

Doylestown Township MS4 Permit Overview & Revised PRP/TMDL Plan

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DOYLESTOWN TOWNSHIP MS4 PERMIT OVERVIEW & REVISED PRP/TMDL PLAN

This presentation provides an overview of Doylestown Township's (MS4) Permit program and the proposed amendments to the Pollutant Reduction Plan (PRP) and Total Maximum Daily Load (TMDL) Plan.





Introduction: The MS4 Permit Program

What is the purpose?

1

Stormwater Management

The Municipal Separate Storm Sewer System (MS4) Permit program is a federal mandate overseen by the Environmental Protection Agency (EPA) to reduce stormwater pollution in our waterways and meet the goals of the Clean Water Act.

2

Stormwater Runoff

Doylestown Township is required to control stormwater runoff from impervious surfaces, such as roads, parking lots, and rooftops, as it can carry pollutants like trash, sediment, and nutrients into local streams, impacting water quality.

3

Best Management Practices

Requires municipalities to manage stormwater runoff, including developing a Stormwater Management Program (SWMP) and implementing best management practices (BMPs) to minimize pollution.

Why is MS4 Permit Compliance Important?



Protecting Public Health

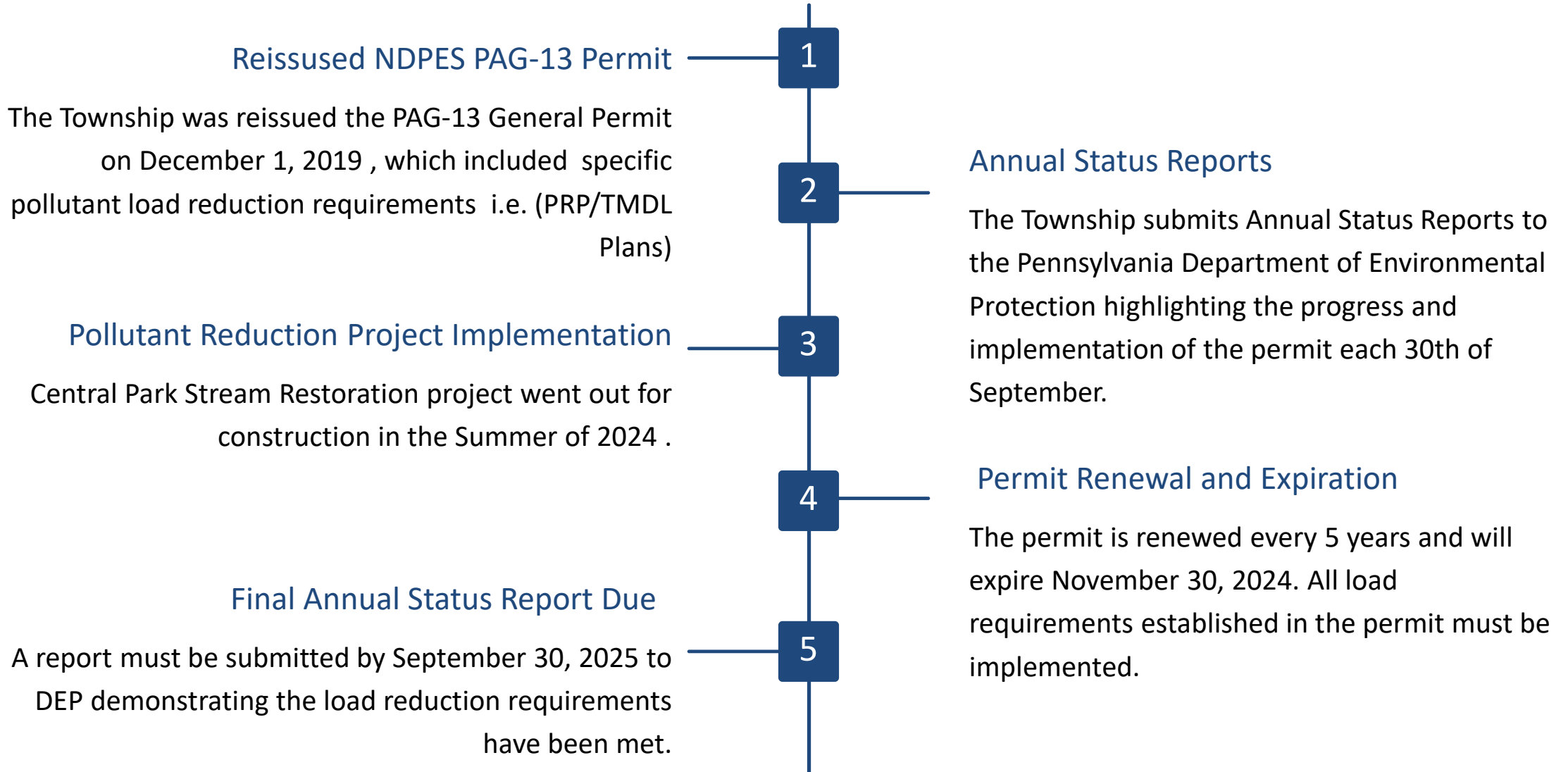
Stormwater runoff can carry pollutants that can contaminate drinking water sources and harm aquatic life.



