

# DEPARTMENT OF NATURAL RESOURCES AND ENVIRONMENTAL CONTROL

## DIVISION OF WATERSHED STEWARDSHIP

Statutory Authority: 7 Delaware Code, Chapter 40 (7 Del.C. Ch.40)

7 DE Admin. Code 5101

### PROPOSED

#### 5101 Sediment and Stormwater Regulations

#### REGISTER NOTICE

SAN #2006-16

**1. Title Of The Regulations:**

*Delaware Sediment and Stormwater Regulations*

**2. Brief Synopsis of the Subject, Substance and Issues:**

Substantial revisions to the *Delaware Sediment and Stormwater Regulations* are proposed to address April 2005 recommendations of Governor Minner's Task Force on Surface Water Management. The regulations have been revised to address stormwater volume management, conveyance adequacy, operation and maintenance of stormwater management facilities, and to establish performance standards for sediment and stormwater practices.

**3. Possible Terms of the Agency Action:**

There is no sunset date for this regulation.

**4. Statutory Basis or Legal Authority to Act:**

Title 7, Delaware Code, Chapter 40, the Sediment and Stormwater Law

**5. Other Regulations That May Be Affected By The Proposal:**

Upon the effective date of revised regulations, the *Regulations Governing the Pollution Control Strategy for the Indian River, Indian River Bay, Rehoboth Bay, and Little Assawoman Bay Watersheds*, effective November 11, 2008, Section 5.0 Sediment and Stormwater Controls, may be affected.

**6. Notice of Public Comment:**

The Department of Natural Resources and Environmental Control (DNREC) Division of Watershed Stewardship will conduct a public hearing on the proposed revisions to the *Delaware Sediment and Stormwater Regulations Regulation No. 5101 Sediment and Stormwater Regulations*, to address the April 2005 recommendations of Governor Minner's Task Force on Surface Water Management.

The public hearing on this proposed revision of **Regulation No. 5101 Sediment and Stormwater Regulations** will be held Thursday, March 1, 2012, at 6:00 p.m. in the DNREC Auditorium, Richardson and Robbins Building, 89 Kings Highway, Dover, DE 19901.

The proposed regulation revisions may be inspected at the following locations:

Department of Natural Resources and Environmental Control  
89 Kings Highway  
Dover, DE 19901

Kirkwood Library  
6000 Kirkwood Highway  
Wilmington DE 19808

Kent County Public Library  
497 South Red Haven Lane  
Dover, DE 19901

Georgetown Public Library  
123 West Pine Street,  
Georgetown, DE 19947

The proposed regulation revisions may be inspected on the DNREC Division of Watershed Stewardship's Sediment and Stormwater Program website: <http://www.dnrec.delaware.gov/swc/Pages/SedimentStormwater.aspx>

For additional information or any appointments to inspect the proposed regulation revisions at DNREC, please contact Elaine Webb, DNREC Sediment and Stormwater Program, 89 Kings Highway, Dover, DE 19901, (302) 739-9921, [Elaine.Webb@state.de.us](mailto:Elaine.Webb@state.de.us). Review of the documents at the libraries will occur during the libraries' scheduled operating hours.

Interested parties shall submit comments in writing on the proposed regulation revisions by the end of the comment period, as designated by the hearing officer at this hearing, to Elaine Webb and/or statements and testimony may be presented either orally or in writing at the March 1, 2012 public hearing. It is requested that those interested in presenting statements at the public hearing register in advance and that written statements and comments be addressed to:

Elaine Webb  
DNREC – Sediment and Stormwater Program  
89 Kings Highway  
Dover, DE 19901

## 7. PREPARED BY:

Elaine Webb / (302) 739-9921 / January 11, 2012

Email address: [Elaine.Webb@state.de.us](mailto:Elaine.Webb@state.de.us)

## 5101 Sediment and Stormwater Regulations

### 4.0 Scope-

- 1.1 ~~Stormwater runoff may reasonably be expected to be a source of pollution to waters of the State, and may add to existing flooding problems. The implementation of a statewide sediment and stormwater program will prevent existing water quantity and water quality problems from becoming worse, and in some cases, reduce existing problems.~~
- 1.2 ~~Sediment and stormwater approvals are required for land changes or construction activities for residential, commercial, industrial, or institutional land use which are not exempted or waived by these Regulations. Requirements under these Regulations do not apply to agricultural land management practices unless the Conservation District or the Department determines that the land requires a soil and water conservation plan, and the owner or operator of the land has refused either to apply to a Conservation District for the development of such a plan, or to implement a plan developed by a Conservation District.~~
- 1.3 ~~The Department intends that, to the extent possible, the provisions of these Regulations be delegated to either the Conservation Districts, local governments, or other State agencies. Those program provisions which are subject to delegation include sediment and stormwater management plan approval, inspection during construction, post-construction inspection, and education and training. Initial consideration regarding delegation of program components shall be given to the Conservation Districts.~~
- 1.4 ~~The implementation of a stormwater utility represents a comprehensive approach to program funding and implementation. The activities which may be undertaken by a stormwater utility include not only assessment, collection, and funding activities, but also carrying out provisions of adopted stormwater management plans. These provisions may include contracting for such services as project construction, project maintenance, project inspection, and enforcement of installation and maintenance requirements imposed with respect to approved land disturbing activities.~~

### 8-DE-Reg. 1172 (2/01/05)

### 2.0 Definitions-

As used in these regulations, the following terms shall have the meanings indicated below:

~~“Adverse Impact” means a negative impact to land or waters resulting from a construction or development activity. The negative impact includes increased risk of flooding; degradation of water quality; increased sedimentation; reduced groundwater recharge; negative impacts on aquatic organisms; negative impacts on wildlife and other resources, and threatened public health.~~

~~“Agricultural Land Management Practices” means those methods and procedures generally accepted by the Conservation Districts and used in the cultivation of land in order to further crop and livestock production and conservation of related soil and water resources.~~

~~“Applicant” means a person, firm, or governmental agency who executes the necessary forms to obtain plan approval for a land disturbing activity.~~

~~“Appropriate Plan Approval Agency” means the Department, Conservation District, county, municipality, or State agency that is responsible in a jurisdiction for review and approval of sediment and stormwater management plans.~~

**~~“As-Built Plans or Record Documents”~~** means a set of engineering or site drawings that delineate the specific approved stormwater management facility as actually constructed.

**~~“Certified Construction Reviewer”~~** means those individuals, having passed a Departmental sponsored or approved training course, who provide on-site inspection for sediment control and stormwater management in accordance with these regulations.

**~~“Delegation”~~** means the acceptance of responsibility by a Conservation District, county, municipality, or State agency for the implementation of one or more elements of the statewide sediment and stormwater management program.

**~~“Department”~~** means the Department of Natural Resources and Environmental Control.

**~~“Designated Watershed or Subwatershed”~~** means a watershed or subwatershed proposed by a Conservation District, county, municipality, or State agency and approved by the Department. The Department may establish additional requirements in these watersheds and subwatersheds due to existing water quantity or water quality problems. These requirements shall be implemented on an overall watershed or subwatershed master plan that is developed for water quality and/or water quantity protection.

**~~“Detention Structure”~~** means a permanent stormwater management structure whose primary purpose is to temporarily store stormwater runoff and release the stored runoff at controlled rates.

**~~“Develop Land”~~** means to change the runoff characteristics of a parcel of land in conjunction with residential, commercial, industrial, or institutional construction or alteration.

**~~“Developer”~~** means a person undertaking, or for whose benefit, activities covered by these regulations are commenced and/or carried out.

**~~“Drainage Area”~~** means that area contributing runoff to a single point measured in a horizontal plane, which is enclosed by a ridge line.

**~~“Easement”~~** means a grant or reservation by the owner of land for the use of such land by others for a specific purpose or purposes, and which must be included in the conveyance of land affected by such easement.

**~~“Erosion and Sediment Control”~~** means the control of solid material, both mineral and organic, during a land disturbing activity, to prevent its transport out of the disturbed area by means of air, water, gravity, or ice.

**~~“Exemption”~~** means those land development activities that are not subject to the sediment and stormwater requirements contained in these regulations.

**~~“Grading”~~** means excavating, filling (including hydraulic fill) or stockpiling of earth materials, or any combination thereof, including the land in its excavated or filled condition.

**~~“Green Technology Best Management Practices (BMP’s)”~~** means those practices that achieve stormwater management objectives by applying the principles of filtration, infiltration and storage most often associated with natural vegetation and undisturbed soils while minimizing a reliance on structural components. They may also be constructed using an imported soil medium and planted with vegetation designed to promote the natural hydrologic process. These practices include, but are not limited to, vegetative filtration, riparian buffer plantings, bio-retention areas, vegetative flow conveyance, as well as recharge and surface storage in undisturbed natural areas.

**~~“Infiltration”~~** means the passage or movement of water through the soil profile.

**~~“Land Disturbing Activity”~~** means a land change or construction activity for residential, commercial, industrial, and institutional land use which may result in soil erosion from water or wind or movement of sediments or pollutants into State waters or onto lands in the State, or which may result in accelerated stormwater runoff, including, but not limited to, clearing, grading, excavating, transporting and filling of land.

**~~“Off-site Stormwater Management”~~** means the design and construction of a stormwater management facility that is necessary to control stormwater from more than one land disturbing activity.

**~~“On-site Stormwater Management”~~** means the design and construction of stormwater management practices that are required for a specific land disturbing activity.

**~~“Person”~~** means any State or federal agency, individual, partnership, firm, association, joint venture, public or private corporation, trust, estate, commission, board, public or private institution, utility, cooperative, municipality or other political subdivision of this State, any interstate body or any other legal entity.

**~~“Redevelopment”~~** means a land disturbance activity that alters the use of land but does not necessarily alter the pre-development runoff characteristics.

**“Responsible Personnel”** means a foreman or superintendent who is in charge of on-site clearing and land disturbing activities for sediment and stormwater control associated with a construction project.

**“Sediment”** means soils or other surficial materials transported and/or deposited by the action of wind, water, ice or gravity as a product of erosion.

**“Sediment and Stormwater Management Plan” (or Detailed Plan)** means a plan for the control of soil erosion, sedimentation, stormwater quantity, and water quality impacts resulting from any land disturbing activity.

**“Stabilization”** means the prevention of soil erosion by surface runoff or wind through the establishment of a soil cover through the implementation of vegetative or structural measures. Examples include, but are not limited to, straw mulch with temporary or permanent vegetation, wood chips, and stone or gravel ground cover.

**“Standard Plan”** means a set of pre-defined standards and/or specifications for minor land disturbing activities that may preclude the preparation of a detailed plan under specific conditions.

**“State Waters”** means any and all waters, public or private, on the surface of the earth which are contained within, flow through or border upon the State or any portion thereof.

**“Stormwater”** means the runoff of water from the surface of the land resulting from precipitation or snow or ice melt.

**“Stormwater Management”** means:

- for water quantity control, a system of vegetative, structural, and other measures that may control the volume and rate of stormwater runoff which may be caused by land disturbing activities or activities upon the land; and
- for water quality control, a system of vegetative, structural, and other measures that control adverse effects on water quality that may be caused by land disturbing activities or activities upon the land.

**“Stormwater Utility”** means an administrative organization that has been established for the purposes of funding sediment control, stormwater management or flood control planning, design, construction, maintenance, and overall resource needs by authorized and imposed charges.

**“Tidewater”** means water that alternately rises and falls due to the gravitational attraction of the moon and sun and is under the regulatory authority of 7 **Del.C.** Ch. 72. Examples of tidewaters include the Atlantic Ocean, the Delaware Bay, and the Delaware Inland Bays.

**“Variance”** means the modification of the minimum sediment and stormwater management requirements for specific circumstances where strict adherence of the requirements would result in unnecessary hardship and not fulfill the intent of these regulations.

**“Waiver”** means the relinquishment from sediment and stormwater management requirements by the appropriate plan approval authority for a specific development on a case-by-case review basis.

**“Water Quality”** means those characteristics of stormwater runoff from a land disturbing activity that relate to the chemical, physical, biological, or radiological integrity of water.

**“Water Quantity”** means those characteristics of stormwater runoff that relate to the rate and volume of the stormwater runoff to downstream areas resulting from land disturbing activities.

**“Watershed”** means the total or partial drainage area contributing stormwater runoff to a single point.

## **8-DE-Reg-1172 (2/01/05)**

### **3.0 Exemptions, Waivers, and Variances**

3.1 The following activities are exempt from both sediment control and stormwater management requirements established by these regulations:-

3.1.1 Agricultural land management practices, unless the local Conservation District or the Department determines that the land requires a new or updated soil and water conservation plan, and the owner or operator of the land has refused either to apply to a Conservation District for the development of such a plan, or to implement a plan developed by a Conservation District;

3.1.2 Developments or construction that disturb less than 5,000 square feet;

3.1.3 Land development activities which are regulated under specific State or federal laws which provide for managing sediment control and stormwater runoff. An example of this exemption would be specific permits required under the National Pollutant Discharge Elimination System when discharges are a combination of stormwater and industrial or domestic wastewater or which must comply with Parts 122, 123, and 124 of Title 40 of the Code of Federal Regulations. The Department shall ensure that all land developments which

~~are regulated under specific State or federal laws are coordinated with delegated plan approval agencies to ensure compatibility of requirements-~~

- 3.1.4 ~~Projects which are emergency in nature that are necessary to protect life or property such as bridge, culvert, or pipe repairs and above ground or underground electric and gas utilities or public utility restoration. The emergency nature of a project may preclude prior plan review and approval, but subsequent inspection may necessitate sediment control or site stabilization in accordance with the provisions of this Chapter. The appropriate plan approval agency shall be notified orally or in writing within 48 hours of the initiation of such emergency activity-~~

~~The appropriate plan approval agency shall determine and approve of the emergency nature of a project. If the nature of the emergency will require more than 120 days to accomplish construction, formal approval shall be obtained for sediment control and stormwater management. These activities must still comply with other State, federal, and local requirements-~~

- 3.1.5 ~~Commercial forest harvesting operations that meet the requirements of the Department of Agriculture under 3 Del.C. Ch. 29, Subchapter VI-~~

- 3.2 ~~Appropriate Plan Approval Agencies may grant waivers from the stormwater management requirements of these regulations for individual developments provided that a written request is submitted by the applicant containing descriptions, drawings, and any other information that is necessary to evaluate the proposed development. A separate written waiver request shall be required if there are subsequent additions, extensions, or modifications which would alter the approved stormwater runoff characteristics to a development receiving a waiver-~~

- 3.2.1 ~~A project may be eligible for a waiver of stormwater management for both quantitative and qualitative control if the applicant can demonstrate that:-~~

3.2.1.1 ~~The proposed project will return the disturbed area to a pre-development runoff condition and the pre-development cover is unchanged at the conclusion of the project; or-~~

3.2.1.2 ~~The proposed project consists of a linear disturbance of less than ten (10) feet in width; or-~~

3.2.1.3 ~~The project is for an individual residential detached unit or agricultural structure, and the total disturbed area of the site is less than one acre; or-~~

3.2.1.4 ~~The proposed project is for agricultural structures in locations included in current soil and water conservation plans that have been approved by the appropriate Conservation District-~~

- 3.2.2 ~~A project may be eligible for a waiver or variance of stormwater management for water quantity control if the applicant can demonstrate that:-~~

3.2.2.1 ~~The proposed project will not generate an increase in the 2-year post-development peak discharge rate of more than ten (10) percent above the 2-year pre-development peak discharge rate and will have no adverse impact on the receiving wetland, watercourse, or waterway; or-~~

3.2.2.2 ~~Provisions will be made or exist for a nonerosive conveyance system to tidewater by either a closed drainage system or by open channel flow that has adequate capacity to contain the runoff events being considered as a requirement of these regulations; or-~~

3.2.2.3 ~~The location of a project within a watershed would aggravate downstream flooding by the imposition of peak control requirements-~~

- 3.3 ~~The plan approval agency may grant a written variance from any requirement of these regulations if there are exceptional circumstances applicable to the site such that strict adherence to the provisions of these regulations will result in unnecessary hardship and not fulfill the intent of these regulations. A written request for variance shall be provided to the plan approval agency and shall state the specific variances sought and the reasons for their granting. The plan approval agency shall not grant a variance unless and until sufficient specific reasons justifying the variance are provided by the applicant-~~

#### **8-DE-Reg-1172 (2/01/05)**

### **4.0 Departmental Responsibilities-**

- 4.1 ~~The Department is responsible for the implementation and supervision of the sediment and stormwater program which is established by 7 Del.C. Ch. 40. This responsibility shall include, but not be limited to, the authority to:-~~

4.1.1 ~~Provide technical and other assistance to Conservation Districts, counties, municipalities, federal, and State agencies in implementing this Chapter;-~~

