Stormwater Management
In
South Carolina

Jill Stewart, P.E., Manager
Stormwater Permitting Section
Stormwater Regulation

- Construction
- Industrial
- Municipal Separate Storm Sewer Systems (MS4s)
Construction
Regulatory Origins

South Carolina Department of Health and Environmental Control

Promote Promote Prosper
South Carolina Department of Health and Environmental Control
S.C. Section 48-18
Erosion and Sediment Reduction Act of 1983

R. 72-405
Standards for Stormwater Management and Sediment Reduction

SCDOT

R. 72-100
Erosion and Sediment Reduction & Stormwater Regulations

State-Owned Facilities

R.72-300
Standards for Stormwater Management and Sediment Reduction

Most other sites, including commercial and residential disturbing 2 acres or more

S.C. Section 48-14
S.C. Section 48-1 Pollution Control Act

Clean Water Act

R. 61-9 Pollution Control Permits

NPDES Construction General Permit

All sites, statewide that disturb 1 acre or more
1991 Stormwater Management and Sediment Reduction Act (R. 72-300)

- Erosion and Sediment Control
  - Sediment basins, traps, etc. on sites that disturb 10+ acres are required to be designed to achieve an 80% efficiency for the 10-year, 24-hour storm event

- Stormwater Management
  - Min. 2- and 10-year, pre- and post-development calculations
  - Allowance for waivers
  - Detention pond design
  - “First flush” requirements for some sites
NPDES Construction General Permit

- Reissued every 5 years
- Latest went into effect on September 1, 2006
- All sites 1 acre or greater (statewide), sites within ½ mile of a receiving waterbody in the Coastal Zone, and other sites on a case-by-case basis are required to obtain coverage
- Since September 1, 2006 we have received **7988** applications for coverage under the CGP
NPDES Construction General Permit

- Requires “qualified” inspectors
- Pre-construction conference for sites that disturb more than 10 acres
- Monthly reports for sites that disturb more than 10 acres
- Inspections either every 7 days or every 14 days and within 24 hrs of the end of a rainfall event that exceeds ½"
- Stabilization is required in no more than 14 days after the construction activity in that portion of the Site has temporarily or permanently ceased
- Additional analysis and possibly added controls if a site drains into an impaired waterbody or a waterbody with a TMDL
EPA

- **Court-ordered Effluent Limits for Construction Sites**
  - Effective in SC in August 2011 when NPDES Construction General Permit is re-issued
  - Limits initially applicable to sites with 20+ acres of active construction/land disturbance
  - Reduces to 10 active acres of construction after 4 years
  - Discharge limit of 280 NTUs – daily average for all storm events less than a 2-year, 24-hour
Turbidity

280 NTU
Industrial
Industrial

- Industrial General Permit – expired August 31, 2008
  - Transition to EPA’s model Multi Sector Permit format
  - Extensive Stakeholder process
  - Public Notice March 2010 with proposed Effective date in October 2010
  - Department will require new NOI from all permitted facilities
Industrial

- Changes
  - Benchmarks – Discharge Targets
  - Effluent Limits
  - Water Quality Monitoring for sites that drain to an Impaired Water (303 (d) and/or TMDL)
  - Each Sector has some combination of best management practices, effluent limits, and/or benchmarks.
MS4
MS4s

- MS4 stands for Municipal Separate Storm Sewer System meaning a conveyance or system of conveyances (including roads with drainage systems, municipal streets, catch basins, curbs, gutters, ditches, man-made channels, or storm drains):
  - Owned or operated by a State, city, town, borough, county, parish, district, association, or other public body (created by or pursuant to State law);
  - Designed or used for collecting or conveying storm water.
MS4s – How are they defined?

- By Urbanized Area
- Urbanized Area defined by US Census:
  500 people/square mile
Phased Approach for MS4s

- Phase I – 1990 - Large and Medium MS4s
  - Large: Urbanized Area with > 250,000 (SCDOT)
  - Medium: Urbanized Area 100,000 – 249,999 (Greenville County, Richland County, City of Columbia)
- Each issued an individual NPDES Permit
Phased Approach for MS4s

- Phase II - 1999 – Small MS4s
  - Small: other urbanized areas (70 entities - Including 4 military facilities)
    - Horry County
    - City of Charleston
    - Florence County
    - City of Rock Hill
    - Shaw Air Force Base
    - And others
  - Issued coverage under a General Permit (2006)
Catawba River Basin MS4s

Legend
- Green circle: Completed TMDL
- Red circle: Impaired Stations
- Light grey area: Catawba River Basin - SC
- Medium grey area: Counties
- Dark grey area: TMDL Watershed

MS4 Categories Responsible Entity
- Orange area: Phase I - Richland County
- Light brown area: Counties
- Green area: Cities

South Carolina Department of Health and Environmental Control
What are Small MS4s required to do?

- Public Education and Outreach
- Public Involvement/Participation
- Illicit Discharge Detection and Elimination
- Construction Site SW Runoff Control
- Post Construction SW Management in New Development and Redevelopment
- Pollution Prevention/Good Housekeeping for Municipal Operations
Additional Regulation of Stormwater

- EPA
  - National Research Council Report
  - Proposed Rulemaking for “Stormwater Management Including Discharges From New Development and Redevelopment”
    - Expand the MS4 areas
    - Establish requirements for stormwater from new and redevelopment
    - Develop a single set of consistent requirements for all MS4s
    - Other changes
Questions?

Jill Stewart, P.E
(803) 898-0439
stewarjc@dhec.sc.gov