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Virginia Soil and Water Conservation Board Stormwater Technical Advisory Committee Technical Discussion of Nitrogen and Phosphorus Criteria Thursday, October 12, 2006 Department of Conservation and Recreation Richmond, VA

## **Participants**

Joe Battiata, Contech Stormwater
Doug Beisch, Williamsburg Environmental Group
Michael Doczi, Michael E. Doczi & Associates
David C. Dowling, Department of Conservation and Recreation
John Friedman, Fairfax County
Mike Gerel, Chesapeake Bay Foundation
Lee Hill, Department of Conservation and Recreation
Dave Hirschman, Center for Watershed Protection
Bob Kerr, Kerr Environmental Services Corp.
Joe Lerch, Chesapeake Bay Foundation
Joan Salvati, Department of Conservation and Recreation
Tom Schueler, Center for Watershed Protection
William Street, James River Association

#### **DCR Staff Present**

Joseph H. Maroon, Director C. Scott Crafton Michael R. Fletcher Ryan Brown, Office of the Attorney General

#### **Observers Present**

Kathy Wilson Jones, City of Richmond Reggie Parrish, EPA David Powers, Michael Baker Group Laura Wheeling, Hampton Roads PDC Michelle Virts, Timmons Group

Mr. Street opened the meeting and thanked attendees for participating. He said the intent was to bring together the best minds in the business for issues related to nutrients and how to address this in the Stormwater Management regulations.

Mr. Street said there had been much interest in the program and that the issue was critical to the Virginia Stormwater Management program.

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Mr. Street referenced the Working Draft for Part II and Part III of the Stormwater Regulations. A copy of this working draft is included as attachment #1.

## Overview of nitrogen and phosphorus criteria included in Virginia's working draft stormwater Technical Criteria

Mr. Street gave an overview of the nitrogen and phosphorus criteria included in the working draft. He referenced Section <u>4VAC50-60-63</u> regarding Water Quality.

Mr. Street said these numbers were established through scientific studies which analyzed what levels of nitrogen, phosphorus and sediment were needed to meet state water quality standards. He said that to meet those loads the state developed tributary strategies that provide specific pathways to achieve the reductions.

A member asked if the philosophy was for no net increase.

Mr. Street said that if undeveloped land were meeting the tributary strategy there would be no net increase.

Mr. Street said the main concern is to meet water quality standards.

Mr. Street said that while there were many questions with regard to the model or the tributary strategies, the focus should be on accepting the numbers presented by them.

#### Overview of nutrient load accounting methodologies

Mr. Schueler gave a presentation regarding nutrient load accounting methodologies.

Mr. Schueler said that to actually reduce nutrients on the ground, it was necessary to look at past experience.

He said the Bay is one area that the state has been dealing with for over four decades. He said there was a long way to go in dealing with the impacts of land development. Local and state programs can be more of a problem in dealing with this than the technology available.

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Mr. Schueler said that the minimization of actively managed turf is a key component of a solution. He said the basic strategy was to minimize impervious cover and turf cover while maximizing forest cover. This is not easy to do in a stormwater plan environment.

A member said that nutrient management plans would help with actively managed turfs.

Another member said credits need to be verifiable, computable and enforceable.

Mr. Schueler said that it was easier to get lower levels of phosphorus than nitrogen.

He said there is a conspicuous lack of data with regard to things like bioretention.

Mr. Battiata said the reason for the committee was to address the concern that whatever methodology was adopted is achievable. He said that if every development with over a certain percentage of impervious cover were going to be forced to go off site or pay a large fee, there would be challenges.

A member said that the goal is to have the tools, whether through credits, site designs or BMPs so that the reduction can be accomplished on site.

A member said that while the regulations should make sure development and stormwater are doing their share of reductions, agriculture and point source reduction goals should also be met.

Mr. Street said it was important to determine what is attainable. If there are going to be nitrogen and phosphorus criteria, the load calculating methodology should be determined. This should be given to DCR as input into the crafting of the regulations.

A member said that it was important to have the locality support these concepts.

Mr. Hill said that the concern was not new development, but what the final development will be and what the rates are coming from that site. What is the impervious area of the site? Where is the road?

A member expressed a concern that this would be setting a predeveloped load or target that post development had to achieve.

At this time the committee recessed for lunch.

Mr. Street said that he wanted to make sure that the committee identified the issues associated with the methodologies and how these would be applied.

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He said it was more an issue for the TAC and DCR to determine the correct numbers or if they should be modified.

Mr. Street noted that there would be another TAC established to revise the stormwater handbook. That is where the detailed questions will be addressed.

A member said that what the Chesapeake Bay manual has for efficiencies should be compared to what the tributary strategies have.

Another member said that the Bay model had not applied much in terms of BMP efficiencies. The numbers are there, but the data has not been plugged in.

A member said he would prefer to consider more current data that has been collected with regard to BMPs.

A member asked if the committee would consider both nitrogen and phosphorus or only one.

Another member said that if nitrogen were not addressed there would be nitrogen pollution. From a water quality standpoint it is important to address both.

#### **Issues for TAC consideration:**

- The consideration of nitrogen and phosphorus together.
- The consideration of nitrogen loads in the Coastal plain.

A member asked if nitrogen should be considered for agriculture while phosphorus should be considered in urban areas.

A member asked if the handbook should be regulatory in terms of having a rigid set of standards.

Mr. Street asked members to comment on other items for consideration. The following points were raised:

- This will be a hard sell to the development community.
- The engineers have to have flexibility.
- Stick with the concept of one pollutant or the other for continuity purposes, most likely phosphorus.
- Make sure concentrations are based on the Chesapeake Bay model.
- We have not seen removal efficiencies for nitrogen.
- The "in lieu of fees" should be flexible within the urban watershed.
- The bar for stormwater management needs to be raised.

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- Standards may mean that a lot of projects are no longer economically viable.
- Make sure that site design is part of meeting the goals, not just treatment.

Mr. Street and Mr. Dowling thanked members for their participation.

The meeting was adjourned.

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Attachment #1

## Part II Stormwater Management Program Technical Criteria

### 4VAC50-60-40. <u>Authority and</u> applicability.

This part specifies technical criteria for every stormwater management program and land-disturbing activity.

Pursuant to the Virginia Stormwater Management Law, § 10.1-603.2 et seq. of the Code of Virginia, the Board is required to take actions ensuring the general health, safety and welfare of the citizens of the Commonwealth as well as protecting the quality and quantity of state waters from the potential harm of unmanaged stormwater. In addition to other authority granted to the Board under the Stormwater Management Law, the Board is authorized pursuant to §§ 10.1-603.2:1 and 10.1-603.4 to adopt regulations that specify minimum technical criteria for stormwater management programs in Virginia, to establish statewide standards for stormwater management from land disturbing activities, and to ensure that there will be no unreasonable degradation of properties [EPA WILL PROVIDE A DEFINITION FOR CONSIDERATION], water quality, stream channels, and other natural resources.

In accordance with the Board's authority, this part establishes the minimum technical criteria and stormwater management standards that shall be employed by a delegated or state-administered local stormwater management program to protect the quality and quantity of state waters from the potential harm of unmanaged stormwater runoff resulting from land disturbing activities.