Avoid Fines and Penalties

The EPA can impose substantial fines for non-compliance with the MS4 permit.

Timeline of the Doylestown Township MS4 Permit



Waterways in Doylestown Township



Cooks Run, Pine Run, Mill Creek, and other tributaries

These waterways flow into the Neshaminy Creek and are essential to the local ecosystem, providing habitat for a wide range of aquatic life, such as trout, bass, and other fish species, as well as various amphibians, reptiles, and birds.



Neshaminy Creek

The Neshaminy Creek flows through the heart of Doylestown Township, providing a scenic backdrop to the community.



Delaware River Watershed

The Township's waterways contribute to the Delaware River watershed, a critical resource for the region.

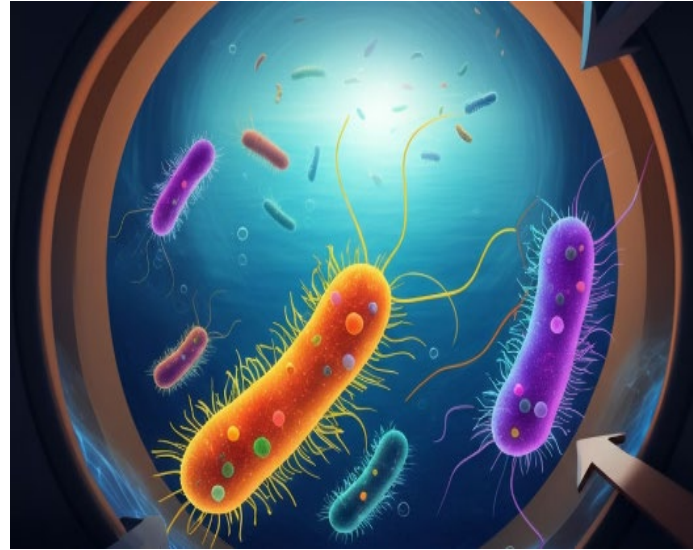
Doylestown Township Pollutant Reduction Requirements

The waterways specified above are listed as impaired, therefore the following permit requirements were implemented:



Minimum Control Measures

The Township must implement 6 minimum control measures to address stormwater pollution from a variety of sources.



Pollutant Control Measures Plan (Appendix B - Pathogens)

The Township is required to address pathogens like bacteria, viruses, and parasites in stormwater runoff.



PRP and TMDL (Appendix E-F)

The Township must develop a Pollutant Reduction Plan (PRP) and Total Maximum Daily Load (TMDL) to reduce nutrients and sediment by 10%.

Minimum Control Measures

The following minimum control measures are required for all MS4s and Doylestown Township addresses each of these throughout the year:



MCM #1 Public Education & Outreach

Educate the public about the importance of stormwater management and encouraging them to adopt best practices. It also includes outreach efforts to raise awareness and promote responsible behavior regarding stormwater runoff.



MCM #2 Public Involvement and Participation

Solicit public input, provide educational material of the Stormwater Management Program through organized implementation efforts such as cleanups, monitoring and storm drain stenciling.



MCM #3 Illicit Discharge Detection and Elimination

Identify and eliminate illegal discharges into the storm sewer system. These discharges include things like wastewater, industrial chemicals, and other pollutants that are not intended for the storm sewer system. Inspections, investigations, and enforcement actions are integral for this MCM.

Minimum Control Measures (Cont.'d)



MCM #4 Construction Site Stormwater Runoff Control

Preventing soil erosion and sedimentation from construction sites, which can significantly impact water quality. This includes implementing best management practices (BMPs) such as silt fences, erosion control mats, and stabilized construction areas.



