

# 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

REGISTER NOTICE: SAN #2015-10

#### 5101 Sediment and Stormwater Regulations

**1. TITLE OF THE REGULATIONS:**

5101 Sediment and Stormwater Regulations with reference to Technical Document

**2. BRIEF SYNOPSIS OF THE SUBJECT, SUBSTANCE AND ISSUES:**

A Superior Court decision of October 7, 2015 invalidated the 2013 and 2014 version of the Delaware Sediment and Stormwater Regulations on procedural grounds because the accompanying Technical Document referenced by the regulations was not published in the State Register in accordance with Administrative Procedure Act requirements. This action is being taken to publish the Technical Document in the State Register as a separate document referenced in 5101 Sediment and Stormwater Regulations. Within the Technical Document, the Residential Construction Standard Plan section (3.01.1.1) has been updated.

**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:**

No other regulations are affected by this proposed regulation with reference to Technical Document.

**6. NOTICE OF PUBLIC COMMENT:**

The Department of Natural Resources and Environmental Control (DNREC) Division of Watershed Stewardship will conduct a public hearing on **Regulation No. 5101 Sediment and Stormwater Regulations**, incorporating the Technical Document by reference.

The public hearing for **Regulation No. 5101 Sediment and Stormwater Regulations** will be held Tuesday, January 5, 2016, at 6:00 p.m. in the DNREC Auditorium, Richardson and Robbins Building, 89 Kings Highway, Dover, DE 19901.

The proposed regulation and referenced Technical Document 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).

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 January 5, 2016 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 Z. Webb     November 12, 2015  
(302) 739-9921  
[Elaine.Webb@state.de.us](mailto:Elaine.Webb@state.de.us)

**5101 Sediment and Stormwater 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 On and after January 1, 2014, 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 to comply with previous regulations shall be consistent with the following:

1.3.2.1 Plans approved to comply with previous regulations where construction has not commenced on January 1, 2014 may have the plan approval extended under the requirements of the previous regulations in subsequent three-year approval periods. Any plan approved to comply with previous regulations must commence construction no later than December 31, 2019. A plan approved to comply with previous regulations where construction has not commenced by December 31, 2019 shall expire and 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 to comply with previous 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 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 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, or these Regulations.
    - 1.5.3.2 Owing to special conditions or an unusual situation, a literal interpretation of these Regulations 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 options may 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. The program shall be administered pursuant to these regulations. The Department may also develop and maintain a Technical Document to serve as a guide for the regulated community and Delegated Agencies in complying with Chapter 40 and these regulations.
- 1.14 Technical Document
- 1.14.1 The Technical Document may include policies, procedures, technical specifications and other advisory documents as deemed necessary by the Department to carry out implementation and supervision of the sediment and stormwater program.
- 1.14.2 The Technical Document, as well as any revisions or subsequent updates, shall be adopted following public notice requirements in accordance with 7 **Del.C.** §6004.
- 1.14.3 The Technical Document may be utilized as a reference for all activities subject to these regulations. Alternative measures that provide functional equivalency to the policies, procedures, technical specifications and other advisory provisions contained in the Technical Document and meet the provisions of these regulations may be considered on a case-by-case basis following Departmental review and approval.

## 18 DE Reg. 396 (11/01/14)

## 2.0 Definitions

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% ( $0.70 \times 0.50 = 0.35$ ) 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.

**“Functional Equivalency”** means alternative measures that are consistent with the policies, procedures, technical specifications, and advisory provisions found in the Technical Document, and which satisfy these Regulations.

**“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.

### 18 DE Reg. 396 (11/01/14)

## 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 January 1, 2014 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 January 1, 2014 but is not approved within eighteen months of January 1, 2014 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 best management practices (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 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, 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.

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### 4.0 Performance Criteria for Construction Site Stormwater Management

4.1 The Technical Document may be utilized as a reference for the design and preparation of construction site stormwater management plans. Alternative measures that provide functional equivalency may be considered on a case-by-case basis in accordance with Section 1.14 of these Regulations.

- 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.
  - 4.5.3 The Department or Delegated Agency may require additional soil testing and reapplication of permanent or temporary stabilization in accordance with the specifications in the Delaware Erosion and Sediment Control Handbook, or alternative measures that provide functional equivalency.
  - 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.