#### 4VAC50-60-50. General. Repeal

#### 4VAC50-60-53. General Requirements

The natural, physical, chemical, biological and hydrologic characteristics and the water quality and quantity of the receiving state waters shall be maintained, protected, or improved to the maximum extent practicable in accordance with these regulations.

Purposes include but are not limited to supporting state designated uses and water quality standards.

## 4VAC50-60-56. Applicability of other laws and regulations

Land disturbing activities shall comply with all applicable laws and regulations related to stormwater management, including but not limited to the Virginia Stormwater Management Law, Virginia Erosion and Sediment Control Law and the Chesapeake Bay Preservation Act except as provided in § 10.1-603.3 subsection I and all applicable regulations adopted in accordance with those laws. Nothing in this chapter shall be construed as limiting the rights of other federal and state agencies from imposing stricter technical criteria or other requirements as allowed by law.

**4VAC50-60-60.** Water quality. Repeal

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## 4VAC50-60-63. Water Quality

In order to protect the quality of state waters and to control nonpoint source pollution, a local program shall apply the following minimum technical criteria and statewide standards for stormwater management to land disturbing activities:

- A. Pursuant to §10.1-603.4, the Board is authorized to establish minimum design criteria for measures to control nonpoint source pollution. In order to address periodic modifications due to continuing advances in types of control measures and engineering methods, such design criteria guidance is provided in the Virginia Stormwater Management Handbook. In requiring the implementation of such control measures on the development site of the land disturbing activity, a local program shall, at a minimum, incorporate the following technical criteria and stormwater management standards:
- 1. A local program shall require new development for residential uses on undeveloped land to implement control measures with minimum design criteria such that the post-development pollutant load of the development site shall not exceed 0.22 0.28 pounds of total phosphorus per acre per year and 2.68 pounds of total nitrogen per acre per year.
- 2. A local program shall require new development for non-residential uses to implement control measures with minimum design criteria such that the post-development pollutant load of the development site shall not exceed 0.45 pounds of phosphorus per acre per year.
- 3-2. A local program shall require that projects occurring on prior developed lands achieve a 44% reduction in total phosphorous load and 28% reduction in total nitrogen load from pre-existing conditions. The post-development pollutant load for projects occurring on prior developed lands shall not be required to be less than 0.28 pounds of total phosphorous per acre per year and 2.68 pounds of total nitrogen per acre per year. For redevelopment projects, a local program shall require that:
- a. Projects occurring on prior developed lands that will result in impervious areas of less than or equal to 50% shall implement control measures with minimum design criteria such that the post-development pollutant load of the land disturbing site shall not exceed 0.45 pounds of phosphorus per acre per year;
- b. Projects occurring on prior developed lands that will result in impervious areas of greater than 50% and less than or equal to 75% shall implement control measures with minimum design criteria such that the post-development pollutant load of the land disturbing site shall not exceed 0.60 pounds of phosphorus per acre per year; and
- c. Projects occurring on prior developed lands that will result in impervious areas of greater than 75% shall implement control measures with minimum design criteria such that the post development pollutant load of the land disturbing site shall not exceed 0.90 pounds of phosphorus per acre per year.
- 3. Total nitrogen load and total phosphorus load shall be calculated using a method approved by the Department provided in the Virginia Stormwater Management Handbook.
- 4. In addition to the above requirements, if a land disturbing activity discharges stormwater to a segment of a state water that has been designated as impaired by the 303(d) Impaired Waters List and a TMDL for that segment has been established and

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approved by the United States Environmental Protection Agency, a local program shall require that additional control measures be implemented such that post-development conditions are targeted toward the improvement of water quality for the listed impairment to the maximum extent practicable.

- B. If the local program allows for offsite controls, and if the applicant demonstrates to the satisfaction of the local program authority that post-development pollutant load water quality technical criteria setout in subsection A cannot be achieved onsite, offsite controls, and in lieu fees, may be considered to achieve the necessary reduction per the following:
- 1. New development pollutant loads shall not exceed 0.37 pounds of total phosphorus per acre per year and 3.5 pounds of total nitrogen per acre per year through onsite WHAT IF ADJACENT TREATMENT controls. Projects occurring on prior developed lands shall at a minimum achieve a 33% reduction in total phosphorous load and 21% reduction in total nitrogen load from pre-existing conditions through onsite controls.
- 2. Once the minimum onsite phosphorus and nitrogen load and reduction criteria setout in subsection B1 have been met, offsite practices acceptable to the local program authority shall be utilized to meet the remaining required pollutant load reductions for the development or redevelopment project. The offsite reductions shall be achieved within the same HUC or the adjacent downstream HUC per guidance provided in the Virginia Stormwater Management Handbook.
- 3. If the local program allows for an in lieu fee, and if the applicant has demonstrated to the satisfaction of the local program authority that the criteria setout in subsection B2 cannot be met, then the remaining load reductions shall be achieved by:
- a. The purchase of nitrogen or phosphorus credits in accordance with the General Virginia Pollutant Discharge Elimination System (VPDES) Watershed Permit Regulation for Total Nitrogen and Total Phosphorus Discharges and Nutrient Trading in the Chesapeake Bay Watershed in Virginia (9 VAC 25-820). This option shall only be available within the Chesapeake Bay Watershed [TO BE DETERMINED IF THIS IS A VIABLE OPTION];
- b. The a payment of a fee deposited in a non-reverting Stormwater Mitigation fund established by the local program for the restricted purpose of achieving the required load reductions pursuant to a Board approved plan and schedule. Such fees shall be based on the project cost per pound of reduction per onsite controls used in subsection A and the fee shall be approved by the local program authority: or
  - c. A combination of the reduction strategies setout in subsections 3a and 3b.
- B.C. The utilization of nonpoint source pollution control measures, including best management practices (BMPs), not included in the Virginia Stormwater Management Handbook which target appropriate nonpoint source pollutants or address water quality standards or goals may be utilized in meeting the technical criteria and stormwater management standards of subsection A at the discretion of the local program authority provided calculations and scientific studies verify pollutant reductions.
- <u>CD.</u> A local stormwater management program shall encourage the reduction of impervious cover and the implementation of LID in achieving the technical criteria set

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forth in subsection A. The reductions achieved by LID measures shall be calculated per the guidance provided in the Virginia Stormwater Management Handbook.

