MS4 Total Maximum Daily Load (TMDL) Plan because PennDOT is not listed for a Waste Load Allocation in any TMDLs.

The PAG-13 General Permit requires Pollutant Control Measures (PCMs) for permittees with discharges to waters impaired by Abandoned Mine Drainage, Pathogens or Priority Organic Compounds. PCMs differ from PRPs in that they involve a compilation of available information on sources of those pollutants, but PCMs do not require a specific pollutant reduction during the permit term. The draft PennDOT permit does not include a PCM requirement because it is unlikely that PennDOT-owned property discharges contain pollutants associated with the PCMs of PAG-13.

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-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.