



STATE OF DELAWARE  
**DEPARTMENT OF NATURAL RESOURCES  
AND ENVIRONMENTAL CONTROL**

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OFFICE OF THE  
SECRETARY

**Secretary's Order No. 2013-WS-0026**

**Re: Adoption of a Final Regulation 7 DE Admin Code 5101 Sediment and  
Stormwater Regulations**

Date of Issuance: July 18, 2013  
Effective Date: January 1, 2014

This Order considers the attached Report of the Department's presiding hearing officer, who reviewed the procedural history and the record and recommends adoption of the final regulation based upon the proposed regulation published April 1, 2013 in the *Delaware Register of Regulations*. This Order adopts the Report to the extent it is consistent with this Order. Consequently, this Order approves the final regulation for publication in the next Delaware Register of Regulations, but with a delayed effective date of January 1, 2014. This delayed effective date is to allow more time for the Department to provide workshops and other outreach efforts for the public.

**Background**

The Hearing Officer's Report discusses the record, which includes two public hearings on two different, albeit similar, proposed regulations. The original proposed regulation (2012 proposed regulation) was published for public comment on February 1, 2012. After reviewing the public comments, the Department had published a revised proposed regulation (2013 proposed regulation) on April 1, 2013. This Order approves the 2013 proposed regulation and withdraws the 2012 proposed regulation.

*Delaware's Good Nature depends on you!*

## Discussion

The regulation adopted by this Order is a comprehensive change from the current regulation codified at 7 DE Admin Code 5101. The change was the result of an extensive regulatory development process, which formally began with an August 15, 2006 Start Action Notice. The revision of Regulation 5101 was consistent with the April 2005 recommendations of the Governor's Task Force on Surface Water Management.<sup>1</sup> Indeed, the Department's experts in the Division of Watershed Stewardship's (DWS) Stormwater and Sediment Program began meetings with a Regulatory Advisory Committee, which the Department formed from interested persons from the land development, academic, governmental and environmental communities. DWS' experts met with the RAC's numerous subcommittees and involved approximately 235 persons from outside the Department. Thus, the proposed regulation was the culmination of years of effort by the Department's staff and those interested in stormwater management and sediment control. This regulation will assist the state in better managing stormwater to reduce economic and environmental impacts from flooding and improving the water quality of our streams, rivers and bays.

Once the 2012 proposed regulation was published, the Department considered the public comments that were submitted by over 200 persons and groups. The DWS experts reviewed the comments and provided responses, including responses that agreed with some of the suggested changes in the public comments. Most of the comments supported a change to the existing regulation, albeit many suggested different changes than proposed. Nevertheless, there was vast support for change to reflect the changes in the sediment and stormwater management since the last time Regulation 5101 was amended.

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<sup>1</sup> Formed by Executive Order No 62 issued December 17, 2004.

In addition, some of the interested persons requested to meet informally to review the technical support and the Department met to try and resolve the differences and to produce an improved proposed regulation. As a result, the time to obtain plan approval under the existing regulations (pre-amendment) as originally written into the proposed 2012 regulation was extended from 12 months to 18 months in the 2013 proposed regulation. In addition, the 2013 proposed regulation changed the compliance criteria for redevelopment to 30% reduction in effective imperviousness from the 2012 proposed regulation's 50% reduction in effective imperviousness based on the existing condition.

The 2013 proposed regulation improves the stormwater and sediment plan review process and updates the regulation to reflect current best management practices (BMP), as recognized by experts in the environmental community and the regulated industry of land developers and engineers. In addition, DWS prepared a Technical Guidance Document (TGD) to support and explain the regulation. Indeed, the TGD became an issue insofar as it was challenged as not being promulgated as a regulation.

The Department does not intend to use the TGD as a regulation that has the force and effect of law and which may be enforced as such. Instead, the TGD is an interpretive or advisory document that the Department will use to administer the regulation, and which will provide greater detail and explanation for the public. The TGD considers various types of stormwater and sediment plans that may be employed under the regulation, and shows how applicants can obtain approval through the use of an offset and other solutions to different and difficult stormwater and sediment management scenarios. The TGD was included in the record to interpret and support the highly technical aspects of the proposed regulation. The TGD describes how the Department

will administer the regulation to specific types of stormwater and sediment plans. The Department, in an effort to alleviate some concerns with the TGD, provided a public notice with the opportunity for public comment on the TGD, but this public comment procedure was not required under Delaware's *Administrative Procedures Act (APA)*, 29 Del. C. 10101 et seq. or any other law. The Department included a public comment procedure for the TGD in the regulation to make this additive procedure binding on the Department so that the public will have the opportunity to comment formally on any changes to the TGD. The public comments received on the TGD; however, are not in this record and the TGD is not the subject of this Order, which is to approve a proposed regulation that has satisfied the formal requirement of the APA. The Department obtained a letter opinion from a Deputy Attorney General that supports the reliance on the TGD to support the regulation without requiring formal APA regulatory development treatment of the TGD.

The comprehensive revision of the Stormwater and Sediment Regulations will improve the protection of Delaware's waterways and property along the waterways from the adverse consequences of improperly managed stormwater runoff and flooding. The revised regulation will improve the control of erosion and reduce the amount of sediment that enters the waterways.

In conclusion, the following findings and conclusions are entered:

1. The Department, acting through this Order of the Secretary, finds that the record developed supports adopting as a final regulation the proposed regulation published April 1, 2013 in the *Delaware Register of Regulations* and as is set forth in the Appendix A;

2. The amendment of Department Regulation 5101 is consistent with protecting Delaware's water and land resources from the adverse consequence of disturbing over 5,000 square feet of soil for activity that is subject to this regulation, such as land development or redevelopment; and

3. The Department shall provide written notice to the persons affected by the Order, as determined by the Department, those persons who requested to receive all regulations, and will submit to the *Delaware Register of Regulations* for publication in its next available issue, but with a delayed effective date of January 1, 2014.

A handwritten signature in black ink, appearing to read "Collin P. O'Mara". The signature is fluid and cursive, with a horizontal line underneath the name.

Collin P. O'Mara  
Secretary

## HEARING OFFICER'S REPORT

TO: The Honorable Collin P. O'Mara  
Secretary, Department of Natural Resources and Environmental Control

FROM: Robert P. Haynes, Esquire  
Senior Hearing Officer, Office of the Secretary  
Department of Natural Resources and Environmental Control

RE: **Proposed Amended Regulation 7 DE Admin. Code 5101, Sediment and Stormwater Regulations**

DATE: July 10, 2013

### I. BACKGROUND AND PROCEDURAL HISTORY

This Report recommends that the Secretary of the Department of Natural Resources and Environmental Control (Department) adopt the attached proposed amendment to regulation, 7 *DE Admin. Code 5101, Sediment and Stormwater Regulations* (Regulation)

The Department's Sediment and Stormwater Program (SSP) in the Division of Watershed Stewardship began the formal regulatory development process to amend the Regulation, which Secretary Hughes approved with Start Action Notice 2006-16 signed on August 15, 2006 (DNREC Ex. 4). The revision process was the result of the Governor's Task Force on Surface Water Management,<sup>1</sup> which in an April 2005 report recommended changes to the Department's regulation of stormwater plans.

The regulatory development process included the participation of interested persons who worked on an ad hoc Regulatory Advisory Committee formed from representatives of 19 interested groups from the environmental, governmental, academic, consultant and real estate land development communities. (DNREC Ex. 6.). SSP's experts also retained the engineering consulting services of Center for Watershed Protection. SSP experts met with the RAC 8 times and also met with its subcommittees 27 times and reviewed 700 comments as part of the informal regulatory development process.

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<sup>1</sup> Created by Governor Minner's Executive Order No. 62 signed on December 17, 2004.

On February 1, 2012, the Department had published in the *Delaware Register of Regulations* a proposed amendment to Regulation 5101, (DNREC Ex. 1) that, if approved, would entirely replace the existing Regulation. In addition, the Department published legal notices in newspapers (DNREC Ex. 11).

On March 1, 2012, the Department held a public hearing on the proposed regulation. SSP's Randell Greer and Elaine Webb provided a detailed presentation on the changes and SSP's technical support for the proposed amendment (DNREC Ex. 3).

I considered requests to keep the public comment period open for 30 and 60 days and granted a 30-day extension of the written public comment period. The Department's public comment period for written comments was from February 1, 2012- April 1, 2012.

Following the close of the public comment period, I requested the technical assistance from SSP. In response, SSP prepared a review of the public comments and their technical response to each comment. (DNREC Ex. 4A). The Department also determined that the proposed amendment should be revised based upon the public comments. In addition, several comments requested meetings in an effort to resolve issues raised in the public comments. The Department agreed to meet with interested persons in an effort to improve the proposed amendment. As a result of the changes and the lapse of one year from the end of the public comment period, the Department published a revised proposed amendment in the *Delaware Register of Regulations* on April 1, 2013 and scheduled an April 23, 2013 public hearing, and opened a written public comment period from April 1, 2013 through May 8, 2013 and also indicated that the public comments submitted on the 2012 proposed regulation would still be in the record of decision in order to reduce duplicative submissions, particularly on the areas in the proposed regulation that did not change from the 2012 proposed regulation to the 2013 proposed regulation.

## **II. SUMMARY OF THE RECORD**

The record contains the verbatim transcript of the two public hearings and the documents timely received at the public hearings or during the two time periods for written public comments. Division of Watershed Stewardship Division Director Frank Piorko and SSP representatives Jamie Rutherford, SSP Program Manager II, Elaine Webb, SSP Engineer IV and Randell Greer, SSP Engineer VI, attended the public hearings. SSP included the following documents into the record at the March 1, 2012 public hearing:

- DNREC Ex 1- proposed regulation as published February 1, 2012;
- DNREC Ex. 2-Delaware Sediment and Stormwater Program Technical Document (4 binders);
- DNREC Ex. 3-Public Hearing Presentation;
- DNREC Ex. 4-Start Action Notice # 2006-16;
- DNREC Ex. 5-Regulatory development chronology;
- DNREC Ex. 6-RAC member list
- DNREC Ex. 7-Regulatory Flexibility Act analysis
- DNREC Ex. 8-Interim Guidance Document
- DNREC Ex. 9-Public Notice of workshop held June 16, 2011
- DNREC Ex. 10-February 5, 2012 Public Notice of Technical Document
- DNREC Ex. 11-February 5, 2012 Public Notice of Public Hearing on proposed amendment to Regulation 5101
- DNREC Ex. 12-Public comments received prior to March 1, 2012 public hearing

In addition, public speakers at the March 1, 2012 public hearing provided the following written comments, which were marked as exhibits:

- Committee of 100 Ex 1-comments
- Home Builders Association (HBA) Ex. 1- comments
- City of Newark Ex. 1- comments
- ACEE Ex. 1- comments
- Haon Ex. 1- comments
- Inland Bays Foundation Ex. 1- comments.

Additional letters and emails were timely received during the post hearing public comment period, including from John Austin, Bob Reed and Rich Collins on behalf of the Positive Growth Alliance. Following the 2012 public hearing and the close of the public comment period, SSP's Elaine Webb prepared a summary of each public comment and provided

SSP's response to each comment in the attached document that was included in the 2013 public hearing record as DNREC Ex. 4A.

At the April 23, 2013 public hearing, SSP's representatives Greer and Webb made presentations on the changes to the proposed regulation from the 2012 proposed regulation, and submitted for the record the following documents as exhibits:

- DNREC Ex. 1A- proposed regulation as published April 1, 2013 Delaware Register of Regulations
- DNREC 2A-revised Delaware Sediment and Stormwater Program Technical Document (4 binders)
- DNREC Ex. 3A-April 23, 2013 public hearing presentation
- DNREC Ex. 4A-SSP summary of March 2012 public hearing comments and response to comments
- DNREC Ex. 5A-updated regulatory process chronology
- DNREC Ex. 6A-Interim Guidance Document revised March 2013
- DNREC Ex. 7A-April Public Notice of the April 23, 2013 public hearing and comment period
- DNREC Ex. 8A-April Public notice of the Technical Document and comment period

Following the 2013 public hearing, SSP received comments from Positive Growth Alliance, Caesar Rodney Institute, Carl Mantegna and Sarah Ford. SSP's Elaine Webb prepared the attached summary of all the public comments and SSP's response to the public comments.

The record also contains a confidential letter from Deputy Attorney General Robert Phillips to support the legality of the TGD.

I consider that the record fully supports the proposed attached amendment to the Regulation, as published April 1, 2013 in the Delaware Register of Regulations.

### **III. DISCUSSION AND REASONS**

The amendment to the Regulation consists of 10 sections, which will replace the existing Regulation's 18 sections. The revised Regulation requires sites to manage the volume of stormwater runoff. An important change is to provide more flexibility in the plans that may be submitted, particularly when on-site solutions may not be possible to deal with a site's stormwater management.

Section 1.0 sets forth the general provisions with findings of fact, which review the potential harm that could and has occurred from stormwater if it is not properly managed. The harm includes property loss from flooding, damage from erosion, sediment entering the waterways and causing water pollution. This section also includes that the regulation applies to all land disturbing activity unless subject to the following exemptions: 1) farming, 2) land disturbance less than 5,000 square feet, 3) land disturbance regulated by other specific state or federal laws and is subject to a written agreement with the Department, or 4) commercial forestry regulated by the Department of Agriculture. This Section describes the procedure to obtain permanent and emergency variances under 7 Del. Code §§6011 and 6012. The Section also provides for the imposition of fees and financial guarantees and allows an offset as an alternative to full or partial compliance with the Resource Protection Event requirements in Section 5.2 and 5.6.3.

Section 2.0 provides the definitions of technical words and terms as used in the Regulation.

Section 3.0 sets forth the Department's three step review process for stormwater and sediment management plans. Step one of the three step process begins with a project meeting with the Department<sup>2</sup> in order to review the applicant's stormwater assessment study and based upon this review the Department prepares a Stormwater Assessment Report, which an applicant may submit to the appropriate local land use agency when seeking approval of a land use plan.

The second step of the review process is an applicant's submission to the Department of a preliminary sediment and stormwater management plan. The Department shall have 30 calendar days to review a preliminary plan in order to submit comments on it to the applicant, reject the plan with an explanation of reasons or indicate in writing that another 30 days is needed to

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<sup>2</sup> The references to the Department also includes its delegated other state and local government agencies.

review the preliminary plan. The submission of modified plans in response to comments shall have another 30 day period for the Department to review.

The third step of the process is for the applicant to submit a final sediment and stormwater management plan that shall be signed by a licensed professional and include: 1) the construction site stormwater management plan, 2) the post construction stormwater management plan, 3) the hydrologic and hydraulic computations, 4) the operations and maintenance plan, and 5) a copy of the preliminary record plan required by the local land use approval agency. The Department shall review the final plan under the same procedure as the preliminary plan review and provide written reasons if the plan is not approved.

Section 3.5.6 provides that any complete plans pending Department review shall be subject to the regulation in effect at the time the plans were first submitted to the Department unless the plan review is not completed within 18 months from the effective date of this regulation.

Section 3.6 provides that approved plans shall remain valid for 3 years from the date of approval unless the Department receives a written request to extend the approval up to the shorter of either the local land use agency's plan approval or 3 years. One extension may be granted for plans that have not commenced and any plan where construction has commenced shall have unlimited extensions approved.

Section 3.7 establishes standard plans that may be approved without detail plans being submitted.

Section 3.8 provides a list of certifications by the licensed professional and the owner, as defined by the Regulation.

Section 3.11 requires the applicant to submit post construction verification documents within 60 days after construction is completed and the Department shall review and approve the

submission before the Department provides a Notice of Completion letter and releases any financial guarantees that it controls to ensure proper completion.

Section 4.0 (Performance Criteria for Construction Site Stormwater Management) requires that all plans for construction site management employ best management practices (BMPs) and conform to the design criteria and minimum standards and specifications within the Delaware Erosion and Sediment Control Handbook and approved supplements (Handbook). In addition, such plans are to employ best available technology (BAT) to manage turbid discharges in accordance with the Department's Section 9.1.02 in the *Regulations Governing the Control of Water Pollution, 7 DE Admin. Code 7200*. This provision limits the total size of any land disturbance that drains to a common discharge point to no more than 20 acres. In addition, this section provides the requirements for stabilization, including perimeter controls and soil and material testing, following soil disturbance in accordance with the approved plan and the Handbook.

Similarly, Section 5.0 (Performance Criteria for Post Construction Stormwater Management) applies the Department policies to the Regulation. Section 5.2 imposes the design requirement for Resource Protection Event criteria based upon the annualized volume of runoff based upon the 99% probability of a 1 year 24 hour rainfall event. Similarly, Section 5.3 impose runoff management measures to protect downstream areas from damage by using a conveyance event criteria base upon storm with a 10% annual probability of occurring or the volume from a 10 year 24 hour rainfall event. Section 5.4 imposes the flooding event criteria volume to meet in designing plans based upon a 1% probability or a 100 year 24 hour rainfall event. Section 5.5 provides the Department with discretion to apply alternative criteria for discharges into state waters or impaired waters or to reduce pollutant loading from a specific source. Section 5.6 provides the criteria for redeveloping properties, including Brownfield regulated properties.