#### 4VAC 50-60-66 Water Quantity

In order to protect state waters from the potential harms of unmanaged quantities of stormwater runoff, the following technical criteria and statewide standards for stormwater management shall apply to land disturbing activities:

- A. Properties and state waters receiving stormwater runoff from any land-disturbing activity shall be protected from sediment deposition, erosion and damage due to changes in runoff rate of flow and hydrologic characteristics, including but not limited to, changes in volume, velocity, frequency, duration, and peak flow rate of stormwater runoff in accordance with the minimum water quantity standards set out in this section and the guidance found in the Virginia Stormwater Management Handbook.
- B. Pursuant to §10.1-603.4:7, a local program shall require that land disturbing activities:
- $\frac{1.\ Maintain\ post-development\ runoff\ rate\ of\ flow\ and\ runoff\ characteristics\ that}{replicate,\ as\ nearly\ as\ practicable,\ the\ existing\ predevelopment\ runoff\ characteristics\ and\ site\ hydrology\ ,\ or$
- 2. If stream channel erosion or localized flooding is an existing predevelopment condition, the proposed land disturbing activity shall maintain or improve upon the contributing share of the existing predevelopment runoff characteristics and site hydrology per design methodology and calculations guidance found in the Virginia Stormwater Management Handbook.
- <u>C.</u> Any land disturbing activity shall satisfy the requirements of subsection B above if the practices implemented on the site are designed to:
  - 1. Detain the water quality volume and to release it over 48 hours;
- 2. Detain and release over a 24-hour period the expected rainfall resulting from the one year, 24 hour storm; and
- 3. Reduce the allowable peak flow rate resulting from the 1.5, 2, and 10-year, 24-hour storms to a level that is less than or equal to the peak flow rate from the site assuming that it was in good forested condition, achieved through multiplication of the forested peak flow rate by a reduction factor that is equal to the runoff volume from the site when it was in a good forested condition divided by the runoff volume from the site in its proposed condition.

Such land disturbing activity shall further be exempt from any flow rate capacity and velocity requirements for natural or manmade channels as defined in any other section of this regulation.

- D. For the purposes of determining compliance with subsection B, a local program shall require the following:
- 1. Pre-development stream characteristics shall be verified by physical surveys and calculations that are consistent with good engineering practices that are acceptable to the local program authority.
- 2. Flooding and channel erosion impacts to receiving streams due to land-disturbing activities shall be calculated for each point of discharge from the land disturbance and

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such calculations shall include any runoff from the balance of the watershed which also contributes to that point of discharge. Flooding and channel erosion impacts shall be evaluated taking the entire upstream watershed into account, including the modifications from the planned land disturbance. Good engineering practices and calculations shall be used to demonstrate post development stream characteristics, flooding and channel erosion impacts.

3. For purposes of computing predevelopment runoff, all pervious lands in the site shall be assumed prior to development to be in good condition (if the lands are pastures, lawns, or parks), with good cover (if the lands are woods), or with conservation treatment (if the lands are cultivated); regardless of conditions existing at the time of computation. Predevelopment runoff calculations utilizing other land cover values may be utilized provided that it is demonstrated to and approved by the local program authority that actual site conditions warrant such considerations.

E. A local stormwater management program shall encourage the reduction of impervious cover and the implementation of LID in achieving water quantity reductions. The reductions achieved by LID measures shall be calculated per the guidance provided in the Virginia Stormwater Management Handbook.

#### 4VAC50-60-70. Stream channel erosion. Repeal

### 4VAC50-60-73. Frequency

The specified design storms shall be defined as a 2 and 10-year 24-hour storm using the site specific rainfall distribution recommended by the U.S. Department of Agriculture's Natural Resources Conservation Service (NRCS). The permit issuing authority may allow for the use of the Modified Rational (critical storm duration) Method for pond designs with a maximum drainage area of 200 acres per the guidance provided in the Virginia Stormwater Management Handbook.

#### 4VAC50-60-76. Linear development projects

Linear development projects shall control post-development stormwater runoff in accordance with a stormwater management plan or a comprehensive stormwater management plan approved in accordance with these regulations.

## 4VAC50-60-80. Flooding. Repeal

## 4VAC50-60-83. Stormwater management impoundment structures or facilities

A. Construction of stormwater management impoundment structures or facilities within tidal or nontidal wetlands and perennial streams shall be avoided to the maximum extent practicable. and should only be considered in situations where the following criteria have been met:

- 1. An alternative analysis has been performed and no practicable alternative exists;
- 2. The alternative analysis has demonstrated that the adverse environmental impacts caused by the impoundment are less damaging than the harm caused by

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uncontrolled stormwater or the benefits of the impoundment are in the public interest and such interests exceed the adverse environmental impacts expected from its construction and maintenance:

- 3. The alternative analysis has demonstrated that the permittee will take all reasonable steps to: (i) avoid adverse environmental impacts, (ii) minimize the adverse impact where avoidance is impractical and, (iii) provide mitigation of the adverse impact on an in kind basis where applicable;
- 4. A demonstration that the siting of the facility, its operation and maintenance will not adversely impact the instream beneficial uses or result in substantive degradation of water quality; and
  - 5. A comprehensive operation and maintenance plan has been developed.
- B. Construction of stormwater management impoundment structures or facilities within a Federal Emergency Management Agency (FEMA) designated 100-year floodplain shall be avoided to the maximum extent practicable. When this is demonstrated to be unavoidable, all stormwater management facility construction shall be in compliance with all applicable requirements under the National Flood Insurance Program, 44 CFR Part 59 and local floodplain ordinances. [TVA]
- C. Stormwater management impoundment structures that are not covered by the Impounding Structure Regulations (4VAC50-20) shall be engineered for structural integrity for the 100-year storm event. In no case shall the design standard be less than the 100-year storm event for any stormwater management impoundment structure.
- D. Construction of stormwater management impoundment structures or facilities may occur in karst areas only after a thorough geological study of the area has been conducted in accordance with guidelines setout in the Virginia Stormwater Management Handbook.
- E. No adverse environmental impacts shall occur to any identified karst features.

  and no permanent Permanent stormwater management impoundment structures or
  facilities shall only be constructed in karst features after completion of a geotechnical
  investigation in accordance with guidelines setout in the Stormwater Management
  Handbook. Discharge of stormwater into a karst feature shall not occur without quantity
  and quality controls shall not occur unless in accordance with the technical criteria setout
  in this Part unless otherwise allowed by law.

## 4VAC50-60-86. Riparian Buffers

A local program shall develop a riparian buffer plan in accordance with the guidance setout in the Virginia Stormwater Management Handbook that includes riparian protection strategies for the maintenance of existing buffers and the establishment of new buffers. To the maximum extent practicable, such a plan shall require that riparian buffers adjacent to state waters, excluding stormwater management impoundment structures or facilities, on development and redevelopment sites be maintained during and following the land disturbing activity. If no such riparian buffers are existing at the time of the land disturbing activity, then such plan shall require that riparian buffers be established. The local program riparian buffer plan shall be approved by the Board. The Board may grant an exception to the 35-foot width requirement provided that the local

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program demonstrates to the satisfaction of the Board that the reduced width will satisfactorily protect water quality and quantity.

4VAC50-60-90. Regional (watershed-wide) stormwater management plans. Repeal

### 4VAC50-60-93. Stormwater Management Plan Development

- A. A stormwater management plan for a regulated-land disturbing activity shall apply these stormwater management technical criteria to the entire land disturbing activity.
- B. Individual lots or planned phases of developments shall not be considered separate land-disturbing activities, but rather the entire development shall be considered a single land disturbing activity.
- <u>C. The stormwater management plan shall consider all sources of surface runoff</u> and all sources of subsurface and groundwater flows converted to surface runoff.

