



# Is Your House In Order?

Minimum Control Measure #6 and what it means for you!

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# Background of Training

## Agenda

- Introductions
- Module 1: Overview of MS4 Program (15 Minutes)
- Module 2: MCM 6 Overview (15 Minutes)
- Module 3: Interactive Scenarios (1 Hour)
- Break (15 Minutes)
- Module 4: Group Quiz/Activity (1 Hour)
- Module 5: Sample MCM 6 Related Information (15 Minutes)

# MS4 Program

## Background

- Municipal Separate Storm Sewer System
- What is an MS4?

An MS4 is a conveyance or system of conveyances that is:

- Owned by a state, city, town, village, or other public entity that discharges to waters of the U.S.
- Designed or used to collect or convey stormwater (including storm drains, pipes, ditches, etc.)
- Not a combined sewer
- Not part of a Publicly Owned Treatment Works (sewage treatment plant).

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<http://water.epa.gov/polwaste/npdes/stormwater/Municipal-Separate-Storm-Sewer-System-MS4-Main-Page.cfm>

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# MS4 Program

## Background

MS4 was divided into 2 phases:

- Phase 1

Issued in 1990 and requires medium and large cities with populations exceeding 100,000 people to obtain NPDES permit coverage for their stormwater discharges. Based on data on the EPA website, this pertains to approximately 750 phase I MS4s.

- Phase 2

In December 2002, Pennsylvania Department of Environmental Protection issued a general permit for use by Urban Areas which became effective in 2003.

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<http://water.epa.gov/polwaste/npdes/stormwater/Municipal-Separate-Storm-Sewer-System-MS4-Main-Page.cfm>

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# PA Map of Urbanized Areas

Based on 2010 Census Data

## MS4 Municipalities / 2010 Urbanized Areas

Permit Status as of May 2012

General

Individual

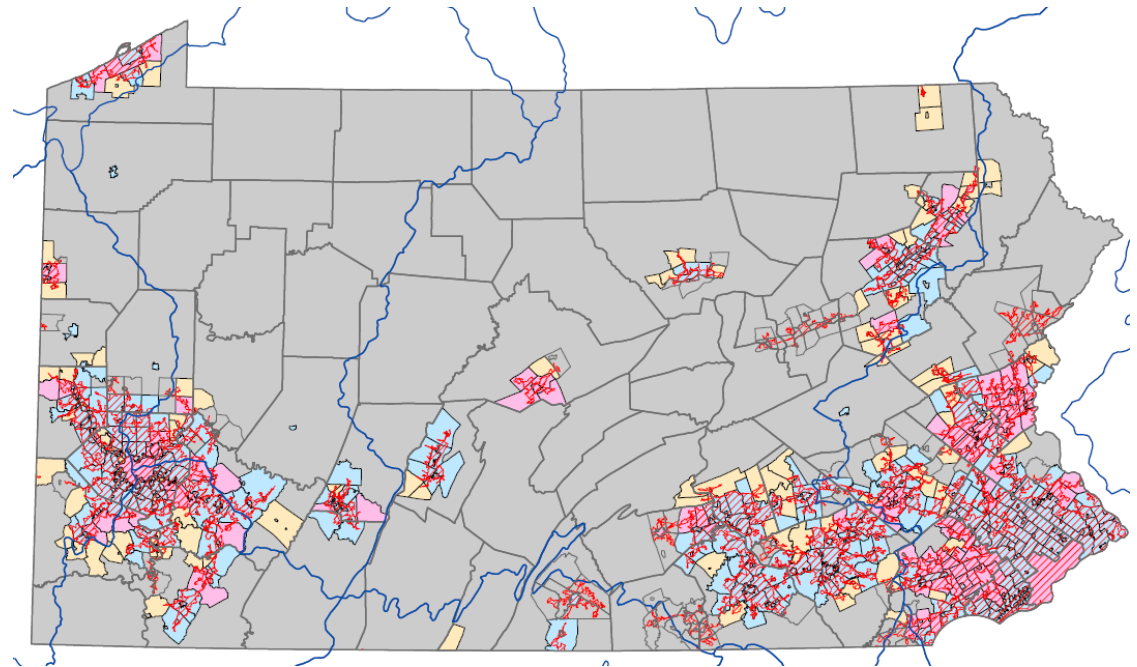
Waiver

Municipalities

County Boundaries

2010 Urbanized Area

Major Watershed Boundary



[http://www.portal.state.pa.us/portal/server.pt/community/ms4\\_information\\_resources/21380/urbanized\\_area\\_numbers/1489647](http://www.portal.state.pa.us/portal/server.pt/community/ms4_information_resources/21380/urbanized_area_numbers/1489647)

# MS4 Program

## Small MS4s Phase 2

- Owned or operated by the US, a State, city, town, borough, city, parish, district, association, or other public body (created by or pursuant to State law) having jurisdiction over disposal of sewage, industrial wastes, stormwater, or other wastes, including special districts under State law, such as a sewer district, flood control district or drainage district, or similar entity

### What is a small MS4?

A small MS4 is defined as all separate storm sewer systems that are:

- Not defined as “large” or “medium” MS4s pursuant to 40 CFR §§122.26(b)(4) and (7), or designated under 40 CFR § 122.26(a)(1)(v)
- This term includes systems similar to separate storm sewer systems in municipalities, such as systems at military bases, large hospitals or prison complexes, and highways or other thoroughfares.