4.1.2 ~~Develop and publish, as regulation components, minimum standards, guidelines and criteria for delegation of sediment and stormwater program components, and model sediment and stormwater ordinances for use by Conservation Districts, counties, State agencies, and municipalities;-~~

- 4.1.3 ~~Review the implementation of all components of the statewide sediment and stormwater management program that have been delegated to either the Conservation Districts, counties, municipalities, or other State agencies in reviews to be accomplished at least once every three years;~~
- 4.1.4 ~~Require that appropriate sediment and stormwater management provisions be included in all new erosion and sediment control plans developed pursuant to these regulations;~~
- 4.1.5 ~~Cooperate with appropriate agencies of the United States or other states or any interstate agency with respect to sediment control and stormwater management;~~
- 4.1.6 ~~Conduct studies and research regarding the causes, effects, and hazards of stormwater and methods to control stormwater runoff;~~
- 4.1.7 ~~Conduct and supervise educational programs with respect to sediment control and stormwater management;~~
- 4.1.8 ~~Require the submission to the Department of records and periodic reports by Conservation Districts, tax ditch organizations, county, and municipal agencies as may be necessary to carry out these regulations;~~
- 4.1.9 ~~Review and approve designated watersheds;~~
- 4.1.10 ~~Establish a maximum life of three years for the validation of approved plans. These regulations shall specify variances which expand this time limitation in specific situations; and~~
- 4.1.11 ~~Establish a means of communication, such as a newsletter, so that information regarding program development and implementation can be distributed to interested individuals.~~
- 4.2 ~~Matters of policy, procedures, standards, criteria, approvals, inspection, or enforcement relating to the Sediment and Stormwater Chapter shall be established by the Department subject to the jurisdiction of the Secretary of the Department. Sediment and stormwater programs or portions of programs which are delegated to the Conservation Districts, counties, municipalities, or State agencies shall include sediment and stormwater criteria consistent with the standards, procedures, and regulations of the Department.  
A variation of requirements by the delegated agency on a specific watershed will not be valid unless approved by the Department. All State and federal development in the watershed shall be reviewed subject to the same variations and requirements by the delegated State agency or Department as appropriate.~~
- 4.3 ~~In situations where public notification and comment are required before an action is taken by the Department, the Regulatory Advisory Committee shall have an opportunity to review the proposed Departmental action and provide input to the Department regarding the action.~~

## **5.0 Criteria for Delegation of Program Elements**

- 5.1 ~~Conservation Districts, counties, municipalities, and State agencies may seek delegation of four program elements relating to the implementation of the statewide sediment and stormwater program. Delegation may be granted by the Secretary for review and approval of sediment and stormwater management plans, inspection during construction, subsequent maintenance inspection, and education and training. Program elements that are delegated shall be implemented according to Chapter 40 and these regulations.~~
- 5.2 ~~The Secretary, or his designee, shall grant delegation of one or more program elements to any Conservation District, county, municipality, or State agency seeking delegation that is found capable of providing compliance with Chapter 40 and these regulations. The final decision regarding delegation shall be made only after an opportunity has been provided for public review and comment. Initial consideration regarding delegation of program elements shall be given to the Conservation Districts. The Conservation Districts, having unique capabilities and area wide responsibilities are in ideal positions to coordinate and implement local sediment and stormwater programs.~~
- 5.3 ~~Requests for delegation of more than one program element may be accomplished by the submission of one request for all the elements requested. A concern by the Department over one element will not jeopardize delegation of other requested program elements.~~
- 5.4 ~~To be considered capable of providing compliance with Chapter 40 and these regulations, applications for delegation of program elements shall contain the following requisite items.~~
  - 5.4.1 ~~Requests for delegation of plan approval responsibility shall include the following information:~~
    - 5.4.1.1 ~~Ordinance or program information detailing the plan approval process,~~
    - 5.4.1.2 ~~Plan review check lists and plan submission requirements,~~
    - 5.4.1.3 ~~Sediment and stormwater criteria, including waiver and variance procedures, that meet minimum standards established by these regulations,~~
    - 5.4.1.4 ~~Assurance of adequate personnel allocations and expected time frames for plan review which meet the requirements of Section 8(9), and~~

- 5.4.1.5 Assurance that plan reviewers will attend Departmental training programs in related fields such as wetlands identification, subaqueous permits requirements, etc.-
- 5.4.2 Requests for delegation of inspection during construction shall include the following information:-
  - 5.4.2.1 Inspection and referral procedures,-
  - 5.4.2.2 Time frames for inspection of active land disturbing activities,-
  - 5.4.2.3 Inspection forms,-
  - 5.4.2.4 Assurance of adequate personnel allocations or a timetable to obtain adequate personnel,-
  - 5.4.2.5 Criteria for the Certified Construction Reviewer if utilized, and-
  - 5.4.2.6 Procedures and time frames for processing complaints.-
- 5.4.3 Requests for delegation of maintenance inspection responsibility shall include the following information:-
  - 5.4.3.1 Inspection and referral procedures,-
  - 5.4.3.2 Inspection forms,-
  - 5.4.3.3 Time frames, not exceeding one year, for inspection of completed stormwater management structures, and-
  - 5.4.3.4 Assurance of adequate personnel allocation or a timetable to obtain adequate personnel.-
- 5.4.4 Requests for delegation of education and training responsibility shall include the following information:-
  - 5.4.4.1 Types of educational and training activities to be accomplished,-
  - 5.4.4.2 Frequency of activities,-
  - 5.4.4.3 Names and backgrounds of those individuals conducting the training, and-
  - 5.4.4.4 Procedures and timetables to notify the Department of educational programs.-
- 5.5 A Conservation District, county, municipality, or State agency which has been granted delegation of one or more program elements may establish alternative requirements which are compatible with or are more stringent than Departmental requirements. These alternative requirements may be implemented only when prior Departmental approval has been granted. These alternative requirements shall apply in lieu of the provisions of these regulations in the specific program element that has been delegated. Alternative requirements shall be implemented only after public notice has been provided which would allow for public review and comment prior to Departmental approval.-
- 5.6 Delegation of authority for one or more program elements may be granted for a maximum time frame of three years. After three years a new application to the Department must be made. Over the time frame for which delegation has been granted, the Department will evaluate delegation implementation, coordinate review findings with the delegated authority, and determine if the new delegation should be granted.-
- 5.7 A Conservation District, county, municipality, or State agency requesting or renewing delegation shall submit a written request to the Secretary on or before January 1 of the year immediately preceding the fiscal year for which delegation or renewal of delegation is sought.-
- 5.8 The Secretary shall, in writing, grant or deny delegation on or before April 1 of the year during which delegation is sought. The Secretary may not deny a requested delegation unless opportunity has been afforded to the appropriate officials to present arguments. Delegation shall be effective July 1 of that year and extend no more than three years, unless renewed. In the event that the Department does not act on the renewal request by April 1, the delegated authority submitting the request would be entitled to continue operating for a subsequent three year time period unless action is taken by the Department to suspend the program.-
- 5.9 If the Secretary determines that a delegated program falls below acceptable standards established by these regulations, delegation may be suspended after opportunity is afforded for a hearing. During a period of suspension, the program element shall revert to the Department for implementation. Funds set aside by a delegated agency, that were collected through fees established by the plan approval agency, shall be transferred to the Department for use if delegation is suspended.-
- 5.10 A delegated authority may sub-delegate program elements, with Departmental concurrence, to a stormwater utility or other responsible entity or agency.-
- 5.11 The Department shall maintain, and make available upon request, a listing of the current status of delegation for all jurisdictions within the State.-

## **6.0 Plan Approval Fees, Maintenance Fees, and Performance Bonds-**

- 6.1 The establishment of plan approval fees, not involving stormwater utilities, shall be in accordance with the following items:
  - 6.1.1 Delegation of program elements will depend, to a large extent, on funding and personnel commitments. If the delegated jurisdiction has a source of funding that is provided through State General or local revenues,

then the implementation of the delegated component will not necessitate the imposition of a plan approval fee to cover the cost of the delegated program component.

6.1.2 In the event that one component of an overall sediment and stormwater management program is not funded through the use of general or special funds, a non-refundable plan approval fee will be collected at the time that the sediment and stormwater management plan or application for waiver or variance is submitted or approved. The plan approval fee will provide for the unfunded costs of plan review, administration and management of the approval agency, construction review, maintenance inspection, and education and training. The plan review or permit approval agency, whether delegated or the Department, shall be responsible for the collection of the plan approval fee.

Unless all program elements in a county or municipality have been delegated to a single agency, the funds collected not supporting the plan review function shall be distributed to the appropriate agencies.

6.1.3 The number of needed personnel and the direct and indirect expenses associated with those personnel shall be developed by the agencies requesting delegation in a specific jurisdiction in conjunction with and with the concurrence of the Department. Those expenses will then form the basis for determining unit plan approval costs.

6.1.4 Prior to plan approval, a fee may be assessed by the appropriate plan approval agency for those activities approved prior to July 1, 1991 for which construction will initiate after July 1, 1991.

6.1.5 Where the Department becomes the designated plan approval agency, the Department may assess a plan review and construction review fee. That fee shall not exceed \$80.00 per disturbed acre per project.

6.1.6 The use of Certified Construction Reviewers for sediment control and the submission of "As Built or Record Document" certification regarding stormwater management construction may reduce the inspection requirements for the delegated agency but may not eliminate that inspection requirement. Periodic overview inspections will still be necessary to ensure construction management.

6.2 The imposition of a financial guarantee, based on existing local authority, may be required by the plan approval agency to ensure that construction of the stormwater management practices was accomplished according to the approved sediment and stormwater management plan. The developer, when required, shall submit to the plan approval agency a surety or cash bond, or irrevocable letter of credit prior to the issuance of any building or grading permit for construction of any land disturbing activity that requires a stormwater management facility.

The amount of the security shall not exceed 150% of the total estimated construction cost of the stormwater management facility. The financial guarantee so required shall include provisions relative to forfeiture for failure to complete work specified in the approved stormwater management plan, compliance with all the provisions of these regulations, and other applicable laws and regulations, and any time limitations. The financial guarantee, fully or partially, shall not be released without a final inspection of the completed work and, when required, after submission of "As Built or Record Document" plans, and after written confirmation by the design engineer that construction was accomplished according to the approved plans. A partial release of the financial guarantee shall be allowed only to the extent that the work already accomplished would warrant such release.

6.3 A maintenance fee may be required on approvals granted for stormwater management structures that will be maintained by a Conservation District, county, or municipality. A fee mechanism shall be established prior to the final release of any required financial guarantee or final approval of the completed stormwater management structure by the designated construction review agency.

## **8-DE-Reg-1172 (2/01/05)**

### **7.0 Criteria for Implementation of a Stormwater Utility**

The implementation of a stormwater utility will necessitate the development of a local utility ordinance prior to its implementation. There are essential components that an ordinance must contain to function as a funding mechanism for stormwater management and those components shall include, but not be limited to, the following items:

7.1 The financing of a stormwater utility with a user charge system must be reasonable and equitable so that each user of the stormwater system pays to the extent to which the user contributes to the need for the stormwater system, and that the charges bear a substantial relationship to the cost of the service. The use of county and municipal taxpayer rolls and accounting systems are allowed for the assessment and collection of fees.

7.2 The intent of the utility must be clearly defined regarding program components that are to be funded through the utility. Those components may include but not be limited to the following activities:

7.2.1 Preparation of long range watershed master plans for stormwater management,

7.2.2 Annual inspections of all stormwater management facilities, both public and private,

- ~~7.2.3 Undertaking regular maintenance, through contracting or other means, of stormwater management structures that have been accepted for maintenance,-~~
- ~~7.2.4 Plan review and inspection of sediment control and stormwater management plans and practices, and-~~
- ~~7.2.5 Retrofitting designated watersheds, through contracting or other means, to reduce existing flooding problems or to improve water quality.-~~
- ~~7.3 The authority for the creation of the stormwater utility and the imposition of charges to finance sediment and stormwater activities is conferred in 7 **Del.C.** Ch. 40. The application of a stormwater utility by means of a local ordinance shall not be deemed a limitation or repeal of any other powers granted by State statute.-~~
- ~~7.4 The creation of a stormwater utility shall include the following components:-~~
  - ~~7.4.1 The boundaries of the utility, such as watersheds or jurisdictional boundaries as identified by the local governing body,-~~
  - ~~7.4.2 The creation of a management entity,-~~
  - ~~7.4.3 Identification of stormwater problems,-~~
  - ~~7.4.4 Method for determining utility charges,-~~
  - ~~7.4.5 Procedures for investment and reinvestment of funds collected, and-~~
  - ~~7.4.6 An appeals or petition process.-~~
- ~~7.5 As established by local ordinance, the local governing agency shall have responsibility for implementing all aspects of the utility including long range planning, plan implementation, capital improvements, maintenance of stormwater facilities, determination of charges, billing, and hearing of appeals and petitions. The local agency also will have responsibility for providing staff support for utility implementation~~  
~~In the event that an agency or department other than the one in which the utility is located is best equipped to undertake a particular task, the local governing agency shall ensure that appropriate interagency charges are determined such that all costs of stormwater management are reflected in the utility budget and that utility charges finance all aspects of stormwater management.-~~
- ~~7.6 With respect to new stormwater management facilities constructed by private developers, the local governing agency shall develop criteria for use in determining whether these will be maintained by the utility or by the facility owner. Such criteria may include whether the facility has been designed primarily to serve residential users and whether it has been designed primarily for purposes of stormwater management. In situations where it is determined that public maintenance is not preferable, standards shall be developed to ensure that inspection of facilities occurs annually and that facilities are maintained as needed.~~
- ~~7.7 The use of charges is limited to those purposes for which the utility has been established, including but not limited to: planning; acquisition of interests in land including easements; design and construction of facilities; maintenance of the stormwater system; billing and administration; and water quantity and water quality management, including monitoring, surveillance, private maintenance inspection, construction inspection, and other activities which are reasonably required.-~~

## **8.0 Plan Application and Approval Process-**

- ~~8.1 After July 1, 1991, unless a particular activity is exempted by these regulations, a person may not disturb land without an approved sediment and stormwater management plan from the appropriate plan approval agency. A grading or building permit may not be issued for a property unless a sediment and stormwater management plan has been approved that is consistent with the following items:-~~
  - ~~8.1.1 7 **Del.C.** Ch. 40, relating to erosion and sediment control and stormwater management, and;~~
  - ~~8.1.2 These regulations, or duly adopted county or municipal ordinances that are adopted as a part of the delegation process and relate to the intent of these regulations.-~~
- ~~8.2 A sediment and stormwater management plan or an application for a waiver shall be submitted to the appropriate plan approval agency by the developer for review and approval for a land disturbing activity, unless otherwise exempted. The sediment and stormwater management plan shall contain supporting computations, drawings, and sufficient information describing the manner, location, and type of measures in which stormwater runoff will be managed from the entire development. The appropriate plan approval agency shall review the plan to determine compliance with the requirements of these regulations prior to approval. The approved sediment and stormwater management plan shall serve as the basis for water quantity and water quality control on all subsequent construction.-~~
- ~~8.3 The sediment and stormwater management plan shall not be considered approved without the inclusion of an approval stamp with signature and date, on the plans by the appropriate plan approval agency.-~~
- ~~8.4 All sediment and stormwater management plans submitted for approval shall contain certification by the owner or developer that clearing, grading, construction, or development will be accomplished pursuant to the plan~~

~~and that responsible personnel involved in the land disturbance will have a Certification of Training at a Departmental sponsored or approved training program for the control of erosion and sediment control before initiation of the project. The Certification of Training for responsible personnel requirement may be waived by the appropriate plan approval agency on any project involving silviculture or fewer than four residential homes.~~