MCM #5 Post-Construction Stormwater Management

Ensure that stormwater management practices implemented during construction are maintained and function properly after the project is complete. It includes inspecting and monitoring BMPs to ensure they continue to effectively control stormwater runoff and prevent pollution.



MCM #6 Pollution Prevention/Good Housekeeping

Preventing pollution from operations, facilities and activities under the control of the Township including snow removal/deicing, storm sewer maintenance, park and open space maintenance, vehicle operation, leaf/yard debris pickup, etc.

PRP/TMDL Plan Implementation

Pollutant Sediment Loading

The Township has a sediment pollutant loading of roughly 2.5 million pounds split between four watersheds. The sediment loading must be reduced by 10% in the 5-year permit term through various BMPS.

Proposed BMP Projects

Eight projects including two “spare tire” projects were proposed in the original PRP/TMDL plan including 6 stream restoration projects and 2 basin retrofits with total project costs close to one million dollars.

Central Park Stream Restoration Project



Stream Restoration

The Central Park Stream Restoration Project provided nearly 1800 linear feet of streambank stabilization and is close to completion. This project will meet approximately 80% of the Township's sediment reduction requirement.

Revised TMDL/PRP Plan

Remaining Pollutant Reduction Goal : 20%

After DEP consultation, the Plan will be revised to analyze the Township as one drainage basin, removing the costly stream restoration projects and saving the Township close to a half a million dollars.

The three basin retrofit projects specified below will be constructed to meet the remaining pollutant reduction goal:

Proposed BMP	Estimated Project Cost*	Project Status	Anticipated Construction Year	Pollutant Credit (%)
Doylestown Knoll Retrofit	\$ 35,000	2025 Budgeting for Preliminary Design/Analysis	2026	4%
Doylestown Hunt Retrofit	\$ 45,000	2025 Budgeting for Preliminary Design/Analysis	2026	12%
Doylestown Lea Retrofit	\$ 35,000	2025 Budgeting for Preliminary Design/Analysis	2026	4%
Total	\$ 115,000			20%

*Project Costs are based on Public Works performing the improvements and preliminary analysis provides favorable results.

Key Takeaways - 5 YR Permit Cycle

Doylestown Township continues to remain in compliance!



Good Faith Effort

Doylestown Township has provided to DEP a good faith effort to achieving the pollutant reduction requirement, therefore the November 30th deadline to install remaining BMPs has been extended to match the above mentioned timeline.



Improved Water Quality

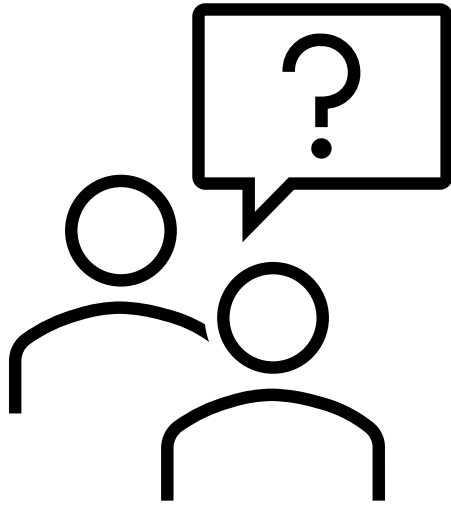
Outfall screenings show a decrease in dry weather flow and lab results indicate low levels of fecal coliform which were elevated in prior years.



BMP Inspections and Education

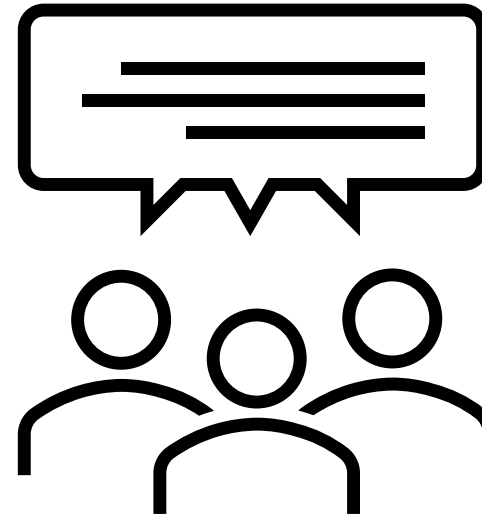
Doylestown Township performed private BMP inspections to ensure proper operation and maintenance of facilities and provided stormwater education to BMP owners.

Questions and Comments?



Questions

Do you have any questions about Doylestown Township's MS4 Permits?



Comments

Do you have any questions about Doylestown Township's MS4 Permits?