

# Brighton Township Board of Supervisors

## Annual MS4 Update

FEBRUARY 10, 2020



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Lennon, Smith, Souleret  
Engineering, Inc.

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Civil Engineers and Surveyors

# MUNICIPAL SEPARATE STORM SEWER SYSTEM (MS4)

- **Agenda:**

- Permit Overview
- Permit Timeline
- Annual MS4 Tasks
  - Stormwater Management Program (Minimum Control Measures)
  - Pollutant Control Measures
  - Pollutant Reduction Plans
- PADEP Compliance Evaluation
  - Annual Report
  - DEP Inspection
    - Current cycle of inspections for 2018 Permit is underway



# MUNICIPAL SEPARATE STORM SEWER SYSTEM (MS4)

## ● Permit Overview – NPDES Permit for Stormwater Discharges from Small MS4s

- Municipal Separate Storm Sewer System (MS4) - Permit applies to stormwater infrastructure that is:
  - Used for collecting and/or conveying stormwater
  - Owned by a municipality or any other public body
  - Not used as a combined sewer
  - Not part of Publicly Owned Treatment Works (i.e. sewage treatment plant)
- NPDES MS4 Permit authorizes discharge of stormwater from the MS4 to the Waters of the Commonwealth
- NPDES MS4 Permit issued by PADEP in Pennsylvania. The program is administered nationally by EPA.
- Primary goal of the permit: Protecting water quality and limiting stormwater pollution



# MUNICIPAL SEPARATE STORM SEWER SYSTEM (MS4)

## ● Permit Timeline

- 1972 – Clean Water Act
  - Establishes first regulation for discharge of pollutants to Waters of the United States
  - Initiation of NPDES Program (Construction, Industrial, MS4)
- 1990 – Phase I of EPA NPDES MS4 Permit
  - Permits issued to Large (population greater than 250,000) and Medium (population greater than 100,000) MS4s
- 2003 – Phase II of EPA NPDES MS4 Permit - Issuance of Initial NPDES Permits for Small MS4s
  - Intended to be 5-year permit duration
  - Administratively extended until March 2013



# MUNICIPAL SEPARATE STORM SEWER SYSTEM (MS4)

## ● Permit Timeline

- 2013 – Issuance of 2<sup>nd</sup> NPDES Permit for Small MS4s
  - Issuance and effective dates were different for all permittees, extending through 2015
- 2018 – Issuance of 3<sup>rd</sup> NPDES Permit for Small MS4
  - Applications were due to PADEP in September 2017 for General Permits
  - Permits issued in 2018-2019 all have effective dates of March 2018
- 2023 – Deadline for Implementation of Pollutant Reduction Plans – March 15, 2023
  - Permit will automatically renew. 2018 Permit is indented to provide perpetual permit coverage
  - New requirements, including future Pollutant Reduction Plan requirements will be issued by PADEP to take effect with formal renewal of permittee



# MUNICIPAL SEPARATE STORM SEWER SYSTEM (MS4)

## ● Annual MS4 Tasks

- Update and Implement Stormwater Management Program (Written Plan) addressing each MCM:
  - MCM #1 - Public Education and Outreach on Stormwater Impacts
  - MCM #2 - Public Involvement/Participation
  - MCM #3 - Illicit Discharge Detection and Elimination
  - MCM #4 - Construction Site Stormwater Runoff Control
  - MCM #5 - Post-Construction Stormwater Management (PCSM) in New and Re-Development Activities
  - MCM #6 - Pollution Prevention/Good Housekeeping
- The Stormwater Management Program must:
  - Reduce the discharge of pollutants from the MS4 to the maximum extent practicable,
  - Protect water quality, and
  - Satisfy appropriate water quality requirements of the Clean Water Act and the Pennsylvania Clean Streams Law



# MUNICIPAL SEPARATE STORM SEWER SYSTEM (MS4)

## ● Minimum Control Measures

- MCM #1 - Public Education and Outreach on Stormwater Impacts
  - Maintain and Implement a written plan
  - Maintain a Target Audience list
  - Distribute of Educational Materials to Target Audiences (Public Meetings, Website, Flyers/Newsletters, School/Community Events)
  
- MCM #2 - Public Involvement/Participation
  - Maintain and Implement a written plan
  - Allow for public input of stormwater policy (i.e. Ordinances)
  - Solicit Public Involvement and Participating in Stormwater Activities – Public Meetings, Recycling Events, Public Comment, Litter Cleanups, School/Community Events



# MUNICIPAL SEPARATE STORM SEWER SYSTEM (MS4)

## ● Minimum Control Measures

- MCM #3 - Illicit Discharge Detection and Elimination
  - Maintain and Implement a written plan
  - Maintain a map of the MS4
  - Complete annual outfall screening. Take measures to eliminate illicit discharges discovered during screening through annual follow up of screening results.
  - Implement and enforce an Ordinance prohibiting illicit discharges. Maintain records of complaints, violations and enforcement activities related to illicit discharges.
  