- ~~8.5 All sediment and stormwater management plans shall contain certification by the owner or developer of the right of the Department or delegated inspection agency to conduct on-site inspections.~~
- ~~8.6 A grading or building permit issued by a local jurisdiction may be suspended or revoked after written notice is given to the permittee by the responsible delegated agency or the Department for any of the following reasons:
  - ~~8.6.1 Violations of the conditions of the sediment and stormwater management plan approval;~~
  - ~~8.6.2 Changes in site runoff characteristics upon which a waiver was granted;~~
  - ~~8.6.3 Construction not in accordance with the approved plans;~~
  - ~~8.6.4 Noncompliance with correction notice or stop work order issued for the construction of the sediment control practices or the stormwater management facilities;~~
  - ~~8.6.5 An immediate danger exists in a downstream area in the opinion of the appropriate plan approval or inspection agency, or the Department; or~~
  - ~~8.6.6 Failure to submit stormwater management "As Built or Record Document" plans, when required, at the completion of the project.~~~~
- ~~8.7 Approved plans remain valid for 3 years from the date of an approval, unless specifically extended or renewed by the appropriate plan approval agency. The basis for extension or renewal may include, but not limited to, the following items:
  - ~~8.7.1 Failure to initiate the approved project for reasons acceptable to the appropriate plan approval agency such as funding or other agency permit delays; or~~
  - ~~8.7.2 Time duration for a type of activity that typically exceeds three years.~~~~
- ~~8.8 Projects which have been approved prior to July 1, 1991, and where site clearing has not been initiated on the project within two years, shall be resubmitted to the appropriate plan approval agency for review and approval subject to the requirements of these regulations.~~
- ~~8.9 Upon receipt of a completed application for sediment and stormwater management, the appropriate plan approval agency shall accomplish its review within 30 calendar days, and have either the approval or review comments transmitted to the applicant. If that 30 day time frame cannot be met, the appropriate plan approval agency shall notify the applicant of the reasons for delay, and an expected time frame not to exceed an additional 30 days, when that review will be accomplished.~~

#### **~~8 DE Reg. 1172 (2/01/05)~~**

### **~~9.0 Criteria for Designated Watersheds~~**

~~The concept of designated watersheds is intended, not only to prevent existing water quantity and water quality problems from getting worse, but also to reduce existing flooding problems and to improve existing water quality or meet State Water Quality Standards in selected watersheds. Criteria is established for designated watersheds and that criteria will depend on whether the specific problems of the watershed are water quantity or water quality oriented. Water quantity and water quality concerns will be considered in all designated watersheds, but the overall emphasis for each designated watershed will depend on its existing and anticipated problems.~~

- ~~9.1 To initiate consideration of a watershed for Designated Watershed or Subwatershed status, a watershed shall be recommended by a Conservation District, county, municipality, or State agency, to the Department. Upon recommendation to the Department, all involved agencies at the local level will be contacted and their input received prior to any watershed study being initiated.~~
- ~~9.2 Included with the recommendation of a watershed for Designated Watershed or Subwatershed status to the Department shall be an identification of the specific problems that exist in the watershed so that the pursuit of a watershed study is warranted. Inclusion in these regulations as a Designated Watershed or Subwatershed requires approval by the Department that a significant water quantity or water quality problem exists that would necessitate this joint State, District, and local government involvement. Also, inclusion of a watershed as a Designated Watershed or Subwatershed will necessitate a public hearing process. The process of problem identification shall be based on the following information:
  - ~~9.2.1 To initiate a watershed study based on water quality considerations the following information must be submitted:
    - ~~9.2.1.1 Existing water quality data that has been collected as a result of the overall statewide water quality inventory process, or~~~~~~

- 9.2.1.2 ~~Other water quality data collected through specific sampling that was accomplished in the watershed, or~~
- 9.2.1.3 ~~Submission of a water quality assessment that was accomplished using a qualitative collection method of benthic macroinvertebrates.~~
- 9.2.2 ~~To initiate a watershed study based on flooding or water quantity considerations the following information must be submitted:-~~
  - 9.2.2.1 ~~Estimated annual flood damage to either private, residential, commercial, industrial, or public properties, or~~
  - 9.2.2.2 ~~Number of residences or industries in the floodplain, or~~
  - 9.2.2.3 ~~The history of flooding in the watershed, or~~
  - 9.2.2.4 ~~Measures already taken to minimize or reduce flooding, or~~
  - 9.2.2.5 ~~Dangers to public health and welfare.~~
- 9.3 ~~Upon modification of these regulations to include a watershed as a Designated Watershed or Subwatershed an advisory group will be established that will guide the overall watershed study. The advisory group will be appointed by the Secretary and will include State, District, and local representatives in addition to representatives of the regulated community and others affected by the results of the study.~~
- 9.4 ~~The general components contained in the actual watershed studies shall be the following items:-~~
  - 9.4.1 ~~Stormwater quantity or water quality problem identification,~~
  - 9.4.2 ~~The overall needs of the watershed including the additional impacts of new development activities,~~
  - 9.4.3 ~~Alternative approaches to address the existing and future problems,~~
  - 9.4.4 ~~A selected approach that includes the overall costs and benefits,~~
  - 9.4.5 ~~Schedule for implementation,~~
  - 9.4.6 ~~Funding sources that are available for the actual implementation of study recommendations, and~~
  - 9.4.7 ~~A public hearing process prior to final Departmental approval.~~
- 9.5 ~~The following goals are to be obtained through the implementation of the Designated Watershed or Subwatershed program:-~~
  - 9.5.1 ~~Reduction of existing flooding or water quality impacts,~~
  - 9.5.2 ~~Prevention of future flooding or water quality impacts, and~~
  - 9.5.3 ~~Minimization of economic and social losses.~~
- 9.6 ~~Specific plan components of a water quality watershed study shall include, but not be limited to, the following items:-~~
  - 9.6.1 ~~The limits of the watershed,~~
  - 9.6.2 ~~An inventory of existing water quality data,~~
  - 9.6.3 ~~An inventory of areas having significant natural resource value as defined in existing State or local studies as they may be impacted by the construction or location of stormwater control structures,~~
  - 9.6.4 ~~An inventory of areas of historical and archaeological value identified in existing State or local studies as they may be impacted by the construction or location of stormwater control structures,~~
  - 9.6.5 ~~A map or series of maps of the watershed showing the following information:-~~
    - 9.6.5.1 ~~Watershed topography,~~
    - 9.6.5.2 ~~Significant geologic formations,~~
    - 9.6.5.3 ~~Soils information,~~
    - 9.6.5.4 ~~Existing land use based on existing zoning,~~
    - 9.6.5.5 ~~Proposed land use based on expected zoning or comprehensive plans,~~
    - 9.6.5.6 ~~Location of tidal and nontidal wetlands, and~~
    - 9.6.5.7 ~~Locations where water quality data were obtained.~~
  - 9.6.6 ~~An evaluation of water quantity concerns so that flooding does not become a problem in the watershed.~~
- 9.7 ~~Specific components of a water quantity based study shall include, but not be limited to, the following items:-~~
  - 9.7.1 ~~The limits of the watershed,~~
  - 9.7.2 ~~An inventory of historic flood damage sites, including frequency and damage estimates,~~
  - 9.7.3 ~~An inventory of areas of significant natural resource value as noted in existing State and local studies as they may be impacted by the construction or location of stormwater control structures,~~
  - 9.7.4 ~~An inventory of areas of historical and archaeological value identified in existing State and local studies as they may be impacted by the construction or location of stormwater control structures,~~

9.7.5 A map or series of maps of the watershed showing the following information:-

9.7.5.1 Watershed topography,-

9.7.5.2 Soils information,-

9.7.5.3 Existing land use based on existing zoning,-

9.7.5.4 Proposed land use based on expected zoning or comprehensive plans,-

9.7.5.5 Locations of tidal and nontidal wetlands,-

9.7.5.6 Locations of existing flooding problems including floor and corner elevations of structures already impacted, and

9.7.5.7 100-year floodplain delineations, water surface profiles, and storm hydrographs at selected watershed location.-

9.7.6 An evaluation of water quality concerns so that water quality degradation does not become a problem in the watershed.-

9.8 The initiation of studies for Designated Watersheds or Subwatersheds depends on the availability of funding for the study. Once a watershed has been designated, the Department will make every effort to secure funding through federal, State, or local means.-

9.9 The Department is designated as the agency responsible for administering designated watershed or subwatershed studies with the advice of the advisory group appointed by the Secretary. Recommendations based on the results of the watershed study will only be made with the overall consent of the advisory group.-

9.10 The formal results of the Designated Watershed or Subwatershed study will require formal acceptance by the local Conservation District Board of Supervisors and the local governing body of the appropriate county or municipality.-

9.11 Implementation of the results of the Designated Watershed or Subwatershed study will necessitate the development and implementation of a dedicated funding source such as a stormwater utility to ensure design, construction, and maintenance of needed structures is accomplished.-

9.12 Those watersheds or subwatersheds designated due to existing water quantity or water quality problems include the following:-

9.12.1 Dover/Silver Lake/St. Jones River and all drainage areas upstream of the Silver Lake dam.-

#### **10.0 Specific Design Criteria and Minimum Standards and Specifications**

10.1 General submission requirements for all projects requiring sediment and stormwater management approval include the following information:-

10.1.1 A standard application form,-

10.1.2 A vicinity map indicating north arrow, scale, and other information necessary to locate the property or tax parcel,-

10.1.3 A plan at an appropriate scale accompanied by a design report and indicating at least:-

10.1.3.1 Name and address of:-

10.1.3.1.1 The owner of the property where the project is proposed;-

10.1.3.1.2 The land developer; and-

10.1.3.1.3 The applicant.-

10.1.3.2 The existing and proposed topography, as required on a case by case basis.-

10.1.3.3 The proposed grading and earth disturbance including:-

10.1.3.3.1 Surface area involved; and-

10.1.3.3.2 Limits of grading including limitation of mass clearing and grading whenever possible.-

10.1.3.4 Stormwater management and stormwater drainage computations, including:-

10.1.3.4.1 Pre and post-development velocities, peak rates of discharge, and inflow and outflow hydrographs of stormwater runoff at all existing and proposed points of discharge from the site,-

10.1.3.4.2 Site conditions around points of all surface water discharge including vegetation and method of flow conveyance from the land disturbing activity, and-

10.1.3.4.3 Design details for structural controls.-

10.1.3.5 Erosion, sediment control, and stormwater management provisions including:-

10.1.3.5.1 Provisions to preserve top soil and limit disturbance;-

10.1.3.5.2 Details of site grading, and;-

10.1.3.5.3 Design details for structural controls which includes diversions and swales.-

- ~~10.1.4 Federal Emergency Management Agency flood maps and federal and State protected wetlands, where appropriate.~~
- ~~10.1.5 The appropriate plan approval agency shall require that plans and design reports be sealed by a qualified design professional that the plans have been designed in accordance with approved sediment and stormwater ordinances, regulations, standards and criteria. The appropriate plan approval agency may waive this requirement on a case by case basis.~~
- ~~10.1.6 Additional information necessary for a complete project review may be required by the appropriate plan approval agency as deemed appropriate. This additional information may include items such as public sewers, water lines, septic fields, wells, etc.~~
- ~~10.2 Specific requirements for the erosion and sediment control portion of the sediment and stormwater management plan approval process include, but are not limited to, the following items. The appropriate plan approval agency may modify the following items for a specific project or type of project. Modification for a specific type of project will require the concurrence of the Department before that modification may be applied and that modification shall be subject to public review and comment prior to adoption.~~
  - ~~10.2.1 All plans shall include details of temporary and permanent stabilization measures including placement of the following statement on all plans submitted for approval. Following soil disturbance or redisturbance, permanent or temporary stabilization shall be completed within 14 calendar days as to the surface of all perimeter sediment controls, topsoil stockpiles, and all other disturbed or graded areas on the project site. These requirements do not apply to those areas which are shown on the plan and are currently being used for material storage, or for those areas on which actual earth moving activities are currently being performed.~~
  - ~~10.2.2 All plans shall be consistent with the standards and specifications contained in the Delaware Erosion and Sediment Control Handbook, and approved supplements. The supplements shall be subject to public review and comment prior to their incorporation in the Erosion and Sediment Control Handbook.~~
  - ~~10.2.3 A sequence of construction shall be contained on all plans describing the relationship between the implementation and maintenance of sediment controls, including permanent and temporary stabilization and the various stages or phases of earth disturbance and construction. The sequence of construction shall, at a minimum, include the following activities:-~~
    - ~~10.2.3.1 Clearing and grubbing for those areas necessary for installation of perimeter controls;-~~
    - ~~10.2.3.2 Construction of perimeter controls;-~~
    - ~~10.2.3.3 Remaining clearing and grubbing;-~~
    - ~~10.2.3.4 Road grading;-~~
    - ~~10.2.3.5 Grading for the remainder of the site;-~~
    - ~~10.2.3.6 Utility installation and whether stormdrains will be used or blocked until after completion of construction;-~~
    - ~~10.2.3.7 Final grading, landscaping, or stabilization; and-~~
    - ~~10.2.3.8 Removal of sediment controls.-~~
  - ~~10.2.4 The plans shall contain a description of the predominant soil types on the site, as described by the appropriate soil survey information available through the local Conservation District.~~
  - ~~10.2.5 Unless an exception is approved on a case by case basis or an exception is approved for a specific type of activity by the appropriate plan approval agency, not more than 20 acres may be cleared at any one time. Once grading is initiated in one 20 acre section, a second 20 acre section may have stumps, roots, brush, and organic material removed. This will necessitate the phasing of construction on sites in excess of 20 acres to minimize areas exposed of ground cover and reduce erosion rates. Grading of the second 20 acre section may not proceed until temporary or permanent stabilization of the first 20 acre section is accomplished.~~
- ~~10.3 Specific requirements for the permanent stormwater management portion of the sediment and stormwater management plan approval process include, but are not limited to, the following items. The appropriate plan approval agency may modify the following items for a specific project or type of project. Modification for a specific type of project will require the concurrence of the Department before the modification may be applied and the modification for a type of project shall be subject to public review and comment.~~
  - ~~10.3.1 It is the overall goal of the Department to utilize stormwater management as a means to minimize water quantity and water quality impacts due to land disturbing activities and to mimic pre-development hydrology, to the maximum extent practicable, in regards to the rate, volume and duration of flow. These regulations will provide general design requirements that must be adhered to in the absence of Designated Watershed or Subwatershed specific criteria.~~

- 10.3.2 All hydrologic computations shall be accomplished using the methodologies from the most recent U.S.D.A. Natural Resources Conservation Service Technical Releases 20 or 55, or other methods as approved by the Department. The storm duration for computational purposes shall be the 24 hour rainfall event. For projects south of the Chesapeake and Delaware Canal, the Delmarva Unit Hydrograph shall be incorporated into the design procedure.
- 10.3.3 Stormwater management requirements for a specific project shall be based on the entire area to be developed, or if phased, the initial submittal shall control that area proposed in the initial phase and establish a procedure and obligation for total site control.
- 10.3.4 Water quantity control is an integral component of overall stormwater management. Control of peak discharges will, to some extent, prevent increases in flooding. The following design criteria for peak flow control is established for water quantity control purposes, unless a waiver is granted based on a case-by-case basis:
- 10.3.4.1 Projects in New Castle County that are located north of the Chesapeake and Delaware Canal shall not exceed the post-development peak discharge for the 2, 10, and 100 year frequency storm events at the pre-development peak discharge rates for the 2, 10, and 100 year frequency storm events.
  - 10.3.4.2 Projects in New Castle County that are located south of the Chesapeake and Delaware Canal, Kent County, and Sussex County shall not exceed the post-development peak discharge for the 2 and 10-year frequency storm events at the pre-development peak discharge rates for the 2 and 10 year frequency storm events.
  - 10.3.4.3 Watersheds, other than Designated Watersheds or Subwatersheds, that have well documented water quantity problems may have more stringent, or modified, design criteria that is responsive to the specific needs of that watershed. Modified criteria for that watershed must receive Departmental approval, and all projects reviewed and approved by the appropriate plan approval agency shall meet or exceed the modified criteria. Proposed modification of criteria for a watershed shall be subject to public review and comment prior to implementation.
  - 10.3.4.4 In addition to the peak flow control design criteria contained in this Section, projects in the Mill Creek, Little Mill Creek, Red Clay Creek, White Clay Creek, Persimmon Creek and Shellpot Creek watersheds shall demonstrate successful management of any increase in stormwater runoff volume from pre-development land use conditions. Successful management of increased stormwater volume shall include but not be limited to; recharge, infiltration and re-use where soils and site conditions are applicable. For any increase in volume that cannot be recharged, infiltrated or re-used, volume management may be achieved by modifying the release rate for the increase in volume so as not to increase the flood elevation for all storms up to and including the 100 year return period.
- 10.3.5 Water quality control is also an integral component of stormwater management. Control of runoff from small, frequent rainfall events on-site will minimize further degradation of downstream water quality and habitat. The following design criteria are established for water quality protection unless a waiver or variance is granted on a case-by-case basis.
- 10.3.5.1 In general, the preferred option for water quality protection shall be those practices collectively referred to as "Green Technology BMP's". Other practices shall be considered only after preferred practices have been eliminated for engineering or hardship reasons as approved by the appropriate plan approval agency.
  - 10.3.5.2 Water quality practices shall be designed to manage the rate and volume of flow from the 2.0" NRCS Type II rainfall event, up to a maximum of 1.0" of runoff.
  - 10.3.5.3 Alternative stormwater quality practices may be acceptable to the Department and/or the plan approval agency if the removal efficiency for suspended solids meets or exceeds 80% as demonstrated by scientifically independent evaluation and monitoring performance data.
  - 10.3.5.4 The Department and/or the plan approval agency may require other acceptable stormwater quality practices if a receiving waterbody has been identified as impaired, or designated with a specific pollutant reduction target necessary to meet State of Delaware water quality regulations.
  - 10.3.5.5 Water quality practices may also be acceptable to the Department and/or the plan approval agency if they are designed to reduce pollutant loading from a specific post-development source. The Department and/or the plan approval agency will determine if this criterion for water quality Best Management Practices is appropriate.
  - 10.3.5.6 The Department will develop policy and maintain documentation related to the performance of water quality practices. The Department will also provide guidance for the design, appropriate use

