



PENNSYLVANIA TURNPIKE COMMISSION

Municipal Separate Storm Sewer
System (MS4) Stormwater
Management Program (SWMP)
Fact Sheet Series

Overview and Minimum Control Measures



Overview

Clean water. We all need it to live, thrive, and survive. Managing stormwater runoff from impervious surfaces helps to reduce pollution in our waterways.

At the Pennsylvania Turnpike Commission, we are proud of being a good neighbor, and it's against this backdrop that the Pennsylvania Department of Environmental Protection (PA DEP) reissued our Individual National Pollutant Discharge Elimination System Municipal Separate Storm Sewer System (MS4) permit on Oct. 29, 2021. This five-year permit, in effect from Nov. 1, 2021, through Oct. 31, 2026, sets the framework for how stormwater is managed across the PA Turnpike's regulated system. At its core, the permit requires the development, implementation, and enforcement of a Stormwater Management Program (SWMP) within urbanized areas, as defined by the 2010 census.

The mission is straightforward but ambitious: reduce pollutant discharges to the maximum extent practicable and eliminate illicit or contaminated flows, all in service of meeting the water quality goals of the Clean Water Act and Pennsylvania's Clean Streams Law. To do this, the SWMP is organized around six Minimum Control Measures (MCMs), each supported by targeted Best Management Practices (BMPs) that translate regulatory intent into on-the-ground action.

Beyond compliance, the PA Turnpike is investing in stream and floodplain restoration projects across the three major watersheds it traverses -- the Ohio River, Chesapeake Bay, and Delaware River basins. These projects are designed to meaningfully reduce sediment, total phosphorus, and total nitrogen loads, helping to restore balance to waterways that have long borne the impacts of development.

Progress is not assumed – we document everything. Each year, by Sept. 30, the PA Turnpike submits a comprehensive report to PA DEP, demonstrating how the SWMP is being carried out and how it continues to meet the permit's requirements.



