The Municipal Stormwater Regulation Program for Public Works

The Annual “What You Need to Know”

Rutgers University
Center for Government Services
&
Public Works Association
of New Jersey

18 March 2015

Outline

- The Regulations and why we need them
- Statewide Basic Requirements (SBR’s)
- What we’ve done and what we need to do
The Regulations and why we need them

- The Federal Clean Water Act:
  - Phase I (Medium and Large MS4’s) (1987)
  - Phase II (Small MS4’s) (2004)

Some acronyms and definitions
- NPDES - National Pollutant Discharge Elimination System
- NJPDES - New Jersey Pollutant Discharge Elimination System
- MS4 – Municipal Separate Storm Sewer System
- BSR – Basic Statewide Requirements
General Stormwater Permits

NJPDES General Stormwater Permits:
• Tier A (approximately 460 municipalities)
• Tier B (approximately 100 municipalities)
• Highway Agency (21 Counties and NJDOT)
• Public Complex (Colleges, hospitals, etc.)

NJPDES Basic Industrial Stormwater General Permits:
• Recycling Center
• Industries

Tier A Stormwater Permit

Figure 1.
Highway Agency Stormwater Permit

Stormwater Program

• Stormwater Pollution Prevention Plan (SPPP)

Additional Measures (AMS)
- Departmen shall provide notice of the adoption of an AMS to the permittee

Statewide Basic Requirements (SBRs)
- Describe the stormwater program and serves as the mechanism for implementation
- Identify and discuss each SBR
- Describe method of implementation
- Include detailed record keeping
- Include implementation schedule
- Include any required diagrams (i.e. Outfall map)
- Include maintenance/inspection schedule

Optional Measures (OMS)
- Voluntary measures that prevent or reduce stormwater pollution

Public Notice
- Peal construction
- Stormwater Management in New Development and Redevelopment
- Comply with applicable design and performance standards for new development (NJAC 7:8)
- Ensure adequate long-term operation and maintenance of BMPs
- Storm drain inlet design standard

Local Public Education
- Local public education program
- Storm drain inlet labeling

Improper Disposal of Waste
- Proper waste disposal control
- Improper waste disposal control
- Wildlife feeding control
- Outfall pipe mapping
- ILCP education program

Solids and Floatable Controls
- Street sweeping
- Storm drain inlet aerating
- Stormwater facility maintenance
- Road erosion control maintenance
- Outfall pipe stream erosion remediation
- Roadside vegetation management

Maintenance Yard Operations
- On-site material storage
- Parking operations
- Vehicle maintenance
- Good housekeeping practices

Employee Training

Stormwater Pollution Prevention Plan
SPPP

- Describes the stormwater program and serves as the mechanism for implementation
- Identifies and discusses each SBR
  - Describe method of implementation
  - Include detailed record keeping
  - Include implementation schedule
  - Include any required diagrams (i.e. Outfall map)
  - Include maintenance/inspection schedule
Crooked streams are a menace to life and crops....The twisting and turning of the channel retards flow and reduces the capacity of the stream to handle large volumes of water. Floods result … take the kinks out of crooked streams … DuPont dynamite has straightened many thousands of miles of crooked streams.”
As the great philosophers see it:

Problems cannot be solved at the same level of awareness that created them. - Albert Einstein

Calvin and Hobbes – Bill Watterson
Public Notice

- Comply with applicable State and local public notice requirements
- Certify annually that public notice requirements were followed
- Applicable to Tier A, Highway Agencies, and Public Complexes
- Documents and records are publically available
Stormwater Management in New Development and Redevelopment

- New development and redevelopment must conform to:
  - Water quantity restrictions
  - Water quality restrictions
  - Groundwater recharge restrictions

Local Public Education Program

- Annually provide educational materials at one or more locations and/or present information at one or more events
- Label storm drain inlets next to sidewalks, parking areas and maintenance yards and keep track of labeled catch basins.
Improper Disposal of Waste

- Pet waste
- Litter
- Improper waste disposal
- Wildlife feeding
- Yard waste
- Refuse Containers and Dumpsters
- Fertilizer Management
- Private Catch Basins

Tier A – requires Ordinances
Tier B – Fertilizer Management Ordinance
Highway Agency and Public Complexes – adopt and enforce appropriate regulatory mechanism
Illicit Connection Elimination and Outfall Pipe Mapping

- Storm Sewer Outfall Pipe Mapping
- Illicit Connection Ordinance
- Illicit Connection Elimination Program