~~and required maintenance of water quality practices. These shall include structural and non-structural practices in addition to source reduction management strategies.~~

- ~~10.3.5.7 The Department and/or the plan approval agency will review the specific water quality practices proposed in a Sediment and Stormwater Management Plan, and review, approve or deny approval of the plan based on the criteria specified in Section E. of these regulations.~~
- ~~10.3.6 All ponds that are constructed for stormwater management shall be designed and constructed in accordance with the U.S.D.A. Soil Conservation Service Small Pond Code 378, dated September, 1990, as approved for use in Delaware.~~
- ~~10.3.7 Any pond utilized for water supply purposes, or for irrigation, must obtain approval from the Department for that use pursuant to Chapter 60.~~
- ~~10.3.8 Where ponds are the proposed method of control, the developer shall submit to the approving agency, when required, an analysis of the impacts of stormwater flows downstream in the watershed for the 100 year frequency storm event.~~
- ~~The analysis shall include hydrologic and hydraulic calculations necessary to determine the impact of hydrograph timing modifications of the proposed development, with and without the pond, on downstream dams, highways, structures, or natural points of constricted streamflows past which the timing effects would be considered negligible. The results of the analysis will determine the need to modify the pond design or to eliminate the pond requirement. Lacking a clearly defined downstream point of constriction, the downstream impacts shall be established, with the concurrence of the approving agency, downstream of a tributary of the following size:~~
- ~~10.3.8.1 The first downstream tributary whose drainage area equals or exceeds the contributing area to the pond; or~~
- ~~10.3.8.2 The first downstream tributary whose peak discharge exceeds the largest designed release rate of the pond.~~
- ~~10.3.9 Where existing wetlands are intended as a component of an overall stormwater management system, the following criteria shall be adhered to:~~
- ~~10.3.9.1 The only disturbance to the wetland, for the purposes of these regulations, shall be that disturbance caused by the stormwater management pond embankment placement and construction; or~~
- ~~10.3.9.2 The applicant can demonstrate that the intended or functional aspects of the stormwater management facility and wetlands are maintained or enhanced, or the construction in the wetland for stormwater management is the only reasonable alternative.~~
- ~~10.3.9.3 All other necessary State and federal permits can be obtained.~~
- ~~10.3.10 Designs shall be in accordance with standards developed or approved by the Department, which are subject to public review and comment.~~
- ~~10.3.11 Ease of maintenance must be considered as a site design component. Access to the stormwater management structure must be provided for in the design, and land area adjacent to the structure must be set aside for disposal of sediments removed from the structure when maintenance is performed. The land set aside for pond maintenance shall be sized as follows:~~
- ~~10.3.11.1 The set aside area shall accommodate at least 2% of the stormwater management basin volume to the elevation of the 2 year storage volume elevation;~~
- ~~10.3.11.2 The maximum depth of the set aside volume shall be one foot;~~
- ~~10.3.11.3 The slope of the set aside area shall not exceed 5%; and~~
- ~~10.3.11.4 The area and slope of the set aside area may be modified if an alternative area or method of disposal is approved by the appropriate plan approval agency.~~
- ~~10.3.12 A clear statement of defined maintenance responsibility shall be established during the plan review and approval process.~~
- ~~10.3.13 All ponds shall have a forebay or other design feature to act as a sediment trap. A reverse slope bench must be provided one foot above the normal pool elevation for safety purposes and all embankment ponds, having a normal pool, shall have a drain installed to facilitate maintenance.~~
- ~~10.3.14 The use of infiltration practices for the disposal of stormwater runoff is classified by the USEPA as an underground injection control practice, class V injection well. The appropriate plan approval agency shall forward a copy of all such approvals and the results of all construction inspections to the Department's Underground Injection Control program manager.~~
- ~~10.3.15 Infiltration practices have certain limitations on their use on certain sites. These limitations include the following items:~~

- 10.3.15.1 ~~Areas draining to these practices must be stabilized and vegetative filters established prior to runoff entering the system. Infiltration practices shall not be used if a suspended solids filter system does not accompany the practice. If vegetation is the intended filter, there shall be, at least, a 20 foot length of vegetative filter prior to stormwater runoff entering the infiltration practice;~~
- 10.3.15.2 ~~The bottom of the infiltration practice shall be at least three feet above the seasonal high water table, whether perched or regional, determined by direct piezometer measurements which can be demonstrated to be representative of the maximum height of the water table on an annual basis during years of normal precipitation, or by the depth in the soil at which mottling first occurs;~~
- 10.3.15.3 ~~The infiltration practice shall be designed to completely drain of water within 48 hours.~~
- 10.3.15.4 ~~Soils must have adequate permeability to allow water to infiltrate. Infiltration practices are limited to soils having an infiltration rate of at least 1.02 inches per hour.  
Initial consideration will be based on a review of the appropriate soil survey, and the survey may serve as a basis for rejection. On-site soil borings and textural classifications must be accomplished to verify the actual site and seasonal high water table conditions when infiltration is to be utilized.~~
- 10.3.15.5 ~~Infiltration practices greater than three feet deep shall be located at least 20 feet from basement walls;~~
- 10.3.15.6 ~~Infiltration practices designed to handle runoff from impervious parking areas shall be a minimum of 150 feet from any public or private water supply well;~~
- 10.3.15.7 ~~The design of an infiltration practice shall provide an overflow system with measures to provide a non-erosive velocity of flow along its length and at the outfall; and~~
- 10.3.15.8 ~~The slope of the bottom of the infiltration practice shall not exceed five percent. Also, the practice shall not be installed in fill material as piping along the fill/natural ground interface may cause slope failure.~~
- 10.3.15.9 ~~Unless allowed on a specific project, infiltration practices will be used primarily for water quality enhancement only.~~
- 10.3.15.10 ~~An infiltration practice shall not be installed on or atop a slope whose natural angle of incline exceeds 20%.~~
- 10.3.16 ~~A regional approach to stormwater management is an acceptable alternative to site specific requirements. As a substitute control practice, regional stormwater management structures shall be required to meet the following items:~~
  - 10.3.16.1 ~~They shall have a contributory drainage area not in excess of 400 acres unless, on a case by case basis, a larger drainage area is approved by the appropriate plan approval agency;~~
  - 10.3.16.2 ~~They shall have a permanent pool of water and provide for 24 hour detention of the first inch of stormwater runoff from the entire upstream watershed; and~~
  - 10.3.16.3 ~~All other necessary approvals have been obtained that could be cause for site rejection.~~
- 10.3.17 ~~The pre-development peak discharge rate shall be computed assuming that all land uses in the site to be developed are in good hydrologic condition.~~

~~8 DE Reg. 1172 (2/01/05)~~

~~10 DE Reg. 735 (10/01/06)~~

#### ~~11.0 Standard Plan Criteria~~

- 11.1 ~~Approval under this section involves submission of a standard plan by a land owner, developer, or agent to the appropriate plan approval agency. The minimum criteria for the standard plan will be developed by the Department, and may be expanded upon by the appropriate plan approval agency. The standard plan will contain standard conditions for erosion and sediment control that must be implemented on sites where a detailed plan is not required. The appropriate plan approval agency shall approve or deny standard plan requests within 14 calendar days of receipt.~~
- 11.2 ~~The inclusion of an activity into the standard plan classification does not relinquish that activity from the requirements of Chapter 40. Rather, the standard plan precludes that activity from the necessity of a detailed plan review for each individual project.~~
- 11.3 ~~Approval of a standard plan does not relieve the applicant from the conditions that are a part of the standard plan approval regarding the implementation of control practices as required by the standard plan. Failure to implement control practices pursuant to conditions included in the general permit standard plan may necessitate appropriate enforcement action as provided in Chapter 40 and these regulations.~~

- 11.4 ~~Those activities eligible for standard plans include the following, when the stormwater management requirements have been waived in accordance with Section 3 of these Regulations:-~~
- 11.4.1 ~~Individual detached residential home or agricultural structure construction where the disturbed area for construction will be less than one acre in size. Two or more contiguous lots being developed concurrently by the same land developer will not be eligible for the standard plan.~~
  - 11.4.2 ~~Highway shoulder and side swale maintenance.~~
  - 11.4.3 ~~The repair, maintenance, and installation of above and underground utilities.~~
  - 11.4.4 ~~Minor Commercial, Institutional, and industrial projects where the total disturbed area will be less than one acre.~~
  - 11.4.5 ~~Modification or reconstruction of a tax ditch by a tax ditch organization when that tax ditches not intended to serve new development, and which will not increase water quantity or adversely impact water quality, or change points of discharge so as to adversely affect the waters of the State.~~
- 11.5 ~~The appropriate plan approval agency may place more restrictive conditions upon the standard plan approval including the requirement for detailed plans for any standard plan category. The imposition of more specific requirements for categories of projects shall be approved by the Department, and shall be subject to public review and comment prior to their imposition.~~

### **8-DE Reg. 1172 (2/01/05)**

#### **12.0 Certified Construction Reviewer Requirements-**

- 12.1 ~~Projects reviewed and approved by the Department for sediment control and stormwater management, in general, shall have a certified construction reviewer when the disturbed area of the project is in excess of 50 acres. In addition any project, regardless of its size, may be required by the Department, or the appropriate plan approval agency, to have a certified construction reviewer on a case by case basis.~~
- 12.2 ~~The Department or the appropriate inspection agency may require that any project, already under construction, have on site a certified construction reviewer if, on that project, significant sediment control or stormwater management problems necessitate more frequent inspections.~~
- 12.3 ~~The certified construction reviewer shall function under the direction of a registered professional engineer licensed to practice engineering in the State of Delaware.~~
- 12.4 ~~Individuals designated as certified construction reviewers shall attend and pass a Departmental sponsored or approved construction review training course. The course content will contain, at a minimum, information regarding the following items:-~~
  - 12.4.1 ~~Basic hydrology and hydraulics;~~
  - 12.4.2 ~~Soils information including texture, limitations, erodibility, and classifications;~~
  - 12.4.3 ~~Types of vegetation, growing times, and suitability;~~
  - 12.4.4 ~~Erosion, sediment control, and stormwater management practices;~~
  - 12.4.5 ~~Inspection and problem referral procedures;~~
  - 12.4.6 ~~Aspects of State law, regulations, local ordinances, and approval procedures; and~~
  - 12.4.7 ~~Sediment and stormwater management plan content.~~
- 12.5 ~~The time frame for certification shall not exceed five years unless extended by the Department.~~
- 12.6 ~~The responsibility of the certified construction reviewer will be to ensure the adequacy of construction pursuant to the approved sediment and stormwater management plan.~~
- 12.7 ~~The certified construction reviewer shall be responsible for the following items:-~~
  - 12.7.1 ~~Provision of a construction review of active construction sites on at least a weekly basis;~~
  - 12.7.2 ~~Within five calendar days, informing the person engaged in the land disturbing activity, and the contractor, by a written construction review report of any violations of the approved plan or inadequacies of the plan. The plan approval agency shall be informed, if the approved plan is inadequate, within five working days. In addition, the appropriate construction review agency shall receive copies of all construction review reports; and~~
  - 12.7.3 ~~Referral of the project through the delegated inspection agency to the Department for appropriate enforcement action if the person engaged in the land disturbing activity fails to address the items contained in the written construction review report. Verbal notice shall be made to the Department within two working days and written notice shall be provided to the Department within five working days.~~
- 12.8 ~~If the Secretary or his designee determines that a certified construction reviewer is not providing adequate site control or is not referring problem situations to the Department, the Secretary or his designee may suspend or revoke the certification of the construction reviewer.~~

- 12.9 In any situation where a certified construction reviewer's approval is being suspended or revoked, an opportunity for hearing before the Secretary or his designee shall be provided. During any suspension or revocation, the certified construction reviewer shall not be allowed to provide construction reviews pursuant to these regulations. The minimum time of suspension or revocation shall be 6 months.

### **13.0 Contractor Certification Program**

- 13.1 The Department shall require certification of responsible personnel for any foreman or superintendent who is in charge of on-site clearing and land disturbing activities for sediment and stormwater control associated with a construction project. Responsible personnel are not required on any project involving silviculture or fewer than four residential homes. Responsible personnel shall obtain certification by completing a Department sponsored or approved training program. Enrollment of existing and future responsible personnel is the responsibility of employers. Response to a Department notice of training and certification in accordance with the provisions of item 3 of this section shall serve as an application for training. The Department shall notify employers of responsible personnel as to the date and location of training programs for attendance by responsible personnel and other interested persons.
- 13.2 After July 1, 1991, any applicant seeking sediment and stormwater plan approval shall certify to the appropriate plan approval agency that all responsible personnel involved in the construction project will have a certificate of attendance at a Departmental sponsored or approved training course for the control of sediment and stormwater before initiation of any land disturbing activity. The certificate of attendance shall be valid until the Department notifies the individual or announces in local newspapers that recertification is required due to a change in course content.
- 13.3 After July 1, 1991, employers of responsible personnel may receive interim certification for responsible personnel during the period before attendance at a Departmental sponsored or approved training course by submitting an enrollment form to the Department. Interim certification shall be valid until the scheduled date of attendance for training of responsible personnel. These enrollment forms are available from the Department and the Conservation Districts.

### **14.0 Construction Review and Enforcement Requirements**

- 14.1 The land developer shall request, at least 24 hours ahead of time, that the appropriate inspection agency approve work completed at the stages of construction outlined in the sequence of construction contained on the approved plans. Any portion of the work which does not comply will be promptly corrected by the developer after written notice by the appropriate inspection agency. The notice shall set forth the nature of corrections required and the time frame within which corrections must be made.
- 14.2 The land developer shall notify the appropriate inspection agency before initiation of construction and upon project completion when a final inspection will be conducted to ensure compliance with the approved sediment and stormwater management plan.
- 14.3 The responsible inspection agency shall, for inspection purposes, do all of the following items:-
- 14.3.1 Ensure that the approved sediment and stormwater management plans are on the project site and are complied with;
  - 14.3.2 Ensure that every active site is inspected for compliance with the approved plan on a regular basis;
  - 14.3.3 Prepare and leave on site, or forward to the contractor, a written report after every inspection that describes:-
    - 14.3.3.1 The date and location of the site inspection;
    - 14.3.3.2 Whether the approved plan has been properly implemented and maintained;
    - 14.3.3.3 Approved plan or practice deficiencies; and
    - 14.3.3.4 The action taken.
  - 14.3.4 Notification of on-site personnel or the owner/developer in writing when violations are observed, describing the:-
    - 14.3.4.1 Nature of the violation;
    - 14.3.4.2 Required corrective action; and
    - 14.3.4.3 Time period for violation correction.
- 14.4 The Department may investigate complaints or refer any complaint received to the local inspection agency if the activity is located in a jurisdiction that has received delegation of sediment and stormwater management inspection. In conjunction with a referral, the Department may also initiate an on-site investigation after notification of the local inspection agency in order to properly evaluate the complaint. The Department shall take enforcement action when appropriate, and notify the local inspection agency in a timely manner of any enforcement actions taken.