Section 6.0 applies to Construction Review of Sediment and Stormwater Management Plans and sets forth the responsibilities of an Owner and cites the BMPs and cites the Department's requirements in the Erosion and Sediment Control Handbook and other regulations. The definition of owner applies to more than legal ownership, but anyone with a legal or equitable interest in the land other than as a result of a secured interest. This Section also includes the responsibilities, duties and certification requirements for a Certified Construction Reviewer and the process of certifying contractor training programs. This Section also sets forth the Department reviews of sites where an approved plan is being implemented and the five calendar day written notice required to the Department before construction may commence and other procedures during construction and other times when construction is reviewed.

Section 7.0 sets forth the Post Construction Maintenance of Stormwater Management Systems and imposes the approved plan's maintenance requirements on the Owner until ownership is transferred. The Owner is required to conduct regular maintenance reviews as determined in the approved Operation and Maintenance Plan. Any post construction changes to the stormwater system are subject to Department approval.

Section 8.0 sets forth the provisions for taking enforcement actions for any violation of an approved plan and any other regulatory duty imposed by the Regulation.

Section 9.0 sets forth the Delegation of Program Elements to other governmental agencies such as conservation districts, counties, municipalities and state agencies and Section 10.0 provides the criteria for implementation of a stormwater utility.

I find that the Department's proposed amendment to Regulation 5101 is adequately supported by the record, including the technical guidance documents prepared by SSP's experts. The approval of the proposed amended Regulation 5101 will improve the Department's ability to regulate plans submitted for approval, and the approved plans under this Regulation will improve

the proper management of water runoff from land disturbing activities, which should reduce the harmful release of improperly managed stormwater that carry sediment and other pollutants into Delaware's waters as a result of land disturbing activities subject to the *Erosion and Sedimentation Control Act, 7 Del C. Chap. 40*.

The public comments varied from support to opposition. The public comments at the second hearing that opposed focused on the technical guidance document and not the proposed regulation. The TGD supports the proposed regulation and is not intended to be a regulation and that is why it was subject to a separate public comment procedure. The TGD will not be a regulation and the Department consequently did not follow the APA procedures intended for a Regulation. Instead, it is provided to the public to aid in the public's understanding of the Regulation. It was prepared to explain the Regulation's various different types of stormwater plans and possible problems and to provide for various different kinds of situations, and technology available to solve stormwater management problems, including the best management practices and industry standards as possible solutions to the problems.

#### **IV. RECOMMENDATION**

Based on the record developed, I find and conclude that the proposed regulation, as published in the *Delaware Register of Regulations* on April 1, 2013 and attached hereto, should be adopted as a final regulation 5101 and submitted to the *Delaware Register of Regulations* to go into effect no earlier than January 1, 2014.



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Robert P. Haynes, Esquire  
Senior Hearing Officer

**Appendix A**  
**Recommended Final Regulation**

## 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, overtakes 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 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 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 the effective date of these regulations 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 six years following the effective date of these regulations. A plan approved to comply with previous regulations where construction has not commenced within six years following the effective date of these regulations 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 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

Department of Natural Resources and Environmental Control  
Division of Watershed Stewardship  
Sediment and Stormwater Program  
7 Del. C. Ch. 40

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

**"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 eighteen months 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 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.

## **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.



**Appendix B**  
**Division Technical Response to Public Comments**



STATE OF DELAWARE  
DEPARTMENT OF NATURAL RESOURCES  
AND ENVIRONMENTAL CONTROL  
DIVISION OF WATERSHED STEWARDSHIP  
89 Kings Highway  
DOVER, DELAWARE 19901

OFFICE OF THE  
DIRECTOR

PHONE: (302) 739-9921  
FAX: (302) 739-6724

**MEMORANDUM**

TO: Robert Haynes, Hearing Officer

FROM: Elaine Z. Webb *ezw* |  
DNREC Sediment and Stormwater Program

DATE: May 20, 2013

SUBJECT: Responses to Comments Received - Proposed Revision of  
**Regulation No. 5101 Sediment and Stormwater Regulations**

CC: Frank Piorko, Director, Division of Watershed Stewardship  
Jamie Rutherford, Sediment and Stormwater Program Manager

Attached you will find responses prepared by Sediment and Stormwater Program for comments received during the public comment periods and at the public hearings for the proposed revisions to **Regulation No. 5101 Sediment and Stormwater Regulations**.

The proposed revisions were first published in the Delaware Register of Regulations on February 1, 2012. A public hearing was held March 1, 2012, and written comments were accepted until March 30, 2012. Based upon comments received, the proposed regulations were revised and were published a second time in the Register of Regulations on April 1, 2013. The second public hearing was held on April 23, 2013 and written comments were received until May 8, 2013.

Following the first public hearing and comment period, Sediment and Stormwater staff met with regulated individuals and groups to address comments received, specifically regarding grandfathering and sunseting of projects, redevelopment criteria, and cost of implementation including offset procedures. Changes to the regulation language were proposed based on these meetings and vetted with the Regulatory Advisory Committee on February 25, 2013 prior to publishing the regulations in the Register of Regulations in April 2013.

A significant portion of the comments received during the second public hearing and comment period centered on public notice requirements of the accompanying Technical Document. Comments were received both in support of not publishing the Technical Document in the Register of Regulations with the proposed regulations, as well as those in support of publishing

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Comment Responses: Sediment and Stormwater Regulations

May 20, 2013

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the Technical Document in the Register. In addition to the attached comment responses you are also receiving a letter from Deputy Attorney General Robert Phillips to Secretary O'Mara, in support of the proposed public notice procedure used for the Technical Document which does not include publishing the voluminous Technical Document in the Register of Regulations.

It is the Sediment and Stormwater Program's goal to secure a signed Secretary's Order in a timely fashion to allow for the revised Sediment and Stormwater Regulations to be published as final regulations in the July 2013 Delaware Register of Regulations. It is also the program's goal to delay the effective date of the regulations to January 1, 2014 to allow for time to provide training to the regulated community in implementation of the requirements of the regulations.

Thank you for your timely attention to this matter. Please contact me if you require any additional information.

# Final Hearing Record Comments and Responses

**Barrett E. Kidner, Caesar Rodney Institute**

**5/7/2013**

***Comment***

It has come to our attention that your agency has not published the applicable technical document in the April Register of Regulations. This oversight appears to be a violation of the Department's legal responsibility under 29 DEL.C., Chapter 101.

Further, it is requested that the current public hearing process be invalidated and re-started only when all of the pertinent documents are published as required by state law to ensure that any resulting regulation has full legal integrity.

***Comment Response***

Sediment and Stormwater Program staff sought direction from the Deputy Attorney General's office with regard to the public notice requirements of the Technical Document. The Technical Document is an interpretive document and not a binding regulation. The Department is given authority under 7. Del. C. 4006(b) to provide technical assistance to local agencies in implementing Chapter 40 and also to develop standards, guidelines, and criteria for program elements. The Technical Document serves that purpose, in addition to providing guidance to the public, interested professionals, Delegated Agencies, and others regarding methods of meeting the standards set out in the Regulations. The Department does not intend to enforce the Technical Document as a binding regulation; rather, only standards of the Regulations will be enforced.

**Bill Moyer, Inland Bays Foundation**

**4/23/2013**

***Comment***

I'd also like to refer to a comment we made, our foundation made at the March 1, 2012 hearing, in which we stated that section 1.3.1 of the regulations should include the Wetlands Act, 7 Del Code Chapter 66, as one of the regulatory items that should be taken into consideration when reviewing a sediment and stormwater application. We notice that the revised regulations don't include the Wetlands Act along with the Subaqueous Lands Act and a couple of other Acts, but that's the only other technical item that we found.

***Comment Response***

7 Del. C. Ch. 40 does not extend statutory authority to the Sediment & Stormwater Program for enforcing the requirements of Ch. 66 or Ch. 72.

**Bill Moyer, Inland Bays Foundation**

**4/23/2013**

**Comment**

A close reading of the Administrative Procedures Act does not indicate anywhere that it is a requirement to publish notice of a technical document as part of the hearing process. The term "technical document" is not even mentioned in Chapter 29. The process to adopt the proposed regulations has been extremely thorough and transparent, and the opportunity for public involvement in the process has been exemplary. It has taken eight years to get where we are this evening. There can be no justifiable reason not to move forward at this point. The Inland Bays Foundation strongly supports the adoption of the revised sediment and stormwater regulations, and would hope that the regulations will become effective before the January 1, 2014 date, given all the effort that has previously been made to implement these regulations.

**Comment Response**

Sediment and Stormwater Program staff sought direction from the Deputy Attorney General's office with regard to the public notice requirements of the Technical Document. The Technical Document is an interpretive document and not a binding regulation. The Department is given authority under 7. Del. C. 4006(b) to provide technical assistance to local agencies in implementing Chapter 40 and also to develop standards, guidelines, and criteria for program elements. The Technical Document serves that purpose, in addition to providing guidance to the public, interested professionals, Delegated Agencies, and others regarding methods of meeting the standards set out in the Regulations. The Department does not intend to enforce the Technical Document as a binding regulation; rather, only standards of the Regulations will be enforced.

**Bob Reed, Remax**

**5/5/2013**

**Comment**

Perhaps I am reading these regulations incorrectly, but these regulations seem to be crippling restrictive. Suppose for the sake of discussion that every property is brought to these standards and holds all of it's stormwater on the heaviest rain of the year (not to mention 10-year or 100-year), how will fresh water get into the watershed? Will the creeks all dry up and be fed only by sea water on the tide? How can a developer prove that a development will have no adverse effect downstream unless there is no runoff? The cost of compliance is going to be enormous!!! How many jobs are projected to be lost in Sussex County? How much more expensive will the average new home become? Who will pay the higher cost of commercial space? Answer: All of these costs will ultimately be borne by the consumer and taxpayer, who you purport to be protecting. Pretending that developers will bear the cost denies reality. All expenses of doing business are passed through to the consumer in every business - or the business soon fails and thus ceases bearing the expense. Please consider the cost of these new regulations. Clean water is everyone's objective, but reason dictates a healthy respect for the economies of the situation. You must balance cost against benefit. As proposed, the cost of these regulations is too great.

**Comment Response**

The proposed Sediment and Stormwater Regulations apply only to new development projects. There is no requirement to store all the water or retain all the runoff from a proposed development project. The standard is to ensure no adverse impact by either increasing stormwater flow depths or area of inundation downstream in comparison to the pre development condition. Through a collaborative process with an ad hoc committee established by Committee of 100, additional example projects were completed with the goal of having the ad hoc committee evaluate the economic impact of compliance with the proposed regulations on both greenfield and redevelopment projects. The Department feels that having gone through this process has resulted in a valid assessment of the economic impacts to those that will be most affected.

**John Austin**

**4/16/2013**

***Comment***

I note that there are but two mention of TMDLs in the proposed regulation. (5.2.3.3 & 5.6.3.3). In both instances, additional best management practices are being required where runoff reduction requirements are not sufficient to meet TMDL. There is no mention of permit denial should the TMDLs already be exceeded or should the additional loads of the project cause exceedance. Language like the text in the wastewater treatment reg should create a moratorium on construction projects when there is simply no load allocation available for the project. The conditions for denial are weak - should add 3.4.4 The Department shall also deny approval of any Sediment and Stormwater Management Plan that contains false information; or for any proposed project, which if constructed, would violate a Department moratorium.

***Comment Response***

TMDLs are established at the watershed level with all sources being considered. New development sites will not be required to meet the TMDL targets as calculated in DURMMv2 to receive approval of the post construction stormwater design; however, the Department will use the resultant nitrogen and phosphorous data from DURMMv2 to track progress toward meeting TMDLs by sites that meet the RPv runoff reduction requirements. The Department will use an adaptive management approach to meeting TMDLs. Loads not being met from a particular sector may use a larger offset or trade in the future to meet those goals. If the RPv requirements are being met but the TMDL targets are not, it may be the model. The Waste Load Allocation for stormwater or the BMP effectiveness credit would need to be looked at. The goal to meeting TMDL's for any watershed is to utilize the efforts of multiple sectors and make adjustments as necessary.

**Ken Currie**

**5/7/2013**

***Comment***

My concern is with the process vs. the substance of the regulations. It appears that the current versions of neither the Technical Guide nor the Erosion & Sediment Control Handbook have been published in the Register of Regulations as per the Administrative Procedures Act and Delaware Code. Yet these documents contain the key information such as specifications, upon which determinations are made and permits are issued or denied. It also appears contradictory that the Department claims it does not have to publish such documents and yet at the public hearing held on April 23, 2013, there was an announcement that the comment period on the Technical Document ends on April 30.

***Comment Response***

Sediment and Stormwater Program staff sought direction from the Deputy Attorney General's office with regard to the public notice requirements of the Technical Document. The Technical Document is an interpretive document and not a binding regulation. The Department is given authority under 7. Del. C. 4006(b) to provide technical assistance to local agencies in implementing Chapter 40 and also to develop standards, guidelines, and criteria for program elements. The Technical Document serves that purpose, in addition to providing guidance to the public, interested professionals, Delegated Agencies, and others regarding methods of meeting the standards set out in the Regulations. The Department does not intend to enforce the Technical Document as a binding regulation; rather, only standards of the Regulations will be enforced. The comment period for the Technical Document was set in a public notice in the newspaper on March 30, 2013, the same day and in the same newspapers that the Public Hearing legal notice appeared.

**Paul Morrill, Committee of 100**

**4/23/2013**

***Comment***

There's been some question raised, not through our membership, but elsewhere, about the status of the technical document that I think Randy talked about. We view -- and we worked extensively in the technical document. We view that as a design guideline. It contains the nuts and bolts of how you do this or that, or what is the makeup of the material for the bioretention facilities. We don't view that as something that needs to be in the regulation. In fact, we prefer it not to be in the regulation, because as we saw over the past year, when good ideas come out of the regulating community, they were able to be adapted without having to go through the entire regulatory process. Yes, changes to the technical document should be a public process, and will be, it will be publicly noticed, but not have to jump through all the hoops of the straight regulatory process. And we think that's appropriate, and we think it actually enhances the possibility that as we find a better way to do things under these regulations, as the development community is the one that's actually living with these things, that if ideas can come forward and there's a better way, a cheaper way, a more effective way to do something, that we hope that that could be done through the technical document. And it should be a public process, but it should be less rigorous than the regulatory process. That's a design guideline, in our opinion.

***Comment Response***

Sediment and Stormwater Program staff sought direction from the Deputy Attorney General's office with regard to the public notice requirements of the Technical Document. The Technical Document is an interpretive document and not a binding regulation. The Department is given authority under 7. Del. C. 4006(b) to provide technical assistance to local agencies in implementing Chapter 40 and also to develop standards, guidelines, and criteria for program elements. The Technical Document serves that purpose, in addition to providing guidance to the public, interested professionals, Delegated Agencies, and others regarding methods of meeting the standards set out in the Regulations. The Department does not intend to enforce the Technical Document as a binding regulation; rather, only standards of the Regulations will be enforced.

**Paul Morrill, Committee of 100**

**4/23/2013**

***Comment***

One of our major expectations going forward is the State and the Department's willingness to pursue watershed plans on a priority -- on a prioritized basis, developing them as plans so that these offset projects can be put in place and that they can be a workable alternative for developers, rather than just waiting for the development community to do that. I think that's a legitimate role for the State to play, and I hope it will step up and do so.

***Comment Response***

Comment so noted; no response required.

**Paul Morrill, Committee of 100**

**4/23/2013**

***Comment***

The -- one of the major pluses of this -- of the regulation is that it actually gives the development community additional flexibility to meet the requirements. No question that we still have concerns about how runoff reduction is going to work. It's new to the industry, it's new to the engineering profession, but we now know that that is the mainstream of stormwater management in this country, and that we need to get on with figuring out how to do it. And I think we've made some progress on that front in the last year. With the addition of the offset provisions, where when you need a certain level

of effort on site beyond which it gets too expensive to comply, you now have some options of going offsite and being able to meet your regulatory requirements. And we think that's a major plus. And admittedly, as Randy was talking about, that offset provision is incomplete, and I think they know that we'll continue to be working on them and with them to expand the offset provision possibilities, because it seems to us from an environmental standpoint it's always better if you can create a banking situation or a larger practice that can solve water quality issues on a watershed basis, rather than doing

individual postage stamp practices that you have a better -- a better chance of positively influencing the environment. And I think that's what this is about, is doing the right thing environmentally, but doing it in a way that doesn't stop development. And I think we're threading that line.

***Comment Response***

Comment so noted; no further action necessary.

**Paul Morrill, Committee of 100**

**4/23/2013**

***Comment***

I will say that we still have some concerns about the price -- the cost impacts of the regulations, but in the ensuing year and several months, we've had a great deal of interaction with the Department in the positive sense, and feel that significant improvements have been made in the regulations since they were first proposed.

***Comment Response***

Through a collaborative process with an ad hoc committee established by Committee of 100, additional example projects were completed with the goal of having the ad hoc committee evaluate the economic impact of compliance with the proposed regulations on both greenfield and redevelopment projects. Resulting from this process, the redevelopment requirement was revised from 50% to 30% reduction in effective impervious, and the fee-in-lieu amount reduced from \$23/cf to \$18/cf for compliance. The Department feels that having gone through this process has resulted in a valid assessment of the economic impacts to those that will be most affected.

