An Overview of Georgetown County’s Stormwater Program

May 28, 2008
Outline

• Background on Stormwater Regulations

• Erosion and Sediment Control Program

• Stormwater Requirements and Guidelines
Phase I Stormwater Regulations

- Federal regulations est. in 1992 – Phase I
- Required large communities (> 100,000 population) to apply for individual stormwater permits
- Phase I Programs in SC – Geenville, Charleston Harbor
Phase II Stormwater Regulations

- Extension of Phase I regulations
- Published in December 1999 and became effective in March 2003
- Phase II Municipal Separate Storm Sewer System (MS4) – "Systems located in urbanized areas as defined by the U.S. Census. Has a population of at least 50,000 and an overall population density of at least 1,000 people per square mile."
Phase II Stormwater Regulations

• Georgetown falls under Phase II due to the population of Murrells Inlet

• Georgetown County received permit in June 1, 2007.
Six Minimum Control Measures

- Six minimum control measures serve as an outline to compliance with the Phase II Regulations:
  - Public Education and Outreach
  - Public Involvement and Participation
  - Illicit Discharge Detection and Elimination
  - Construction Site Stormwater Runoff Control
  - Post-Construction Stormwater Management
  - Pollution Prevention and Good Housekeeping
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Erosion and Sediment Control Program
History of SC’s Construction Site Stormwater Control Regulatory Program

- DHEC Regulations 72-300 and 61-9 implements a Statewide construction regulatory program consistent with Phase II requirements
History of Georgetown County's Stormwater Program

- Need to develop a program to aid in the protection of our local water resources
- County voluntarily created program
- City regulations are based on DHEC’s regulations, and are intended to supplement
- County program is modeled after other programs in SC
Georgetown County Stormwater Ordinance

- Originally developed by Citizen Advisory Group in 2005
- Adopted by County Council on October 24, 2006
- Established protocol for submission and review of site Best Management Practices (BMP) Plans as well as staff inspection procedures
Georgetown County Stormwater Management Program

- Established protocol for enforcement

- Enabled County personnel to issue citations and/or stop work orders to developers/contractors in violation of the ordinance
County Roles and Responsibilities

• BMP Plan Review
  – Developer’s Design Engineer or QCP responsible for designing BMPs to ensure compliance with County, State, and federal regulations
  – County has adopted statewide standards to ensure uniformity in design, construction and maintenance

• Initial On-Site Walkthrough Inspection of Site BMPs

• Rainfall and/or Monthly Inspections
DHEC’s Role and Responsibilities

• Management of Construction Site National Pollutant Discharge Elimination System (NPDES) Stormwater Permit program

• Perform Site Inspections and respond to citizen concerns

• Responsible agency for protection and preservation of water quality in SC
DHEC’s Role and Responsibilities

- Enforcement Action in accordance with NPDES permit in the form of consent orders, fines, etc.
- Oversee QLP Program
Developer’s Role and Responsibilities

• Hire competent Engineer/QCP to design and inspect BMPs

• Construction and Maintenance

• Comply with DHEC regulations

• Satisfy County standards

• Responsible for downstream property damage
County Plan Review and Initial Approval Process

• Perform initial review of Site BMP plan during engineering plan review process

• Additional BMPs may be required by the County over the course of construction to minimize sediment release

• Preconstruction Meeting held and Clearing and Grubbing permit issued

• Initial Walkthrough Inspection
Inspection and Enforcement Process
Routine/Monthly Inspections

- At a minimum, County conducts monthly inspections of all construction sites.
- Numerous other inspections conducted on a weekly basis to monitor and follow up on sites.
- Currently monitoring approximately 40 sites.
Rainfall Inspections

- Conducted after each rainfall event
- Inspections typically conducted within 48 hours of rainfall event
- Standard checklist developed by staff is filled out and communication is generated
Site Inspection Categories

• **No deficiencies on site**
  - Letter sent to permit holder stating that no deficiencies were found on site

• **Minor deficiencies on site**
  - Letter sent to permit holder stating that deficiencies should be corrected “prior to the next rain event”
  - Verbal communication made with permit holder and contractor regarding issues

• **Major deficiencies on site**
  - Examples: Sediment leaving the site, failure to correct minor deficiencies listed in previous report, numerous deficiencies
  - Enforcement process is initiated
County Enforcement Procedures

• Correction notice given to permit holder

• After indicated time period, no action triggers a STOP WORK ORDER
County Enforcement Procedures
(cont.)

- At the end of this period, failure to acknowledge the notices results in a citation to appear before the Magistrate
- $500 per day per offence and/or maximum six months determined by the Magistrate
- Gross negligence or repeat offenses can shorten enforcement process time
- Intent of enforcement is to minimize sediment release to maximum extent practical
County Water Quality Sampling Program
Water Sampling Program

- Analyze effectiveness of BMPs on construction sites – not as a regulatory compliance measure
- Currently monitoring 8 Sites
Stormwater
Requirements Guidelines
Stormwater Requirements
Guidelines

- Stormwater Ordinance and Manual
- Development Regulations
- Zoning Ordinance
Stormwater Requirements Guidelines

• What is a Storm Event?
  – Duration
  – Intensity
  – Basin Size
Stormwater Requirements Guidelines

• Specific Requirements for Streets
  – Pipe Sizing – 25 Year Storm Event
  – Gutter Spread – Half a Lane
Stormwater Requirements
Guidelines

• Specific Requirements for Site Plans
  – Detention Pond Requirements
  – Parcel Size Requirements
  – Storage Requirements
  – Floodplain Delineation
  – Corps Permitting
Stormwater Requirements
Guidelines

• Stormwater Maintenance Issues
  – Houses Flooding
  – Streets Flooding
  – Yards Flooding
Stormwater Requirements Guidelines

What is an Easement?
Stormwater Requirements
Guidelines

• **Typical Maintenance**
  – Clean Pipes within Right-of-way and Easements
  – Clean Ditches within Easements
  – Stabilize Ditches within Easement if Causing Significant Property Damage
  – Replace Pipe if Causing Streets or Houses to Flood
  – Piping Policy
Georgetown County
Stormwater Management Program

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