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[http://www.portal.state.pa.us/portal/server.pt/community/ms4\\_information\\_resources/21380/urbanized\\_area\\_numbers/1489647#MCM](http://www.portal.state.pa.us/portal/server.pt/community/ms4_information_resources/21380/urbanized_area_numbers/1489647#MCM)

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# MS4 Program

## Small MS4s Phase 2

### What is a regulated small MS4?

- Please see the EPA Urbanized Area map webpage (<http://cfpub.epa.gov/npdes/stormwater/urbanmaps.cfm>) to see if all or part of a municipality is located within an Urbanized Area. If you are still unsure, you may ask DEP if your municipality has a regulated small MS4.
- A regulated small MS4 as defined in PAG-13 is the portion of a small MS4 located within a designated Urbanized Area (UA) or a small MS4 that is specifically designated by DEP.
- Federal regulations (see 64 FR 235, December 8, 1999, Page 68838) require operators of small MS4s within designated UAs to obtain authorization to discharge stormwater under a National Pollutant Discharge Elimination System (NPDES) permit beginning on March 10, 2003.
- UA is based upon the US Census Bureau data in accordance with 40 CFR 122.28(a)(1)(vi) and is "a land area comprised of a residential population of at least 50,000 and an overall population density of at least 1,000 people per square mile.
- This is designated either automatically by the EPA or through discretionary designation by DEP.

[http://www.portal.state.pa.us/portal/server.pt/community/ms4\\_information\\_resources/21380/urbanized\\_area\\_numbers/1489647#MCM](http://www.portal.state.pa.us/portal/server.pt/community/ms4_information_resources/21380/urbanized_area_numbers/1489647#MCM)

# MS4 Program

## Phase 2

Pennsylvania has over 1000 jurisdictions that require Phase 2 permits.

Under the small MS4 program, operators of regulated small MS4s are required to do the following:

- 1 Apply for NPDES permit coverage
- 2 Develop a stormwater management program which includes 6 minimum control measures (MCMs)
- 3 Implement a stormwater management program using appropriate stormwater management controls or best management practices (BMPs)
- 4 Develop measureable goals for the program
- 5 Evaluate the effectiveness of the program

<http://water.epa.gov/polwaste/npdes/stormwater/Municipal-Separate-Storm-Sewer-System-MS4-Main-Page.cfm>



# MS4 Program

## Minimum Control Measures



Under the MS4 program there are 6  
**Minimum Control Measures:**

- 1 Public outreach & education
- 2 Public involvement & participation
- 3 Illicit discharge detection & elimination
- 4 Construction site runoff control
- 5 Post-Development Stormwater Management in new developments and redevelopments
- 6 Pollution prevention & good housekeeping for municipal operations & maintenance

# MS4 Program

## Minimum Control Measure #1

### Public Outreach & Education

Municipalities must implement a **public education program** and distribute materials developed by PADEP that describe the adverse impact of uncontrolled stormwater runoff and **develop an outreach plan** for the community.

It is also recommended that municipalities inform their residents about steps that they can take themselves to help reduce pollution within their community, like:

- Proper use & disposal of garden chemicals
- Proper disposal of household hazardous material
- Proper Septic System Maintenance

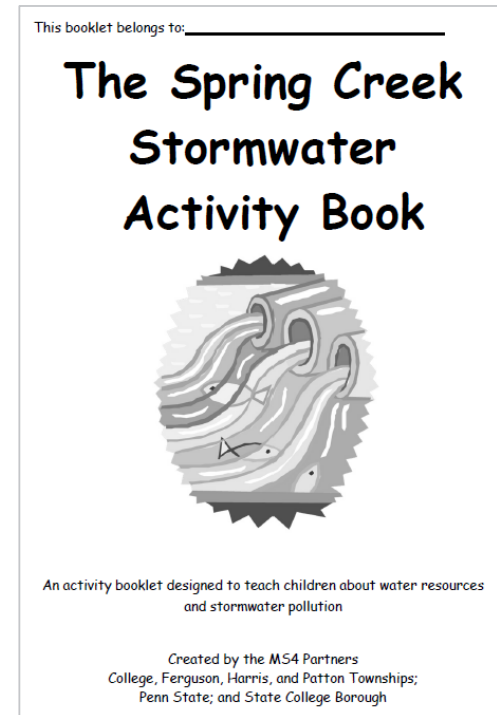
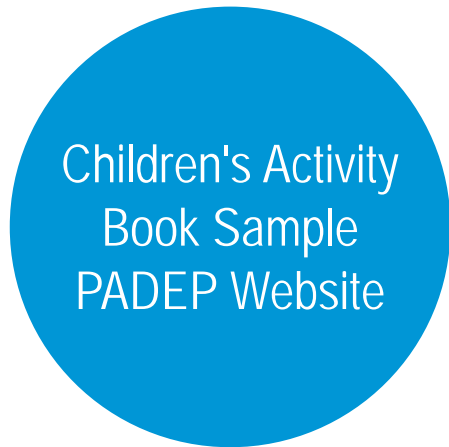
<http://www.wateronline.com/doc/part-ii-epa-details-six-minimum-control-measu-0001>