**Rich Collins, Positive Growth Alliance**

**4/30/2013**

***Comment***

An additional and separate issue is that both the Technical Document and the Erosion and Sediment Control Handbook indicate they were revised in March, 2013. Since they didn't go through the proper process as spelled out by the Administrative Procedures Act, these versions can not be legally adopted at the present time.

***Comment Response***

Sediment and Stormwater Program staff sought direction from the Deputy Attorney General's office with regard to the public notice requirements of the Technical Document. The Technical Document is an interpretive document and not a binding regulation. The Department is given authority under 7. Del. C. 4006(b) to provide technical assistance to local agencies in implementing Chapter 40 and also to develop standards, guidelines, and criteria for program elements. The Technical Document serves that purpose, in addition to providing guidance to the public, interested professionals, Delegated Agencies, and others regarding methods of meeting the standards set out in the Regulations. The Department does not intend to enforce the Technical Document as a binding regulation; rather, only standards of the Regulations will be enforced.

**Rich Collins, Positive Growth Alliance**

**4/30/2013**

**Comment**

After consultation with an attorney who is an expert in Delaware law, we are confident that this stormwater regulation update is being done in a manner contrary to state law, specifically Title 29, Chapter 101, the Administrative Procedures Act.

The reason is that the most important documents have not been published in the state Register of Regulations. This includes the Technical Document and the Delaware Erosion and Sediment Control Handbook, and possibly others.

After conversations with the Department of Natural Resources and Environmental Control, we understand their position to be that they don't have to publish these documents because they claim they are just "guides."

"Guides" are specifically defined as a regulation. 29 Del C, §10102. states: "Regulation" means any statement of law, procedure, policy, right, requirement or prohibition formulated and promulgated by an agency as a rule or standard, or as a guide for the decision of cases thereafter by it or by any other agency, authority or court. Such statements do not include locally operative highway signs or markers, or an agency's explanation of or reasons for its decision of a case, advisory ruling or opinion given upon a hypothetical or other stated fact situation or terms of an injunctive order or license. Thus a guide is clearly defined as a regulation.

**Comment Response**

Sediment and Stormwater Program staff sought direction from the Deputy Attorney General's office with regard to the public notice requirements of the Technical Document. The Technical Document is an interpretive document and not a binding regulation. The Department is given authority under 7. Del. C. 4006(b) to provide technical assistance to local agencies in implementing Chapter 40 and also to develop standards, guidelines, and criteria for program elements. The Technical Document serves that purpose, in addition to providing guidance to the public, interested professionals, Delegated Agencies, and others regarding methods of meeting the standards set out in the Regulations. The Department does not intend to enforce the Technical Document as a binding regulation; rather, only standards of the Regulations will be enforced.

**Rich Collins, Positive Growth Alliance**

**4/30/2013**

**Comment**

Since 29 Del C, §10102 makes it obvious that the Technical Document and similar documents are regulations in the legal sense, we then must look at § 10113. Adoption of regulations; exemptions.

(a) All regulations, except those specifically exempted, shall be adopted according to the requirements of this chapter. Then, of course, to discover what must be done to adopt a regulation, we look at § 10115. Notice.

(a) Whenever an agency proposes to formulate, adopt, amend or repeal a regulation, it shall file notice and full text of such proposals, together with copies of the existing regulation being adopted, amended or repealed, with the Registrar for publication, in full or as a summary, in the Register of Regulations pursuant to § 1134 of this title.

**Comment Response**

Sediment and Stormwater Program staff sought direction from the Deputy Attorney General's office with regard to the public notice requirements of the Technical Document. The Technical Document is an interpretive document and not a binding regulation. The Department is given authority under 7. Del. C. 4006(b) to provide technical assistance to local agencies in implementing Chapter 40 and also to develop standards, guidelines, and criteria for program elements. The Technical Document serves that purpose, in addition to providing guidance to the public, interested professionals, Delegated Agencies, and others regarding methods of meeting the standards set out in the Regulations. The Department does not intend to enforce the Technical Document as a binding regulation; rather, only standards of the Regulations will be enforced.

**Rich Collins, Positive Growth Alliance**

**4/30/2013**

***Comment***

Furthermore, at the public hearing held on April 23, 2013, the announcement was made that the comment period on the published regulation will end on May 8, 2013, but the comment period on the Technical Document ends on April 30. We are unaware of any legal authority that would allow DNREC to set a comment period outside of the parameters of 29 Del. C, Chapter 101. How and under what authority was the public made aware of this?

***Comment Response***

The comment period for the Technical Document was set in a public notice in the newspaper on March 30, 2013, the same day and in the same newspapers that the Public Hearing legal notice appeared.

**Rich Collins, Positive Growth Alliance**

**4/30/2013**

***Comment***

Finally, there is another and completely different problem in rules 1.14, 4.1, and 5.1 of the published regulation. All of these state that, "Revisions or updates to any of these documents shall be adopted in compliance with public notice requirements in accordance with 7 Del.C. §6004." This is a completely incorrect reference to state code! It should say 29 Del.C Chapter 101.

7 Del.C. §6004 is for the purpose of a citizen getting a permit for his project from DNREC. It has nothing to do with updating any DNREC document.

7 Del. C § 6004. Permit -- Application; hearing.

(a) Any person desiring to obtain a permit required by § 6003 of this title or a variance or an application to establish a redemption center or a certificate of public convenience and necessity required by subchapter V of this chapter shall submit an application therefore in such form and accompanied by such plans, specifications and other information as required by applicable statute or regulation.

We believe that correcting this error alone constitutes a major change and will require republishing. Since this language was also included in the document that was published last February, 2012, one has to wonder just how thorough the legal review has been.

When the Administrative Procedures Act was originally passed, the General Assembly made it clear they wanted the public to have adequate notice of rulemaking by state agencies. The procedure is neither complex nor difficult. We are asking that DNREC revise their procedures to ensure they are following it.

***Comment Response***

Sediment and Stormwater Program staff sought direction from the Deputy Attorney General's office with regard to the public notice requirements of the Technical Document. This procedure allows for public review of the document and affords the public an opportunity to request a hearing.

**Rich Collins, Positive Growth Alliance**

**4/30/2013**

***Comment***

Rule 4.1 is problematic in a similar way. It states: All construction site stormwater management Imps 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. Once again, the Delaware Erosion and Sediment Control Handbook is more than a guide, it is where the specifications are found, thus it is also a regulation under at least two criteria.

***Comment Response***

Sediment and Stormwater Program staff sought direction from the Deputy Attorney General's office with regard to the public notice requirements of the Technical Document. The Technical Document is an interpretive document and not a binding regulation. The Department is given authority under 7. Del. C. 4006(b) to provide technical assistance to local agencies in implementing Chapter 40 and also to develop standards, guidelines, and criteria for program elements. The Technical Document serves that purpose, in addition to providing guidance to the public, interested professionals, Delegated Agencies, and others regarding methods of meeting the standards set out in the Regulations. The Department does not intend to enforce the Technical Document as a binding regulation; rather, only standards of the Regulations will be enforced.

**Rich Collins, Positive Growth Alliance**

**4/30/2013**

***Comment***

Looking at rule 5.1 in the published stormwater regulation, however, we discover that the Technical Document is far more than a guide: 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. Thus we see that the Technical Document is the controlling document.

***Comment Response***

Sediment and Stormwater Program staff sought direction from the Deputy Attorney General's office with regard to the public notice requirements of the Technical Document. The Technical Document is an interpretive document and not a binding regulation. The Department is given authority under 7. Del. C. 4006(b) to provide technical assistance to local agencies in implementing Chapter 40 and also to develop standards, guidelines, and criteria for program elements. The Technical Document serves that purpose, in addition to providing guidance to the public, interested professionals, Delegated Agencies, and others regarding methods of meeting the standards set out in the Regulations. The Department does not intend to enforce the Technical Document as a binding regulation; rather, only standards of the Regulations will be enforced.

**Rich Collins, Positive Growth Alliance**

**4/23/2013**

***Comment***

I did not become aware of the enormity of this technical document till just a few days ago. It is over 2000 pages. We tried to print it out, and I was told by other folks who had the same problem, it froze our computer up. One person told me that it was 2000 I think 374 pages, just for the technical document. So I did my best to look it over a little bit, but in all honesty, I haven't studied it. So I'm hoping there will be another public hearing, and at that time we can get in some specifics.

***Comment Response***

Sediment and Stormwater Program staff sought direction from the Deputy Attorney General's office with regard to the public notice requirements of the Technical Document. The Technical Document is an interpretive document and not a binding regulation. The Department is given authority under 7. Del. C. 4006(b) to provide technical assistance to local agencies in implementing Chapter 40 and also to develop standards, guidelines, and criteria for program elements. The Technical Document serves that purpose, in addition to providing guidance to the public, interested professionals, Delegated Agencies, and others regarding methods of meeting the standards set out in the Regulations. The Department does not intend to enforce the Technical Document as a binding regulation; rather, only standards of the Regulations will be enforced.

**Rich Collins, Positive Growth Alliance**

**4/23/2013**

***Comment***

Because of this huge error in 1.14, 4.1, and 5.1. They all say pretty much the same thing, "Revisions or updates to any of these documents" -- and they're talking about the technical or the sediment and erosion, those things -- "shall be adopted in compliance with public notice requirements in accordance with 7 Delaware C 6004." Folks, that's the part of the State law that talks about what you have to do if you want a public hearing for yourself, like for a project. It has zero to do with Department regulations and updating anything.

***Comment Response***

Sediment and Stormwater Program staff sought direction from the Deputy Attorney General's office with regard to the public notice requirements of the Technical Document. The Technical Document is an interpretive document and not a binding regulation. The Department is given authority under 7. Del. C. 4006(b) to provide technical assistance to local agencies in implementing Chapter 40 and also to develop standards, guidelines, and criteria for program elements. The Technical Document serves that purpose, in addition to providing guidance to the public, interested professionals, Delegated Agencies, and others regarding methods of meeting the standards set out in the Regulations. The Department does not intend to enforce the Technical Document as a binding regulation; rather, only standards of the Regulations will be enforced.

**Rich Collins, Positive Growth Alliance**

**4/23/2013**

**Comment**

I simply mean that the material has to be presented to the Registrar, published, given the appropriate amount of time -- he has to have it so he can publish it the 1st of the month. I would suspect, at this point, maybe it would be the June 1 issue. Then they could have another public hearing three weeks later, and then a few days, I don't know the exact -- not -- just a few days later the Secretary can sign off, and all this can be in force. And by the way, the effective date of this, from what I understood, is not supposed to be till the end of the year anyway. So nothing has to be lost, but we can follow the law.

**Comment Response**

Sediment and Stormwater Program staff sought direction from the Deputy Attorney General's office with regard to the public notice requirements of the Technical Document. The Technical Document is an interpretive document and not a binding regulation. The Department is given authority under 7. Del. C. 4006(b) to provide technical assistance to local agencies in implementing Chapter 40 and also to develop standards, guidelines, and criteria for program elements. The Technical Document serves that purpose, in addition to providing guidance to the public, interested professionals, Delegated Agencies, and others regarding methods of meeting the standards set out in the Regulations. The Department does not intend to enforce the Technical Document as a binding regulation; rather, only standards of the Regulations will be enforced.

**Rich Collins, Positive Growth Alliance**

**4/23/2013**

**Comment**

If you look at the regulation that was legally published, and if you look at Rule 5.1, what does it say? "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." Does that sound like a guide? Specifications? "Established by Department policy, procedures, and guidelines, as set forth in accompanying technical documents." Folks, the rules are in the technical documents. And then if you look at Rule 4.1, it says the same basic thing in regards to the Delaware Erosion and Sediment Control Handbook, and that has to do with construction.

**Comment Response**

Sediment and Stormwater Program staff sought direction from the Deputy Attorney General's office with regard to the public notice requirements of the Technical Document. The Technical Document is an interpretive document and not a binding regulation. The Department is given authority under 7. Del. C. 4006(b) to provide technical assistance to local agencies in implementing Chapter 40 and also to develop standards, guidelines, and criteria for program elements. The Technical Document serves that purpose, in addition to providing guidance to the public, interested professionals, Delegated Agencies, and others regarding methods of meeting the standards set out in the Regulations. The Department does not intend to enforce the Technical Document as a binding regulation; rather, only standards of the Regulations will be enforced.

**Rich Collins, Positive Growth Alliance**

**4/23/2013**

**Comment**

This, to me, is not the best time to be imposing a lot of new burdens on our economy. I think it would be counterproductive, both for the economy and for the environment.

**Comment Response**

Through a collaborative process with an ad hoc committee established by Committee of 100, additional example projects were completed with the goal of having the ad hoc committee evaluate the economic impact of compliance with the proposed regulations on both greenfield and redevelopment projects. Resulting from this process, the redevelopment requirement was revised from 50% to 30% reduction in effective impervious, and the fee-in-lieu amount reduced from \$23/cf to \$18/cf for compliance.

**Ron Wuslich, South Bethany property owner**

**4/23/2013**

**Comment**

In my opinion, there are less harmful alternatives than to continue discharging the 4,700,000 gallons into the South Bethany Anchorage Canal. One such alternative would be to pipe the 4,700,000 gallons one mile south along Route 1 to a retention pond constructed on State game lands located between South Bethany and Fenwick Island. And lastly, I support the adoption of the revised sediment and stormwater regulations.

**Comment Response**

Comment so noted; no further action necessary

**Sally Ford, Land Design**

**5/7/2013**

**Comment**

The proposed regulations were initiated April 2005, the current regulations were amended Oct. 2006. The economy has slowed down growth significantly. Many projects designed under regulations prior to 2005 have not yet been built out. Also projects designed using the existing regulations of 2005/2013 have yet to be built. The effectiveness of the Current Regulations have not been fully evaluated.

These new regulations will add more cost to design and construction. The actual impact can not be fully appreciated by the Professional Population until they actually design and construct them. These cost increases will be passed on to the General Population in the future. New regulations during a depressed economic time seems questionable.

**Comment Response**

The 2005 changes to the Regulations changed the hierarchy of preferred SWM practices to include Green Technology BMPs as the preferred practices, but the goal remained 80% TSS removal for quality management. The Minter Task Force recommendations recognized the need to address volume management. Since that time, EPA also appears to be placing a greater emphasis on runoff reduction to meet watershed management goals. The proposed revisions reflect this change in policies. Through a collaborative process with an ad hoc committee established by Committee of 100, additional example projects were completed with the goal of having the ad hoc committee evaluate the economic impact of compliance with the proposed regulations on both greenfield and redevelopment projects. Resulting from this process, the redevelopment requirement was revised from 50% to 30% reduction in effective impervious, and the fee-in-lieu amount reduced from \$23/cf to \$18/cf for compliance.

**Sally Ford, Land Design**

**5/7/2013**

**Comment**

1.14 'accompanying technical documents' are referenced here, are they included with this Public Hearing?

**Comment Response**

Sediment and Stormwater Program staff sought direction from the Deputy Attorney General's office with regard to the public notice requirements of the Technical Document. The Technical Document is an interpretive document and not a binding regulation. The Department is given authority under 7. Del. C. 4006(b) to provide technical assistance to local agencies in implementing Chapter 40 and also to develop standards, guidelines, and criteria for program elements. The Technical Document serves that purpose, in addition to providing guidance to the public, interested professionals, Delegated Agencies, and others regarding methods of meeting the standards set out in the Regulations. The Department does not intend to enforce the Technical Document as a binding regulation; rather, only standards of the Regulations will be enforced.

## **Sally Ford, Land Design**

**5/7/2013**

### **Comment**

"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 all disturbed areas on the site has been achieved.

- Standard subdivisions do not have individual homes shown on lots, thus once they have completed all roads, utilities, grading, stormwater management and stabilization they should qualify for a "Notice of Completion" and termination of the NOI.
- o  Single lot construction qualifies for the Standard Plan per Appx. 3.01.1.1 of the Technical Documents.
- o  The developer is not going to want to keep the NOI open paying a fee of \$195 each year, renewing Stormwater Plans every 3 years (and chance that new regulation may require additional revisions) while waiting for the last home to be built.
- o  If "Notice of Completion" and NOI's can not happen until the "last" home is built, developers will not sell lots to those unable to build immediately
- young people hoping to build in the future would not be able to buy a vacant lot
- middle age people who want a lot for retirement or investors who want a piece of land for investment, would not have the option to buy vacant lots
- This will have a definite impact on sales and the economy.

If "Notice of Completion" and NOI's can not happen until the "last" home is built, there will be even more projects that have started but do not built out. The economy is slow, banks are not lending and homes are not selling – few have the money and incentive to continue building. This policy/regulation is really detrimental to the economy of today and of the future

### **Comment Response**

The issues raised in these comments ultimately center on Federal requirements for coverage under the NPDES Construction General Permit (CGP). The current and proposed revisions to the Delaware Sediment & Stormwater Regulations (DSSR) are intended to make compliance with these requirements as seamless as possible, but they must be adhered to. Under Federal NPDES regulations, individual lots that are part of a larger common development plan that disturbs more than 1 acre must seek and maintain permit coverage until the conditions for termination are met. While there are provisions for homebuilders to seek co-permittee status and to terminate their co-permittee status once their obligations have been met on their individual lots, the owner/developer of the overall project must maintain coverage until the entire project is complete. The owner/developer could conceivably terminate a project, however no further construction activity (including individual lot construction) can occur unless the project is re-activated with an approved Sediment & Stormwater Plan and the filing of a new NOI.