## 4VAC50-60-96. Comprehensive stormwater management plans

- A. Localities are encouraged to develop comprehensive stormwater management plans which meet the water quality and quantity requirements of this chapter on a watershed-wide basis. State and federal agencies intending to develop large tracts of land are encouraged to develop or participate in comprehensive stormwater management plans where practicable.
- B. The objective of a comprehensive stormwater management plan is to address the stormwater management concerns in a given watershed with optimal economy and efficiency and to better integrate stormwater management facilities and practices. The implementation of comprehensive stormwater management plans shall mitigate the impacts of new development, and provide for the remediation of erosion, flooding or water quality problems caused by existing development within the given watershed.

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Part III<u>A</u> Local Programs

4VAC50-60-100. Applicability. Repeal

4VAC50-60-110. Technical criteria for local programs. Repeal

4VAC50-60-120. Requirements for local program and ordinance. Repeal

4VAC50-60-130. Administrative procedures: stormwater management plans. Repeal

4VAC50-60-140. Administrative procedures: exceptions. Repeal

4VAC50-60-150. Administrative procedures: maintenance and inspections. Repeal

#### 4VAC50-60-102. Authority and Applicability.

In accordance with the Virginia Stormwater Management Law, §10.1-603.2 et seq., the Board is authorized to delegate to an approved locality the administration of a local stormwater management program. Pursuant to §10.1-603.4, the Board is required to establish standards and procedures for such a delegation. Delegation shall follow the adoption of a local stormwater management program by a locality in accordance with §\$10.1-603.3 A or B and the Board's deeming of such program as consistent with the Virginia Stormwater Management Law and these regulations in accordance with §10.1-603.3 F.

This part specifies the minimum technical criteria for a locality or a Department-administered stormwater management program and the requirements of a local government ordinance regarding a stormwater management program. Such criteria include but are not limited to administrative, plan review, permit issuance, inspection, and enforcement.

### 4VAC50-60-104. Technical criteria for local programs.

A. All local stormwater management programs shall comply with the provisions of Part II (4VAC50-60-40 et seq.).

B. When a locality operating a delegated local stormwater management program has adopted more stringent requirements or implemented a regional (watershed-wide) stormwater management plan, the Department shall consider these requirements in its review of state projects within that locality in accordance with Part IV of these regulations (4VAC50-60-160 et seq.).

<u>C. Nothing in this part shall be construed as authorizing a locality to regulate, or to require prior approval by the locality for, a state project.</u>

#### 4VAC50-60-106. Local Program Administrative Requirements.

A. A local stormwater management program shall provide for the following:

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- 1. Identification of the permit issuing authority, the plan approving authority, the inspection authority, and the enforcement authority;
- 2. Regulations and technical criteria to be used in the stormwater management program;
  - 3. Procedures for the submission and approval of plans;
- 4. Procedures for the issuance, denial, revocation, termination, reissuance, transfer, or modifications of stormwater permits;
  - 5. Assessment and collection of fees;
  - 6. Inspection and monitoring of land disturbing activities for compliance;
  - 7. Procedures for long-term BMP monitoring inspection;
  - 8. Enforcement.
- B. A locality shall adopt an ordinance that incorporates the components setout in subsection A.
- C. A local program shall report to the Department information related to the administration and implementation of the local program, in a method and on a time schedule established by the Department.
- D. A local program may require the submission of a reasonable performance bond or such other financial surety and for the release of such sureties in accordance with the criteria set forth in §10.1-603.8.

### 4VAC50-60-108. Local program stormwater management plan review.

- A. A locality shall require new or redevelopment projects to submit stormwater management plans for review and approval prior to commencement of the land disturbing activities.
- B. Localities shall approve or disapprove a stormwater management plan according to the following:
- 1. Localities shall begin stormwater management plan review upon submission of a complete plan. A complete plan shall at a minimum include the following elements:
- a. Contact Information including the name, address, and telephone number of the property owner and the operator and the tax reference number and parcel number of the property or properties affected;
- b. A narrative description of the site and proposed stormwater management BMPs and the mechanism through which the BMPs will be operated and maintained during and after construction;
  - c. The location and the design of the proposed stormwater management BMPs;
- d. A report identifying the geotechnical properties for the hydrologic and structural properties of soils utilized with the installation of stormwater management BMPs per the Virginia Stormwater Management Handbook;
- e. Overall site plan that identifies the location of potentially impacted receiving state waters and that includes pre-developed and post-developed conditions for drainage areas including final drainage patterns and changes to existing contours;
- <u>f. Comprehensive hydrologic and hydraulic computations of the pre-development</u> and post-development runoff conditions for the required design storms;

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- g. Good engineering practices and calculations verifying compliance with the water quality and quantity requirements of this chapter;
- <u>h. Inspection schedules, maintenance agreements and sources for funding the maintenance of all stormwater management BMPs;</u>
- i. Right-of-entry agreements or easements from the owner for purposes of inspection and maintenance;
- j. Agreements between the local program and the owner that states where maintenance or repair is neglected, or the stormwater management BMP becomes a danger to public health or safety, the local program has the authority to perform the work and to recover the costs from the owner;
- All stormwater management plans shall be appropriately sealed and signed by a professional in adherence to all minimum standards and requirements pertaining to the practice of that profession in accordance with Chapter 4 of Title 54.1 of the Code of Virginia and attendant regulations; and
- il. The person responsible for the development project shall certify that all land clearing, construction, land development and drainage will be done according to the approved plan.
- 2. Upon receipt of a plan, the locality shall have 15 calendar days to determine the administrative completeness of the plan and notify the applicant of its determination. If a plan is deemed to be administratively incomplete based on the criteria setout in subsection B1 of this section, the locality must identify in writing the reasons the plan is deemed deficient. If a locality does not make a determination within the 15 calendar days, the plan shall be deemed administratively complete as of the date of submission and a maximum of 45 additional calendar days will be allowed for the review of the plan.
- 3. Upon the determination that a plan is administratively complete, a maximum of 60 calendar days will be allowed for the review of the plan.
- 4. During the review period, the locality shall either approve or disapprove the plan and communicate its decision to the person responsible for the development project in writing. If the plan is not approved, the reasons for not approving the plan shall be provided in writing. Approval or denial shall be based on the plan's compliance with the locality's stormwater management program.
- 5. If a plan meeting all requirements of the local program is submitted and If no action is taken by the locality within the time specified above, the plan shall be deemed approved.
- C. An initial stormwater management plan may be submitted to a locality, if allowed by the local program, for review and approval when it is accompanied by an approved erosion and sediment control plan and preliminary stormwater design for the current and future site work. Such initial plans shall be limited to the initial clearing and grading of the site. An initial plan does not supercede the need for the submittal and approval of a complete stormwater management plan. The following information in the initial plan shall include, but not be limited to:
- 1. A map(s) indicating the location of the natural resources and structures at the site and surrounding area as it exists prior to the commencement of the project. This map(s) shall also include an identification of the limits of clearing and grading, existing

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and proposed drainage patterns, perennial streams, soil types, forest cover, topography, wetlands, and other native vegetative areas on the site. Particular attention should be paid to environmentally sensitive features that provide particular opportunities or constraints for development.