- 14.5 The Department, at its discretion and upon notification to either the owner, developer, or contractor, may visit any site to determine the adequacy of sediment and stormwater management practices. In the event that the Department conducts site inspections, the appropriate inspection agency shall be notified prior to the initiation of any enforcement action. The appropriate inspection agency shall establish a time frame to obtain site compliance. This notification shall, in no way limit the right to the Department to take action subsequent to any provision of these regulations or Chapter. Formal procedures for interaction between the Department and the appropriate inspection agency on site inspection and referral will be developed on an individual basis.
- 14.6 The appropriate plan approval agency may require a revision to the approved plans as necessary due to differing site conditions. The appropriate plan approval agency shall establish guidelines to facilitate the processing of revised plans where field conditions necessitate plan modification. Where changes to the approved plan are necessary those changes shall be in accordance to the following:-
- 14.6.1 Major changes to approved sediment and stormwater management plans, such as the addition or deletion of a sediment basin, shall be submitted by the owner/developer to the appropriate plan approval agency for review and approval.
- 14.6.2 Minor changes to sediment and stormwater management plans may be made in the field if approved by the construction reviewer and documented in the field review report. The appropriate inspection agency shall develop a list of allowable field modifications for use by the construction reviewer.
- 14.7 Stormwater management construction shall have inspections accomplished at the following stages:-
- 14.7.1 Infiltration practices shall be inspected at the commencement, during, and upon completion of construction;
- 14.7.2 All ponds shall be inspected at the following stages:-
- 14.7.2.1 Upon completion of excavation to sub-foundation and where required, installation of structural supports or reinforcement for structures, including, but not limited to;
- 14.7.2.1.1 Core trenches for structural embankments,
- 14.7.2.1.2 Inlet outlet structures and anti-seep structures, watertight connectors on pipes, and
- 14.7.2.1.3 Trenches for enclosed storm drainage facilities.
- 14.7.2.2 During placement of structural fill, concrete, and installation of piping and catch basins;
- 14.7.2.3 During backfill of foundations and trenches;
- 14.7.2.4 During embankment construction; and
- 14.7.2.5 Upon completion of final grading and establishment of permanent vegetation.
- 14.8 The agency responsible for construction review may, in addition to local enforcement options, refer a site violation to the Department for additional enforcement action.
- 14.9 Referral of a site violation to the Department may initiate a Departmental construction review of the site to verify site conditions. That construction review may result in the following actions:-
- 14.9.1 Notification through appropriate means to the person engaged in a land disturbing activity and the contractor to comply with the approved plan within a specified time frame; and
- 14.9.2 Notification of plan inadequacy, with a time frame for the person engaged in a land disturbing activity to submit a revised sediment and stormwater plan to the appropriate plan approval agency and to receive its approval with respect thereto.
- The Department shall notify the local inspection agency in a timely manner of what enforcement action is taken on the site.
- 14.10 Failure of the person engaged in the land disturbing activity or the contractor to comply with Departmental requirements may result in the following actions in addition to other penalties as provided in Chapter 40.
- 14.10.1 The Department shall have the power to issue a cease and desist order to any person violating any provision of Chapter 40 and these regulations by ordering such person to cease and desist from any site work activity other than those actions necessary to achieve compliance with any administrative order.
- 14.10.2 The Department may request that the appropriate plan approval agency refrain from issuing any further building or grading permits to the person having outstanding violations until those violations have been remedied.

## **15.0 Maintenance Requirements**

- 15.1 For erosion and sediment control, all practices shall be maintained in accordance with requirements specified in the Delaware Sediment and Erosion Control Handbook dated 1989 or as directed by the construction reviewer.

- 15.2 ~~Prior to the issuance of any building or grading permit for which stormwater management is required, the responsible plan approval agency shall require the applicant or owner to execute an inspection and maintenance agreement binding on all subsequent owners of land served by the private stormwater management facility. Such agreement shall provide for access to the facility at reasonable times for regular inspection by an inspection agency and for an assessment of property owners to ensure that the stormwater management structure is maintained in proper design working condition.~~
- 15.3 ~~The Department encourages, and will provide technical assistance to, any Conservation District or local jurisdiction who chooses to assume the maintenance responsibility for stormwater management structures on, at least, residential lands. Public maintenance provides a reasonable assurance that maintenance will be accomplished on a regular basis.~~
- 15.4 ~~The owner or person responsible shall perform or cause to be performed preventive maintenance of all completed stormwater management practices to ensure proper functioning. The responsible inspection agency shall ensure preventive maintenance through inspection of all stormwater management practices. The inspections shall occur at least once each year.~~
- 15.5 ~~Inspection reports shall be maintained by the responsible inspection agency on all detention and retention structures and those inspection reports shall include the following items:-~~
- ~~15.5.1 The date of inspection;-~~
  - ~~15.5.2 The name of the inspector;-~~
  - ~~15.5.3 The condition of:-~~
    - ~~15.5.3.1 Vegetation,-~~
    - ~~15.5.3.2 Fences,-~~
    - ~~15.5.3.3 Spillways,-~~
    - ~~15.5.3.4 Embankments,-~~
    - ~~15.5.3.5 Reservoir area,-~~
    - ~~15.5.3.6 Outlet channels,-~~
    - ~~15.5.3.7 Underground drainage,-~~
    - ~~15.5.3.8 Sediment load, or~~
    - ~~15.5.3.9 Other items which could effect the proper function of the structure.-~~
  - ~~15.5.4 Description of needed maintenance.-~~
- 15.6 ~~Responsible inspection agencies shall provide procedures to ensure that deficiencies indicated by inspections are rectified. The procedures shall include the following:-~~
- ~~15.6.1 Notification to the person responsible for maintenance of deficiencies including a time frame for repairs;-~~
  - ~~15.6.2 Subsequent inspection to ensure completion of repairs; and~~
  - ~~15.6.3 Effective enforcement procedures or procedures to refer projects to the Department if repairs are not undertaken or are not done properly.-~~

#### **~~16.0 Penalties-~~**

- 16.1 ~~Any person who violates any rule, order, condition imposed in an approved plan or other provision of these regulations shall be fined not less than \$200 or more than \$2,000 for each offense. Each day that the violation continues shall constitute a separate offense. The Justice of the Peace Courts shall have jurisdiction of offenses brought under this subsection.~~
- 16.2 ~~Any person who intentionally, knowingly, and after written notice to comply, violates or refuses to comply with any notice issued pursuant to these regulations shall be fined not less than \$500 or more than \$10,000 for each offense. Each day the violation continues shall constitute a separate offense. The Superior Court shall have jurisdiction of offenses brought under this subsection.~~

#### **~~17.0 Hearings-~~**

~~The conduct of all hearings conducted pursuant to these regulations shall be in accordance with the relevant provisions of 7 Del.C. Ch. 60.~~

#### **~~18.0 Severability-~~**

~~If any section, subsection, sentence, clause, phrase, or portion of these regulations are for any reason held invalid or unconstitutional by any court or competent jurisdiction, such provision and such holding shall not affect the validity of the remaining portions of these regulations.~~

## **1.0 General Provisions**

### **1.1 Findings of Fact**

1.1.1 It is determined that:

1.1.1.1 Erosion and sedimentation and delivery of other nonpoint source pollutants such as nutrients through stormwater runoff continue to present serious problems throughout the State.

1.1.1.2 The removal of a stable ground cover in conjunction with the decrease in the infiltration capability of soils resulting from the creation of additional impervious areas such as roads and parking lots has accelerated the process of soil erosion and sediment deposition and nonpoint source runoff of other pollutants resulting in pollution of waters of the State. This damages domestic, agricultural, industrial, recreational, fish and wildlife and other resource uses.

1.1.1.3 Accelerated stormwater runoff increases flood flows and velocities, contributes to erosion, sedimentation and degradation of water quality, overtaxes the carrying capacity of streams and storm sewers, greatly increases the cost of public facilities in carrying and controlling stormwater, undermines floodplain management and flood control efforts in downstream communities, reduces groundwater recharge, and threatens public health, welfare and safety.

1.1.2 The regulation of stormwater runoff from land development activities will control stormwater runoff, soil erosion and nonpoint source pollution and will mitigate the adverse effects of stormwater runoff from development and will reduce threats to public health and safety.

1.2 The purpose of this regulation is to enhance and extend the present erosion and sediment control activities and programs of the State for both rural and urban lands and to provide for control and management of stormwater runoff consistent with sound water and land use practices. These activities will reduce, to the maximum extent practicable, adverse effects of stormwater runoff on the water and lands of the State.

1.3 Applicability

1.3.1 The effective date of these regulations shall be 90 days following the date of publication of the final regulations. On the effective date of these regulations, unless a particular activity is exempted by these regulations, a person shall not disturb land without an approved Sediment and Stormwater Management Plan from the Department or Delegated Agency. A Sediment and Stormwater Management Plan shall not be approved for a property unless it is consistent with the following items:

1.3.1.1 These regulations;

1.3.1.2 7 Del.C. Ch. 40, relating to erosion and sediment control and stormwater management;

1.3.1.3 7 Del.C. Ch. 60, relating to the development, utilization, and control of the land, water, underwater and air resources of the State, and;

1.3.1.4 Regulations Governing the Control of Water Pollution, Section 9.1.02, known as Special Conditions for Stormwater Discharges Associated with Construction Activities.

1.3.2 Applicability of these regulations for plans that have been approved before the effective date of these regulations shall be consistent with the following:

1.3.2.1 Plans approved before the effective date of these regulations where construction has not commenced within three years of the plan approval date shall expire. If the earlier plan expires, a new plan in compliance with these regulations shall be submitted to the Department or Delegated Agency for review and approval before commencement of construction.

1.3.2.2 Plans approved before the effective date of these regulations where construction has commenced may be extended based on the requirements in place at the time of original Plan approval.

1.3.2.3 Plan approval extension may be granted no more than 90 days before plan expiration. In no case shall the plan extension supersede the sunset provisions of the county or local government.

1.3.2.4 Commencement of construction means that the construction of the approved Plan is visible with the construction of a structure or infrastructure, including but not limited to roads, water and sewer lines, and stormwater management systems. General earth moving is not considered commencement of construction.

1.4 The following activities are exempt from both sediment control and stormwater management requirements established by these regulations:

1.4.1 Agricultural land management practices having a soil and water conservation plan unless the Department or Delegated Agency determines that a new or updated soil and water conservation plan is required, and the Owner or operator of the land has refused either to apply to a Conservation District for the development of a conservation plan, or to implement a conservation plan developed by a Conservation District.

1.4.2 Developments or construction that disturbs less than 5,000 square feet. Individual disturbances of less than 5,000 square feet that accumulate to exceed 5,000 square feet are not exempt and may be subject to the provisions of these regulations as determined by the Department or Delegated Agency on a case-by-case basis.

- 1.4.3 With written agreement of the Department, land development activities which are regulated with respect to erosion and sediment control and stormwater management under other specific State or Federal laws.
- 1.4.4 Commercial forest harvesting operations that meet the requirements of the Department of Agriculture under 3 **Del.C.** Ch. 10, Subchapter VI.
- 1.4.5 Permitted land application of biosolids and residuals.

## 1.5 Variances

- 1.5.1 The Department may grant a variance from any requirement of these regulations in accordance with the provisions of 7 **Del.C.** §6011.
- 1.5.2 The Department may grant a temporary emergency variance from any requirement of these regulations in accordance with the provisions of 7 **Del.C.** §6012.
- 1.5.3 Excluding items covered by 1.7 Offset Provisions, the Department shall consider and decide applications for a variance from the provisions of these Regulations or the technical documents if all of the following are established by the applicant:
  - 1.5.3.1 The variance sought will not be detrimental to the environment or contrary to law, these Regulations, or the technical documents.
  - 1.5.3.2 Owing to special conditions or an unusual situation, a literal interpretation of these Regulations or the technical documents will result in hardship to the owner of the property in question.
  - 1.5.3.3 If the variance were granted, the goals of these Regulations and the technical documents will be met with respect to the property in question.
- 1.5.4 The applicant must submit a request for a variance to the Sediment and Stormwater Program of the Department that sets forth and explains the need for the variance.
- 1.5.5 The Secretary or his designee shall publish his decision on the requested variance and the decision shall be effective immediately.
- 1.5.6 Any person whose interests are substantially affected may appeal to the Environmental Appeals Board within 15 days of publication of the Secretary's decision.
- 1.5.7 The variance shall be effective from the date of its approval until a final plan is approved unless the nature and scope of the project for which it was granted has changed.

## 1.6 Fees and Financial Guarantees

### 1.6.1 Fees

- 1.6.1.1 The Delegated Agency has the authority to require fees to support local program implementation, including overall program management, plan review, construction review, enforcement, and maintenance responsibilities. An Owner seeking approval of a Sediment and Stormwater Management Plan shall pay a fee as prescribed by the Department or Delegated Agency. When the Department is the approval agency, the fees shall not exceed \$80.00 per disturbed acre per project.
- 1.6.1.2 The establishment of fees, not involving stormwater utilities, shall be in accordance with the following items:
  - 1.6.1.2.1 The number of needed personnel and the direct and indirect expenses associated with those personnel shall be developed by the agencies requesting delegation in a specific jurisdiction in conjunction with and with the concurrence of the Department. Those expenses will then form the basis for determining plan review, construction review and maintenance review costs.
  - 1.6.1.2.2 The fee schedule and revisions to the fee schedule of the Delegated Agency shall be subject to applicable State or local public notice requirements. State public notice requirements shall be governed by 7 **Del.C.** §6004.

### 1.6.2 Financial Guarantee

- 1.6.2.1 The Department or Delegated Agency may require and implement a financial guarantee for construction of the elements of the approved Sediment and Stormwater Management Plan. The Owner shall submit when required to the Department or Delegated Agency a financial guarantee before the onset of construction activities. The financial guarantee will ensure that action can be taken by the Department or Delegated Agency to complete required elements of the approved Sediment and Stormwater Management Plan, at the Owner's expense, should the Owner fail to initiate, complete, or maintain those measures identified in the approved Sediment and Stormwater Management Plan after being given proper notice and within a reasonable time specified by the Department or Delegated Agency.

1.6.2.2 Following approval of the Department, the financial guarantee provisions of the Delegated Agency shall be subject to applicable State or local public notice requirements. State public notice requirements shall be governed by 7 Del.C. §6004.

1.7 Offset Provisions

1.7.1 The Department may require an offset as an alternative to full or partial compliance with the Resource Protection Event requirements as provided in Sections 5.2 and 5.6.3 of these regulations.

1.7.2 Offset requirements shall be subject to Departmental review and approval as well as to the public notice requirements of 7 Del.C. §6004.

1.7.3 Procedures for determining offset requirements shall be developed by the Department and published in the technical document supplement to these regulations.

1.8 These regulations are adopted pursuant to authority conferred by and in accordance with 7 Del.C. Ch. 40 and 7 Del.C. Ch. 60.

1.9 These regulations are not intended to interfere with, abrogate, or annul any other ordinance, rule or regulation, statute, or other provision of law. The requirements of these regulations should be considered minimum requirements, and where any provision of these regulations imposes restrictions different from those imposed by any other ordinance, rule or regulation, or other provision of law, whichever provisions are more restrictive or impose higher protective standards for human health or the environment shall be considered to take precedence.

1.10 If any section, subsection, sentence, clause, phrase or portion of these regulations is for any reason held invalid or unconstitutional by any court or competent jurisdiction, such provision and such holding shall not affect the validity of the remaining portions of these regulations.

1.11 Any person who undertakes or causes to be undertaken any land disturbing activities shall ensure that soil erosion, sedimentation, increased pollutant loads and changed water flow characteristics resulting from these activities are controlled so as to minimize pollution of state waters. The requirements of these regulations are minimum standards and a person's compliance shall not relieve the person from the duty of enacting all measures necessary to minimize pollution of, or detrimental impacts to state waters.

1.12 The conduct of all hearings conducted pursuant to these regulations shall be in accordance with the relevant provisions of 7 Del.C. Ch. 60.

1.13 The Department is responsible for the implementation and supervision of the sediment and stormwater program which is established by 7 Del.C. Ch. 40.

1.14 All activities subject to these regulations shall comply with the design criteria and meet the minimum standards developed and published by the Department and shall follow Department policy, procedures and guidelines as set forth in accompanying technical documents. Revisions or updates to any of these documents shall be adopted following public notice requirements in accordance with 7 Del.C. §6004.

**2.0 The following words and terms, when used in this regulation, shall have the following meaning unless the context clearly indicates otherwise:**

**“Adequate conveyance”** means any system having sufficient capacity to transport the runoff generated during the Resource Protection Event, Conveyance Event, and Flooding Event; functions and discharges in a non-erosive manner; and does not adversely impact any offsite properties, conveyance system, stormwater facility, or State Waters.

**“Adverse impact”** means a negative impact resulting from a construction or development activity. The negative impact may include, but is not limited to, increased risk of flooding; degradation of water quality; increased sedimentation; reduced groundwater recharge; negative impacts on aquatic habitat; or threatened public health and safety.

**“Agricultural land management practices”** means those methods and procedures generally accepted by the Conservation Districts and used in the cultivation of land in order to further crop and livestock production and conservation of related soil and water resources.

**“Agricultural structure”** means a structure on a farm used solely for agricultural purposes in which the use is exclusively in connection with the production, harvesting, storage, drying, or raising of agricultural commodities, including the raising of livestock. Structures used for human habitation, public use, or a place of employment where agricultural products are processed, treated, or packaged are not considered agriculture structures for the purposes of these regulations.

**“Applicant”** means a person who has requested approval of a Sediment and Stormwater Management Plan through submittal of an application in accordance with these regulations or who has requested permission to conduct any activity subject to these regulations.