## **Sally Ford, Land Design**

**5/7/2013**

### **Comment**

Asking all parties, at the project application meeting, to 'concur' on design approach prior all agency reviews and without detailed engineering for full feasibility is not appropriate

### **Comment Response**

The value stream mapping process was completed with input from delegated agencies, planning agencies, DelDOT, and designers and the result of that process was the basis for the three-step review process proposed in the revised regulations. The project application meeting was developed through the value stream mapping process. The steps, checklists, and regulatory language centered around the plan approval process, including the project application meeting was thoroughly reviewed by the Technical Subcommittee as well as the Regulatory Advisory Committee.

**Sally Ford, Land Design**

**5/7/2013**

***Comment***

5.2.1 I fully agree with the need to "reduce pollutant loads" but question the need for recharge in areas with a high water table. The alternative of an offset or off site mitigation will be expensive and increase the cost of development

***Comment Response***

Through a collaborative process with an ad hoc committee established by Committee of 100, additional example projects were completed with the goal of having the ad hoc committee evaluate the economic impact of compliance with the proposed regulations on both greenfield and redevelopment projects. Resulting from this process, the redevelopment requirement was revised from 50% to 30% reduction in effective impervious, and the fee-in-lieu amount reduced from \$23/cf to \$18/cf for compliance. The Department feels that having gone through this process has resulted in a valid assessment of the economic impacts to those that will be most affected.

**Sally Ford, Land Design**

**5/7/2013**

***Comment***

To achieve '0% effective imperviousness' for the quality storm in areas with a highwater table will not work and does not make sense. The Quality storm does need to be treated but there needs to be ways other than recharge. Reuse is suggested, but where do you retain the water in back to back storms, and irrigation is not needed until several days after a rain event

***Comment Response***

Design criteria for reuse practices are based upon average annual precipitation. Accounting for back-to-back major storms is not a requirement. Under a worst-case scenario, if an applicant can show that onsite compliance costs exceed maximum extent practicable, then they become eligible for compliance through offset provisions of the proposed regulations. Therefore, this should allow a more "level playing field" for compliance costs.

## Sally Ford, Land Design

5/7/2013

### Comment

'Delegated Agency shall issue a Notice of Completion' Comments on this issue have been address above under '2.0 Definitions'

"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 all disturbed areas on the site has been achieved.

- Standard subdivisions do not have individual homes shown on lots, thus once they have completed all roads, utilities, grading, stormwater management and stabilization they should qualify for a "Notice of Completion" and termination of the NOI.

○ Single lot construction qualifies for the Standard Plan per Appx. 3.01.1.1 of the Technical Documents.

○ The developer is not going to want to keep the NOI open paying a fee of \$195 each year, renewing Stormwater Plans every 3 years (and chance that new regulation may require additional revisions) while waiting for the last home to be built.

○ If "Notice of Completion" and NOI's can not happen until the "last" home is built, developers will not sell lots to those unable to build immediately

- young people hoping to build in the future would not be able to buy a vacant lot
- middle age people who want a lot for retirement or investors who want a piece of land for investment, would not have the option to buy vacant lots
- This will have a definite impact on sales and the economy.

If "Notice of Completion" and NOT's can not happen until the "last" home is built, there will be even more projects that have started but do not builtout.. The economy is slow, banks are not lending and homes are not selling – few have the money and incentive to continue building. This policy/regulation is really detrimental to the economy of today and of the future

### Comment Response

The issues raised in these comments ultimately center on Federal requirements for coverage under the NPDES Construction General Permit (CGP). The current and proposed revisions to the Delaware Sediment & Stormwater Regulations (DSSR) are intended to make compliance with these requirements as seamless as possible, but they must be adhered to. Under Federal NPDES regulations, individual lots that are part of a larger common development plan that disturbs more than 1 acre must seek and maintain permit coverage until the conditions for termination are met. While there are provisions for homebuilders to seek co-permittee status and to terminate their co-permittee status once their obligations have been met on their individual lots, the owner/developer of the overall project must maintain coverage until the entire project is complete. The owner/developer could conceivably terminate a project, however no further construction activity (including individual lot construction) can occur unless the project is re-activated with an approved Sediment & Stormwater Plan and the filing of a new NOI.

**ACEC-Delaware**

**3/1/2012**

***Comment***

Under the new regulations, the number and size of stormwater management (SWM) facilities will increase to some extent. These increases will result in increased engineering and construction costs. We request that the Department consider the potential impact of these increased costs with respect to economic development.

***Comment Response***

The number and size of SWM facilities will not increase in all cases. DNREC has contracted with local consultants to revise the hydrologic modeling and conceptual SWM plan for several previously approved projects of different types (residential, commercial, institutional, redevelopment) to determine the impact of the new regulations on the number and size of SWM facilities. Projects that were designed to comply with the 2006 version of the Sediment and Stormwater Regulations utilizing Green Technology BMPs in the design are not significantly affected by the revisions to the regulations. The new suite of BMPs proposed in the Post Construction BMP Standards and Specifications allow for credit of BMPs that previously were not counted in the stormwater management approach.

**ACEC-Delaware**

**3/1/2012**

***Comment***

Uncertainty surrounding the increase in construction costs associated with new regulation compliance warrants further study. Therefore, it is our opinion that that promulgation of the regulations should be a delayed for one year to allow adequate time to evaluate this economic impact. Economic evaluations should particularly consider cost impacts on redevelopment projects.

***Comment Response***

Through a collaborative process with an ad hoc committee established by Committee of 100, additional example projects were completed with the goal of having the ad hoc committee evaluate the economic impact of compliance with the proposed regulations on both greenfield and redevelopment projects. Resulting from this process, the redevelopment requirement was revised from 50% to 30% reduction in effective impervious, and the fee-in-lieu amount reduced from \$23/cf to \$18/cf for compliance. The Department feels that having gone through this process has resulted in a valid assessment of the economic impacts to those that will be most affected.

## **ACEC-Delaware**

**3/1/2012**

### ***Comment***

There has been little discussion regarding the compatibility of the new regulations with local land use agencies. As written, the new regulations appear to be in conflict with some local land use code and policies (e.g., reduced impervious area vs. required sidewalks, parking, etc). In addition, with an increase in the size and number of SWM facilities, there is a decrease in usable land, particularly in jurisdictions where SWM facilities cannot be considered open space. Flexibility in local agency SWM buffer, setback and open space requirements is essential to maintain the practical and economic feasibility of development projects.

### ***Comment Response***

DNREC does not have jurisdiction over local land use decisions and has been successfully challenged in court. Many of the larger jurisdictions offer a planning option for clustering development in favor of preserving open space. In Kent County a density bump is offered for residential development within the growth zone, and in Sussex County the clustering option allows for higher density on a particular project site when a portion of the site is left undisturbed. Higher density results in curbed roadways which can make it more difficult to accomplish runoff reduction through traditional green technology BMPs. The traditional "pipe to pond" solution at the site level has not been shown to meet the desired goal of mimicking natural hydrologic conditions at the watershed level. The 40+ BMP options in the Post Construction Standards and Specifications will be applicable to helping achieve runoff reduction goals. Some stormwater management will need to take place on lots to meet runoff reduction goals and we now have BMPs to help accomplish that.

## **ACEC-Delaware**

**3/1/2012**

### ***Comment***

The new regulations require more information earlier in the review process; therefore, a higher monetary investment for the owner/developer earlier in the plan review process will be required. This early expenditure of funds at the concept level may discourage many businesses from considering a project in Delaware.

### ***Comment Response***

The initial step in the review process, the Stormwater Assessment Study, does not require field collection of data, only a field review to assess downstream condition of conveyances. All other information is available online. DNREC is working to make these data layers available from the DNREC website as a service. The front-end information gathering is intended to avoid costly "back-end" design changes resulting from unforeseen design issues. The remaining review steps are staged so that the entire design does not need to be changed if the project doesn't meet the requirements with the conceptual stormwater design. A project developer that previously incurred the cost of fully engineered construction plans without the benefit of planning and meeting with the local agency, has now realized the benefits of an incremental process that is far less costly in the long run.

## **ACEC-Delaware**

**3/1/2012**

### ***Comment***

It appears that new residential subdivisions in undeveloped watersheds (green fields) will be the least impacted by the new regulations, thereby encouraging development in these areas and possibly resulting in sprawl.

### ***Comment Response***

The current Sediment and Stormwater Regulations require 100% compliance for both new and redevelopment which has been viewed as a disincentive for redevelopment projects. Section 5.6.1 of the proposed regulations states: "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." Redevelopment projects are being asked to provide a 30% reduction in the effective impervious of the existing impervious portion of the site being redeveloped (as compared to 100% compliance for greenfield development), and the soils on a redevelopment sites will be considered no higher than HSG 'C', resulting in a much lower runoff reduction requirement. Currently, at the Federal level, no lesser requirements for post construction stormwater management are proposed for redevelopment projects.

## **ACEC-Delaware**

**3/1/2012**

### ***Comment***

It appears that compliance with the new regulations will be difficult for redevelopment sites resulting in a high potential to discourage redevelopment. Discouragement of redevelopment is in conflict with most existing land use policies. Offsets, if found to be economically feasible, may provide a vehicle for compliance. Further, discouragement of redevelopment will lead to more "greenfield" development and sprawl.

### ***Comment Response***

The current Sediment and Stormwater Regulations require 100% compliance for both new and redevelopment which has been viewed as a disincentive for redevelopment projects. Section 5.6.1 of the proposed regulations states: "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." Redevelopment projects are being asked to provide a 30% reduction in the effective impervious of the existing impervious portion of the site being redeveloped (as compared to 100% compliance for greenfield development), and the soils on a redevelopment sites will be considered no higher than HSG 'C', resulting in a much lower runoff reduction requirement. Currently, at the Federal level, no lesser requirements for post construction stormwater management are proposed for redevelopment projects.

## **ACEC-Delaware**

**3/1/2012**

### ***Comment***

DNREC is to be commended on their comprehensive approach to the revisions of the Sediment and Stormwater regulations. DNREC's development of the revisions has been transparent and the opportunity for professional and public input over the past 4 years is unprecedented in the State of Delaware.

### ***Comment Response***

Comment so noted; no further action necessary.

**ACEC-Delaware****3/1/2012****Comment**

It appears that the new regulations will increase protection from the discharge of pollutants from stormwater runoff associated with land disturbing activities. In addition, the new regulations' goal is to better protect streams from bank and bed erosion associated with extended bankfull flows. ACEC-DE supports the goal to improve the quality of our waters and efforts to minimize erosion.

**Comment Response**

Comment so noted; no further action necessary.

**ACEC-Delaware****3/1/2012****Comment**

We believe that approved sediment and stormwater plans for projects that are not yet under construction should be renewable. The Technical Document references a three year extension. However, because of the lengthy recession, some approved plans have lapsed, even though the land use jurisdiction's sunset period has not ended. In the Grandfather provision, plans that are in the review process prior to the effective date of the new regulations have one year from that date to be approved. In some jurisdictions, it can take up to three years to go through the approval process. The Grandfather period for sediment and stormwater plans approved under the current regulations should be extended to reflect that reality. To avoid flood of plan renewals in a short time frame and a market-distorting glut of construction brought on by regulatory deadlines, we recommend that previously approved and pending plans be given five years from the effective date of the new regulations to begin construction, unless the record plan has sunsetted previous to that date.

**Comment Response**

Regulations 1.3.2.1 has been updated from what was first published in the Register. Plans approved under previous requirements will have a six-year window following the effective date of the revised regulations to commence construction, otherwise the project will expire and will require compliance with the revised regulations. Once construction commences, so long as construction continues, the plan may be extended for three-year approval periods until construction is complete.

**ACEC-Delaware****3/1/2012****Comment**

With respect to grandfathering, we request that DNREC consider a site plan grandfathered once a formal preliminary/exploratory plan submittal has been made to a local plan review agency, consistent with recent policy developed by DelDOT.

**Comment Response**

Each Delegated Agency currently has a different plan review process. DNREC developed an Interim Guidance Policy regarding the review, approval and extension of projects submitted prior to the effective date of revised regulations which lists the grandfathering "starting point" for each delegated agency. Section 3.5.6 of the regulations states that a project in the review process will have 18 months following the effective date of the revised regulations to gain approval under the previous regulations. The Interim Guidance policy has been updated to reflect that condition as well as to provide additional examples and timelines to clarify.

**ACEC-Delaware**

**3/1/2012**

**Comment**

It is unclear if the proposed fee in-lieu cost of \$23 per cubic foot of unmanaged stormwater runoff is economically feasible. The new regulations should include provisions to negotiate or change this fee, a phase-in price, a project cap, or allow trading across watersheds to keep compliance costs feasible.

**Comment Response**

The Department has revised the proposed fee-in-lieu to \$18/cu.ft. after several rounds of meetings with representatives from the regulated community. This adjustment was based on a \$10/cu.ft. estimated cost for constructing a bioretention facility with agreement from these representatives plus present value costs for a 20-year maintenance program. In addition, the "maximum extent practicable" requirement has been tied to the \$10/cu.ft. construction cost so that if an applicant can show their costs exceed this amount, they become eligible for an offset. The proposed regulations allow the applicant to determine the most appropriate offset for their particular project and is not limited to the fee-in lieu-option.

**ACEC-Delaware**

**3/1/2012**

**Comment**

There is a concern that DeIDOT input required in the draft of the proposed regulations will result in delays in plan approval. A Memorandum of Understanding outlining DeIDOT's role, responsibilities and plan review turn-around times should be in place before the regulations are promulgated. We request an explanation of why DeIDOT's input on stormwater issues is even necessary on projects that do not impact DeIDOT stormwater conveyance or management facilities.

**Comment Response**

DNREC agrees to remove the tie to the DeIDOT process in the DNREC/Sediment and Stormwater Review process by removing this step from the plan review checklists. The required project application meeting is essential to ensure as smooth a review process as possible. The project application meeting should not add time to the review process as this is held at the information gathering stage and is part of the background collection of information that a designer should be doing up front anyway.

**ACEC-Delaware**

**3/1/2012**

**Comment**

Since the EPA has not finalized its effluent limitation guidelines (ELGs) for construction sites, there are currently no ELG requirements included in the proposed regulations. However, when EPA established new ELGs, DNREC must follow suit and require ELGs for construction sites. How will ELG requirements be incorporated into the new regulations? We encourage that DNREC consider delaying the implementation of the new regulations until the EPA has issued its EGL requirements

**Comment Response**

It is correct that when when EPA establishes new ELGs, DNREC must follow suit and require ELGs for construction sites. This will be a "during construction" requirement and will not apply to the post construction stormwater management BMPs or post construction discharges from the site. The methods for complying with ELGs is likely to be included in the NPDES Construction General Permit regulations under Chapter 60. At the present time EPA has given no indication when, or even if, the ELGs will be a requirement. Therefore, DNREC does not agree that there is a need to delay implementation of the proposed Sediment and Stormwater Regulations based on this condition.

## **ACEC-Delaware**

**3/1/2012**

### ***Comment***

Although there are provisions for TMDL compliance using the DURMM v.2.0 spreadsheet incorporated in the new regulations, currently there are no TMDL requirements. Clearly, at some point in near the future TMDL compliance for land disturbing activities will be a requirement. It is our understanding that the EPA will consider compliance with the new regulations as compliance with Chesapeake Bay Watershed TMDLs. This may be an advantage, however, based on the preliminary plan sample projects, it is unclear if a site can meet compliance using the DURMM v.2.0 model.

### ***Comment Response***

TMDLs are established at the watershed level with all sources being considered. New development sites will not be required to meet the TMDL targets as calculated in DURMMv2 to receive approval of the post construction stormwater design; however, the Department will use the resultant nitrogen and phosphorous data from DURMMv2 to track progress toward meeting TMDLs by sites that meet the Rpv runoff reduction requirements. The Department will use an adaptive management approach to meeting TMDLs. Loads not being met from a particular sector may use a larger offset or trade in the future to meet those goals. If the Rpv requirements are being met but the TMDL targets are not, it may be the model. The Waste Load Allocation for stormwater or the BMP effectiveness credit would need to be looked at. The goal to meeting TMDL's for any watershed is to utilize the efforts of multiple sectors and make adjustments as necessary.

## **Am. Rivers, Brandywine Conservancy, De Audubon Soc., DNS, DRN, De Wild Lands, Inland Bays Fou**

**3/30/2012**

### ***Comment***

The organizations represented by this letter support the proposed Sediment and Stormwater Regulations. Overall, the regulations are an important advancement in protecting communities and the environment from the harms inflicted by stormwater and sediment pollution – they bring Delaware's regulations up to modern day standards, reflecting the scientific and technological advancements and understandings that exist today on these important issues. DNREC is to be commended for this important and protective proposal.