The map(s) may also include proposed buildings, roads, parking areas, utilities, and stormwater management measures. The map(s) may also show proposed land use with tabulation of the percentage of surface area to be adapted to various uses, including but not limited to; planned locations of utilities, roads and easements.

- 2. A narrative shall accompany such map(s) describing the elements setout in subsection 1. Acreages shall be provided for the overall site, limits of clearing and grading, wetlands, and riparian areas. Such narrative shall include a justification description of how the proposed changes in the would alter the site's natural conditions.
- D. Each plan approved by a locality may be changed in accordance with the following:
- 1. Changes to an approved plan, not based on field inspections, shall be allowed only after the review and written approval of the plan approving authority. The plan approving authority shall have 30 calendar days for the review.
- 2. If field inspection by the person responsible for the development project shows that a plan is not adequate, the person responsible for the development project may request modifications to the approved plan to address noted deficiencies may be requested. The plan approving authority shall have 15 calendar days to respond in writing either approving or disapproving such request.
- 3. The plan approving authority based on an inspection may require amendments to the approved plan to address the noted deficiencies and notify the person responsible for the development project of the required modifications.

## <u>4VAC50-60-112.</u> Local program issuance of VSMP General Permit for Discharges of Stormwater from Construction Activities.

- A. A locality shall issue coverage under the VSMP General Permit for Discharges of Stormwater from Construction Activities in a format determined by the Department and in accordance with the following:
- 1. The applicant must have an approved initial stormwater management plan or an approved stormwater management plan for the land disturbing activity.
- 2. The applicant has submitted a complete registration statement for the VSMP General Permit for Discharges of Stormwater from Construction Activities and the registration statement has been reviewed and approved by the local program authority.
- 3. The applicant has submitted the required fee form and fee for the registration statement seeking coverage under the VSMP general permit.
- 4. Applicants submitting registration statements deemed to be incomplete must be notified within 3 working days that the registration statement is not complete, informed of what material needs to be submitted to complete the registration statement, and that the land disturbing activity does not have VSMP general permit coverage.
- B. The locality shall report VSMP general permit information to the Department in accordance with 4VAC50-60-126.

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#### 4VAC50-60-114. Local program inspections.

- A. A local program shall conduct inspections of stormwater management BMPs during construction to ensure that the location and design criteria of the BMPs are in accordance with the approved plan.
- B. A local program shall require the person responsible for the development project to submit a final report containing an as-built survey certifying that the stormwater management BMPs have been implemented constructed in accordance with the approved plan. The local program shall inspect the BMPs for compliance with the final report as-built survey prior to the release of the construction bond.
- C. A local program shall require the operator of stormwater management BMPs to conduct inspections in accordance with a recorded inspection schedule and maintenance agreement or on an annual basis for stormwater management BMPs without a recorded inspection schedule and maintenance agreement and provide a written report to the local program administrator.
- D. A local program shall inspect stormwater management BMPs on an annual basis or may establish an alternative inspection program which ensures that stormwater management BMPs are functioning as intended. Any alternative inspection program shall be:
  - 1. Approved by the Board prior to implementation;
  - 2. Established in writing;
- 3. Based on a system of priorities that, at a minimum, considers takes into consideration the purpose and type of the facility, the contributing drainage area, and or downstream conditions;
- 4. Demonstrated to be an enforceable inspection program conducted by the locality local program or its designee, not to include the property owner, that meets the intent of the regulations; and
  - 5. Documented by inspection records.
- <u>E. Inspection reports shall be generated and kept on file for all stormwater</u> management BMPs inspected by the local program.
- <u>F. The local program shall be allowed the right of entry</u> by the operator to conduct periodic inspections of the project.

## 4VAC50-60-116. Local program enforcement.

- A. A local program shall incorporate the following components:
- 1. Informal and formal administrative enforcement procedures including:
- a. Verbal warning and inspection reports;
- b. Notice of corrective action;
- c. Consent special orders and civil charges in accordance with §§ 10.1-603.2:17 and 10.1-603.14 D 2;
  - d. Notice to comply in accordance with § 10.1-603.11;
  - e. Special orders in accordance with § 10.1-603.2:17;
  - f. Emergency special orders in accordance with § 10.1-603.2:17; and
  - g. Public notice and comment period pursuant to 4 VAC 50-60-660.

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- 2. Civil and criminal judicial enforcement procedures including:
- a. Schedule of civil penalties setout in subsection D;
- b. Criminal penalties in accordance with § 10.1-603.14 B and C; and
- c. Injunctions in accordance with §§ 10.1-603.12:4 and 10.1-603.14 D1
- B. A local program shall develop a policies and procedures manual that outline the steps to be taken regarding enforcement actions under the Stormwater Management Act and attendant regulations, and local ordinance.
- C. A local program may utilize the Department's Stormwater Management
  Enforcement Manual as guidance in establishing policies and procedures manuals.
- D. Schedule of Civil Penalties set by the Board in accordance with § 10.1-603.14

  A. The Board intends that these civil penalties generally be applied after other enforcement remedies have been unsuccessful, in egregious situations, or for repeat offenders.

Violations and Frequency of Occurrence *	<u>Maximum</u>	Recommended Minimum
	\$\$/occurrence (occur.)/day	\$\$/occurrence/day
No Permit Registration	<u>Up to \$32,500/ occur./ day(s)</u>	\$10,000/ occur./ day(s)
No Stormwater Pollution Prevention Plan (SWPPP) [No SWPPP components including erosion and sediment (E&S Control Plan)]	Up to \$32,500/ occur./ day(s)	\$10,000/ occur./ day(s)
No approved E&S Control Plan	<u>Up to \$32,500/ occur./ day(s)</u>	\$10,000/ occur./ day(s)
Failure to install stormwater Best  Management Practices (BMPs) or E&S  controls**	<u>Up to \$32,500/ occur./ day(s)</u>	\$5,000/ occur./ day(s)
Failure to conduct required inspections	<u>Up to \$32,500/ occur./ day(s)</u>	\$1,000/ occur./ day(s)
Operational deficiencies (e.g., failure to initiate stabilization measures as soon as practicable; failure to implement control measures for construction debris; incomplete SWPPP; SWPPP not onsite; Stormwater BMPs or erosion and sediment controls improperly installed or maintained; incomplete, improper or missed inspections.)	<u>Up to \$32,500/ occur./ day(s)</u>	\$500/ occur./ day(s)

<sup>\*</sup> The frequency of occurrence is a maximum of per day per violation.

<sup>\*\*</sup> Each BMP and E&S control not installed constitutes a separate violation

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E. Pursuant to § 10.1-603.2:1 2, delegation shall not remove from the Board authority to enforce the provisions of the stormwater management law and attendant regulations.

#### 4VAC50-60-118. Hearings.

A local program shall ensure that any permit applicant or permittee shall have a right to a hearing pursuant to § 10.1-603.12:6 and shall ensure that all hearings held under this Chapter shall be conducted in accordance with § 10.1-603.12:7 or as otherwise provided by law.