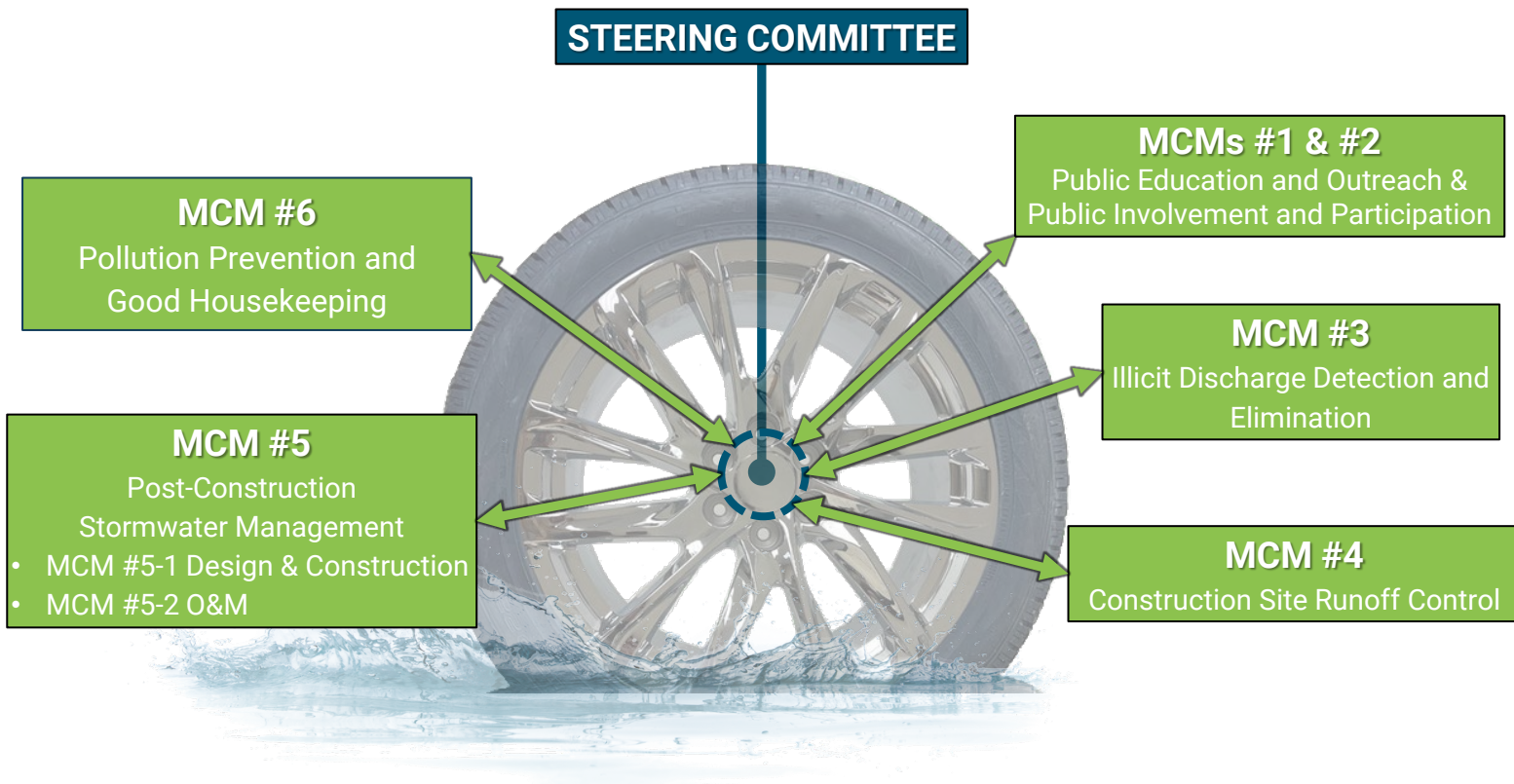
Program Structure

Directed by: PA Turnpike Chief Engineer and MS4 Steering Committee

MS4 Steering and Subcommittees: The foundation of the SWMP is its inclusive organizational structure and vision. We established subcommittees, each with a specific stormwater focus and set of objectives. Subcommittee membership includes representatives from various departments within the organization. Membership is typically rotated every two years to ensure staff diversity and fresh perspectives on subcommittees.

The subcommittees are titled by their stormwater focus, aligning with a specific program element (MCM).

The subcommittees are the incubator for PA Turnpike stormwater pollution reduction solutions. The organizational structure was intentionally designed to promote team building and fluid communication between individuals and among assigned groups instead of a traditionally rigid top-down chain-of-command reporting hierarchy. The MS4 Steering Committee is the central “hub” of the subcommittees and serves as a clearinghouse for proposed new or revised policies and practices to strengthen the organization’s SWMP. The Steering Committee keeps the subcommittees productive by vetting ideas and authorizing implementation of new practices.