There are a few modifications/clarifications we would seek and support, but overall we think you have done a good job in modernizing these regulatory requirements so vital for protecting our communities from flooding, flood damages, and water pollution.

### ***Comment Response***

Comment so noted; no further action necessary.

## **Am. Rivers, Brandywine Conservancy, De Audubon Soc., DNS, DRN, De Wild Lands, Inland Bays Fou**

**3/30/2012**

### ***Comment***

One of the biggest initial sources of increased water runoff that causes flooding and pollution problems for neighboring and downstream waterways and communities is the removal of ground covering vegetation. The regulatory proposal, in provision 1.1.1.2 recognizes this significant source for increasing the volume of polluted runoff from development and thereby sets an important element of the stage for this regulatory proposal as a whole to address this water and pollution contribution from new and re-development.

### ***Comment Response***

Comment so noted; no further action necessary.

**Am. Rivers, Brandywine Conservancy, De Audubon Soc., DNS, DRN, De Wild Lands, Inland Bays Fou**

**3/30/2012**

***Comment***

The regulatory proposal ensures coverage of all projects 5,000 square feet or greater in provision 1.4.2. Ensuring coverage of projects of this size is important, otherwise we leave our watersheds and communities open to the continuing piecemeal devastation of our landscapes without an appropriate level of regulatory protection.

***Comment Response***

Comment so noted; no further action necessary.

**Am. Rivers, Brandywine Conservancy, De Audubon Soc., DNS, DRN, De Wild Lands, Inland Bays Fou**

**3/30/2012**

***Comment***

Provision 1.5 provides for a variance due to "hardship" which can be obtained within 15 days. It is important that the rules include a specific definition of what would be considered a "hardship". This definition should clearly not allow a hardship variance to be issued when the concern claimed is purely economic.

***Comment Response***

Variances to specific areas of the regulations will follow the provisions of 7. Del. C. Ch. 60, which is determined by the Department Secretary. This is not a process that will be taken lightly and all factors will be considered in determining if a hardship is realized and granting a variance from any aspect of the regulations.

**Am. Rivers, Brandywine Conservancy, De Audubon Soc., DNS, DRN, De Wild Lands, Inland Bays Fou**

**3/30/2012**

***Comment***

In addition, a 15-day review period is too short for the Department to do an effective level of review; a minimum 45 to 60 days should be provided. And it is important that any hardship request be subjected to immediate public notice and comment to ensure fully informed decision making by DNREC.

***Comment Response***

The time frames are in accordance with those established in 7. Del. C. Ch. 60. 15 days is the time frame for a person who is affected by the decision to appeal; there is not time frame mentioned for the Department to respond to a variance request. Based upon the requirements of Ch. 60, there is no requirement for public notice and comment; the Secretary's decision on the variance request is published. If an individual would like to request a hearing, the request would have to be in the form of an appeal within 15 days following the publication of the decision.

**Am. Rivers, Brandywine Conservancy, De Audubon Soc., DNS, DRN, De Wild Lands, Inland Bays Fou**

**3/30/2012**

***Comment***

Provision 1.7 allows for offsets and yet fails to provide the process and/or specific guiding substance by which an offset request will be considered and judged. Substantive guidelines and a specific process, which includes opportunity for public review and comment, needs to be specifically articulated in the regulations.

***Comment Response***

An offset procedure has been proposed. Initially, all projects in the state that wish to utilize the offset/fee-in-lieu option will need to demonstrate to DNREC that they have achieved compliance with the Resource Protection Event requirements to the maximum extent practicable (MEP) on the site. Once this process has been established over a reasonable time period, this responsibility may revert to the Delegated Agencies' level with Departmental oversight. Offset procedures included in the Technical Document are subject to public review and comment prior to adoption.

**Am. Rivers, Brandywine Conservancy, De Audubon Soc., DNS, DRN, De Wild Lands, Inland Bays Fou**  
**3/30/2012**

**Comment**

The definition of Land Disturbance needs to include roadways, a significant and growing source of polluted runoff in all communities.

**Comment Response**

The definition of Land Disturbing Activity included in the revised regulations is in accordance with the definition of Land Disturbing Activity that is included in the Sediment and Stormwater Law (7. Del. C. Ch. 40).

**Am. Rivers, Brandywine Conservancy, De Audubon Soc., DNS, DRN, De Wild Lands, Inland Bays Fou**  
**3/30/2012**

**Comment**

The three-step approval process and the expiration of an approval if not acted upon within three years are both sound elements of the proposed regulations, and we support them. It is important that the process allow enough time for the communication that is provided by the application meeting, the preliminary plan submission and then the final submission for consideration through the approval process. This ensures the maximum opportunity for solid applications that fulfill the requirements of the law and that the Department can act upon favorably. The provision of three years of validity for an approved plan provides plenty of time for the applicant to act upon the approval but also ensures that plans are not allowed to stay in force and be implemented many years later (i.e. 4 plus) when numerous changes on the ground may have made them no longer appropriate due to changing community conditions and the introduction of new developments and other projects.

**Comment Response**

Comment so noted; no further action necessary.

**Am. Rivers, Brandywine Conservancy, De Audubon Soc., DNS, DRN, De Wild Lands, Inland Bays Fou**  
**3/30/2012**

**Comment**

The Stormwater performance requirements included in section 5 of the Rule are largely sound:  
--they prevent reliance upon basins for stormwater management which we know from the experience of increased flooding in our communities to be ineffective;  
-- they focus on preserving the rate, volume and duration of runoff from pre-development to post development which is key to preventing increased flooding and pollution problems for communities;  
--while additional details are needed on the specifics in provisions 5.2, 5.3, and 5.5, the focus on multiple storm events and their water quality and runoff implications is important; and  
--we are very supportive of DNREC's efforts to ensure that redevelopment projects are also viewed and regulated as an opportunity to undo some of the harms of past inappropriate development by ensuring more modern standards are required for redevelopment projects in Delaware.

**Comment Response**

Comment so noted; no further action necessary.

**Amy Roe, Ph.D.**

**3/29/2012**

**Comment**

DNREC's proposed stormwater regulations are a vital step forward in the protection of aquatic life. Nutrient loads and sediment are damaging to the biological and reproductive processes of fish and amphibians, including species which are considered rare, endangered or threatened in Delaware. Acidic water prevents fish eggs from hatching, excessive nutrients encourage algal blooms and hypoxia, leading to fish kills, and sediments produce such fine silt that damages fragile eggs. The proposed regulations would safeguard these species and enable populations to recover. These regulations are essential to progress towards sustainability in our state's aquatic systems.

**Comment Response**

Comment so noted; no further action necessary.

**Audrey Braam, Michael W Evans, Michael Tyksinski, David LaVerne, Andrew McGrath, Pat Brundage,**

**3/30/2012**

**Comment**

I support Delaware's proposed Sediment and Stormwater Regulations and Technical Document. It is important that we take full advantage of the updated science, technologies and experiences that have been used to inform your regulatory proposal. Focusing on reducing the volume of polluted runoff in protecting drinking water supplies and stream/river flows, on protecting the natural landscapes that prevent needless polluted runoff and beautify our state at the same time, as well as ensuring DNREC and the community have the best information possible to ensure we are making good decisions are all high priority goals I support. Increasing pollution, flood damages and erosion harm our economy, jeopardize the safety of our communities, and deprive our children of a safe, beautiful and healthy future. Your regulations ensure Delaware and its residents will continue to benefit from healthy environments and only appropriate developments. Thank you for this well reasoned proposal and put the citizens of Delaware first.

**Comment Response**

Comment so noted; no further action necessary.

**Bill Moyer, Inland Bays Foundation**

**3/1/2012**

**Comment**

The IBF is concerned with the amount of impervious surfaces, in the form of roads, rooftops, and parking lots, which are being constructed within the three inland bays watersheds. Scientific studies indicate that when the total impervious surface area of a watershed exceeds 10% (as it does in Rehoboth Bay by 10.5% and Little Assawoman Bay by 10.2%) then significant negative impact on water quality will result from bacteria and chemical contaminants. The percent of impervious surface must, at worst, not exceed 10% of a watershed. Therefore in some instances, existing impervious surfaces may have to either be removed or allowed to remain only as an "offset" when developing offset requirements relative to subsection 1.7.3.

**Comment Response**

The studies referenced in this comment suggested that impervious cover could be used as an indicator for watershed health. They did not imply there is a direct cause and effect relationship, nor would a 10.5% impervious cover be a statistically significant increase over a 10% impervious cover based on the study results. In its report to EPA on the current state of stormwater management at the national level, the National Research Council properly identified the fact that the hydrologically connected, or "effective" imperviousness was a better metric for estimating impacts associated with urban development than physical imperviousness itself. The intent of the proposed revisions to the DSSR is to disconnect as much of the impervious surface associated with new and redevelopment in order to minimize impacts to receiving waters.

**Bill Moyer, Inland Bays Foundation**

**3/1/2012**

***Comment***

Section 1.3.1 should include the Wetlands Act (7 Del. C. Chapter 66) and the Subaqueous Lands Act (7 Del. C. Chapter 72).

***Comment Response***

7 Del. C. Ch. 40 does not extend statutory authority to the Sediment & Stormwater Program for enforcing the requirements of Ch. 66 or Ch. 72.

**Bill Moyer, Inland Bays Foundation**

**3/1/2012**

***Comment***

Section 1.4.3 should list examples of other State and Federal sediment and erosion control and storm water management laws that are applicable.

***Comment Response***

This is intentionally a much broader statement of Section 3.1.3 of the current Sediment and Stormwater Regulations which gives the example of sites that discharge a combination of stormwater and wastewater under a NPDES discharge permit.

**Bill Moyer, Inland Bays Foundation**

**3/1/2012**

***Comment***

Section 1.7.3 should state that no offset requirements be allowed until such time as the Department formally adopts the procedures referenced in this subsection.

***Comment Response***

At a minimum the fee-in-lieu process will be in place at the time of the effective date of the regulations.

**Bill Moyer, Inland Bays Foundation**

**3/1/2012**

***Comment***

Section 6.5.6.2 should require that a set of "as-built plans" be submitted as part of the post-construction verification.

***Comment Response***

The post-construction verification documents contain the information typically included in an "as-built plan". The Technical Subcommittee specifically recommended avoiding the use of the term "as-built" due to legal issues.

**Bill Moyer, Inland Bays Foundation**

**3/1/2012**

***Comment***

The IBF is concerned that the Department and/or designated agencies may not have adequate staff to conduct maintenance reviews. This Subsection should require that each permittee submit an annual maintenance report to the Department and/or designated agency.

***Comment Response***

The regulations require the owner to conduct maintenance reviews of stormwater management systems in accordance with the Operation and Maintenance Plan for the site. Guidance for conducting those maintenance reviews will be included on the O&M plan and are provided in the Technical Document. The Department has not required submittal of a maintenance report by the owner, viewing it as an unnecessary step for a system that is functioning properly.

## **City of Newark**

**3/1/2012**

### ***Comment***

The City of Newark is very concerned about the economic impact that the 50% reduction in the effective imperviousness for redevelopment will have. Newark is primarily built out with the majority of our construction being redevelopment. This requirement could effectively discourage redevelopment and have a significant impact on revenues generated that supplement out tax and electric revenues. The cost of meeting 50% reduction in the effective imperviousness along with the increased volumes to be managed, will be more expensive to achieve in Newark where clay soils are predominant in comparison to south of the canal where sandy soil is more prevalent. It is recommended that the % reduction in effective imperviousness be revised to a range of 20% to 50% depending on hydrological soil groups. This will help to lessen the economic impact in Newark and New Castle County and make costs more consistent across the state.

### ***Comment Response***

The current Sediment and Stormwater Regulations require 100% compliance for both new and redevelopment which has been viewed as a disincentive for redevelopment projects. Section 5.6.1 of the proposed regulations states: "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." Redevelopment projects are being asked to provide a 30% reduction in the effective impervious of the existing impervious portion of the site being redeveloped (as compared to 100% compliance for greenfield development), and the soils on a redevelopment sites will be considered no higher than HSG 'C', resulting in a much lower runoff reduction requirement. Currently, at the Federal level, no lesser requirements for post construction stormwater management are proposed for redevelopment projects.

## **Committee of 100**

**2/6/2012**

### ***Comment***

Just like previous regulation revisions, the new regulation does not address past practices. This includes all development that occurred before 1975 in New Castle County and 1991 for the rest of the State. The nation learned through the NPDES for sanitary sewer that they needed to correct the past to improve the future. These regulations need to correct the past instead of having all new development account for stormwater reduction. If all development were to stop today, the stream quality and flooding problems do not go away, but rather continue as they currently exist.

### ***Comment Response***

The Sediment and Stormwater Law and Regulations specifically addresses management of stormwater runoff resulting from land disturbing activities. Without a land disturbance a project is not subject to the requirements. Chesapeake WIP goals and MS4 permits may address retrofitting urban areas to manage stormwater further.

## **Committee of 100**

**2/6/2012**

### ***Comment***

The technical document in its current form is incomplete and there has not been sufficient time to evaluate and review all of the components. The technical document is more important than the regulations themselves for it is the technical document that will be used to meet the regulations.

### ***Comment Response***

The Technical Document has been subject to public review and comment.

## **Committee of 100**

**2/6/2012**

### **Comment**

The key component in all discussions at the RAC and Technical Subcommittee that has not been addressed is the compatibility between local land use agencies and the new Sediment Stormwater Regulations. One agency has a required buffer from all SWM. Another agency has a 25' buffer from right-of-way or permanent easements for SWM. A third agency does not permit

SWM to count as open space (active or passive). The new regulations lend designers and developers to de-centralize SWM into smaller areas and treat stormwater at the source where possible. Will local land use agencies adjust their regulations in regards to the new sediment and stormwater regulations? Based on the RAC and Technical Subcommittee sign-in sheets, a member from Sussex County or SCAT has never shown up to receive updates or provide guidance and comments on the regulations.

### **Comment Response**

DNREC does not have jurisdiction over local land use decisions and has been successfully challenged in court. Many of the larger jurisdictions offer a planning option for clustering development in favor of preserving open space. In Kent County a density bump is offered for residential development within the growth zone, and in Sussex County the clustering option allows for higher density on a particular project site when a portion of the site is left undisturbed. Higher density results in curbed roadways which can make it more difficult to accomplish runoff reduction through traditional green technology BMPs. The traditional "pipe to pond" solution at the site level has not been shown to meet the desired goal of mimicking natural hydrologic conditions at the watershed level. The 40+ BMP options in the Post Construction Standards and Specifications will be applicable to helping achieve runoff reduction goals. Some stormwater management will need to take place on lots to meet runoff reduction goals and we now have BMPs to help accomplish that.

## **Committee of 100**

**2/6/2012**

### **Comment**

The new regulations are based upon 0% effective impervious as compared to pre-development and some practices involve the use of annual rainfall versus rain events. These design premises are not used anywhere else in the United States. There are federal projects within the State that are subject to review by EPA and other federal agencies. Will the new design premise (regulations) be acceptable to these agencies? Currently, only programs approved by FHWA, USACE or NRCS can be used for design.

### **Comment Response**

The shortcomings of traditional event-based modeling methods to estimate runoff from the frequent, low magnitude storms that generate the majority of the annual runoff from a typical developed site are well documented. All the agencies cited in the comment recommend against using these models for small storm hydrology. The need to consider annualized runoff when evaluating the effectiveness of water quality BMPs has been recognized from at least 1987 with the publication of Schuler's "Green Book" which included the so-called "Short-Cut Method" to determine the annual runoff based on percent imperviousness. In fact, many jurisdictions use this methodology today for water quality regulatory compliance purposes. The EPA guidance document for Federal facilities to comply with the Energy Independence and Security Act (EISA) recognizes the variety of models available to estimating runoff volume, including many created by local jurisdictions. The methodology employed in the updated version of the Delaware Urban Runoff Management Model (DURMM v.2) is documented in Article 3.04.2 of the Technical Document. This methodology is based on the same algorithms developed by Dr. Robert Pitt from his original SLAMM model that were used in DURMM, Release 1. The SLAMM model has been universally recognized for its ability to accurately predict annual runoff volumes and pollutant loads specifically from urban lands. Therefore, the Department is confident that any Federal facility that complies with the proposed Delaware Sediment & Stormwater Regulations would meet or exceed any requirements under the EISA.

**Dave Morgan, Environmental Alliance, Inc.**

**2/24/2012**

***Comment***

If someone wants to clear trees to put in gravel, and the disturbance is over 5,000 ft<sup>2</sup>, that would require a stormwater management plan – correct? What if the clearing was done in successive phases that did not exceed 5,000 ft<sup>2</sup>?

***Comment Response***

Clearing trees to do anything, if the disturbance is >5,000sf requires a plan. We have incorporated the following language into our proposed regulations to combat the incremental 5,000sf disturbances that you're asking about:

1.4.2 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.

So, no, successive phases of 5,000sf of land disturbance would not be exempt.

**Dave Morgan, Environmental Alliance, Inc.**

**2/24/2012**

***Comment***

What qualifies as a "Land disturbing Activity"?

Does replacing existing pavement with new pavement qualify?