**“Best Available Technology (BAT)”** means a level of technology based on the very best (state of the art) sediment and stormwater control and treatment measures that have been developed or are capable of being developed and that are economically achievable.

**“Best Management Practices (BMPs)”** means schedules of activities, prohibition of practices, maintenance procedures, and other management practices or measures to prevent or reduce the discharge of pollutants. BMPs include the following, among other practices and measures: structural and non-structural controls; treatment requirements; operating procedures and practices to control site runoff.

**“Biosolids”** means solid or semi-solid material obtained from treated wastewater or animal manure.

**“Brownfield”** means any vacant, abandoned or underutilized real property the development or redevelopment of which may be hindered by the reasonably held belief that the real property may be environmentally contaminated.

**“Certified Construction Reviewer” or “CCR”** means those individuals, having passed a Departmental sponsored or approved training course and holding current certification, which provide on-site construction review for sediment control and stormwater management in accordance with these regulations.

**“Conservation plan”** means a customized document that outlines the use and best management practices of the natural resources on a parcel of land.

**“Conveyance Event”** means the runoff event produced by a storm having an annual probability of occurrence of 10%.

**“Conveyance Event Volume (Cv)”** means the volume of runoff generated by the Conveyance Event that is not otherwise reduced for the Resource Protection Event.

**“Dedication”** means transferring ownership of a stormwater management system to a delegated agency, public utility, municipality, stormwater utility, or private entity, along with all associated easements, escrow funds, and maintenance responsibilities.

**“Delegated Agency”** means the Conservation District, county, municipality, or State agency that has accepted responsibility in a jurisdiction for implementation of one or more elements of the Sediment and Stormwater Program within that jurisdiction.

**“Delegation”** means the acceptance of responsibility by a Conservation District, county, municipality, or State agency for the implementation of the Sediment and Stormwater Program.

**“Department”** means the Department of Natural Resources and Environmental Control.

**“Designated Watershed or Subwatershed”** means a watershed or subwatershed proposed by a conservation district, county, municipality, or State agency and approved by the Department. The Department may establish additional requirements due to existing water quantity or water quality problems. These requirements shall be implemented on an overall watershed or subwatershed master plan developed for water quality or water quantity protection.

**“Detailed plan”** means a plan developed by a Licensed Professional in the State of Delaware which does not meet standard plan criteria.

**“Drainage area”** means that area contributing runoff to a single point measured in a horizontal plane, which is enclosed by a ridge line.

**“Easement”** means a grant or reservation by the Owner of land for the use of land by others for a specific purpose or purposes, and which must be included in the conveyance of land affected by the easement.

**“Effective imperviousness”**, for the purposes of these Regulations, means the equivalent percentage of a site’s impervious area that directly contributes stormwater runoff during the Resource Protection Event after all runoff reduction practices have been implemented.

**“Erosion and sediment control”** means the control of solid material, both mineral and organic, during a land disturbing activity, to prevent its transport out of the disturbed area by means of wind, water, gravity, or ice.

**“Final stabilization”** means that:

(1) All soil disturbing activities at the site have been completed and either of the two following criteria are met:

(a) A uniform (e.g. evenly distributed, without large bare areas) perennial vegetative cover with a density of 70% of the native background vegetative cover for the area has been established on all unpaved areas and areas not covered by permanent structures, or

(b) Equivalent permanent stabilization measures (such as the use of riprap, gabions, or geotextiles) have been employed.

(2) When background native vegetation will cover less than 100% of the ground (e.g., arid areas, beaches), the 70% coverage criteria is adjusted as follows: if the native vegetation covers 50% of the ground,

70% of 50% (0.70 X 0.50 = 0.35) would require 35% total coverage for final stabilization. On a beach with no natural vegetation, no stabilization is required.

(3) For individual lots in residential construction, final stabilization means that either:

(a) The homebuilder has completed final stabilization as specified above, or

(b) The homebuilder has established temporary stabilization including perimeter controls for an individual lot prior to occupation of the home by the homeowner and informing the homeowner of the need for, and benefits of, final stabilization.

(4) For construction projects on land used for agriculture purposes (e.g., pipelines across crop or range land, staging areas for highway construction, etc.) final stabilization may be accomplished by returning the disturbed land to its preconstruction agriculture use. Areas disturbed that were not previously used for agricultural activities, such as buffer strips immediately adjacent to a "water of the United States" and areas which are not being returned to their preconstruction agricultural use must meet the final stabilization criteria (1) or (2) above.

"Financial guarantee" means a bond, security, letter of credit, etc. provided by the Owner to serve as a payment source should the Owner fail to meet the obligations and requirements of the approved Sediment and Stormwater Management Plan.

"Flooding Event" means the runoff event produced by a storm having an annual probability of occurrence of 1.0%.

"Flooding Event Volume (Fv)" means the volume of runoff generated by the Flooding Event that is not otherwise reduced for the Resource Protection Event and the Conveyance Event.

"Impervious surface" means a surface which either prevents or retards the entry of water into the soil.

"Infiltration" means the passage or movement of water into the soil profile.

"Land disturbing activity" means a land change or construction activity for residential, commercial, industrial, and institutional land development which may result in soil erosion from water or wind, or the movement of sediments or pollutants into state waters or onto lands in the State; or which may result in accelerated stormwater runoff, including, but not limited to, clearing, grading, excavating, transporting and filling of land.

"Licensed Professional in the State of Delaware" means a design professional licensed under 24 Del.C. Ch. 2, 24 Del.C. Ch. 27, or 24 Del.C. Ch. 28.

"Maintenance" means the work of keeping stormwater management systems including access routes and appurtenances (grade surfaces, walls, drains, dams and structures, vegetation and other protective devices) in a safe and functioning condition as the system was designed. Routine or minor maintenance includes grass mowing and trimming, debris removal, minor sediment removal, filling eroded areas and animal burrows, and removal of trees and shrubs on embankments. Non-routine or major maintenance includes structural repair, major sediment removal and major erosion repair, and invasive aquatic vegetation removal.

"Maximum Extent Practicable" means, for the purpose of these Regulations, using stormwater management measures, techniques and methods that are available and capable of being implemented while taking into consideration cost, available technology, and project site constraints.

"Notice of Completion" means a document issued by the Department or Delegated Agency at the end of project construction when all items and conditions of the approved Sediment and Stormwater Management Plan have been satisfied, post construction verification documents demonstrate that the stormwater management systems have been constructed in accordance with the approved Sediment and Stormwater Management Plan, and final stabilization of disturbed areas on the site has been achieved.

"Offset" means an alternate to strict adherence to the regulations including, but not limited to trading, banking, fee-in-lieu, or other similar program that serves as compensation when the requirements of these regulations cannot be reasonably met on an individual project basis.

"Operation and Maintenance Plan" means the plan which identifies required maintenance for stormwater management systems.

"Owner" means a person who has a legal interest in lands of this State, or who has an equitable interest in lands of this State, except when a person holds an interest in those lands as a security interest, unless through foreclosure or other action the holder has taken possession of those lands, and who undertakes, or for whose benefit, activities subject to these regulations are commenced or carried out on those lands, or the person responsible for maintenance of stormwater management systems constructed to comply with these regulations on those lands.

"Performance-based approach" means a stormwater quantity management technique that utilizes an analytical process to determine compliance.

**“Person”** means a State or federal agency, individual, partnership, firm, association, joint venture, public or private corporation, trust, estate, commission, board, public or private institution, utility, cooperative, municipality or other political subdivision of this State, an interstate body or any other legal entity.

**“Permanent stabilization”** means the establishment of perennial vegetation by application of soil amendments, seed, and mulch in accordance with methods accepted by the Department on disturbed areas that have reached final grade in order to stabilize the soil, prevent erosion, and reduce sediment and runoff to downstream or offsite areas.

**“Post construction verification documents”** means a set of surveyed plans reflecting the as-built condition of stormwater management measures and may also include supporting computations and specifications as required by the Department or the Delegated Agency.

**“Redevelopment”**, including brownfield development, means a construction, alteration or improvement, including but not limited to the demolition or building of structures, filling, grading, paving, or excavating, where existing land use is residential, commercial, industrial, or institutional. Ordinary maintenance activities, remodeling of existing buildings, resurfacing of paved areas, and exterior changes or improvements are typically not considered redevelopment activities for the purposes of these regulations.

**“Resource Protection Event”** means the runoff event produced by a storm having an annual probability of occurrence of 99 %.

**“Resource Protection Event Volume (RPv)”** means the annualized volume of runoff generated by the Resource Protection Event.

**“Responsible personnel”** means a foreman or superintendent who is in charge of on-site clearing and land disturbing activities for sediment and stormwater control associated with a construction project.

**“Runoff reduction practices”** means stormwater best management practices that reduce total runoff volume from a developed site through canopy interception, surface recharge, evaporation, rainfall harvesting, engineered infiltration, or evapotranspiration and may include practices that delay the delivery of stormwater to a surface discharge.

**“Sediment”** means soils or other surficial materials transported or deposited by the action of wind, water, ice or gravity as a product of erosion.

**“Sediment and Stormwater Management Plan”** means a plan for the control of soil erosion, sedimentation, stormwater quantity, and water quality impacts resulting from a land disturbing activity, through both the construction and post construction phases of development.

**“Standard plan”** means a set of pre-defined standards or specifications for minor land disturbing activities that may preclude the need for the preparation of a detailed plan under specific conditions.

**“Standards-based approach”** means a stormwater quantity management technique that utilizes a pre-determined discharge rate to determine compliance.

**“State waters”** means any and all waters, public or private, on the surface of the earth which are contained within, flow through or border upon the State or any portion thereof.

**“Stormwater”** means the runoff of water from the surface of the land resulting from precipitation, or snow or ice melt.

**“Stormwater management”** means:

- (a) For water quantity control, a system of vegetative, structural, and other measures that controls the volume and rate of stormwater runoff which may be caused by land disturbing activities upon the land; and
- (b) For water quality control, a system of vegetative, structural, and other measures that controls adverse effects on water quality that may be caused by land disturbing activities upon the land.

**“Stormwater management system”** means vegetative, structural, and other facilities or measures, singularly or in combination, that provide stormwater management.

**“Stormwater utility”** means an administrative organization that has been established for the purposes of funding sediment control, stormwater management or flood control planning, design, construction, maintenance, and overall resource needs by authorized and imposed charges.

**“Temporary stabilization”** means planting quick-growing vegetation and applying anchored straw mulch or other means to stabilize the soil and prevent erosion of a disturbed area until permanent vegetation or other stabilization measures can be established.

**“Tidal waters”** means any water that alternately rises and falls in a predictable and measurable rhythm or cycle due to the gravitational attraction of the moon and sun and is under the regulatory authority of 7 Del.C. Ch. 72.

**“Transfer”** means to convey responsibility for maintenance of a stormwater management system to a new Owner.

“Variance” means a permitted deviation from an established rule or regulation, or plan, or standard or procedure.

“Water quality” means those characteristics of stormwater runoff from a land disturbing activity that relate to the chemical, physical, biological, or radiological integrity of water.

“Water quantity” means those characteristics of stormwater runoff that relate to the rate, volume and duration of flow to downstream areas resulting from land disturbing activities.

“Watershed” means the drainage area contributing stormwater runoff to a single point.

“Watershed plan” means a comprehensive study of the activities and sources that contribute to water quality or water quantity problems and identifies the location of those problem areas within a specific watershed boundary. It also serves as a framework for how, where and what stormwater management tools will be applied to address those water quality or water quantity problems.

### **3.0 Plan Approval Procedures and Requirements**

3.1 All projects requiring approval of a detailed Sediment and Stormwater Management Plan are subject to a three-step approval process. Step 1 of the plan approval process is scheduling and conducting the project application meeting. Step 2 of the plan approval process is submission of the preliminary Sediment and Stormwater Management Plan. Step 3 of the plan approval process is submission of the Sediment and Stormwater Management Plan.

3.1.1 Authorization from the Department or Delegated Agency is required to proceed from the current step to the subsequent step in the plan approval process.

3.1.2 If significant changes, as determined by the Department or Delegated Agency, are proposed on the subsequent submittal from the submittal that received authorization to proceed, the Owner may be required to repeat the previous step in the plan approval process.

#### **3.2 Project Application Meeting**

3.2.1 All Owners are required to hold a project application meeting with the Department or Delegated Agency, unless the requirement for a project application meeting is waived in writing by the Department or Delegated Agency as determined on a case-by-case basis.

3.2.2 Before scheduling the project application meeting, the Owner shall submit a Stormwater Assessment Study to the Department or Delegated Agency.

3.2.3 At the project application meeting the Stormwater Assessment Study will be reviewed as well as potential approaches for stormwater management and opportunities to reduce runoff rates, volumes, and pollutant loads.

3.2.4 A document listing the topics of discussion and items agreed upon will be developed during the meeting and concurred by all attendees.

3.2.5 A Stormwater Assessment Report will be completed by the Department or Delegated Agency based on the Stormwater Assessment Study and project application meeting discussion. The Stormwater Assessment Report will be submitted to the local land use approval agency.

#### **3.3 Preliminary Sediment and Stormwater Management Plan**

3.3.1 The preliminary Sediment and Stormwater Management Plan submittal shall include preliminary plans for the site, as well as the schematic erosion and sediment control plan, with supporting hydrologic and hydraulic calculations necessary for the Department or Delegated Agency to determine compliance with these regulations.

3.3.2 If significant changes are proposed on the preliminary Sediment and Stormwater Management Plan from the plan that was discussed at the project application meeting, such as a change in land use or changes that result in a different rating on the Stormwater Assessment Report, the Owner may be required to repeat the project application meeting step of the process.

#### **3.4 Sediment and Stormwater Management Plan**

3.4.1 The Sediment and Stormwater Management Plan submittal shall consist of the following elements: Construction Site Stormwater Management Plan, Post Construction Stormwater Management Plan, final hydrologic and hydraulic computations, Operation and Maintenance Plan, and a copy of the preliminary Record Plan as required by the local land use approval agency.

3.4.2 If significant changes are proposed on the Sediment and Stormwater Management Plan from the preliminary Sediment and Stormwater Management Plan, such as a change in the size or location of proposed BMPs, the Owner may be required to repeat the preliminary Sediment and Stormwater Plan step of the process.

3.4.3 Failure by the Owner to demonstrate that the Sediment and Stormwater Management Plan meets the requirements of these regulations, as determined by the Department or Delegated Agency, shall be reason to deny approval of the Sediment and Stormwater Management Plan.

### 3.5 Review Procedures for Plan Submittals

3.5.1 The Department or Delegated Agency shall have 30 calendar days from receipt of either the preliminary Sediment and Stormwater Management Plan or final Sediment and Stormwater Management Plan to complete the review and have either the approval or review comments transmitted to the Owner, unless the 30-calendar day period cannot be met, in which case the Department or Delegated Agency shall notify the Owner in writing of the reasons for delay, and an expected time period not to exceed an additional 30 calendar days, for when that review will be completed.

3.5.2 The Department or Delegated Agency shall have the right to reject an incomplete application at any time during the 30-calendar day review period. If an application is rejected for incompleteness, the Owner will be informed in writing of the information necessary to complete the application.

3.5.3 In cases where modifications are required to approve the plan, the Department or Delegated Agency shall have an additional 30 calendar days to review the revised plan from the initial and any subsequent resubmission dates.

3.5.4 The sediment and stormwater management plan shall not be considered approved without the inclusion of an original approval stamp on the plans with signature and date by the plan approval agency. If the plan is approved, a minimum of one (1) copy bearing the signed approval stamp shall be returned to the Owner or Owner's agent. If the plan is not approved, the Owner shall be notified in writing of the reasons.

3.5.5 No changes shall be made to an approved plan without review and written approval by the Department or Delegated Agency. The Department or Delegated Agency may request additional data with a plan amendment as may be necessary for a complete review of the plan and to ensure that changes to the plan will comply with the requirements of these regulations.

3.5.6 Administratively complete sediment and stormwater management plans, as determined by Department policy, that have been submitted for review and ultimate approval before the effective date of these regulations shall be subject to the regulations in effect at the time that the plan was first submitted to the Department or Delegated Agency. Unless administratively extended by the Department, a plan undergoing the review process on the effective date of these regulations but is not approved within one year of the effective date of these regulations shall be subject to these regulations.

### 3.6 Expiration of Plan Approval

3.6.1 Approved plans remain valid for 3 years from the date of an approval, unless specifically extended by the Department or Delegated Agency. The basis for extension may include, but is not limited to, the following items:

3.6.1.1 Failure to initiate the approved project for reasons acceptable to the Department or Delegated Agency such as funding or other agency permit delays; or

3.6.1.2 Time duration for a type of activity that typically exceeds three years.

3.6.2 The Department or Delegated Agency may extend plan approval following a written request for extension providing justification for the extension request. Plan approval extension may be granted no more than 90 days before plan expiration, and will be granted for a maximum extension of an additional 3 years. In no case shall the plan extension supersede the sunset provisions of the county or local government.