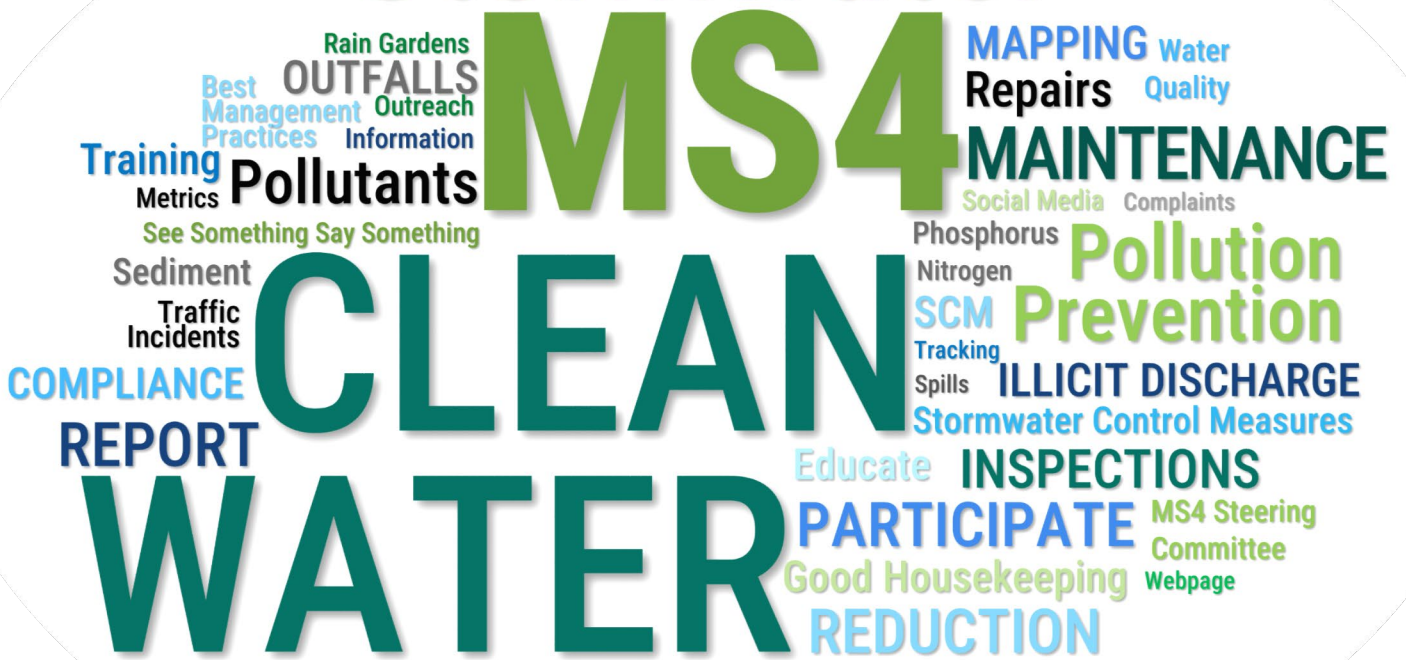
Steering Committee

Goal/Purpose: Clearinghouse for proposed new or revised policies and practices to strengthen the organization’s Stormwater Management Program.

Leadership: PA Turnpike Chief Engineer

Participants: Assistant Chief Engineer- Design, Assistant Chief Engineer- Construction, Director of Maintenance, Subcommittee Chairs, Legal Department Representative, and IT Department Representative

Stormwater





MCMs #1 & #2

Public Education and Outreach & Public Involvement and Participation

Goal/Purpose: Raise awareness of the benefit of clean stormwater runoff and the destructive impact stormwater pollution has on streams, rivers, and other waterbodies and encourage participation in pollution prevention.

Leadership: PA Turnpike Strategy & Communications, Service Plaza Operations, MCMs #1 & #2 Subcommittee

Participants: PA Turnpike employees, business partners, customers, and the general public

Responsibilities: Educational materials, publications, Clean Water website content, training, MS4 coordination correspondence reporting mechanism, annual reporting

Programs: Public Education and Outreach Program, Public Involvement and Participation Program

Metrics: Volume of distributed materials, pre- and post-training, municipal coordination, and reporting mechanism resolution tracking



MCM #3

Illicit Discharge Detection and Elimination

Goal/Purpose: Identify and eliminate illicit discharges (any flow from a stormwater pipe, swale, or ditch, which is not entirely composed of stormwater).

Leadership: PA Turnpike Environmental, MCM #3 Subcommittee

Participants: PA Turnpike Maintenance Department, construction contractors, customers and vendors, neighboring property owners, and adjacent municipalities

Responsibilities: Storm sewer system mapping and public-facing viewer, dry weather screenings, potential illicit discharge investigation and reporting, training, annual reporting

Documentation: IDD&E Manual, IDD&E Field Guide, Potential Illicit Discharge (PID) Report Form

Programs: Illicit Discharge Detection and Elimination Program

Metrics: Mapping updates; dry weather screenings, illicit discharge corrections, deficient outfall conditions and corrective actions, pre- and post-training effectiveness



MCM #4

Construction Site Runoff Control

Goal/Purpose: Minimize sediment pollution in stormwater runoff from construction activities.

Leadership: PA Turnpike Environmental, Construction Engineering, MCM #4 Subcommittee

Participants: PA Turnpike Engineering, construction inspectors, and construction contractors

Responsibilities: Training, construction site inspection and reporting, updating construction standards (specifications and contract language), annual reporting

Programs: Document Inspection Reporting Technology (DIRT)

Metrics: Inspection reporting of construction activities, pre- and post-training effectiveness



Before



After

**Example of SCM
restoration work**

MCM #5

Post-Construction Stormwater Management

MCM #5-1: Design & Construction

MCM #5-2: Operations & Maintenance

Goal/Purpose: Ensure stormwater control measures are designed, constructed, and maintained in compliance with Chapter 102 regulations.

Leadership: PA Turnpike Environmental, Contract Management, Maintenance, and MCM #5-1 and MCM #5-2 Subcommittees