***Comment Response***

Milling and repaving without increasing the paving limits we do not currently consider land disturbing activity. If replacing existing pavement involves subgrade excavation, that would be considered land disturbance.

**Delaware Association of Realtors**

**3/30/2012**

***Comment***

DAR is concerned that appropriate economic analysis was not done. The "study projects" (taken only through preliminary design) offered by the Department showing the extent of the impact on a typical project was not complete. The projects did not take into account the impact of new and/or redevelopment projects in Kent and Sussex Counties. Because the regulations now look at volumes as opposed to storm events - the impact on the impoundment of water is very significant on lands with high water tables and no slopes. There was also a negative impact upon those redevelopment projects in an urban setting. Some estimations place the open space requirement on these urban infill projects of up to 50% of the total land on the site. These numbers will not work in today's economy, and may not ever work.

***Comment Response***

Through a collaborative process with an ad hoc committee established by Committee of 100, additional example projects were completed with the goal of having the ad hoc committee evaluate the economic impact of compliance with the proposed regulations on both greenfield and redevelopment projects. Resulting from this process, the redevelopment requirement was revised from 50% to 30% reduction in effective impervious, and the fee-in-lieu amount reduced from \$23/cf to \$18/cf for compliance. The Department feels that having gone through this process has resulted in a valid assessment of the economic impacts to those that will be most affected.

**Delaware Association of Realtors**

**3/30/2012**

***Comment***

In summary, we are asking that this regulation be suspended for a minimum of one year until a complete fiscal impact study is conducted by the Department. We continue to maintain that the housing market is rocky at best, and any increases in costs will simply make housing more expensive. As stated during testimony, the impact upon all aspects of Delaware's economy cannot be ignored and the fiscal impact must be fully vetted before this is approved and made the law of the land.

***Comment Response***

Through a collaborative process with an ad hoc committee established by Committee of 100, additional example projects were completed with the goal of having the ad hoc committee evaluate the economic impact of compliance with the proposed regulations on both greenfield and redevelopment projects. Resulting from this process, the redevelopment requirement was revised from 50% to 30% reduction in effective impervious, and the fee-in-lieu amount reduced from \$23/cf to \$18/cf for compliance. The Department feels that having gone through this process has resulted in a valid assessment of the economic impacts to those that will be most affected.

**Delaware Association of Realtors**

**3/30/2012**

***Comment***

It is imperative that the Department, once post construction verification document have been submitted, they or the Delegated Agency must return the bond within 30 days. Currently there is not timeline as to when a response is received from the regulator.

***Comment Response***

Proposed regulation section 1.6.2 is enabling language to allow the Department or the Delegated Agency to develop a process to require a financial guarantee. Financial guarantee procedures, including the time frame for returning a bond, would be subject to public notice requirements prior to adoption.

**Delaware Association of Realtors**

**3/30/2012**

***Comment***

DAR believes that any project in any jurisdiction under review or submitted should be automatically grandfathered from these regulatory provisions.

***Comment Response***

Each Delegated Agency currently has a different plan review process. DNREC developed an Interim Guidance Policy regarding the review, approval and extension of projects submitted prior to the effective date of revised regulations which lists the grandfathering "starting point" for each delegated agency. Section 3.5.6 of the regulations states that a project in the review process will have 18 months following the effective date of the revised regulations to gain approval under the previous regulations. The Interim Guidance policy has been updated to reflect that condition as well as to provide additional examples and timelines to clarify.

**Delaware Association of Realtors**

**3/30/2012**

***Comment***

Given the extremely difficult economy housing is facing, with no relief in sight, the three(3) year sunset on the plans as submitted to the Department should be a minimum of five (5) years. In many instances, local government is extending good plans for years because there is simply no market. Recently the State of Virginia by statute extended all approved plans to 2014.

***Comment Response***

Regulations 1.3.2.1 has been updated from what was first published in the Register. Plans approved under previous requirements will have a six-year window following the effective date of the revised regulations to commence construction, otherwise the project will expire and will require compliance with the revised regulations. Once construction commences, so long as construction continues, the plan may be extended for three-year approval periods until construction is complete.

**Delaware Association of Realtors**

**3/30/2012**

***Comment***

Here, there is no consideration for extensive weather events that prevent the builder or property owner from fixing soil stabilization structures within the 14 days. While it is unlikely, 14 days may not be enough time to do what is required under this section.

***Comment Response***

Fourteen-day stabilization is not a new requirement with these regulation revisions. The 14-day stabilization requirement has been in place since 1991 and will be the maximum time allowed for stabilization under the construction general permit based upon guidance from EPA.

**Delaware Association of Realtors**

**3/30/2012**

***Comment***

Once additional soil testing is required by the regulator, there is not time frame as to when the Department or Delegated Agency shall return these documents or reports to the builder or property owner. This time delay could be costly if the regulator becomes unresponsive.

***Comment Response***

Additional soil testing would be required of the owner and the results would be delivered to the owner by the independent testing lab. The Department or Delegated Agency would have no involvement to cause delay in the process.

**Delaware Association of Realtors**

**3/30/2012**

***Comment***

This essentially states that, in our estimation, 100% of the rainfall event shall be retained on the property. This is the heart of the regulation, and, as discussed previously, the size and depth of the retention facilities to be used in Kent and Sussex Counties could become prohibitively expensive.

***Comment Response***

There is no prescribed retention volume for the flooding event required under the proposed revisions. The performance standard for the flooding event is a "no adverse impact" standard. If a proposed project can meet the "no adverse impact" criteria as contained in Article 3.04 of the Technical Document, no additional management is required. If an unmanaged project can not meet this standard, management is only required to the point that the standard is met.

## **Delaware Association of Realtors**

**3/1/2012**

### ***Comment***

On behalf of the 3,200 members of the Delaware Association of REALTORS, I respectfully request the hearing record for the Revised Sediment and Stormwater Regulations and corresponding Technical Document to remain open for at least 30 days"

Given the far reaching impact and highly technical nature of this comprehensive re-write of the Sediment and Stormwater Regulations we, believe a minimum of 30 days to review the final proposal is appropriate.

### ***Comment Response***

Comment period extended through March 30, 2012.

## **Delaware Center for the Inland Bays**

**3/25/2012**

### ***Comment***

I am writing on behalf of the Center for the Inland Bays to support the proposed revisions to DNREC's Sediment and Stormwater Regulations. The revisions will serve to reduce the volume, and thus the erosive power, of stormwater carried to streams. This will reduce the potential for flood damage, preserve the natural capacity of streams to mitigate pollutants, and reduce the amount of nutrients and sediments conveyed to surface waters.

These revisions will be of significant importance to the watersheds of the Inland Bays, which experienced a 57% increase in developed lands from 1992 to 2007. Two of these watersheds now exceed 10% impervious cover, a threshold often cited as the point where the effects of land development begin to degrade surface water quality. After decades of restoration efforts, the Inland Bays continue to demonstrate fair to poor water quality, and many of their tributaries remain severely degraded by excess nutrient pollution caused in part by urban runoff. These revisions implement the Inland Bays Comprehensive Conservation and Management Plan by helping to achieve the Total Maximum Daily Loads for the Inland Bays and by requiring Environmentally Sensitive Development.

### ***Comment Response***

Comment so noted; no further action necessary.

## **Delaware Center for the Inland Bays**

**3/25/2012**

### ***Comment***

The Center would also like to comment on one section of the proposed revisions in particular. The offset provision for applicants who cannot fully meet the resource protection event criteria provides flexibility to meet stormwater management goals. However, this provision requires a strict monitoring and enforcement component to ensure that offsets are properly implemented. The Center encourages the Department to take every step necessary to ensure that where applicants can meet resource protection event criteria on site, they do so.

### ***Comment Response***

An offset procedure has been proposed. Initially, all projects in the state that wish to utilize the offset/fee-in-lieu option will need to demonstrate to DNREC that they have achieved compliance with the Resource Protection Event requirements to the maximum extent practicable (MEP) on the site. Once this process has been established over a reasonable time period, this responsibility may revert to the Delegated Agencies' level with Departmental oversight.

## **Delaware Center for the Inland Bays**

**3/25/2012**

### ***Comment***

We also encourage the Department to continually scrutinize the monetary compensation rate to ensure that the full costs of planning, designing, implementing, monitoring, and maintaining offset projects be borne by the applicant seeking the offset. The often hidden costs of formulating and successfully administering such a program, if not properly accounted for, could increase the public costs of the program and reduce its potential for success.

### ***Comment Response***

The Department has developed a framework for offset fee-in-lieu. Although no specific time frame has been established to re-evaluate this process, the Department intends to take an adaptive management approach to the offset provisions and will revisit it as needed.

## **Delaware Riverkeeper Network**

**3/30/2012**

### ***Comment***

Finally, nowhere in the regulations is there a mandatory minimum buffer requirement – either the protection of pre-development buffers or the creation of buffers. While this may be referenced as a development strategy in the associated materials, having a mandatory minimum buffer requirement of 300 feet for all streams and additional protection for impaired or still high quality streams is appropriate --- the scientific literature is clear, when you start getting below 100 feet much of the benefit provided by a buffer is lost, and that greater than 100 feet, and in the range of 300 feet is significantly more beneficial and protective. Not only do buffers reduce polluted runoff, encourage infiltration, reduce the volume of runoff from a site, but they also ensure communities are not developing increasingly close to the water's edge so as to result in these harms and to put their structure in the path of floods. While there are other regulatory requirements in Delaware having to do with floodplain protection etc., ensuring that buffers are also a recognized stormwater and pollution strategy is critical.

### ***Comment Response***

The Department has been successfully challenged in court over buffer provisions. No buffer requirements will be established with these regulations.

## **Delaware Riverkeeper Network**

**3/30/2012**

### ***Comment***

The Delaware Riverkeeper Network supports the proposed Sediment and Stormwater Regulations and encourages their passage. While there are a few areas where we think the regulatory package can and should be strengthened, we believe that with these regulations Delaware's Department of Natural Resources and Environmental Control (DNREC) is taking a proactive step to help protect our communities from the avoidable harms of inappropriate development practices. DNREC is proposing a set of Sediment and Stormwater Regulations that are clearly designed to put in place modern day standards for protecting communities and waterways from the non-natural flooding, pollution and erosion caused by inappropriate development practices.

### ***Comment Response***

Comment so noted; no further action necessary.

**Delaware Riverkeeper Network**

**3/30/2012**

***Comment***

Section 1.1.1.2 while sound in its intent could use some refinement to ensure clarity and accuracy. The section should be modified to ensure it is clear that all land development activities have the potential for causing accelerated erosion and nonpoint source polluted runoff, not just those aspects of land development that result in impervious cover such as roads and parking lots. The language in Section 1 cites impervious cover as the cause of accelerated runoff and nonpoint source runoff but then discusses regulation of all land development activities – not recognizing all land development activities as being potential causes of accelerated erosion and nonpoint source pollution could create confusion and the opportunity for legal challenge.

***Comment Response***

Section 1.1.1.2 of the proposed regulations is written in accordance with 7. Del. C. Ch. 40.

**Delaware Riverkeeper Network**

**3/30/2012**

***Comment***

DRN recommends that Section 1.1.1.3 be edited so as to also specifically refer to flood damages as a ramification of increasing stormwater runoff and a benefit of the proposed regulations. Flooding is a natural, normal, needed part of any waterway's lifecycle, it is the human-induced, unnatural flooding that needs to be addressed and it is the flood damages caused by this human-induced flooding and/or inappropriate siting of development projects that we are seeking to minimize.

***Comment Response***

Section 1.1.1.3 of the proposed regulations is written in accordance with 7. Del. C. Ch. 40.

**Delaware Riverkeeper Network**

**3/30/2012**

***Comment***

It would be helpful to define the term "water flow characteristics" used in section 1.11.

***Comment Response***

The specific requirements regarding water quality and water quantity management are contained in the Technical Document to support the regulations.

**Delaware Riverkeeper Network**

**3/30/2012**

***Comment***

Applying the regulations at a threshold of 5,000 square feet as per Section 1.4.2, is an important and proactive provision that recognizes the potentially significant impacts of smaller projects on both an individual but also a cumulative basis. DRN supports the use of the 5,000 square feet threshold.

***Comment Response***

Comment so noted; no further action necessary.

## **Delaware Riverkeeper Network**

**3/30/2012**

### ***Comment***

The definition of the term "hardship" used in Section 1.5.3.2 which could entitle a property owner to waiver from the provisions found in the regulations needs definition. Without definition there is too much opportunity for misuse, challenge and/or confusion. Having a definition for the term "hardship" as used in these regulations will provide the needed clarity and guidance that will ensure the hardship waiver provision is only used in limited circumstances when truly warranted; and that when a request for such waiver is denied that there is stronger defensibility in the face of a legal challenge. When this definition of "hardship" is crafted, DRN urges that under no circumstances should the term include as a consideration of "hardship" an increase in the cost of the project, nor should a needed reduction in the size of the project in terms of square footage of disturbance and/or impervious cover qualify one for a hardship exemption.

### ***Comment Response***

To be clear, 1.5.3.2 covers variances from provisions of the Regulations, not waivers or exemptions. Compliance with post construction stormwater resource protection event requirements will first utilize Offset Provisions as defined in 1.7 and the Technical Document. Variances to other areas of the regulations will follow the provisions of 7. Del. C. Ch. 60, which is determined by the Department Secretary. This is not a process that will be taken lightly and all factors will be considered in granting a variance from any aspect of the regulations.

## **Delaware Riverkeeper Network**

**3/30/2012**

### ***Comment***

DRN would recommend that a greater time frame than 15 days be provided in section 1.5.6 to ensure full opportunity for a substantially affected person to review and appeal an approval to the EAB. 60 days seems a much more equitable time frame.

### ***Comment Response***

The time frames are in accordance with those established in 7. Del. C. Ch. 60.

## **Delaware Riverkeeper Network**

**3/30/2012**

### ***Comment***

We urge DNREC to specifically define any Offset Provisions included in the regulatory framework, and that when doing so you ensure the provisions are rigorous and only support and encourage their use when needed as a last resort. The Offset Provisions should ensure protection of the streams and watersheds that would be affected by a project. Payment of a "fee in lieu" should never be allowed as an offset. And the inclusion of an Offset Provision in the regulations should not negate the option/opportunity/possibility of DNREC outright denying requested permit applications for a project when doing so would be the most beneficial and appropriately protective for the environment and communities that would otherwise be impacted – in other words, including the opportunity for offsets in the regulation should not be used as a means to ensure that every project proposal put before DNREC will be granted approval for construction/implementation.

### ***Comment Response***

An offset procedure has been proposed. Initially, all projects in the state that wish to utilize the offset/fee-in-lieu option will need to demonstrate to DNREC that they have achieved compliance with the Resource Protection Event requirements to the maximum extent practicable (MEP) on the site. Once this process has been established over a reasonable time period, this responsibility may revert to the Delegated Agencies' level with Departmental oversight.

## **Delaware Riverkeeper Network**

**3/30/2012**

### ***Comment***

DRN urges a modification of the definition given "Best Management Practices". The definition of Best Management Practices used in the regulations is overly broad and deceptive in that it would seemingly include any kind of structural control. Best Management Practices are generally used to describe practices that are designed to rely upon and/or restore and/or mimic the natural function of nature for reducing the volume of runoff and or the level of pollution contained therein. The term Best Management Practices generally includes the following concepts:

- Preventing stormwater runoff in the first place through sound development practices that protect and restore vegetated landscapes and the environment's natural ability to infiltrate rainfall so as to avoid the water quality and hydrologic impacts that runoff creates.
- Approaches that protect and restore infiltration of stormwater in order to minimize the volume of runoff, recharge aquifers, filter out pollutants, reduce human-induced flooding and feed groundwater to streams during dry times.
- Building, engineering and commonsense techniques that can effectively protect and enhance infiltration of rainfall and filter out nonpoint source pollution.

Best Management Practices are generally intended to preserve and/or mimic the natural world using natural systems in place or restored, and are intended to steer developers and regulators away from construction and installation of structural measures, particularly those that use hardened, artificial mechanisms and piping for dealing with stormwater runoff. And so in addition to providing a clear definition of Best Management Practices it would also be appropriate to include a hierarchy of consideration with the nonstructural Best Management Practices being given preferential consideration as compared to those that are more structural.

### ***Comment Response***

The definition of "Best Management Practice" was developed in consultation with the Center for Watershed Protection, which acted as the Department's outside consultant for the proposed revisions. It is meant to be as broad as possible so as not to limit potential practices either now or in the future. Unless granted prior approval by the Department, any BMPs proposed for compliance purposes must meet the Stds & Specifications for Post-Construction Stormwater Management contained in Article 3.04 of the Technical Document.

## **Delaware Riverkeeper Network**

**3/30/2012**

### ***Comment***

In the definition of "final stabilization" DRN does not believe it is appropriate to be making the criteria included (1)(a) and (1)(b) as co-equals. Allowing the use of gabions, riprap etc. is in no way similar or equivalent environmentally to the use and benefits of native vegetation and therefore we would urge a language change that encourages the use of native vegetation strategies as referenced in (a) to the hardened bank approaches discussed in (b).

Also in the definition of "final stabilization" it would seem to make sense to change the terminology used in (3)(a) and (b) from homebuilder to simply builder, and from homeowner to property owner.

