STORMWATER MANAGEMENT AND MS4s

Regulated under

- Federal Clean Water Act
- Pa Clean Streams Law
- Pa Stormwater Management Act (167)
FEDERAL CLEAN WATER ACT

- 1972 EPA prohibits discharge of pollutants
- 1990 EPA Develops NPDES Phase I Program
- 1999 EPA Adopts Phase II Program
NPDES PROGRAM

Phase I of NPDES applies to:

- Construction sites disturbing greater than five acres
- Eleven categories for industrial sites
- Large and medium municipalities (MS4’s) with populations of 100,000 or greater that discharge stormwater
NPDES PROGRAM

Phase II of NPDES applies to:

- Construction sites disturbing one to five- acres
- Municipalities in urbanized areas not covered by Phase I, otherwise known as small MS4s (940 municipalities)
NPDES PROGRAM

- Phase III Does Not Exist-Except for Oceanside Cooling Water Intakes
- Unless EPA is developing something without DEPs knowledge
MS4s

Municipal Separate Storm Sewer Systems

- Municipalities required to develop and implement MS4 program

- Objective: Reduce pollutant loadings to the maximum extent practicable (MEP)
MS4 PROGRAM

Must incorporate:

- Public education and outreach
- Public participation and involvement
- Illicit discharge detection and elimination
- Construction site runoff control
- Post-construction stormwater management in new development and redevelopment
- Pollution prevention and good housekeeping for municipal operations and maintenance
MS4 PROGRAM

• A PASSHE University may be a regulated MS4

• Depending on:
  ◦ Location in “urbanized area”
  ◦ Location in high population density area
  ◦ Location in High growth, growth potential area
  ◦ Direct discharge to surface water
  ◦ Discharge to sensitive waters
MS4 PROGRAM

- Individual Permits are Municipal/Facility specific for stormwater discharges to “Designated Use Waters” (HQ, EV)

- General Permit PAG-13 Covers MS4s as determined by DEP (population basis)

- Permits were issued for a 5 year term
Round 1 of the General Permits (PAG-13) have expired.

DEP has issued a series of administrative extensions for General Permit holders.

Automatically extended through June 11, 2012.
MS4 PROGRAM ON THE HORIZON

- Eventually-MS4 General Permit holders will be required to submit a Notice of Intent

- Essentially a General Permit Renewal

- File no later than 180 days prior to the expiration of the current extension

- Submit by December 16, 2011 (AS IT NOW STANDS)
MS4 PROGRAM

- **Individual Permit** holders must either submit an application for permit renewal or request an extension.

- 180 days prior to Permit expiration.
MS4 PROGRAM

- Six month extension of Individual Permit

- http://www.portal.state.pa.us/portal/server.pt/community/stormwater_management/10628/npdes_ms4%C2%A0information/669119
MS4 PROGRAM

- All General and Individual Permits require 6 Minimum Control Measures (MCMs) AND Annual Reporting (Due June 9, 2011 for Reporting Year 2010)

- Public Education and Outreach
- Public Participation and Involvement
- Illicit Discharge Detection and Elimination
- Construction Site Runoff Control
- Post-Construction SWM
- Pollution Prevention and Housekeeping
Stormwater Management

- Act 167 (Stormwater Management Act)
- All Pa Counties must prepare and adopt
- All Municipalities must adopt, implement and regulate stormwater
Stormwater Management

- All construction projects disturbing 1 acre or more and result in the discharge of stormwater must have a NPDES Individual (Phase I, 5 or more acres) or General Permit (Phase II, 1 to 5 acres)

- Local ordinances may also require a permit for projects disturbing more than 5,000 SF
Stormwater Management

- Objectives of Permits
  - Reduce construction impacts on watershed
  - Minimize and mitigate unavoidable impacts by use of Best Management Practices (BMPs)
  - Refer to your local Stormwater Management Ordinance and/or DEP’s BMP Manual
    - [http://www.elibrary.dep.state.pa.us/dsweb/View/Collection-8305](http://www.elibrary.dep.state.pa.us/dsweb/View/Collection-8305)
## BMPs

### Structural
- Porous Pavement with infiltration bed
- Infiltration Basin
- Infiltration Trench
- Rain garden/Bioretention
- Vegetated Swale
- Vegetated Filter Strip
- Infiltration Berm
- Retentive Grading
- ........Many More

### Non-Structural BMPs
- Low Impact Development and Conservation Design