#### 4VAC50-60-122. Local program: exceptions.

- A. A person may request an exception to the provisions of Part II (4VAC50-60-40 et seq.). A request for an exception shall be submitted, in writing, to the permit issuing authority. An exception may be granted, provided that: (i) the exception is the minimum necessary to afford relief, (ii) reasonable and appropriate conditions shall be imposed as necessary upon any exception granted so that the intent of the Act and this chapter are preserved, (iii) granting the exception will not confer on the permittee any special privileges that are denied to other permittees who present similar circumstances, and (iv) exception requests are not based upon conditions or circumstances that are self-imposed or self-created.
- B. Economic hardship is not sufficient reason to grant an exception from the requirements of this chapter.
- C. Under no circumstance shall the permit issuing authority grant an exception to the requirement that the land disturbing activity obtain a permit.

#### 4VAC50-60-124. Local program: BMP maintenance.

- A. Responsibility for the operation and maintenance of stormwater management BMPs in accordance with this chapter, unless assumed by a governmental agency, shall remain with the property owner and shall pass to any successor or owner. If portions of the land are to be transferred or conveyed, legally binding arrangements shall be made to pass the basic responsibility to successors in title. These arrangements shall designate for each project the property owner, governmental agency, or other legally established entity to be permanently responsible for maintenance.
- B. In the case of developments where lots are to be transferred or conveyed, permanent arrangements satisfactory to the local program shall be made to ensure continued performance in accordance with this chapter.
- C. Where maintenance or repair is neglected, or the stormwater management BMP becomes a danger to public health or safety, the local program has the authority to perform the work and to recover the costs from the owner.
- <u>D.</u> The local program shall require right-of-entry agreements or easements from the owner for purposes of inspection and maintenance.
- E. The local program shall ensure that the flow and drainage patterns associated with a permanent BMP are maintained. Proposed changes to the flow and drainage patterns must be approved by the local program.

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## 4VAC50-60-126. Local program: reporting and record keeping.

A. A local program shall report in a format provided by the Department on a monthly quarterly basis. The information to be provided shall include but not be limited to the following:

- 1. Permitted project information for the month quarter to include permit number, operator name, activity name, acres disturbed, date of permit coverage;
- 2. Permitted projects terminated for the month quarter to include permit number, operator name, activity name, and date of permit termination;
- 3. Information on each permanent BMP installed accepted in the month quarter to include type of BMP, GPS coordinates location, acres treated, and the state waters into which the BMP will discharge;
- 4. Number of VSMP general permit projects inspected and the number of inspections for the month quarter;
- 5. Number and type of VSMP general permit enforcement actions for the month quarter; and
- 6. Number of exceptions applied for and whether granted or denied for the month quarter.
  - B. A local program shall keep records in accordance with the following:
- 1. Permit files shall be kept by the local program for 5 years after permit termination. After 5 years, the registration statements, notices of coverage and notices of termination shall be archived at the Library of Virginia in accordance with its regulations.
- 2. BMP maintenance agreements, design standards and specifications, post-construction surveys, inspection reports, and maintenance records shall be maintained by the local program in perpetuity.
- 3. Other records shall be maintained in accordance with the regulations of the Library of Virginia.

#### Part IIIB

#### Department of Conservation and Recreation administered local programs

### 4VAC50-60-128. Authority and Applicability.

In the absence of delegation to a locality, the Department shall administer the local stormwater management program in accordance with \$10.1-603.3 C. This part specifies the minimum technical criteria for a Department-administered stormwater management program in accordance with the Virginia Stormwater Management Law, \$10.1-603.2 et seq., and the standards and criteria established in these regulations by the Board pursuant to its authority under that article. Such criteria include but are not limited to administrative, plan review, inspection, enforcement, and education and outreach components.

#### 4VAC50-60-132. Technical criteria.

A. The Department administered local stormwater management programs shall comply with the provisions of Part II (4VAC50-60-40 et seq.).

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B. When reviewing a federal project, the Department shall apply the provisions of this chapter.

#### 4VAC50-60-134. Administrative authorities.

- A. The Department is the permit issuing authority, plan approving authority, and the enforcement authority.
- B. The Department or its designee is the plan reviewing authority and the inspection authority.
  - C. The Department shall assess and collect fees.
- D. The Department may require the submission of a reasonable performance bond or such other financial surety in accordance with the criteria set forth in §10.1-603.8 prior to the issuance of the general permit and in accordance with the following:
- 1. The amount of the installation performance security shall be the total estimated construction cost of the stormwater management BMPs approved under the stormwater management plan, plus 25%;
- 2. The performance security shall contain forfeiture provisions for failure, after proper notice, to complete work within the time specified, or to initiate or maintain appropriate actions which may be required of the applicant in accordance with the approved stormwater management plan;
- 3. If the Department takes such action upon such failure by the applicant, the Department may collect from the applicant for the difference should the amount of the reasonable cost of such action exceed the amount of the security held; and
- 4. Within sixty days of the completion of the requirements of the VSMP permit conditions and the Department's acceptance of the Notice of Termination, such bond, cash escrow, letter of credit or other legal arrangement shall be refunded to the applicant.
- E. Nothing in this chapter shall be construed as limiting the rights of other federal and state agencies from imposing stricter technical criteria or other requirements as allowed by law.

## 4VAC50-60-136. Stormwater management plan review.

- A. The Department shall require new or redevelopment projects to submit stormwater management plans for review and approval prior to commencement of the land disturbing activities.
- B. The Department shall approve or disapprove stormwater management plans according to the following:
- 1. Stormwater management plan review shall begin upon submission of a complete plan. An initial stormwater management plan or clearing and grading plan shall not be considered a complete plan. A complete plan shall at a minimum include the following elements:
- a. Contact Information including the name, address, and telephone number of the property owner and the operator and the tax reference number and parcel number of the property or properties affected;

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- <u>b. A narrative description of the site and proposed stormwater management BMPs and the mechanism through which the BMPs will be operated and maintained during and after construction;</u>
  - c. The location and the design of the proposed stormwater management BMPs;
- d. A report identifying the geotechnical properties for the hydrologic and structural properties of soils utilized with the installation of stormwater management BMPs per the Virginia Stormwater Management Handbook;
- e. Overall site plan that identifies the location of potentially impacted receiving state waters and that includes pre-developed and post-developed conditions for drainage areas including final drainage patterns and changes to existing contours. At a minimum, this will include a topographic base map utilizing 5 foot or less contour intervals of the site which includes all contributing drainage areas and downstream receiving areas of the proposed development and indicates existing surface water drainage including streams, ponds, culverts, ditches, and wetlands; current land use including all existing structures; locations of utilities, roads, and easements; and significant natural and manmade features not otherwise shown necessary to meet the requirements of this chapter;
- <u>f. Comprehensive hydrologic and hydraulic computations of the pre-development</u> and post-development runoff conditions for the required design storms;
- g. Good engineering practices and calculations verifying compliance with the water quality and quantity requirements of this chapter;
- <u>h. Inspection schedules, maintenance agreements and sources for funding the</u> maintenance of all stormwater management BMPs;
- i. Right-of-entry agreements or easements from the owner for purposes of inspection and maintenance;
- j. Agreements between the local program and the owner that states where maintenance or repair is neglected, or the stormwater management BMP becomes a danger to public health or safety, the local program has the authority to perform the work and to recover the costs from the owner;
- a professional in adherence to all minimum standards and requirements pertaining to the practice of that profession in accordance with Chapter 4 of Title 54.1 of the Code of Virginia and attendant regulations;
- il. The person responsible for the development project shall certify that all land clearing, construction, land development and drainage will be done according to the approved plan; and
- km. The person responsible for the development project shall provide proposed right-of-entry agreements or easements, acceptable to the Department, from the owner for purposes of inspection and maintenance.
- 2. Upon receipt of a plan, the Department or its designee shall have 15 calendar days to determine the administrative completeness of the plan and notify the applicant of its determination. If a plan is deemed to be administratively incomplete based on the criteria setout in subsection B1 of this section, the Department must identify in writing the reasons the plan is deemed deficient. If the Department does not make a determination within the 15 calendar days, the plan shall be deemed administratively