### ***Comment Response***

The definition of final stabilization is in accordance with the Federal definition for final stabilization in the NPDES Stormwater Construction General Permit regulations.

## **Delaware Riverkeeper Network**

**3/30/2012**

### ***Comment***

For clarity and to ensure full applicability, in the definition of "Land disturbing activity" DRN suggests you add the words "and/or increased volume of" before "stormwater runoff, including, but not limited to, clearing, grading, excavating, transporting and filling of land" found in the last sentence.

### ***Comment Response***

"Land disturbing activity" has been defined in 7. Del. C. Ch. 40 and this definition has been carried over into the proposed Sediment and Stormwater Regulations.

## **Delaware Riverkeeper Network**

**3/30/2012**

### ***Comment***

DRN would suggest that the definition of "permanent stabilization" use language making clear that native vegetation is not just suggested but mandated, there is no reason to allow anywhere in these regulations the use of non-native vegetation and so we would urge any changes necessary to make that clear.

### ***Comment Response***

The purpose of the stabilization requirements is to protect the soil surface from erosion. This can be accomplished with both native and non-native vegetation, as well as non-vegetated surfaces. The Department is not in the position to mandate any one particular type of stabilization as long the end result is accomplished. If this recommendation were taken literally, it would preclude the use of many turf species that are proven to be effective in preventing soil erosion.

## **Delaware Riverkeeper Network**

**3/30/2012**

### ***Comment***

DRN supports the three-step process for project review and approval. We believe the process provides good opportunity for ensuring full application of the terms and goals of the regulations. The Project Application Meeting ensures a timely opportunity for discussion between the regulators and the developers at a time when participants feel more able to make the adjustments necessary for best implementation of the law. But it would be beneficial to provide an additional level of definition to the process and to sure there is documentation placed in the file that citizens can review.

### ***Comment Response***

A Stormwater Assessment Study (SAS) will be conducted by the owner's representative and submitted to the reviewing agency prior to a project application meeting. At the project application meeting, minutes will be kept based upon a template to ensure that all items are covered at all meetings. As a result of the SAS and the project application meeting, a Stormwater Assessment Report (SAR) will be developed. All of these documents will be kept in the file and will be FOIAable information.

## **Delaware Riverkeeper Network**

**3/30/2012**

### ***Comment***

Section 3.4.2 should be enhanced with more guidance as to when design changes meet the threshold that warrants a starting over of the review process. Such guidance would better empower the agency to take such action when warranted and better inform the regulated community as to when they can anticipate, or how they can avoid, this step.

### ***Comment Response***

3.4.2 states "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". DNREC believes this guidance is adequate. Whether a plan needs to repeat the preliminary step or not will be determined on a case-by-case basis.

## **Delaware Riverkeeper Network**

**3/30/2012**

### ***Comment***

It would seem that in section 3.6 it would be appropriate to allow the expiration of a plan approval within the 3-year period if there is some substantial changed condition within the watershed or affected waterway. DRN would recommend that this provision be modified so as to allow for expiration within the 3-year period if there is some demonstrable change in the watershed or waterway that would warrant it.

### ***Comment Response***

The Sediment and Stormwater program has the ability to require changes to the approved plan if deemed necessary. Rather than expiring the plan, we would choose to request modifications.

## **Delaware Riverkeeper Network**

**3/30/2012**

### ***Comment***

DRN, informed by the technical expertise of Meliora Design, supports the elements found in section 3.7 designed to aid in meeting the requirements of the regulations for small projects, i.e. reducing the requirements for professional design support but also ensuring the ability of DNREC to seek a greater level of information and review when warranted

### ***Comment Response***

Comment so noted; no further action necessary.

## **Delaware Riverkeeper Network**

**3/30/2012**

### ***Comment***

Section 3.8 should also be modified to mandate that all stormwater calculations be approved and sealed by a licensed and qualified engineer.

### ***Comment Response***

The term "Licensed Professional" has been used in the regulations to allow for licensed surveyors and landscape architects to seal plans within their area of licensure.

## **Delaware Riverkeeper Network**

**3/30/2012**

### ***Comment***

While participation in the training discussed in 3.8.3 is later qualified so as to mandate updated training if so noticed by the Department, DRN suggests it would also be valuable to ensure that even when there has not been a change in the overall program or materials professionals should be required to participate in the course on a regular basis to ensure ongoing upkeep with the concepts and materials in the training and in this regulation. Mandating participation a minimum of every two years seems appropriate.

### ***Comment Response***

It would be burdensome on the Department to require all trained personnel to recertify every two years.

## **Delaware Riverkeeper Network**

**3/30/2012**

### ***Comment***

Including a description of low impact development practices in provision 5.1.1 is very beneficial and we support it. But, DRN would suggest adding the word "implementing" before "other measures that simulate natural watershed hydrological processes" found in the last sentence of that provision.

### ***Comment Response***

Comment so noted. DNREC does not believe it modifies the intent significantly to warrant a change to the proposed reg language.

## **Delaware Riverkeeper Network**

**3/30/2012**

### ***Comment***

Section 5.1.3, as per the Meliora Memo, could use some clarification and perhaps adjustment.

### ***Comment Response***

On-lot controls such as rain gardens would be the maintenance responsibility of individual lot owners, or placed within easements if maintained as part of the larger system.

## **Delaware Riverkeeper Network**

**3/30/2012**

### ***Comment***

The definition and exemption found in section 5.1.6 "regrading and replacement of existing pervious areas" could be inappropriately applied if additional clarification is not provided. For example, right now the exemption provided in this section could apply to golf courses and athletic fields which in fact have significant stormwater impacts and therefore should not be entitled to the exemption. DRN suggests clarification and modification that takes out of the exemption areas such as golf courses, ball fields, and other manicured and/or developed landscapes that can have significant stormwater impacts.

### ***Comment Response***

This section stipulates that the disturbed area must return to the original hydrologic condition and land cover at the conclusion of the project.

## **Delaware Riverkeeper Network**

**3/30/2012**

### ***Comment***

DRN supports the provisions and concepts found in Section 5.2 regarding Resource Protection Criteria. As provided for, this section can go a long way towards providing communities and the environment needed protections that would otherwise result from development. As written, this section also provides the opportunity to improve existing conditions, which is important considering all of the flooding, erosion and pollution problems already in place as the result of past inappropriate development practices. But as per the Meliora Memo, in order to ensure the provisions in this section are not manipulated or misapplied more guidance for implementation is warranted. As discussed previously, this section too needs more clarification regarding the offset provision/opportunity to ensure it is not misused or misapplied in any given situation. See Meliora Memo for additional input.

### ***Comment Response***

Extensive guidance for compliance with the Resource Protection Event criteria is included in the Technical Document.

## **Delaware Riverkeeper Network**

**3/30/2012**

### ***Comment***

The focus of Sections 5.3 and 5.4 on volume reduction are important and supported by DRN. But these sections could benefit from an additional level of guidance and detail to ensure clarity, understanding, and accurate implementation. See Meliora Memo for additional detail and discussion.

### ***Comment Response***

Extensive guidance for compliance with the Conveyance and Flooding Event criteria is included in the Technical Document.

## **Delaware Riverkeeper Network**

**3/30/2012**

### ***Comment***

5.4.1 should be clear that it is not concerned about "flooding" it is concerned about human-induced, non-natural flooding and flood damages. It is important that those implementing the regulations and/or the community they are designed to protect understand that flooding is not in and of itself a problematic condition, in fact when at natural levels it is vital for environmental health, and so offering qualifying language in this provision would help to offer that clarity of understanding.

### ***Comment Response***

This section is an overall goal for managing large storm events within the framework of the regulations themselves. It is not intended to be an all-inclusive attempt to address the myriad of issues related to flooding events.

## **Delaware Riverkeeper Network**

**3/30/2012**

### ***Comment***

Section 5.5 provides the opportunity for Alternative Criteria defined by a watershed plan; DRN believes this is a good opportunity to include in the regulations as long as there is language added that makes clear the Alternative Criteria cannot be "less" rigorous than would otherwise be required by these regulations. Section 5.5 talks about additional protections for impaired streams and/or meeting specific pollutant reduction targets found in Delaware water quality regulations; but it would also be appropriate to add a provision that allows for alternative and/or additional practices and/or criteria to protect high quality streams.

### ***Comment Response***

These provisions would presumably be included in a watershed plan that would support any alternative criteria.

## **Delaware Riverkeeper Network**

**3/30/2012**

### ***Comment***

Section 5.6 Redevelopment Criteria could use some further clarification as discussed in the Meliora Memo.

### ***Comment Response***

Redevelopment criteria is further defined in the Technical Document.

## **Derek Strine (Hearing comments)**

**3/1/2012**

### ***Comment***

The cost benefit analysis needs to be calculated on a -- a real numbers type reality, as opposed to something plucked from the air, \$23 per cubic foot, particularly when, within the same regulations, they say that site is not doable.

### ***Comment Response***

The Department has revised the proposed fee-in-lieu to \$18/cu.ft. after several rounds of meetings with representatives from the regulated community. This adjustment was based on a \$10/cu.ft. estimated cost for constructing a bioretention facility with agreement from these representatives plus present value costs for a 20-year maintenance program. In addition, the "maximum extent practicable" requirement has been tied to the \$10/cu.ft. construction cost so that if an applicant can show their costs exceed this amount, they become eligible for an offset. The proposed regulations allow the applicant to determine the most appropriate offset for their particular project and is not limited to the fee-in lieu-option.

## **Derek Strine (Hearing comments)**

**3/1/2012**

### ***Comment***

On the brownfields redevelopment, I believe the Department's own consulting engineers showed that a project on Kirkwood Highway and Route 7 was not built -- was not feasible under these proposed regulations. That causes me great concern. I own a number of properties in all three counties, including some areas that are likely to be redeveloped, and to take a, in that instance on Kirkwood Highway, a gas station and a Steak and Ale and expect that on a corner of Kirkwood Highway, with 40 or 50,000 cars a day, it should be scraped clean and turned to grass is probably not in the best interests of the State. Certainly not of the land owners in that particular piece. And is in direct conflict with what I believe is former Governor Minner's goals of keeping development in areas that are appropriate, and are already -- appropriate, and have adequate infrastructure. To say it's better to go to a farm field with some class A soils and build a -- a bank, and leave an abandoned gas station in place to rot and turn into grass is probably not the intent of the Governor in her directions to the Department, and certainly should not be a goal of the regulations.

### ***Comment Response***

The example redevelopment site included as Appx. 3.02.2.7.4 of the Technical Document was able to meet the requirements of the proposed revisions to the DSSR with only minor adjustments to the stormwater management plan. There were no adjustments necessary to the site layout itself. The current DSSR make no distinction between new development and redevelopment projects. Under the proposed revisions, compliance requirements for redevelopment projects would be relaxed. In the case of Brownfields redevelopment projects, runoff reduction would not be required if a Department-approved remediation plan is implemented.

## **First State Manufactured Housing Association**

**11/20/2012**

### ***Comment***

It appears that compliance with the new regulations will be difficult for redevelopment sites resulting in a high potential to discourage redevelopment. Discouragement of redevelopment is in conflict with most existing land use policies. Offsets, if found to be economically feasible, may provide a vehicle for compliance. Further, discouragement of redevelopment will lead to more "greenfield" development and sprawl.

### ***Comment Response***

The current Sediment and Stormwater Regulations require 100% compliance for both new and redevelopment which has been viewed as a disincentive for redevelopment projects. Section 5.6.1 of the proposed regulations states: "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." Redevelopment projects are being asked to provide a 30% reduction in the effective impervious of the existing impervious portion of the site being redeveloped (as compared to 100% compliance for greenfield development), and the soils on a redevelopment sites will be considered no higher than HSG 'C', resulting in a much lower runoff reduction requirement. Currently, at the Federal level, no lesser requirements for post construction stormwater management are proposed for redevelopment projects.

**First State Manufactured Housing Association**

**3/30/2012**

***Comment***

Uncertainty surrounding the increase in construction costs associated with new regulation compliance warrants further study. Therefore, it is our opinion that that promulgation of the regulations should be a delayed for one year to allow adequate time to evaluate this economic impact. Economic evaluations should particularly consider cost impacts on redevelopment projects.

***Comment Response***

Through a collaborative process with an ad hoc committee established by Committee of 100, additional example projects were completed with the goal of having the ad hoc committee evaluate the economic impact of compliance with the proposed regulations on both greenfield and redevelopment projects. Resulting from this process, the redevelopment requirement was revised from 50% to 30% reduction in effective impervious, and the fee-in-lieu amount reduced from \$23/cf to \$18/cf for compliance. The Department feels that having gone through this process has resulted in a valid assessment of the economic impacts to those that will be most affected.

**First State Manufactured Housing Association**

**3/30/2012**

***Comment***

Under the new regulations, the number and size of stormwater management (SWM) facilities will increase to some extent. These increases will result in increased engineering and construction costs. We request that the Department consider the potential impact of these increased costs with respect to economic development.

***Comment Response***

The number and size of SWM facilities will not increase in all cases. DNREC has contracted with local consultants to revise the hydrologic modeling and conceptual SWM plan for several previously approved projects of different types (residential, commercial, institutional, redevelopment) to determine the impact of the new regulations on the number and size of SWM facilities. Projects that were designed to comply with the 2006 version of the Sediment and Stormwater Regulations utilizing Green Technology BMPs in the design are not significantly affected by the revisions to the regulations. The new suite of BMPs proposed in the Post Construction BMP Standards and Specifications allow for credit of BMPs that previously were not counted in the stormwater management approach.

## **First State Manufactured Housing Association**

**3/30/2012**

### ***Comment***

There has been little discussion regarding the compatibility of the new regulations with local land use agencies. As written, the new regulations appear to be in conflict with some local land use code and policies (e.g., reduced impervious area vs. required sidewalks, parking, etc). In addition, with an increase in the size and number of SWM facilities, there is a decrease in usable land, particularly in jurisdictions where SWM facilities cannot be considered open space. Flexibility in local agency SWM buffer, setback and open space requirements is essential to maintain the practical and economic feasibility of development projects.

### ***Comment Response***

DNREC does not have jurisdiction over local land use decisions and has been successfully challenged in court. Many of the larger jurisdictions offer a planning option for clustering development in favor of preserving open space. In Kent County a density bump is offered for residential development within the growth zone, and in Sussex County the clustering option allows for higher density on a particular project site when a portion of the site is left undisturbed. Higher density results in curbed roadways which can make it more difficult to accomplish runoff reduction through traditional green technology BMPs. The traditional "pipe to pond" solution at the site level has not been shown to meet the desired goal of mimicking natural hydrologic conditions at the watershed level. The 40+ BMP options in the Post Construction Standards and Specifications will be applicable to helping achieve runoff reduction goals. Some stormwater management will need to take place on lots to meet runoff reduction goals and we now have BMPs to help accomplish that.

## **First State Manufactured Housing Association**

**3/30/2012**

### ***Comment***

It appears that new residential subdivisions in undeveloped watersheds (green fields) will be the least impacted by the new regulations, thereby encouraging development in these areas and possibly resulting in sprawl.

### ***Comment Response***

The current Sediment and Stormwater Regulations require 100% compliance for both new and redevelopment which has been viewed as a disincentive for redevelopment projects. Section 5.6.1 of the proposed regulations states: "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." Redevelopment projects are being asked to provide a 30% reduction in the effective impervious of the existing impervious portion of the site being redeveloped (as compared to 100% compliance for greenfield development), and the soils on a redevelopment sites will be considered no higher than HSG 'C', resulting in a much lower runoff reduction requirement. Currently, at the Federal level, no lesser requirements for post construction stormwater management are proposed for redevelopment projects.

## **First State Manufactured Housing Association**

**3/30/2012**

### ***Comment***

It appears that the new regulations will increase protection from the discharge of pollutants from stormwater runoff associated with land disturbing activities. In addition, the new regulations' goal is to better protect streams from bank and bed erosion associated with extended bankfull flows. FSMHA supports the goal to improve the quality of our waters and efforts to minimize erosion.

### ***Comment Response***

Comment so noted; no further action necessary.

## **First State Manufactured Housing Association**

**3/30/2012**

### ***Comment***

It is unclear if the proposed fee in-lieu cost of \$23 per cubic foot of unmanaged stormwater runoff is economically feasible. The new regulations should include provisions to negotiate or change this fee, a phase-in price, a project cap, or allow trading across watersheds to keep compliance costs feasible.

### ***Comment Response***

The "fee-in-lieu" is not a fee applied to all projects requiring Sediment and Stormwater approval. The fee-in-lieu is an offset compliance option for sites that are not able to meet Resource Protection event requirements due to engineering reasons on a particular site. Therefore, this represents an equivalent cost of providing onsite stormwater management measures to comply with the regulations.

## **First State Manufactured Housing Association**

**3/30/2012**

### ***Comment***

There is a concern that DelDOT input required in the draft of the proposed regulations will result in delays in plan approval. A Memorandum of Understanding outlining DelDOT's role, responsibilities and plan review turn-around times should be in place before the regulations are promulgated. We request an explanation of why DelDOT's input on stormwater issues is even necessary on projects that do not impact DelDOT stormwater conveyance or management facilities.