3.6.3 Plan extension requests for projects that have not commenced construction shall be granted for a maximum of one additional 3-year period.

3.6.4 Plan extension requests for projects that have commenced and have been actively under construction within the latest approval or extension period will not be limited in the number of extensions that may be approved.

### 3.7 Standard Plans

3.7.1 The Department may develop criteria for standard plans when a detailed plan is deemed not necessary. Project types that may qualify for a standard plan include, but are not limited to, individual parcel construction or improvements, tax ditch maintenance, minor linear disturbances, stormwater facility maintenance, agricultural structure construction, or other activities approved by the Department.

3.7.2 All standard plans shall contain standard conditions for construction site stormwater management and may contain standard conditions for post construction stormwater management.

3.7.3 The inclusion of an activity into the standard plan classification does not exclude that activity from the requirements of 7 Del.C. Ch. 40. Rather, the standard plan precludes that activity from the necessity of a detailed plan review for a qualifying project.

3.7.4 Failure to implement control practices pursuant to conditions included in the standard plan may necessitate appropriate enforcement action as provided in 7 Del.C. Ch. 40 and these regulations.

3.7.5 A detailed plan may be required for a site that would otherwise meet standard plan criteria as deemed appropriate by the Department or Delegated Agency on a case-by-case basis.

### 3.8 Plan Certifications

3.8.1 All detailed plans submitted for review shall be prepared, signed, dated, and sealed by a Licensed Professional in the State of Delaware. It is the obligation of the Licensed Professional in the State of Delaware to ensure that the design of construction site stormwater management BMPs and post construction stormwater management systems meet the requirements in these regulations.

3.8.2 All Sediment and Stormwater Management Plans submitted for approval shall contain certification by the Owner stating that clearing, grading, construction, and development will be accomplished pursuant to the plan.

3.8.3 All Sediment and Stormwater Management Plans for projects having a land disturbance greater than or equal to one acre shall contain a certification by the Owner stating that responsible personnel involved in the land disturbance will have attended and successfully completed the Departmental-sponsored Contractor Training Program before initiation of the project.

3.8.4 All Sediment and Stormwater Management Plans shall contain certification by the Owner granting the right of either the Department or Delegated Agency or both to conduct on-site construction reviews.

3.9 Approvals issued in accordance with these regulations do not relieve the Owner of responsibility for obtaining other necessary permits or approvals from other federal, state, or local agencies. If the requirements of applicable federal, state, or local agencies vary, the most environmentally protective shall apply.

3.10 Before project completion the Owner shall submit a final post construction stormwater management Operation and Maintenance Plan for the entire stormwater management system. Operation and Maintenance Plans remain valid for the life of the stormwater management system.

### 3.11 Post Construction Verification Documents

3.11.1 Post construction verification documents shall be submitted to the Department or Delegated Agency within 60 calendar days of completion for stormwater management systems. The post construction verification documents shall compare the designed and constructed elements of the stormwater management system, meet the criteria for post construction verification documents in the Department or Delegated Agency checklist, and bear the seal of a Licensed Professional in the State of Delaware. A final construction review and approval by the Department or Delegated Agency is required before a financial guarantee shall be released, and before a Notice of Completion may be issued.

3.11.2 Only those post construction verification documents that comply with the Department or Delegated Agency policies, procedures and guidelines shall be considered acceptable.

## **4.0 Performance Criteria for Construction Site Stormwater Management**

4.1 All construction site stormwater management BMPs shall conform to the design criteria and meet the minimum standards and specifications contained in the Delaware Erosion and Sediment Control Handbook, and approved supplements. Revisions or updates to any of these documents shall be adopted in compliance with public notice requirements in accordance with 7 Del.C. §6004.

4.2 A sequence of construction shall be provided on plans describing the relationship between the implementation and maintenance of erosion and sediment controls, including permanent and temporary stabilization and the various stages or phases of earth disturbance and construction.

4.3 Best available technology (BAT) shall be employed to manage turbid discharges in accordance with requirements of 7 Del.C. Ch 60, *Regulations Governing the Control of Water Pollution*, Section 9.1.02, known as Special Conditions for Stormwater Discharges Associated with Construction Activities, and Department policies, procedures, and guidance.

### 4.4 Limits on Land Disturbance

4.4.1 Use of standard details from the Delaware Erosion and Sediment Control Handbook for design of construction site stormwater management BMPs is limited to sites where no more than 20 acres draining to a common discharge point will be disturbed at one time.

4.4.2 Construction site stormwater management BMPs intended to manage areas greater than 20 acres shall have supporting design computations, including but not limited to storage, conveyance, stability, and treatment capabilities.

- 4.4.3 In no case shall the area of disturbance draining to a common discharge point exceed 20 acres. Grading of subsequent sections within that drainage area shall not proceed unless temporary or permanent stabilization has been accomplished such that the 20 acre limit of disturbance is maintained.
- 4.4.4 All plans shall include a limit of disturbance line (L.O.D.) establishing the maximum necessary extent of land disturbance required to implement and accomplish the permitted site construction for land disturbing activities subject to these Regulations.

#### 4.5 Stabilization

- 4.5.1 Following soil disturbance or re-disturbance, Permanent or Temporary Stabilization shall be completed for perimeter sediment controls, topsoil stockpiles, and all other disturbed or graded areas on the project site within 14 calendar days unless more restrictive Federal requirements apply.
- 4.5.2 Documentation of soil testing and materials used for temporary or permanent stabilization including but not limited to soil test results, seed tags, soil amendment tags, etc. shall be provided to the Department or Delegated Agency to verify that the permanent or temporary stabilization has been completed in accordance with the approved plan and the standards and specifications of the Delaware Erosion and Sediment Control Handbook.
- 4.5.3 The Department or Delegated Agency shall have the discretion to require additional soil testing and reapplication of permanent or temporary stabilization in accordance with the specification provided in the Delaware Erosion and Sediment Control Handbook.
- 4.5.4 Release of either a financial guarantee or issuance of Notice of Completion or both shall not occur until final stabilization of exposed areas is achieved.

### **5.0 Performance Criteria for Post Construction Stormwater Management**

- 5.1 All items under this section, including design and construction of stormwater management systems, shall conform to the design criteria and meet the minimum standards and specifications established by Department policy, procedures and guidelines as set forth in accompanying technical documents. Revisions or updates to any of these documents shall be adopted in compliance with public notice requirements in accordance with 7 Del.C. §6004.
  - 5.1.1 Stormwater management designs shall reduce runoff, mimic natural watershed hydrologic processes, and cause no adverse impact to property. This shall be accomplished by treating runoff at the source, disconnecting impervious surfaces, preserving or enhancing natural flow paths and vegetative cover, conserving or enhancing natural open spaces and riparian areas, and other measures that simulate natural watershed hydrologic processes.
  - 5.1.2 Residential, commercial, institutional or industrial developments shall apply these stormwater management criteria to land development as a whole. Smaller sites, such as individual residential lots in new subdivisions that are part of a larger, common plan of development or sale shall be subject to these requirements as part of that larger plan.
  - 5.1.3 No portion of a stormwater system that is owned and maintained by a joint ownership such as a homeowner's association or maintenance corporation in a residential development shall be located on private property, except for those areas designated as common areas, community open space, community-owned property, jointly owned property, or within a recorded easement dedicated to public use. A stormwater system owned by a single Owner, as in the case of a commercial, institutional or industrial development, may be located on that Owner's private property.
  - 5.1.4 If runoff from a land development will flow to a permitted or non-permitted municipal separate storm sewer system (MS4) or other drainage infrastructure, the land development applicant shall notify the system's owner of the intent to discharge into the system before plan approval. The Department, Delegated Agency, or system's owner may require the land development applicant to demonstrate that the system has adequate conveyance.
  - 5.1.5 All applications that propose to use infiltration or natural recharge shall include a soils investigation to determine the appropriate design criteria.
  - 5.1.6 Water quality and water quantity management shall be provided in accordance with the requirements set forth in this section unless the proposed project is limited to reconstruction of existing paved areas, re-grading and replacement of existing pervious areas, or rebuilding or repairing of structures damaged by fire, flood, wind, or other natural disaster and where the disturbed area will return to the original hydrologic condition and land cover at the conclusion of the project.
- 5.2 Resource Protection Event Criteria

- 5.2.1 The Resource Protection Event criteria provide runoff management measures to reduce the volume of stormwater runoff generated on a site, recharge groundwater, minimize impacts to downstream channels from runoff leaving the site, and reduce pollutant loads discharged into receiving waters.
- 5.2.2 The Resource Protection Event Volume (RPv) is the post-development annualized volume of runoff produced by the storm having a ninety-nine percent (99%) probability of occurrence, or the 1-year, 24-hour rainfall event.
- 5.2.3 Compliance with this section shall be accomplished to the maximum extent practicable through the following provisions:
- 5.2.3.1 Runoff from disturbed areas that were wooded or meadow in the pre-developed condition shall be reduced using runoff reduction practices to an equivalent wooded condition.
- 5.2.3.2 All remaining disturbed areas shall employ runoff reduction practices to achieve an equivalent 0% effective imperviousness. For those cases in which the minimum runoff reduction requirements are not met:
- 5.2.3.2.1 The allowable discharge for any remaining runoff shall not exceed the equivalent 24-hr detention time of the RPv, and
- 5.2.3.2.2 An offset shall be provided for the portion of the RPv that does not meet the minimum runoff reduction requirements.
- 5.2.3.3 Additional water quality treatment BMPs may be provided if the runoff reduction requirements of this section are not sufficient to meet Total Maximum Daily Load (TMDL) requirements for the receiving water. Pollutant reductions achieved through the use of these treatment BMPs may be used to partially reduce a runoff reduction offset requirement provided in accordance with Section 5.2.3.2.2 above.
- 5.2.4 Projects that qualify for and meet standard plan criteria developed by the Department shall be considered in compliance with the Resource Protection Event criteria.

### 5.3 Conveyance Event Criteria

- 5.3.1 The Conveyance Event criteria provide runoff management measures to minimize impacts to downstream properties, channels, and structures by optimizing watershed conveyance and hydrograph timing.
- 5.3.2 The Conveyance Event Volume (Cv) is the volume of runoff produced by the post-development storm having a ten percent (10%) annual probability of occurrence, or the 10-year, 24-hour rainfall event, less any volume reduction achieved for the RPv in accordance with Section 5.2.
- 5.3.3 Compliance with this section shall be accomplished through the following provisions:
- 5.3.3.1 The Cv shall be reduced to the maximum extent practicable using runoff reduction practices. For any portion of the Cv that is not reduced, quantity management shall be provided using either a standards-based or performance-based approach such that there is no adverse impact; or
- 5.3.3.2 Provisions will be made or exist for a non-erosive conveyance system to tidal waters by either a closed drainage system or by open channel flow that has adequate conveyance for the Cv; or
- 5.3.3.3 Demonstration that the location of a project within a watershed would aggravate flooding or channel erosion by the imposition of peak control requirements, as evidenced by a downstream analysis approved by the Department or Delegated Agency; or
- 5.3.3.4 The proposed project will generate only a de minimis discharge and will have no adverse impact on the receiving wetland, watercourse or downstream property as determined on a case-by-case basis.
- 5.3.4 Projects that qualify for and meet standard plan criteria developed by the Department shall be considered in compliance with the Conveyance Event criteria.

### 5.4 Flooding Event Criteria

- 5.4.1 The Flooding Event Criteria provide runoff management measures to reduce downstream flooding by optimizing watershed storage and hydrograph timing.
- 5.4.2 The Flooding Event Volume (Fv) is the volume of runoff produced by the post-development storm having a one percent (1%) probability of occurrence, or the 100-year, 24-hour rainfall event less any volume reduction achieved for the RPv and Cv in accordance with Sections 5.2 and 5.3.
- 5.4.3 Compliance with this section shall be accomplished through the following provisions:
- 5.4.3.1 The Fv shall be reduced to the maximum extent practicable using runoff reduction practices. For any portion of the Fv that is not reduced, quantity management shall be provided using either a standards-based or performance-based approach such that there is no adverse impact; or
- 5.4.3.2 Provisions will be made or exist for a non-erosive conveyance system to tidal waters by either a closed drainage system or by open channel flow that has adequate conveyance for the Fv; or

5.4.3.3 Demonstration that the location of a project within a watershed would aggravate downstream flooding or channel erosion by the imposition of peak control requirements, as evidenced by a downstream analysis approved by the Department or Delegated Agency; or

5.4.3.4 The proposed project will generate only a de minimis discharge and will have no adverse impact on the receiving wetland, watercourse, or downstream property as determined on a case-by-case basis.

5.4.4 Projects that qualify for and meet standard plan criteria developed by the Department shall be considered in compliance with the Flooding Event criteria.

## 5.5 Alternative Criteria

5.5.1 Land development that discharges to State Waters included in a Designated Watershed, or other watershed management plan approved in accordance with these Regulations, shall meet the alternative criteria identified in the approved watershed plan.

5.5.2 The Department or Delegated Agency, at its discretion, may require alternative stormwater treatment practices or criteria if a receiving waterbody has been identified as impaired, or designated with a specific pollutant reduction target necessary to meet State of Delaware water quality regulations.

5.5.3 The Department or Delegated Agency, at its discretion may require alternative stormwater treatment practices designed to reduce pollutant loading from a specific source.

## 5.6 Redevelopment Criteria

5.6.1 The Department recognizes the benefits of redevelopment. The requirements under this section are intended to encourage redevelopment while establishing compliance criteria that meet the overall goals and intent of these regulations.

5.6.2 In the case of Brownfield development, a remediation plan approved by the Department may meet the stormwater management goals and the intent of these regulations with prior consent and subsequent approval by the Department.

5.6.3 Compliance with the Resource Protection Event as defined in 5.2.2 shall be accomplished to the maximum extent practicable for redevelopment projects through the following provisions:

5.6.3.1 Runoff from redeveloped areas within the project limit of disturbance that were wooded or meadow in the existing condition shall be reduced to an equivalent wooded condition using runoff reduction practices.

5.6.3.2 All remaining redeveloped areas within the project limit of disturbance shall employ runoff reduction practices to achieve a 50% reduction in the effective imperviousness based on the existing condition. For those cases in which the minimum runoff reduction requirements are not met:

5.6.3.2.1 The allowable discharge for any remaining runoff shall not exceed the equivalent 24-hr detention time of the RPv, and

5.6.3.2.2 An offset shall be provided for any portion of the RPv that does not meet the minimum runoff reduction requirements.

5.6.3.3 Additional water quality treatment BMPs may be provided if the runoff reduction requirements of this section are not sufficient to meet Total Maximum Daily Load (TMDL) requirements for the receiving water. Pollutant reductions achieved through the use of these treatment BMPs may be used to partially reduce a runoff reduction offset requirement provided in accordance with Section 5.6.3.2.2 above.

5.6.4 Any redevelopment project that increases the rate, volume or duration of flow to a new or existing point of discharge during the Conveyance Event shall comply with the requirements of Section 5.3.

5.6.5 Any redevelopment project that increases the rate, volume or duration of flow to a new or existing point of discharge during the Flooding Event shall comply with the requirements of Section 5.4.

## **6.0 Construction Review of Sediment and Stormwater Management Plan**

### 6.1 Owner Responsibilities

6.1.1 The Owner shall ensure that all elements of the approved Sediment and Stormwater Management Plan are implemented and construction site stormwater management BMPs and post construction stormwater management systems are installed and maintained in accordance with that plan. All construction sites shall comply with these regulations.

6.1.2 The Owner shall install and maintain construction site stormwater management BMPs in accordance with the standards and specifications contained in the Delaware Erosion and Sediment Control Handbook, and approved supplements.

