New Jersey Department of Environmental Protection
Municipal Stormwater Regulation Program

Tier A & B Final Permits
Presented to
14th Annual Public Works
Continuing Education Conference

March 29th, 2018

MS4 Permit Universe

Current Effort
- Tier A Municipalities (462) (mostly densely populated, along/near coast)
- Tier B Municipalities (104) (rural, non-coastal)

To Follow
- Public Complex (71) (colleges, universities, hospitals, prisons)
- Highway Agencies (33) (Counties, NJDOT, Parkway and Turnpike Authorities)

Municipal Tier Assignments 2009
Under the NJPDES Municipal Stormwater Regulation Program

Explanation
- Tier A - Municipalities (462)
- Tier B - Municipalities (104)
WHAT DOES THIS MEAN?

- In 1999 EPA enacted Phase II rules addressing Non-point pollution control from small and medium MS4s.
- Outlined in their Six Minimum Measures
- Issued Initial MS4 permits in 2004
- Renewed 2009
- Latest Renewal Effective date Jan. 1st 2018

Federal Obligations under the MS4 Rules

- Develop and Implement a Stormwater Management Program that reduces the discharge of pollutants to the Maximum Extent Practicable
- Develop measurable goals that quantify program improvements and progress
- Develop & Implement Six Minimum Control Measures (otherwise known as Statewide Basic Requirements or SBRs)
  - Public Education
  - Public Involvement/Participation
  - Illicit Discharge Detection and Elimination
  - Construction Site Storm Water Runoff Control
  - Post-Construction SWM for New Dev. & Redevelopment
  - Pollution Prevention/Good Housekeeping
### Municipal Separate Storm Sewer System (MS4) Permits

**NJPDES (7:14A)**
- Public Involvement & Participation
- Local Public Education and Outreach
- Pollution Prevention/Good Housekeeping
- MS4 Outfall Pipe Mapping & Illicit Discharge and Scouring Detection and Control
- Other Control Measures
- Additional & Optional Measures

**Stormwater Management Rule (7:8)**
- Post Construction Management in New and Re-Development
- For projects owned and operated by municipality’s themselves
- Projects not owned and operated by the municipality
- Ensure long-term operation of SWFs

### Local Review of Stormwater Design

- Projects subject to RSIS-Residential
- Projects that are commercial or industrial subject to SCO
- All projects must be reviewed for Compliance under SW Management Rules

**Threshold:**
- One acre or more of disturbance
- Includes projects that are part of common plan of development
WHY ARE STORMWATER FACILITIES IMPORTANT?

- SW from developed areas must be treated before discharged
- Properly functioning SWFs integral to reducing nonpoint pollution
- SWF must function as designed or there is no treatment
- Must be maintained
- Must have maintenance plan
- Deed Restriction
Major Changes to the Tier A Permit

• Conditions Related to Local Review of Stormwater Design in Development & Redevelopment

• Collection of SWF Location Information During Operation & Maintenance Activities

• Incorporation of Total Maximum Daily Load (TMDL) information into the Stormwater Pollution Prevention Plan (SPPP)

• Permit Conditions Transparency/Reduced Duplication of Effort

Tier A Permit-Local Review

- Requirement:
  - Conditions Related to Local Review of Stormwater Design in Development & Redevelopment
    - Require DEP training for Stormwater Management Design Reviewers (e.g. Municipal Engineers)
    - Require 45 Minutes Online Training for Municipal Council and Board Members
    - Major Development Stormwater Summary Form

- Rationale:
  - Reinforce Proper Application of Standards
  - Improve water quality
  - Addresses water quantity and flooding

- Assistance:
  - Schedule to Implement Updated requirements
  - Annual DEP training course for Stormwater Design Review (similar content posted on-line – not yet replacing live training)
9.4 EXTENDED DETENTION BASINS

An extended detention basin is a stormwater management facility that temporarily stores and attenuates stormwater runoff. In addition, extended detention basins provide pollutant treatment for runoff from the water quality design storm through settling. When designed in accordance with this chapter, the total suspended solids (TSS) removal rate is 40 - 60%, depending on the duration of runoff detention.