- MCM #4 - Construction Site Stormwater Runoff Control
  - Implement and enforce an Ordinance requiring erosion and sedimentation controls.
  - Maintain records of complaints, violations and enforcement activities related to illicit discharges.





# MUNICIPAL SEPARATE STORM SEWER SYSTEM (MS4)

## ● Minimum Control Measures

- MCM #5 - Post-Construction Stormwater Management (PCSM) in New and Re-Development Activities
  - Implement and enforce an Ordinance requiring Post Construction Stormwater Management BMPs
  - Develop and maintain an inventory of PCSM BMPs
  - Ensure adequate operation and maintenance of all municipal-owned stormwater facilities and facilities that were constructed under NPDES Permit
  
- MCM #6 - Pollution Prevention/Good Housekeeping
  - Develop a list of municipal facilities and activities.
  - Implement an operation and maintenance plan for each facility and activity (i.e. spill-kits, proper disposal of waste, vehicle washing/maintenance etc.)
  - Training of Township Staff, proper maintenance of municipal-owned facilities (spill-kits, proper disposal of waste, etc.)



# MUNICIPAL SEPARATE STORM SEWER SYSTEM (MS4)

## ● Pollutant Control Measures

- Required for discharges to waters impaired for:
  - Appendix A: Metals (AMD)
  - Appendix B: Pathogens
  - Appendix C: Priority Organic Compounds (PCB)
  
- 2019 Task – Mapping of tributary area to each impaired outfall was submitted with the September 2019 annual report
  
- 2020 Task – Identification of potential impairment sources. These sources will be identified based on results of the annual outfall screening program conducted as part of MCM 3
  
- 2021-2022 Task – Evaluation of identified potential sources. Results of source evaluation will be included in the 2022 Annual Report



# MUNICIPAL SEPARATE STORM SEWER SYSTEM (MS4)

- **Pollutant Reduction Plans (PRPs) were developed in 2017 and submitted to PADEP to meet the following requirements:**
  - All permittees that discharge to waters impaired for the following pollutants require PRPs:
    - Nutrients (Nitrogen and Phosphorus)
    - Sediment
  - The following reductions must be achieved within 5 years of permit issuance (March 2023 for General Permits):
    - Achieve 10% reduction in pollutant loading of sediment
    - Achieve 5% reduction in pollutant loading of total phosphorus
- **PRPs approved by PADEP established:**
  - Total pollutant loading required to be addressed in permit term
  - Potential BMPs to be constructed to achieve required pollutant reduction goals.



# MUNICIPAL SEPARATE STORM SEWER SYSTEM (MS4)

- **BMPs identified in the Pollutant Reduction Plan must be constructed and the required pollutant reduction achieved by March 2023**
- **Municipal budget for each year must include funds for:**
  - Final Design of BMPs
  - Acquisition of property, as needed for BMP construction
  - Construction costs for installation of new BMPs or retrofit of existing BMPs, including bidding costs if constructed by a contractor
  - Annual maintenance of all BMPs
- **Each Annual Report will include documentation and supporting calculations for reductions achieved through implementation of the Pollutant Reduction Plan.**



# MUNICIPAL SEPARATE STORM SEWER SYSTEM (MS4)

## ● Annual Reports

- Due September 30 of each year
- Self reporting on progress made for each MCM, along with PRP and PCM progress
- \$500 renewal fee due annually

## ● DEP or EPA Inspections

- DEP Inspects each permittee at least once every 5 years
- Inspections for 2018 Permit are underway
  - Office Review - Thorough review of written plans and documentation of compliance with required Minimum Control Measures. Documentation of all MS4 related activities (event flyers, distributed materials, work logs, complaint resolution tracking, outfall screening etc.)
  - Field Review – Evaluation of municipal facilities including Public Works yard, garage, salt storage and other facilities. Field review of BMPs and outfalls



# CONTACTS

**Ned Mitrovich, P.E.**  
**Lennon, Smith, Souleret Engineering, Inc.**  
**[nmitrovich@lsse.com](mailto:nmitrovich@lsse.com)**

**Shawn R. Wingrove, E.I.T.**  
**Lennon, Smith, Souleret Engineering, Inc.**  
**[swingrove@lsse.com](mailto:swingrove@lsse.com)**

