

Virginia Stormwater Management Regulations

RRRC Environment and Land Use Committee
November 15, 2012

History and Background

- In 2005, Virginia HB1177 passed setting the stage for reorganization of stormwater (SWM) programs and revised regulations
- Virginia has been working for several years to update SWM regulations
- Regulations attempt to combine existing local programs and State VSMP construction site program
- Chesapeake Bay Preservation Act (CBPA) and MS4 Communities (Stafford is both) are required to adopt a local SWM program; for non-CBPA or MS4 localities, adoption is currently optional
- The new regulations became effective on September 13, 2011
- Local programs submitted to Virginia Soil and Water Conservation Board (VA SWCB) by July 1, 2013 or request time extension by April 1, 2013
- Local implementation (adoption of program) required by July 1, 2014
- Significant work to be completed in the meantime by DCR and Localities

Regulations

- Water Quality
- Water Quantity
- Offsite Compliance
- Stormwater Pollution Prevention Plans (SWPPPs)
- Local Programs
- Grandfathering

Regulations-Discussion of Key Components-Water Quality

- Water Quality
 - New Development-Total Phosphorus (P) Load shall not exceed 0.41 lbs/acre/year
 - Will require the County to change from current “technology” based approach, to “performance” based approach
 - Compliance determined by use of Virginia Runoff Reduction Method
 - Redevelopment
 - Land Disturbance < 1 acre-Reduce P at least 20% below pre-development (Also, included are linear redevelopment projects)
 - Land Disturbance >1 acre-Reduce P at least 10% below pre-development
 - Any increase of impervious surface on redevelopment-Meet standards for new development on that portion of the site

*Localities are permitted to adopt a more stringent standard

Regulations-Discussion of Key Components-Water Quantity

- Water Quantity
 - Channel Protection
 - Manmade system-Convey post-development peak flow rate for 2 year 24 hour storm without erosion; or meet requirement for natural channels
 - Restored system-Meet design parameters of restored system; or meet requirements for natural channels
 - Natural system-Use mathematical equation specified in the regulations or other locally approved calculations
 - Flood Protection
 - No flooding in system currently-Post development peak flow rate of the 10 year 24 hour storm must be confined to the system
 - Flooding in system currently-Post development 10 year 24 hour storm must be confined in the system; or reduced to less than the 10 year 24 hour storm peak flow rate
 - Flood Protection
 - Sheet Flow
 - Increased volumes of sheet flow must also be analyzed and addressed if necessary, based on the regulations

*Replaces Erosion Control Minimum Standard-19

Regulations-Discussion of Key Components-Offsite Compliance

- Offsite Compliance Options include:
 - Offsite controls in accordance with a locality development comprehensive SWM plan
 - Locality Pro-Rata program
 - Offset program established by Code of Virginia Section 10.1-603.8:1 (Bank)
 - Other offsite options approved by State agencies
 - Other developer owned properties in the same watershed
- Offsite Compliance allowed under the following conditions:
 - > 5 acres of land disturbance
 - Post construction P control is less than 10 lbs/year
 - At least 75% of required reductions made onsite
 - Cannot allow violations of local water quality standards or MS4 permit provisions

Regulations-Discussion of Key Components-Stormwater Pollution Prevention Plans (SWPPPs)

- Plan Components
 - Erosion and Sediment Control
 - Minimize soil exposed during construction
 - Minimize steep slope disturbance
 - Minimize sediment discharge
 - Others (May not match existing E&S requirements)
 - Stormwater Management
 - Water Quality and Quantity
 - Pollution Prevention
 - Wash water, Concrete washout
 - Building materials and other pollutants
 - Spills and leaks
 - TMDL Compliance (if applicable)

Regulations-Discussion of Key Components-Local Programs

- Plan Review
 - Specific plan acceptance and review timelines in regulations
- Long term maintenance
 - Agreements required
- Inspections
 - For E&S, SWM, SWPPP's
 - Locality adopts inspection program, subject to:
 - SWCB Approval
 - County inspections of all post construction BMPs at least once every 5 years
- Enforcement
 - Administrative procedures
 - Civil or criminal penalties
- Exceptions
 - May be granted, but not for economic hardship alone
- Reports and Recordkeeping
 - Annual reports

Regulations-Discussion of Key Components-Local Programs

- Virginia Soil and Water Conservation Board must approve local programs, subject to the following:
 - Provide a draft (or final) ordinance in accordance with the regulations
 - A funding and staffing plan
 - Policies and procedures for the local program

Regulations-Discussion of Key Components-Grandfathering

- New regulations provide prescriptive rules for grandfathering (vesting) of projects
- These rules are complex and may not match currently established plan validity or vesting timelines