[http://www.portal.state.pa.us/portal/server.pt/community/ms4\\_information\\_resources/21380/urbanized\\_area\\_numbers/1489647](http://www.portal.state.pa.us/portal/server.pt/community/ms4_information_resources/21380/urbanized_area_numbers/1489647)

# MS4 Program

## Minimum Control Measure #1

Public Outreach & Education



<http://www.wateronline.com/doc/part-ii-epa-details-six-minimum-control-measu-0001>

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# MS4 Program

## Minimum Control Measure #2

### Public Involvement & Participation



- Give the **public opportunities to participate** in the development and implementation of the storm water management program. Municipalities must comply with state and local public notice requirements regarding adoption of plans, policies, ordinances, etc.
- Municipalities should also consider involving the public in the **development of their community stormwater management plan** to the extent possible. This could include a citizen stormwater advisory panel that conducts water quality monitoring, or enlisting residents to volunteer with stream clean ups and stenciling storm drains with "NO DUMPING".

<http://www.wateronline.com/doc/part-ii-epa-details-six-minimum-control-measu-0001>

PADEP: [MS4 Education & Outreach Presentation \(PPT\)](#)

# MS4 Program

## Minimum Control Measure #3

### Illicit Discharge Detection & Elimination



### Municipalities must:

- Develop, implement & enforce program to detect & eliminate illicit discharges
- Enact PADEP's model ordinance or update existing ordinance
- Develop storm water system maps (location of all outfalls & names of receiving waters)
- Effectively prohibit non-storm water discharges into the system using ordinances & enforcement actions
- Implement a plan to detect & address non-storm water discharges & illegal dumping
- Inform public employees, businesses & citizens of hazards & dangers of illegal discharges

Municipalities should also attempt to coordinate these requirements with the public education measure; **visually monitor their outfalls** throughout the year, and trace and remove discharge sources.

<http://www.wateronline.com/doc/part-ii-epa-details-six-minimum-control-measu-0001>

# MS4 Program

## Minimum Control Measure #4

### Construction Site Runoff Control



### Municipalities must:

- Control construction sites of one acre or larger if they have not obtained a waiver
- Enact PADEP's model ordinance or update their existing ordinance
- Pass an ordinance or other regulatory mechanism to control erosion & sediment
- Control construction site waste material such as excess building materials, concrete washout, & sanitary waste. Include in program the requirement for construction site owners to implement BMPs

<http://www.wateronline.com/doc/part-ii-epa-details-six-minimum-control-measu-0001>

# MS4 Program

## Minimum Control Measure #4

### Construction Site Runoff Control



#### Municipalities must (continued):

- Adopt procedures
  - for site plan review of water quality impacts.
  - to receive & consider public input.
  - for inspections & enforcement.
- Set sanctions to ensure compliance.
- Coordinate with the County Conservation District for NPDES Construction Stormwater Permitting & Erosion & Sedimentation Pollution Control
- Consider setting meetings for a pre-construction review of site plans, conduct site inspections, and require a site-specific storm water pollution prevention plan within their ordinance.

<http://www.wateronline.com/doc/part-ii-epa-details-six-minimum-control-measu-0001>

# MS4 Program

## Minimum Control Measure #5

Post Construction Stormwater Management



Municipalities must:

- Control construction sites of one acre or larger if they have not obtained a waiver.
- Adopt PADEP's Model stormwater management ordinance
- Ensure proper long-term operation and maintenance of post-construction controls.
- Strategies for structural and non-structural BMPs
- Ensure that controls are in place that prevent and minimize water quality impacts

<http://www.wateronline.com/doc/part-ii-epa-details-six-minimum-control-measu-0001>



# MS4 Program

## Minimum Control Measure #6

Pollution Prevention & Good Housekeeping



Municipalities must:

- Implement an Operations & Maintenance program that focuses on pollution prevention
- Train Community employees on good housekeeping practices
- Educate the community on pollution prevention
- MORE INFORMATION TO COME ON THIS IN OUR NEXT SEGMENT!