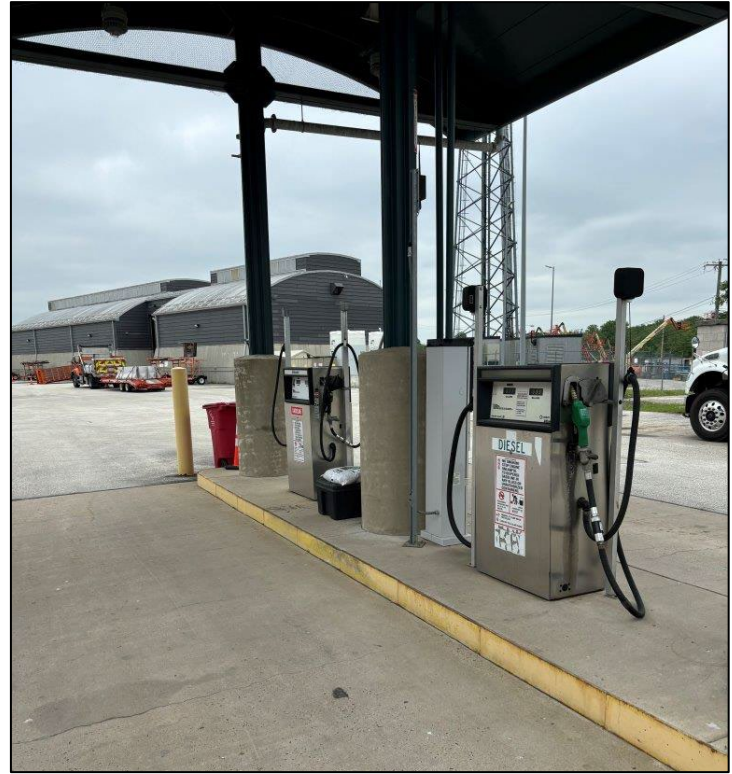
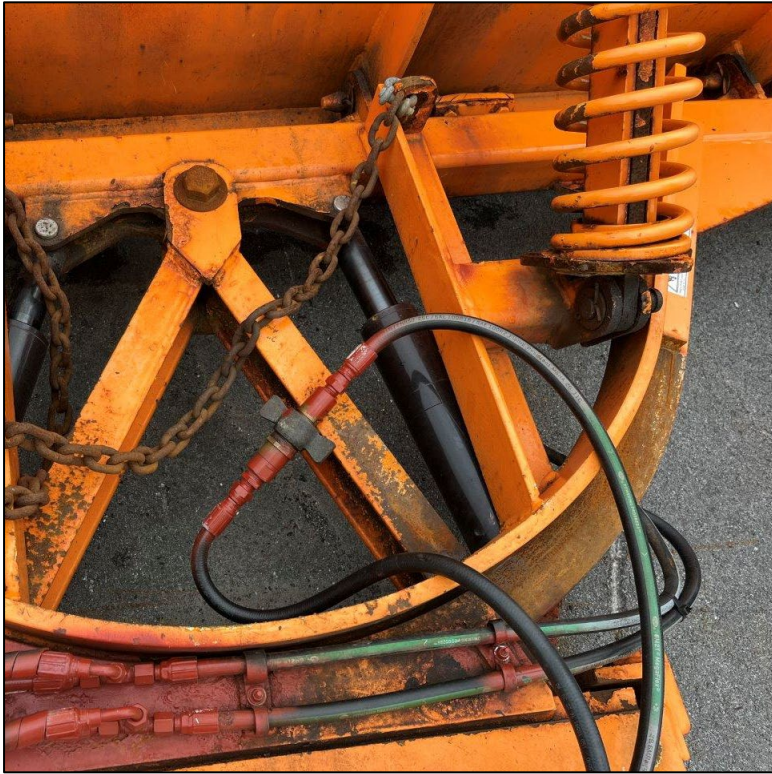
Participants: PA Turnpike Environmental, design consultants, Contract Management, Construction Engineering, construction contractors, GeoAnalytics, Maintenance, maintenance contractors, Service Plaza Operations, third-party inspectors

Responsibilities: Design and construction specifications and manual updates; site selection and design oversight; construction oversight; SCM maintenance, inspections, and corrective activity; annual reporting

Documentation: Stormwater Control Measure Operations and Maintenance Manual; SCM inventory/database, including: SCM inspection/condition reports and maintenance reports

Programs: Stormwater Asset Management Program

Metrics: SCMs, functioning as designed



MCM #6

Pollution Prevention and Good Housekeeping

Goal/Purpose: Preventing and reducing pollutant runoff from PA Turnpike operations.

Leadership: PA Turnpike Maintenance, MCM #6 Subcommittee

Participants: PA Turnpike Maintenance, Service Plaza Operations, and construction contractors

Responsibilities: Self-inspections, training, annual reporting, compliant waste management practices, salt storage and distribution management

Documentation: Maintenance Manual; site-specific inventory and mapping; internal inspection documentation, including: facility conditions, deficiencies, and corrections; good housekeeping training; annual reporting

Programs: Operations & Maintenance program; internal inspection program

Metrics: Pre- and post-testing training effectiveness