Solids and Floatable Controls

- Street Sweeping
- Storm Drain Inlet Retrofitting
- Stormwater Facility Maintenance
- Drain Inlet Inspection and Cleaning
- Road erosion control maintenance
- Outfall pipe stream scouring remediation
- Roadside vegetation management
Solids and Floatable Controls

Street Sweeping

- Monthly Street Sweeping required for:
  - Roads with speed limits less than or equal to 35 mph, and
  - Curbs, and
  - Predominantly commercial areas

MUST KEEP RECORDS OF:
- ROADS SEGMENTS, and
- DATES, and
- MATERIAL AMOUNT COLLECTED

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2010 Status Summary Report

![Graph showing the number of miles swept in New Jersey from 2004 to 2009.](image)
Storm Drain Inlet Retrofitting

- Catch basin grates and curb pieces must be retrofitted when:
  - A road is reconstructed
  - A road is repaved
- Must keep track of basins that are retrofitted
- Not required for pothole patching

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- 63,812 storm sewers were retrofitted between 2007-2009 to prevent floatables and trash from reaching surface waters of the state.
Stormwater Management Facility
Maintenance
Catch Basins (inlets)

- Catch basins must be inspected and/or cleaned annually
- Inspections and cleanings must be documented

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1,431,491 stormwater catch basins cleaned in NJ since 2004
Stormwater Management Facility
Maintenance
Detention Basins

Manufactured Treatment Devices (MTD's)
Stormwater Management Facility Maintenance
Manufactured Treatment Devices

- Require periodic maintenance/cleaning
- Frequency of cleaning depends on location and can be highly variable
- If device is full upon cleaning, need to clean more frequently
- RECORD CLEANING DATES AND AMOUNT COLLECTED

Outfall Pipe Stream Scouring

- Must look for scour when inspecting outfalls
- Must keep track of scour spots and maintain a priority repair list
- If scour is noted, report it to your supervisor
Roadside Vegetation Management

- Herbicide application
  - Only use where vegetation can’t readily be cut or mowed
  - Use within 2’ radius of guard rail, sign post or utility pole

Applicable to Highway Agencies only
Maintenance Yard Operation Requirements

- De-icing material storage
- Fueling operations
- Vehicle maintenance
- Good housekeeping
  - SOP’s posted at maintenance facilities
- Vehicle Washing – not allowed to drain to storm sewers!
- Must record when and where vehicles are washed

Standard Operating Procedures

- Waste Disposal
  - The storm drain system is not the same as the sanitary sewer system
  - Contaminants entering the storm drain system will end up in our streams, rivers and water supply
  - All spills to be cleaned up using adsorbent materials
  - Spent adsorbent to be put in designated containers
  - DO NOT wash spills down catch basins or hose down area to disperse contaminants
  - 1-877-WARNDEP  (1-877-927-6337)
Road Erosion Control

- Must look for erosion regularly
- Must keep track of erosion spots and maintain a priority repair list
- If an erosion area is noted, report it to your supervisor

Maintenance Yard Operation Requirements

- Dumpsters containing anything must be covered
- Drain holes are not allowed
Employee Training Requirements

- Develop and conduct an employee training program for appropriate employees that covers the topics contained in your permit

- *Did you sign in???

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2010 Status Summary Report

COMPLIANCE & ENFORCEMENT
Is the Department conducting compliance assistance inspections of all municipalities, public complexes and highway agencies permitted statewide?

2,423 Compliance Assistance Inspections Statewide since 2005

Notes: In view of the fact that the primary requirements of the permit have been attained, the Department has shifted their efforts from routine inspections to identifying and correcting problem areas. Consequently, the number of inspections and penalty money collected has decreased from previous years.
Summary

When you see something like this . . . .
Summary

- Meets Regulations
- Looks better
- Cleaner Work environment
- Less Maintenance
- More productivity
- Happier employees

... You can help turn it into something like this!

Summary

- Sweep up any material that falls on parking lots, sidewalks, and roads
- Keep Source Material indoors or appropriately covered
- Never dump anything down storm drains “Only Rain Goes Down the Drain”
- Follow reporting/recording procedures
- If in doubt, contact your supervisor
What we’ve done and what we need to do

- What we’ve done:
  - The Municipalities and Counties have done an excellent job of complying with the regulations
  - GREAT WORK EVERYONE!!!!!!

- What we need to do:
  - Lead by example (public education)
  - Stay safe

The Municipal Stormwater Regulation Program

Questions?

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