County Impacts-Fees

- Regulations require the following:
 - Combined prescriptive fees for plan review and permitting
 - Fee schedule will have to be changed
 - Need to determine whether or not we can still charge separate fees for E&S and SWM or if this is all or nothing
 - Planning and PW will need to work together to divide revenues
 - County can petition the SWCB for higher fees
 - Locality keeps 72% of collected fees, remaining 28% must be returned to Virginia Department of Conservation and Recreation- Fees submitted to DCR monthly
 - Bottom line, the County will probably be collecting less revenue under the new program than our current program for plan review and permitting

Example Project-Fees (Current)

- Berea Knolls
 - 27 lots zoned R-1
 - 11 disturbed acres
 - Several BMPs
 - Plan Review=\$2,080
 - Permitting
 - E&S=\$6,600
 - SWM=\$6,026 (2% of security amount for BMPs and Storm Sewers)
 - Total=\$12,626

Example Project-Fees (Future)

- Project between 10 and 50 acres=\$4,500

County Impacts-Land Development

- Land development projects will face higher costs for stormwater treatment, although implementation will be easier in Stafford since we have experience with LID
- Many sites will have a treatment train approach (i.e. multiple BMPs in sequence)
- County Plan Reviewers and Inspectors will be assuming additional duties to address pollution prevention requirements
- Accounting systems will need to be implemented to divide fees among Departments and to identify funds to be returned to DCR
- County Ordinances and Design Manuals will need to be revised and approved by the Board. They will have to meet the minimum criteria adopted in the regulations. Consultant assistance will be needed for these tasks.

Local Government Advisory Committee (LGAC)

- Committee Responsibilities and Format
 - Assist DCR with development of local stormwater program implementation guidance and tools
 - 6 meetings scheduled-April-October 2012
- Committee Membership
 - Diverse group from all geographic areas of the State
 - Urban/Suburban Counties/Cities-Virginia Beach, Chesapeake, Fairfax, Henrico, Stafford, Roanoke
 - Medium/Small Cities-Harrisonburg, Lynchburg, Falls Church
 - Rural Counties-Frederick, Augusta, Goochland, Madison
 - Planning District Commissions-Roanoke, Hampton Roads, Northern VA
 - Soil/Water Conservation Districts-Northern Neck, Thomas Jefferson
 - VAMSA (Aqualaw)

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LGAC (cont.)

- Grandfathering Guidance
 - Approved May 15, 2012
- Local Program Checklist
 - Identifies 18 required submittal elements for local programs
 - Draft SWM Ordinance
 - Funding and Staffing Plan, Fee Structure
 - Identification of Potential Partners
 - Plan Approval, Inspection, and Record Keeping Processes
 - BMP Design Criteria, Tracking and Maintenance Requirements
 - Security (Bonding) Process
 - Enforcement Process

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LGAC (Cont.)

- Program Adoption Timeline
 - Identifies timeline and key steps in program development/adoption process
 - Localities suggested to begin program development in July, 2012
- E-Permitting System
 - DCR developing online system for obtaining permits
 - Permitting Functions (Public)
 - Permit Data Entry, Payment Functions
 - Administrative Functions (DCR/Localities)
 - Permit/Compliance Management, Inspection and BMP Tracking
 - Issues and Concerns
 - "One size fits all" approach may not work
 - May be a challenge for existing programs to integrate with existing permit/inspection tracking systems
 - Could benefit new program adopters who have not developed tracking mechanisms
 - E-permitting system to required State portion of revenue (28%) required

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LGAC (Cont.)

- Model Ordinance
 - "Draft Model Ordinance" is complete
 - Further revisions on hold until the VSMP Construction General Permit regulation development is completed
- Training Sessions
 - Phase II Regional Training Meetings
 - 9 meetings to be held State-wide - 10-18 through 11-28
- Certification Program
 - DCR developing new certification program for SWM similar to E&S certification program
 - Combined and separate certifications will be available
 - No grandfathering, no reciprocity for P.E.'s etc.

LGAC (cont.)

- BMP Handbook
 - Update to the VA SWM Handbook is in process
 - Completed portions available on DCR website
 - Utilizes BMP Clearinghouse for information on individual types of BMPs
 - <http://www.dcr.virginia.gov/lrzi.shtml>
- Guidance Documents
 - Frequently Asked Questions
 - Roles and Responsibilities
 - Process Flow Charts

LGAC (cont.)

- SWPPP Review
 - Local government review of Pollution Prevention Plans now allowed
- Grant Funding
 - 59 projects @ \$2.08 million funded
 - 10 regional submittals; 49 individual submittals
 - Covers 100 localities

Questions?

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