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complete as of the date of submission and a maximum of 45 additional calendar days will be allowed for the review of the plan.

- 3. Upon the determination that a plan is administratively complete, a maximum of 60 calendar days will be allowed for the review of the plan.
- 4. During the review period, the Department shall either approve or disapprove the plan and communicate its decision to the person responsible for the development project in writing. If the plan is not approved, the reasons for not approving the plan shall be provided in writing. Approval or denial shall be based on the plan's compliance with the Department's stormwater management program.
- 5. If no action is taken by the Department within the time specified above, the plan shall be deemed approved.
- C. Each plan approved by the Department may be changed in accordance with the following:
- 1. Changes to an approved plan not based on field inspections, shall be allowed only after the review and written approval of the Department. The Department shall have 30 calendar days for the review.
- 2. If field inspection by the person responsible for the development project shows that a plan is not adequate, the person responsible for the development project may request modifications to the approved plan to address noted deficiencies may be requested. The Department shall have 15 calendar days to respond in writing either approving or disapproving such request.
- 3. The Department based on an inspection may require amendments to the approved plan to address the noted deficiencies and notify the person responsible for the development project of the required modifications.

## <u>4VAC50-60-138.</u> Issuance of the VSMP General Permit for Discharges of Stormwater from Construction Activities.

The Department shall issue coverage under the VSMP General Permit for Discharges of Stormwater from Construction Activities in accordance with the following:

- 1. The applicant must have a Department approved stormwater management plan for the land disturbing activity.
- 2. The applicant has submitted a complete registration statement for the VSMP General Permit for Discharges of Stormwater from Construction Activities in accordance with Part VII (4VAC50-60-360 et seq) and the registration statement has been reviewed and approved by the Department.
- 3. The applicant has submitted the required fee form and fee for the registration statement seeking coverage under the VSMP general permit.
- 4. Applicants submitting registration statements deemed to be incomplete must be notified within 10 working days that the registration statement is not complete, informed of what material needs to be submitted to complete the registration statement, and that the land disturbing activity does not have VSMP general permit coverage.
- 5. Individual permits for qualifying land disturbing activities may be issued at the discretion of the Board or its designee pursuant to 4 VAC 50-60-410 B 3.

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## <u>4VAC50-60-142</u>. <u>Inspections</u>.

- A. The Department or its designee shall conduct inspections of stormwater management BMPs during construction to ensure that the location and design criteria of the BMPs are in accordance with the approved plan.
- B. The Department shall require the person responsible for the development project to submit a final report containing an as-built survey certifying that the stormwater management BMPs have been implemented constructed in accordance with the approved plan. The Department or its designee shall inspect the BMPs for compliance with the final report as-built survey prior to the release of the construction bond.
- C. The Department shall require the operator of stormwater management BMPs to conduct inspections in accordance with a recorded inspection schedule and maintenance agreement or on an annual basis for stormwater management BMPs without a recorded inspection schedule and maintenance agreement and provide a written report to the Department.
- D. The Department or its designee shall inspect stormwater management BMPs on an annual basis or may establish an alternative inspection program which ensures that stormwater management BMPs are functioning as intended. Any alternative inspection program shall be:
  - 1. Approved by the Board prior to implementation;
  - 2. Established in writing;
- 3. Based on a system of priorities that, at a minimum, considers takes into consideration the purpose and type of the facility, the contributing drainage area, and or downstream conditions; and
- 4. Demonstrated to be an enforceable inspection program conducted by the Department or its designee, not to include the property owner, that meets the intent of the regulations; and
  - 45. Documented by inspection records.
- E. Inspection reports shall be generated and kept on file for all stormwater management BMPs inspected by the Department or its designee.
- F. The Department or its designee shall be allowed the right of entry by the operator to conduct periodic inspections of the project.

## 4VAC50-60-144. Enforcement.

- A. A Department administered local program shall contain the following components:
  - 1. Informal and formal administrative enforcement procedures including:
  - a. Verbal warning and inspection reports:
  - b. Notice of corrective action;
- c. Consent special orders and civil charges in accordance with §§ 10.1-603.2:17 and 10.1-603.14 D 2;
  - d. Special orders in accordance with § 10.1-603.2:17;
  - e. Emergency special orders in accordance with § 10.1-603.2:17; and
  - f. Public notice and comment period pursuant to 4 VAC 50-60-660.

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- 2. Civil and criminal judicial enforcement procedures including:
- a. Schedule of civil penalties setout in subsection C;
- b. Criminal penalties in accordance with § 10.1-603.14 B and C; and
- c. Injunctions in accordance with §§ 10.1-603.12:4 and 10.1-603.14 D1.
- B. The Department's Stormwater Management Enforcement Manual shall serve as guidance to be utilized in enforcement actions under the Stormwater Management Act and attendant regulations.
- C. Schedule of Civil Penalties set by the Board in accordance with § 10.1-603.14 A. The Board intends that these civil penalties generally be applied after other enforcement remedies have been unsuccessful, in egregious situations, or for repeat offenders.

Violations and Frequency of Occurrence *	Maximum \$\$/occurrence (occur.)/day	Recommended Minimum \$\$/occurrence/day
No Permit Registration	Up to \$32,500/ occur./ day(s)	\$10,000/ occur./ day(s)
No Stormwater Pollution Prevention Plan (SWPPP) [No SWPPP components including erosion and sediment (E&S Control Plan)]	Up to \$32,500/ occur./ day(s)	\$10,000/ occur./ day(s)
No approved E&S Control Plan	Up to \$32,500/ occur./ day(s)	\$10,000/ occur./ day(s)
Failure to install stormwater Best Management Practices (BMPs) or E&S controls**	Up to \$32,500/ occur./ day(s)	\$5,000/ occur./ day(s)
Failure to conduct required inspections	Up to \$32,500/ occur./ day(s)	\$1,000/ occur./ day(s)
Operational deficiencies (e.g., failure to initiate stabilization measures as soon as practicable; failure to implement control measures for construction debris; incomplete SWPPP; SWPPP not onsite; Stormwater BMPs or erosion and sediment controls improperly installed or maintained; incomplete, improper or missed inspections.)	<u>Up to \$32,500/ occur./ day(s)</u>	\$500/ occur./ day(s)

<sup>\*</sup> The frequency of occurrence is a maximum of per day per violation.