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

- 5.1 The Technical Document may be utilized as a reference for the design and preparation of post construction stormwater management plans. Alternative measures that provide functional equivalency may be considered on a case-by-case basis in accordance with Section 1.14 of these Regulations.
  - 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 development of a contaminated site or Brownfield, 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 30% 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.

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**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 may refer to the specifications contained in the Handbook or take functionally equivalent measures to install and maintain construction site stormwater management BMPs in accordance with the approved plan.
- 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.

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### **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.

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

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

**17 DE Reg. 240 (08/01/13)**

**18 DE Reg. 396 (11/01/14)**

**19 DE Reg. 472 (12/01/15) (Prop.)**

Included by reference herein is the Proposed December 2015 Technical Document. Due to the size of the Technical Document it is not being published here. Authenticated PDFs are available at the links below:

[1.0 Article 1 Sediment and Stormwater Program Background\\_PROP DEC 2015 \(http://regulations.delaware.gov/register/december2015/proposed/Article1.pdf\)](http://regulations.delaware.gov/register/december2015/proposed/Article1.pdf)

[2.0 Article 2 Policies and Procedures\\_PROP DEC 2015 \(http://regulations.delaware.gov/register/december2015/proposed/Article2.pdf\)](http://regulations.delaware.gov/register/december2015/proposed/Article2.pdf)

[3.0 Article 3 Plan Review and Approval\\_PROP DEC 2015 \(http://regulations.delaware.gov/register/december2015/proposed/Article3.pdf\)](http://regulations.delaware.gov/register/december2015/proposed/Article3.pdf)

[3.02.1.5 Example Project Application Package\\_PROP DEC 2015 \(http://regulations.delaware.gov/register/december2015/proposed/Example30215.pdf\)](http://regulations.delaware.gov/register/december2015/proposed/Example30215.pdf)

[3.02.2.7.1 Example Residential Preliminary Plan\\_PROP DEC 2015 \(http://regulations.delaware.gov/register/december2015/proposed/Example302271.pdf\)](http://regulations.delaware.gov/register/december2015/proposed/Example302271.pdf)

[3.02.2.7.2 Example Commercial Preliminary Plan\\_PROP DEC 2015 \(http://regulations.delaware.gov/register/december2015/proposed/Example302272.pdf\)](http://regulations.delaware.gov/register/december2015/proposed/Example302272.pdf)

[3.02.2.7.3 Example Institutional Preliminary Plan\\_PROP DEC 2015 \(http://regulations.delaware.gov/register/december2015/proposed/Example302273.pdf\)](http://regulations.delaware.gov/register/december2015/proposed/Example302273.pdf)

[3.02.2.7.4 Example Redevelopment Preliminary Plan\\_PROP DEC 2015 \(http://regulations.delaware.gov/register/december2015/proposed/Example302274.pdf\)](http://regulations.delaware.gov/register/december2015/proposed/Example302274.pdf)

[3.06.1 Delaware ESC Handbook\\_PROP DEC 2015 \(http://regulations.delaware.gov/register/december2015/proposed/ESCHandbook.pdf\)](http://regulations.delaware.gov/register/december2015/proposed/ESCHandbook.pdf)

[3.06.2 Post Construction Stormwater BMP Standards and Specifications\\_PROP DEC 2015 \(http://regulations.delaware.gov/register/december2015/proposed/PostConstruction.pdf\)](http://regulations.delaware.gov/register/december2015/proposed/PostConstruction.pdf)

[4.0 Article 4 Construction Review and Compliance\\_PROP DEC 2015 \(http://regulations.delaware.gov/register/december2015/proposed/Article4.pdf\)](http://regulations.delaware.gov/register/december2015/proposed/Article4.pdf)

[5.0 Article 5 Operation and Maintenance\\_PROP DEC 2015 \(http://regulations.delaware.gov/register/december2015/proposed/Article5.pdf\)](http://regulations.delaware.gov/register/december2015/proposed/Article5.pdf)

See also

<http://www.dnrec.delaware.gov/swc/Pages/SedimentStormwater.aspx>