- 6.1.3 The Owner shall comply with the requirements contained in Chapter 60 of Title 7 of the Delaware Code Section 9.1.02 of Delaware's Regulations Governing the Control of Water Pollution, 7 DE Admin. Code 7201.
- 6.1.3.1 The Owner or Owner's representative shall conduct weekly construction reviews of the construction site stormwater management BMPs and post construction stormwater management systems.
- 6.1.3.2 The Owner or Owner's representative shall conduct construction reviews of the construction site stormwater management BMPs and post construction stormwater management systems following rainfall events producing runoff.
- 6.1.3.3 The Owner or Owner's representative shall maintain written records of all construction reviews at the construction site.
- 6.1.3.4 The Owner or Owner's representative shall maintain the approved Sediment and Stormwater Management Plan at the construction site.
- 6.1.4 The Department or Delegated Agency shall have the authority to require revisions to the approved Sediment and Stormwater Management Plan. The Owner is responsible for implementation of plan revisions when deficiencies are noted on the site by the Department or Delegated Agency construction reviewer.
- 6.1.5 The Owner shall certify to the Department or Delegated Agency that responsible personnel involved in the construction project have successfully completed the Contractor Training Program before initiation of a land disturbing activity. Responsible personnel shall implement the Sediment and Stormwater Management Plan fully through daily oversight of the construction site and guidance of construction personnel while a land disturbing activity is taking place.
- 6.1.6 For projects developing 20 acres or greater, and including those projects that require discharge monitoring for the maximum daily discharge limitation under Federal requirements, the Owner shall acquire the services of a Certified Construction Reviewer to perform weekly construction reviews of the approved Sediment and Stormwater Management Plan elements as well as construction reviews of installation of stormwater management systems. Any project, regardless of its size, may be required by the Department or Delegated Agency, to have a Certified Construction Reviewer on a case-by-case basis. Sediment and Stormwater Management Plans approved by the Department shall have a Certified Construction Reviewer. The Department or Delegated Agency may, at its discretion and following a written request, modify Certified Construction Reviewer reporting frequency for a particular site if site conditions warrant.
- 6.1.7 All costs and fees associated with the use of Certified Construction Reviewers shall be the responsibility of the Owner.
- 6.1.8 The Certified Construction Reviewer shall be responsible for reviewing construction activities and reporting on the adequacy of construction in accordance with the approved Sediment and Stormwater Management Plan, in addition to the following items:
- 6.1.8.1 Provision of a construction review on at least a weekly basis until released from review responsibility by the Department or Delegated Agency;
- 6.1.8.2 Provision of a construction review of stormwater management system construction at a frequency as needed to accurately complete the stormwater BMP construction checklist.
- 6.1.8.3 Inform the Department or Delegated Agency, the Owner, and the contractor, by a written construction review report of site conditions including any inconsistencies with or inadequacies of the approved plan within five calendar days of the construction review.
- 6.1.8.4 Referral of the project through the Delegated Agency to the Department for appropriate enforcement action if the Owner fails to address the items contained in the written construction review report. Verbal notice shall be made to the Department within two calendar days and written notice shall be provided to the Department within five calendar days.
- 6.1.9 The Owner shall notify the Department or Delegated Agency any time a new Certified Construction Reviewer begins providing construction review for the site.
- 6.1.10 Upon written notice by the Department, Delegated Agency, or Certified Construction Reviewer, any portion of the work which does not comply with the approved Sediment and Stormwater Management Plan or these regulations shall be corrected by the Owner within the time period specified in the written notice.
- 6.2 Contractor Training Program
- 6.2.1 A certificate of attendance shall be issued to Responsible Personnel who have attended and successfully completed the Contractor Training Program sponsored or approved by the Department.
- 6.2.2 Training shall be required of a foreperson or superintendent who is in charge of on-site clearing and land disturbing activities for construction projects subject to the requirements of these regulations.

- 6.2.3 The Contractor Training Program certification shall be valid until the Department notifies the individual or announces in local newspapers that additional training is required due to a change in course content.
- 6.2.4 The Department shall provide public notification of the date and location of training programs for attendance by responsible personnel and other interested persons.
- 6.2.5 Enrollment of existing and future responsible personnel is the responsibility of individuals or their employers.
- 6.3 Certified Construction Reviewer Requirements
  - 6.3.1 The Certified Construction Reviewer shall function under the direction of a registered professional engineer licensed to practice engineering in the State of Delaware.
  - 6.3.2 Certified Construction Reviewers shall attend and successfully complete the Departmental sponsored or approved Certified Construction Reviewer course. The Certified Construction Reviewer shall be responsible for reviewing construction activities and reporting on the adequacy of construction in accordance with the approved Sediment and Stormwater Management Plan, these regulations, and training received in the Certified Construction Reviewer training course.
  - 6.3.3 Certification as a CCR shall be valid for five years. Recertification may extend certification for an additional five years.
  - 6.3.4 A Certified Construction Reviewer who is not performing the duties prescribed by Section 6.1.8 of these regulations may be referred by the local Delegated Agency to the Department for action by providing written notification to the Department and supporting documentation.
  - 6.3.5 In a situation where a Certified Construction Reviewer's certification is being suspended or revoked, an opportunity for hearing before the Secretary or his designee shall be provided. During a suspension, the Certified Construction Reviewer shall not be allowed to provide construction reviews in accordance with these regulations on any construction sites within the state.
- 6.4 Department or Delegated Agency Construction Reviews
  - 6.4.1 The Department or Delegated Agency may, at a reasonable time, visit a site subject to these regulations to determine compliance with these regulations, including implementation of the Sediment and Stormwater Management Plan.
  - 6.4.2 The Department or Delegated Agency shall conduct regular reviews of the construction site at a frequency to ensure that all elements of the approved Sediment and Stormwater Management Plan are implemented and all construction site stormwater management BMPs and post construction stormwater management systems are installed and maintained in accordance with that plan.
  - 6.4.3 All Department or Delegated Agency construction reviews shall be documented in writing with a copy provided to the Owner. The review report shall document site conditions relevant to the Sediment and Stormwater Management Plan, identify deficiencies that warrant correction, and provide a time period for the Owner to take corrective action.
  - 6.4.4 When the Department or Delegated Agency determines a deficiency in the approved Sediment and Stormwater Management Plan, a revision to the approved plans may be required. A change to the approved Sediment and Stormwater Management Plan shall be approved by the Department or Delegated Agency before construction.
- 6.5 Required Construction Reviews and Notification Steps
  - 6.5.1 The Owner shall notify the Department or Delegated Agency in writing at least five calendar days before the initiation of construction. The notification shall include the contact information for the responsible person. The notification shall verify that the Sediment and Stormwater Management Plan for the project has been approved and that permit coverage for Storm Water Discharges Associated with Construction Activity has been gained through submittal of a Notice of Intent to the Department. If there is a Certified Construction Reviewer requirement for the site, the application for Certified Construction Reviewer shall be included with the notification.
  - 6.5.2 A pre-construction meeting shall be required. The pre-construction meeting shall be held on site, unless another location is approved by the Department or Delegated Agency on a case-by-case basis.
  - 6.5.3 The Department or Delegated Agency shall determine when Standard Plan applications require a pre-construction meeting and construction reviews based on the project type and land disturbance on a case-by-case basis.
  - 6.5.4 Upon completion of installation of perimeter controls, the Department or Delegated Agency shall conduct a perimeter control review before commencement of bulk grading or other construction activities on the site.
  - 6.5.5 All stormwater management systems shall be reviewed during construction with enough frequency to document that the system has been constructed in accordance with the approved Sediment and Stormwater Management Plan, the design specifications, and the appropriate stormwater management

system construction checklist. The Owner shall provide adequate notice to the Department or Delegated Agency and Certified Construction Reviewer, if applicable, before initiating construction of stormwater management systems. The Department, Delegated Agency, or Certified Construction Reviewer shall be responsible for conducting and documenting these reviews, as required.

6.5.6 Upon project completion a final construction review shall be conducted by the Department or Delegated Agency to ensure compliance with the approved Sediment and Stormwater Management Plan. The Department or Delegated Agency shall issue a Notice of Completion for a project when all of the following criteria have been met:

6.5.6.1 All items and conditions of the approved Sediment and Stormwater Management Plan have been satisfied.

6.5.6.2 Post construction verification documents demonstrate that the stormwater management systems have been constructed in accordance with the approved Sediment and Stormwater Management Plan and accepted by the approving agency.

6.5.6.3 Operation and Maintenance Plan has been approved by the Department or Delegated Agency.

6.5.6.4 Final stabilization of disturbed areas on the site has been achieved.

6.5.6.5 A copy of the approved Record Plan showing easements or maintenance notes associated with the approved Sediment and Stormwater Management Plan has been submitted to the Department or Delegated Agency.

## **7.0 Post Construction Maintenance of Stormwater Management Systems**

7.1 Stormwater management systems constructed to comply with 7 Del.C. Ch. 40 and these regulations shall be maintained in accordance with the provisions of this section.

7.1.1 Maintenance responsibility lies with the Owner until the time that a legal transfer of ownership has been executed. Prior notice of the transfer shall be provided to the Department or Delegated Agency 30 business days before the transfer occurs.

7.1.2 The stormwater management system shall run with the land and be binding upon the landowner and any successors in interest. Maintenance of these systems shall ensure that the stormwater management system is performing in accordance with the approved engineered design, within the tolerances of the accepted post construction verification documents, and in compliance with these regulations.

7.1.3 The Owner of a stormwater management system established in accordance with these regulations may offer for dedication to a delegated agency, public entity, municipality, stormwater utility, or private entity, a stormwater management system, together with the easements and appurtenances as may be reasonably necessary for the proper functioning of the system.

### **7.2 Owner Responsibilities**

7.2.1 The Owner shall conduct regular maintenance reviews of stormwater management systems to determine that routine maintenance obligations are being met. The frequency of the reviews will be contained in the Operation and Maintenance Plan.

7.2.2 The Owner shall ensure that the stormwater management system is functioning in accordance with the approved engineering design, within the tolerances of the accepted post construction verification documents, and in compliance with these regulations. The Owner will promptly repair and restore stormwater management systems.

7.2.2.1 Such repairs, restoration, or maintenance shall be conducted in accordance with the approved Sediment and Stormwater Management Plan, the Operation and Maintenance Plan, Standard Guidelines for Operation and Maintenance of Stormwater Management Systems, and directions provided by the Department or Delegated Agency.

7.2.2.2 When the Department or Delegated Agency gives direction for maintenance, those maintenance activities shall be conducted by the Owner within the time period established by the Department or Delegated Agency.

7.2.3 Any change made to the stormwater management system shall require the Owner to obtain approval of the Department or Delegated Agency, including updating of the Operation and Maintenance Plan as necessary.

7.2.4 The Owner shall submit a scope of work for non-routine maintenance to the Department or Delegated Agency for approval prior to implementation.

7.2.5 Maintenance responsibilities may be shared through a legal agreement between the Owner and another entity such as a delegated agency, public utility, municipality, stormwater utility, maintenance company, or

other private entity. Responsibility for maintenance shall be joint and several among the parties to the agreement to share those responsibilities.

7.2.6 If the Sediment and Stormwater Management Plan includes structural or nonstructural stormwater management measures located within a tax ditch right-of-way the Owner shall enter into an agreement with the tax ditch organization for maintenance of those stormwater management measures.

### 7.3 Maintenance Reviews

7.3.1 The Department, Delegated Agency, or duly authorized agent shall conduct maintenance reviews of completed stormwater management systems. The Department, Delegated Agency, or duly authorized agent shall have the right of entry and access at reasonable times to perform stormwater management system maintenance reviews.

7.3.2 The maintenance review performed by the Department, Delegated Agency, or duly authorized agent shall document maintenance and repair needs and any discrepancies from the Operation and Maintenance Plan. A copy of the review shall be provided to the Owner.

7.3.3 The Owner of the stormwater management system shall comply with the conditions of the maintenance review within the timeframe specified by the Department or Delegated Agency.

### 7.4 Enforcement of Maintenance Responsibilities

7.4.1 The Department may seek enforcement action against an Owner deemed negligent in fulfilling the requirements of Section 7 of these regulations.

7.4.2 Enforcement will be conducted in accordance with Section 8 of these regulations.

## **8.0 Enforcement and Penalties**

8.1 Any action or failure to act, which violates any of the following: the provisions of this regulation, the requirements of an approved Sediment and Stormwater Management Plan, permit, Notice of Intent, construction review report, notice of violation, or the requirements of a final Operation and Maintenance Plan, may be subject to the provisions of any of the following: 7 **Del.C.** §§4012, 4013, 4015, and 4016; 7 **Del.C.** §§6005, 6013, and 6018.

8.2 The Delegated Agency may, in addition to local enforcement options, refer a site violation to the Department for additional enforcement action. Referral of a site violation to the Department may initiate a Departmental construction review of the site to verify site conditions. That construction review may result in the following actions:

8.2.1 Notification through appropriate means to the Owner and the contractor to comply with the approved Sediment and Stormwater Management Plan within a specified time frame; or

8.2.2 Notification of plan inadequacy and the establishment of a date certain for the Owner to submit a revised Sediment and Stormwater Management Plan to the Department or Delegated Agency and to receive its approval with respect thereto. The Department shall notify the Delegated Agency in a timely manner of what enforcement action is taken on the site.

8.3 Failure of the person engaged in the land disturbing activity or the contractor to comply with Departmental requirements may result in the following actions in addition to other penalties as provide in Chapter 40 of Title 7 of the **Delaware Code**.

8.3.1 The Department shall have the power to issue a cease and desist order to a person violating any provision of Chapter 40 of Title 7 of the **Delaware Code** or these Regulations by ordering the person to cease and desist from any site work activity other than those actions necessary to achieve compliance with any administrative order.

8.3.2 The Department may request that the appropriate plan approval agency refrain from issuing any further building or grading permits to the person having outstanding violations until those violations have been remedied.

## **9.0 Delegation of Program Elements**

9.1 The provisions of these regulations may be delegated to the Conservation Districts, counties, municipalities, or State agencies. Initial consideration regarding delegation of program elements shall be given to the Conservation Districts.

9.1.1 Program elements that are delegated shall be implemented according to Chapter 40 of Title 7 of the **Delaware Code** and these Regulations.

9.1.2 Any Delegated Agency may submit documentation to the Department for determination of functional equivalency to the requirements contained in these regulations.

- 9.2 A Conservation District, county, municipality, or State agency requesting or renewing delegation shall submit a written request to the Secretary on or before January 1 of the year immediately preceding the fiscal year for which delegation or renewal of delegation is sought. The request for delegation shall contain sufficient information to determine whether the agency may be considered capable of implementing program elements in accordance with Chapter 40 and these regulations. The Department shall provide guidance to agencies requesting delegation of program elements as to information that shall be submitted with the delegation request.
- 9.3 The Secretary shall grant delegation of program elements to a Conservation District, county, municipality, or State agency seeking delegation that is found capable of implementing program elements in accordance with Chapter 40 and these regulations.
- 9.4 The Secretary shall, in writing, grant or deny delegation on or before April 1 of the year during which delegation is sought. The Secretary shall not deny a request for delegation unless opportunity has been afforded to the appropriate officials from the agency requesting delegation to present arguments. Delegation shall be effective July 1 of that year and extend no more than three years, unless renewed. In the event that the Department does not act on the renewal request by April 1, the Delegated Agency submitting the request would be entitled to continue operating for a subsequent three year time period unless action is taken by the Department to suspend the program.
- 9.5 Delegation of program elements shall be granted for a maximum time period of three years. After three years a new application to the Department must be made. During the period for which delegation has been granted, the Department will evaluate delegation implementation, coordinate review findings with the Delegated Agency, and determine if the new delegation should be granted.
- 9.6 Based on the Department's evaluation of Delegated Agency performance, the Department may determine that re-delegation of program elements may be granted for a time period of less than three years. A delegation period of less than the maximum of three years shall be considered a probationary delegation and specific improvement items shall be provided to the Delegated Agency. If program implementation is not improved during the probationary delegation, delegation may not be renewed beyond the probationary delegation period.
- 9.7 A Delegated Agency may establish alternative requirements which are compatible with or are more stringent than Departmental requirements. These alternative requirements may be established through local ordinance or statutes. Alternative requirements that are not codified in local statute must have approval of the Department following compliance with the public notice of 7 Del.C. §6004.
- 9.8 A Delegated Agency may enter into a cooperative agreement or contract with a third party to assist with program implementation only after Departmental concurrence.

#### **10.0 Criteria for Implementation of a Stormwater Utility**

- 10.1 The implementation of a stormwater utility will necessitate the development of a local utility ordinance prior to its implementation.
- 10.2 The financing of a stormwater utility must be reasonable and equitable so that each user within the stormwater utility jurisdiction, including state agencies, contributes to the financing according to the users' pro rata share of runoff.
- 10.3 The intent of the utility must be clearly defined regarding program components that are to be funded through the utility. Those components may include but are not limited to the following: program administration, planning and engineering, maintenance operations, regulation and enforcement, and capital construction.
- 10.4 The authority for the creation of the stormwater utility and the imposition of charges to finance sediment and stormwater activities is conferred in 7 Del.C. Ch. 40. The implementation of a stormwater utility by means of a local ordinance shall not be deemed a limitation or repeal of any other powers granted by State statute.

**7 DE Reg. 1147 (3/1/04)**

**15 DE Reg. 1119 (02/01/12) (Prop.)**