N.J.A.C. 7:8 Stormwater Management Rules - Design and Performance Standards

<table>
<thead>
<tr>
<th>Nonstructural Strategies</th>
<th>Not Allowed</th>
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</thead>
<tbody>
<tr>
<td>Water Quantity</td>
<td>Yes, when designed for the 2-, 10-, and 100-year design storms</td>
</tr>
<tr>
<td>Groundwater Recharge</td>
<td>Not Allowed</td>
</tr>
<tr>
<td>Water Quality</td>
<td>40 - 60% TSS Removal, depending on duration of detention</td>
</tr>
</tbody>
</table>

Water Quality Mechanisms and Corresponding Criteria

<table>
<thead>
<tr>
<th>Setting</th>
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<tbody>
<tr>
<td>Minimum Detention Time for Calculation of TSS Removal Rate</td>
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<tr>
<td>Maximum Detention Time for Calculation of TSS Removal Rate</td>
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</tbody>
</table>
DEP Assistance: Stormwater Design Review
Board and Council Training Video Posted Online

DEP Assistance: Stormwater Design Review
Stormwater Management Rule Training Videos
Applicability
Planning
Design and Performance
Safety
Permit Requirement:
Stormwater Design Review
Major Development
Stormwater Summary

Final 2018 Permit Conditions

- **Requirement:**
  - Incorporation of TMDL Information Into SPPP
    - Identify Impaired Waterway Segments in Municipality
    - Identify and Develop Strategies to Address Sources of Pollutants
    - Update SPPP Annually
    - Prioritize Stormwater Facility Maintenance & Repairs

- **Rationale:**
  - Recognizes Limited Municipal Resources
  - Supports local efforts to improve water quality

- **Assistance:**
  - Schedule to Implement (EDP +1 year)
TMDL Look-Up Tool

Permit Conditions: Transparency

- Public Involvement/Participation
  - Post SPPP, Municipal Stormwater Management Plan and Ordinances on website
  - Ensure public notice of opportunities to participate in plan development
Local Public Education

Storm Drain Labeling with stormwater message:
• Storm drain labeling
• Storm drain labeling maintenance plan
• Website and social media
• Newspaper Ad
• Radio/Television
• Green Infrastructure Signage

Minimum Standards for Pollution Prevention/Good Housekeeping for Municipal Operators

- Community Wide Ordinances
- Community Wide Measures
- Municipal Maintenance Yard Operations
- Employee Training
- SW Management Design Review Training
Community Wide Ordinances

- Pet waste Ordinance
- Litter Ordinance
- Improper Disposal of Waste Ordinance
- Wildlife Feeding Ordinance
- Vegetative Waste Ordinance-Two options
- Private Catch Basin Inlet Retrofitting Ordinance

Employee Training

Topics include:
- Waste Disposal
- Control Measures
- Illicit Connection
- Street Sweeping
- Stormwater Facility Maintenance
- Outfall Pipe Stream Scouring
- Maintenance Yard Operations
- Equipment/Vehicle washing
MS4 Outfall Pipe Mapping, Illicit Discharge and Scouring

**Illicit Connection Elimination**
- If a dry weather flow is detected
- Determination through the process outlined in the Guidance Documents
- Submit closeout forms
- If determined from another public source contact NJDEP

**Outfall Pipe Mapping**
- Must be current
- Must show location of surface water bodies
- Included in SPPP
- Be provided to Department
- Updated annually
- Map is due
- Electronic Submission after 12/21/2020

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Maintenance Yard Operations

- Images of maintenance yard operations

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Maintenance Yard Operations

Other Control Measures

- Minimum Standards for Facilities Maintenance
- Minimum Standards for TMDL Information
Stormwater Facility Maintenance

Tier A’s required to:

- Ensure long-term maintenance
- Must be maintained as designed
- Must have maintenance Plan
- Includes Manufactured Treatment Devices
- Collect Location Information

DEP Assistance: Maintenance

Stormwater Maintenance Training Videos
Other Improved Permit Conditions

- Clear requirements
- Reference Library/Tool Kits
- Minimal SPPP changes (except for new conditions) and no expected ordinance changes
- Training language revised to better reflect employee duties
- Reduced frequency for most employee training from Annual to Biennial
- Expanded public education opportunities (12 points w/ additional options)
Attachment A – Measureable Goals and Implementation Schedule

DEP Assistance: Permit Issuance
Old to 2018 Permit Crosswalk
Funding

Common Examples of Stormwater Projects

- Green Infrastructure projects (i.e. rain gardens, pervious paving, subsurface gravel wetlands, etc.)
- Purchase of stormwater maintenance equipment, such as street sweepers and vacuum trucks
- Replacing existing storm inlets and stormwater systems
- Rehabilitation of existing stormwater sewer systems which have water quality benefits
- Retrofit of existing basins to increase water quality benefits;
- Installation of Manufactured Treatment Devices
- Construction of regional stormwater basins and extending stormwater outfalls

More Information: Municipal Finance and Construction Element
http://www.nj.gov/dep/dwq/mface.htm
DEP Assistance: Permit Issuance
Stormwater Web Navigation Page
www.nj.gov/dep/dwq/fd.htm

NEW JERSEY DEPARTMENT
OF ENVIRONMENTAL
PROTECTION

DIVISION OF WATER QUALITY

BUREAU OF NONPOINT POLLUTION
CONTROL

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