#### 4VAC50-60-146. Hearings.

<sup>\*\*</sup> Each BMP and E&S control not installed constitutes a separate violation

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A. Any permit applicant or permittee shall have a right to a hearing pursuant to § 10.1-603.12:6 and all hearings held under this chapter shall be conducted in accordance with § 10.1-603.12:7 or as otherwise provided by law.

#### **4VAC50-60-148.** Exceptions.

- A. A person may request an exception to the provisions of Part II (4VAC50-60-40 et seq.). A request for an exception shall be submitted, in writing, to the Department. An exception may be granted, provided that: (i) the exception is the minimum necessary to afford relief, (ii) reasonable and appropriate conditions shall be imposed as necessary upon any exception granted so that the intent of the Act and this chapter are preserved, (iii) granting the exception will not confer on the permittee any special privileges that are denied to other permittees who present similar circumstances, and (iv) exception requests are not based upon conditions or circumstances that are self-imposed or self-created.
- B. Economic hardship is not sufficient reason to grant an exception from the requirements of this Chapter.
- C. Under no circumstance shall the Department grant an exception to the requirement that the land disturbing activity obtain a permit.

#### 4VAC50-60-152. BMP maintenance.

- A. Responsibility for the operation and maintenance of stormwater management BMPs in accordance with this chapter, unless assumed by a governmental agency, shall remain with the property owner and shall pass to any successor or owner. If portions of the land are to be sold, legally binding arrangements shall be made to pass the basic responsibility to successors in title. These arrangements shall designate for each project the property owner, governmental agency, or other legally established entity to be permanently responsible for maintenance.
- B. In the case of developments where lots are to be sold, permanent arrangements satisfactory to the Department shall be made to ensure continued performance in accordance with of this chapter.
- C. Where maintenance or repair is neglected, or the stormwater management BMPs becomes a danger to public health or safety, the Department has the authority to perform the work and to recover the costs from the owner.
- D. The Department shall require right-of-entry agreements or easements, acceptable to the Department, from the owner for purposes of inspection and maintenance.
- E. The Department shall ensure that the flow and drainage patterns associated with a permanent BMP is maintained and proposed changes to the flow and drainage patterns must be approved by the Department.

#### 4VAC50-60-154. Reporting and record keeping.

- A. The Department, on a monthly quarterly basis, will compile the following information:
- 1. Permitted project information for the month quarter to include permit number, operator name, activity name, acres disturbed, date of permit coverage;

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- 2. Permitted projects terminated for the month quarter to include permit number, operator name, activity name, and date of permit termination;
- 3. Information on each permanent BMP installed accepted in the month quarter to include type of BMP, GPS coordinates location, acres treated, and the state waters into which the BMP will discharge;
- 4. Number of VSMP general permit and individual permit projects inspected and the number of inspections for the month quarter;
- 5. Number and type of VSMP general permit and individual permit enforcement actions for the month quarter; and
- 6. Number of exceptions applied for and whether granted or denied for the month quarter.
  - B. The Department shall keep records in accordance with the following:
- 1. Permit files shall be kept by the Department for 5 years after permit termination. After 5 years, the registration statements, notices of coverage and notices of termination shall be archived at the Library of Virginia in accordance with its regulations.
- 2. BMP maintenance agreements, design standards and specifications, postconstruction surveys, inspection reports, and maintenance records shall be maintained by the Department in perpetuity or until the program is delegated.
- 3. Other records shall be maintained in accordance with the regulations of the Library of Virginia.

#### Part IIIC

#### Department of Conservation and Recreation local program review procedures

#### 4VAC50-60-156. Authority and Applicability.

This part specifies the criteria that the Department will utilize in reviewing a locality's administration of a stormwater management program pursuant to §10.1-603.12 following the delegation of a local stormwater management program to that locality by the Board in accordance with the Virginia Stormwater Management Law and these regulations.

## 4VAC50-60-157. Stormwater Management Program Review.

A. The Department shall periodically review each Board approved program once every five years on a review schedule approved by the Board. In addition, the Department may be requested by the locality or the general public to review a local program on a more frequent basis.

- B. The Board approved review of a local program shall consist of the following:
- 1. A personal interview between Department staff and the local program administrator or his designee;
  - 2. A review of the local ordinance(s) and other applicable documents;
  - 3. A review of plans approved by the locality and consistency of application;
  - 4. An inspection of regulated activities; and
  - 5. A review of enforcement actions.

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- <u>C.</u> To the maximum extent practicable the Department will coordinate the reviews with other local government program reviews to avoid redundancy.
- D. The Department shall determine if the program and ordinance are consistent with the state stormwater management regulations and notify the local program of its findings.
- E. If the Department determines that the deficiencies noted in the review will cause the local program to be inconsistent with the Stormwater Management Act and its attendant regulations, the Department shall notify the local program concerning the deficiencies and provide a reasonable period of time for corrective action to be taken. If the local program fails to take the corrective action within the specified time, the Department may formally request the Board to take action pursuant to §10.1-603.12 of the Code of Virginia.

#### Part IIID

# <u>Virginia Soil and Water Conservation Board delegation procedures for local programs</u>

#### 4VAC50-60-158. Authority and Applicability.

Section 10.1-603.4:1 requires that the Board establish standards and procedures for delegating the authority for administering a stormwater management program to localities. In accordance with that requirement, and with the further authority conferred upon the Board by the Virginia Stormwater Management Law, §10.1-603.2 et seq., this part specifies the procedures the Board will utilize in delegating a stormwater management program to a locality.

## <u>4VAC50-60-159.</u> Delegation Procedures for local stormwater management programs.

- A. A locality required to operate a program in accordance with §10.1-603.3 A or those electing to seek seeking delegation must submit to the Board an application package which, at a minimum, contains the following:
  - 1. The local program ordinance(s) and other applicable documents;
  - 2. A funding and staffing plan;
- 3. The policies and procedures, including but not limited to, agreements with Soil and Water Conservation Districts, adjacent localities, or other entities, for the administration, plan review, permit issuance, inspection and enforcement components of the program; and
- 4. The process by which the locality will collect permit fees and submit for deposit on a monthly basis to the Virginia Stormwater Management Fund.
- B. Upon receipt of an application package, the Board or its designee shall have 15 days to determine the completeness of the application package. If an application package is deemed to be incomplete based on the criteria setout in subsection A of this section, the Board or its designee must identify in writing the reasons the application package is deemed deficient.

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C. Upon receipt of a complete application package, the Board or its designee shall have a maximum of 90 calendar days for the review of the application package. During the 90-day review period, the Board or its designee shall either approve or disapprove the application and communicate its decision to the locality in writing. If the application is not approved, the reasons for not approving the application shall be provided to the locality in writing. Approval or denial shall be based on the application's compliance with the Virginia Stormwater Management Law and these regulations.