### ***Comment Response***

DNREC agrees to remove the tie to the DelDOT process in the DNREC/Sediment and Stormwater Review process by removing this step from the plan review checklists.

The required pre application meeting is essential to ensure as smooth a review process as possible. The pre application meeting should not add time to the review process as this is held at the information gathering stage and is part of the background collection of information that a designer should be doing up front anyway.

## **First State Manufactured Housing Association**

**3/30/2012**

### ***Comment***

The new regulations require more information earlier in the review process; therefore, a higher monetary investment for the owner/developer earlier in the plan review process will be required. This early expenditure of funds at the concept level may discourage many businesses from considering a project in Delaware.

### ***Comment Response***

The initial step in the review process, the Stormwater Assessment Study, does not require field collection of data, only a field review to assess downstream condition of conveyances. All other information is available online. DNREC is working to make these data layers available from the DNREC website as a service. The front-end information gathering is intended to avoid costly "back-end" design changes resulting from unforeseen design issues. The remaining review steps are staged so that the entire design does not need to be changed if the project doesn't meet the requirements with the conceptual stormwater design. A project developer that previously incurred the cost of fully engineered construction plans without the benefit of planning and meeting with the local agency, has now realized the benefits of an incremental process that is far less costly in the long run.

## **First State Manufactured Housing Association**

**3/30/2012**

### ***Comment***

Since the EPA has not finalized its effluent limitation guidelines (ELGs) for construction sites, there are currently no ELG requirements included in the proposed regulations. However, when EPA established new ELGs, DNREC must follow suit and require ELGs for construction sites. How will ELG requirements be incorporated into the new regulations? We encourage that DNREC consider delaying the implementation of the new regulations until the EPA has issued its EGL requirements

### ***Comment Response***

It is correct that when when EPA establishes new ELGs, DNREC must follow suit and require ELGs for construction sites. This will be a "during construction" requirement and will not apply to the post construction stormwater management BMPs or post construction discharges from the site. The methods for complying with ELGs is likely to be included in the NPDES Construction General Permit regulations under Chapter 60. At the present time EPA has given no indication when, or even if, the ELGs will be a requirement. Therefore, DNREC does not agree that there is a need to delay implementation of the proposed Sediment and Stormwater Regulations based on this condition.

## **First State Manufactured Housing Association**

**3/30/2012**

### ***Comment***

Although there are provisions for TMDL compliance using the DURMM v.2.0 spreadsheet incorporated in the new regulations, currently there are no TMDL requirements. Clearly, at some point in near the future TMDL compliance for land disturbing activities will be a requirement. It is our understanding that the EPA will consider compliance with the new regulations as compliance with Chesapeake Bay Watershed TMDLs. This may be an advantage, however, based on the preliminary plan sample projects, it is unclear if a site can meet compliance using the DURMM v.2.0 model.

### ***Comment Response***

TMDLs are established at the watershed level with all sources being considered. New development sites will not be required to meet the TMDL targets as calculated in DURMMv2 to receive approval of the post construction stormwater design; however, the Department will use the resultant nitrogen and phosphorous data from DURMMv2 to track progress toward meeting TMDLs by sites that meet the RPv runoff reduction requirements. The Department will use an adaptive management approach to meeting TMDLs. Loads not being met from a particular sector may use a larger offset or trade in the future to meet those goals. If the RPv requirements are being met but the TMDL targets are not, it may be the model. The Waste Load Allocation for stormwater or the BMP effectiveness credit would need to be looked at. The goal to meeting TMDL's for any watershed is to utilize the efforts of multiple sectors and make adjustments as necessary.

**Gary Schwetz, Delaware Center for Horticulture**

**3/30/2012**

***Comment***

I support Delaware's proposed Sediment and Stormwater Regulations and Technical Document. Stormwater runoff carries with it toxic pollutants from pavement and hard surfaces; things like benzene and toluene that are health hazards and can be found in toxic runoff. These proposed stormwater regulations will also reduce flooding problems downstream - something that is of concern for historic river towns. The regulations also encourage redevelopment of already built areas - so instead of paving over new land, they encourage redevelopment of existing lands which would directly Delaware's cities. Increasing pollution, flood damages and erosion harm our economy, jeopardize the safety of our communities, and deprive our children of a safe, beautiful and healthy future. Your regulations ensure Delaware and its residents will continue to benefit from healthy environments and only appropriate developments. Thank you for a well reasoned proposal and put the citizens of Delaware first.

***Comment Response***

Comment so noted; no further action necessary.

**George Kelly, Environmental Banc & Exchange, LLC**

**3/30/2012**

***Comment***

In section 1.7 and Section 2.0 in the definition of "Offset", it should be made clear that "in-lieu fees shall be an offset of last resort, in the event on-the-ground options are not available. There shall be a preference for on-the-ground offsets rather than payment into an in-lieu fee account."

***Comment Response***

An offset procedure has been proposed. Initially, all projects in the state that wish to utilize the offset/fee-in-lieu option will need to demonstrate to DNREC that they have achieved compliance with the Resource Protection Event requirements to the maximum extent practicable (MEP) on the site. Once this process has been established over a reasonable time period, this responsibility may revert to the Delegated Agencies' level with Departmental oversight.

**Harry Haon, Inland Bays Foundation and Sierra Club of Southern Delaware**

**3/1/2012**

***Comment***

I commend DNREC for the thoroughness of this proposed regulation. But, unfortunately, there is one significant missing piece. And that is storm water and sediment control on farmland in the Inland Bays watershed. Early in the proposed regulation it is made clear that farmland is exempted. This is particularly troublesome when it is recognized that chicken litter used as fertilizer contains high concentrations of nitrogen and phosphorus nutrients and is allowed to be deposited right up to the edge of the bays, their tributaries and wetlands. In this situation steps should be taken to significantly reduce the amount of nutrient pollution washed into the bays by storm water. CAFO regulations primarily address the land around chicken houses and litter storage piles but does not cover the land at the edge of waterways. We recommend that regulations similar to these for residential and commercial development be enacted for farmland to reduce pollution of the Inland Bays.

***Comment Response***

Agricultural land management practices having an approved soil and water conservation plan are exempt from the Sediment and Stormwater Law (7 Del. C., Ch. 40) and regulations. Construction of agricultural structures is addressed by the proposed regulations. Application of nutrients to agricultural lands, whether it is commercial fertilizer or poultry manure, is regulated by the Delaware Nutrient Management regulations through the Delaware Department of Agriculture, even for those sites that do not have CAFO permit coverage.

**Home Builders Association of Delaware**

**3/1/2012**

***Comment***

Another concern is how these new regulations will be affected by other potentially costly initiatives DNREC and the EPA have launched. DNREC has initiated new studies with cost implications on Sea Level Rise and Floodplain drainage. It appears that another new initiative on Wetland Preservation is coming. The Chesapeake Bay WIP's is intertwined with Stormwater regs as well.

***Comment Response***

DNREC proposes to implement new requirements statewide. Reducing runoff volume is a critical component to water quality statewide, is a cornerstone of the proposed MS4 permit and is most applicable in areas of the state where densely populated communities already experience drainage and flooding problems. From the recommendations of Governor Minner's Surface Water Management Task Force to the Public Policy Dialogue on Stormwater and Wastewater that followed, to specific Levels of Service Analysis performed for each county, to the current state of the science of stormwater endorsed by the National Academy of Science, the methodology proposed in the Sediment and Stormwater Regulations represents the best science of stormwater management that has evolved over the past twenty years.

**Home Builders Association of Delaware**

**3/1/2012**

***Comment***

The HBADE is requesting that these regulations delayed until the full economical effect of all new proposed regulations by DNREC has been evaluated (Sea Level Rise, Floodplain drainage, Chesapeake WIP's, Wetland Preservation).

***Comment Response***

Reducing runoff volume is a critical component to water quality statewide, is a cornerstone of the proposed MS4 permit and is most applicable in areas of the state where densely populated communities already experience drainage and flooding problems. From the recommendations of Governor Minner's Surface Water Management Task Force to the Public Policy Dialogue on Stormwater and Wastewater that followed, to specific Levels of Service Analysis performed for each county, to the current state of the science of stormwater endorsed by the National Academy of Science, the methodology proposed in the Sediment and Stormwater Regulations represents the best science of stormwater management that has evolved over the past twenty years.

**Home Builders Association of Delaware**

**3/1/2012**

***Comment***

We are very concerned because the new regulations have not been properly evaluated for the economic impact on our communities. These regulations not only affect residential development, but commercial development as well as many small and large businesses that want to expand or come to the state of Delaware. They also do not encourage re-development.

***Comment Response***

The current Sediment and Stormwater Regulations require 100% compliance for both new and redevelopment which has been viewed as a disincentive for redevelopment projects. Section 5.6.1 of the proposed regulations states: "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." Redevelopment projects are being asked to provide a 30% reduction in the effective impervious of the existing impervious portion of the site being redeveloped (as compared to 100% compliance for greenfield development), and the soils on a redevelopment sites will be considered no higher than HSG 'C', resulting in a much lower runoff reduction requirement. Currently, at the Federal level, no lesser requirements for post construction stormwater management are proposed for redevelopment projects.

## **Home Builders Association of Delaware**

**3/1/2012**

### ***Comment***

The example projects commissioned by DNREC showed questionable environmental benefits at increased costs and the potential for sites to be rendered un-developable. One example is an institutional project that would have required a 60% increase in the size of the bioretention area. On a residential project example, the engineering costs would be higher and the site would not meet the TMDL requirements. On a commercial redevelopment project in a developed area, the project could not meet the new requirements. Because of the increased standards required by the new regulations, costs will increase as did in these example test cases. DNREC has not performed a true cost analysis on the impact of these regulations. Any assertion that the costs associated are nominal need to be backed up with a concrete cost analysis.

### ***Comment Response***

Through a collaborative process with an ad hoc committee established by Committee of 100, additional example projects are being completed with the goal of having the ad hoc committee evaluate the economic impact of compliance with the proposed regulations on both greenfield and redevelopment projects. The most recent example projects will develop a conceptual SWM plan based upon the BMP design criteria in the proposed Post Construction Stormwater BMP Standards and Specifications. TMDL compliance is not required for a Sediment and Stormwater Plan to be approved, and if a project cannot meet the Resource Protection Event runoff reduction requirements, there are offset provisions that may be employed to achieve compliance.

## **Home Builders Association of Delaware**

**3/1/2012**

### ***Comment***

The HBADE is requesting that the implementation of these rules be delayed at least one year and that implementation not occur until the General Assembly has reviewed the cost analysis and determined that the increased costs are commensurate with the environmental benefits.

### ***Comment Response***

University of Delaware Water Resources Agency authored "Economic Value of Stormwater in Delaware". This report discusses the economic benefits of green stormwater management and watershed protection, showing that green stormwater BMPs are a cost savings over traditional stormwater BMPs. The report states that "the annual economic value of stormwater management in Delaware approaches \$1 billion if innovative practices are implemented based on benefits from: increased property value, water treatment, stormwater detention, stormwater runoff, improved water quality, and small property owner benefits". In addition, "total benefits of municipal and construction site stormwater management to achieve boatable, fishable, and swimmable water quality standards in Delaware are \$153 million per year". Sediment and Stormwater Program staff provided a response based upon the Regulatory Flexibility Act requirements in accordance with Department policy and procedures.

## **Home Builders Association of Delaware**

**3/1/2012**

### ***Comment***

All these issues have cost implications for businesses and property owners. The costs associated with these initiatives should be evaluated along with the stormwater regulations, not separately. This is another reason why the new Stormwater regulations should not be adopted now. Increased costs of projects during these economic times will be devastating to all business in Delaware. Companies will not want to expand or come to Delaware which will cost jobs and lost revenue for the Municipalities and the State. It will hurt small businesses the most. The new regulations do not encourage re-development of existing sites. The HBADE is requesting that a thorough cost analysis of the new regulations with respect to the increased pollution removal be conducted.

### ***Comment Response***

University of Delaware Water Resources Agency authored "Economic Value of Stormwater in Delaware". This report discusses the economic benefits of green stormwater management and watershed protection, showing that green stormwater BMPs are a cost savings over traditional stormwater BMPs. The report states that "the annual economic value of stormwater management in Delaware approaches \$1 billion if innovative practices are implemented based on benefits from: increased property value, water treatment, stormwater detention, stormwater runoff, improved water quality, and small property owner benefits". In addition, "total benefits of municipal and construction site stormwater management to achieve boatable, fishable, and swimmable water quality standards in Delaware are \$153 million per year". Sediment and Stormwater Program staff provided a response based upon the Regulatory Flexibility Act requirements in accordance with Department policy and procedures.

## **Home Builders Association of Delaware**

**3/1/2012**

### ***Comment***

The HBADE is suggesting that the regulations be reconsidered in areas where it discourages re-development or promotes sprawl.

### ***Comment Response***

The current Sediment and Stormwater Regulations require 100% compliance for both new and redevelopment which has been viewed as a disincentive for redevelopment projects. Section 5.6.1 of the proposed regulations states: "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." Redevelopment projects are being asked to provide a 30% reduction in the effective impervious of the existing impervious portion of the site being redeveloped (as compared to 100% compliance for greenfield development), and the soils on a redevelopment sites will be considered no higher than HSG 'C', resulting in a much lower runoff reduction requirement. Currently, at the Federal level, no lesser requirements for post construction stormwater management are proposed for redevelopment projects.

## **Home Builders Association of Delaware**

**3/1/2012**

### ***Comment***

Clarification is also needed to define if a project ceases construction for 3 years. Under the new regs, if it ceases construction, it must be re-approved under the new regs. What defines a cease in construction? If a project has 2 phases constructed, but not actively building the 3rd stage while the builder is selling homes, or a landlord trying to locate tenants; does that constitute a cease of construction? Or, considerations should be given to adopting Del Dots standards for grandfathering of large projects.

### ***Comment Response***

An approved plan is valid for three years. When the plan nears the three-year expiration date, it may be extended. So long as construction is ongoing, including homebuilding, the plan may be extended. This includes phases of the plan that have not begun construction, as long as that phase was included in the original approval. If there is no construction for a period of three years, the project will not be extended.

## **Home Builders Association of Delaware**

**3/1/2012**

### ***Comment***

The grandfathering provisions are in need of clarification. If not clarified and expanded upon, the potential impact can be devastating for businesses that want to pursue a project, but can't now due to the economy. It is our understanding that DNREC recognizes this and has pledged to clarify the grandfathering provisions. We feel that any projects previously approved or submitted but not approved plans should be granted a 6 year extension.

### ***Comment Response***

Regulations 1.3.2.1 has been updated from what was first published in the Register. Plans approved under previous requirements will have a six-year window following the effective date of the revised regulations to commence construction, otherwise the project will expire and will require compliance with the revised regulations. Once construction commences, so long as construction continues, the plan may be extended for three-year approval periods until construction is complete.

## **Home Builders Association of Delaware**

**3/1/2012**

### ***Comment***

The proposed regulations have the potential to significantly increase the design costs and subsequent construction costs with a project. It appears that the front end design costs before entitlement or approval can be particularly high, increasing the risk for a project.

### ***Comment Response***

The initial step in the review process, the Stormwater Assessment Study, does not require field collection of data, only a field review to assess downstream condition of conveyances. All other information is available online. DNREC is working to make these data layers available from the DNREC website as a service. The front-end information gathering is intended to avoid costly "back-end" design changes resulting from unforeseen design issues. The remaining review steps are staged so that the entire design does not need to be changed if the project doesn't meet the requirements with the conceptual stormwater design. A project developer that previously incurred the cost of fully engineered construction plans without the benefit of planning and meeting with the local agency, has now realized the benefits of an incremental process that is far less costly in the long run.

## **June Cattell, John Eschen, Caylee Gabbott, Roger, Larry Siegel, Laura Cushman, Halla Baker, Joy Kr**

**3/30/2012**

### ***Comment***

I support Delaware's proposed Sediment and Stormwater Regulations and Technical Document. It is important that we take full advantage of the updated science, technologies and experiences that have been used to inform your regulatory proposal. Focusing on reducing the volume of polluted runoff in protecting drinking water supplies and stream/river flows, on protecting the natural landscapes that prevent needless polluted runoff and beautify our state at the same time, as well as ensuring DNREC and the community have the best information possible to ensure we are making good decisions are all high priority goals I support. Increasing pollution, flood damages and erosion harm our economy, jeopardize the safety of our communities, and deprive our children of a safe, beautiful and healthy future. Your regulations ensure Delaware and its residents will continue to benefit from healthy environments and only appropriate developments. Thank you for this well reasoned proposal and put the citizens of Delaware first.

### ***Comment Response***

Comment so noted; no further action necessary.

## **League of Women Voters of Delaware**

**3/20/2012**

### ***Comment***

Thank you for this opportunity to comment on the proposed Sediment and Stormwater Regulations. The League commends the Soil and Conservation Division for its tenacity for the last seven years in promulgating regulations that will meet the present and future needs of Delaware residents. The League wholeheartedly supports these new regulations and support without delay.

As more areas in Delaware are affected by sea level rise and more turbulent storms and winds bringing additional concentrated rainfall, it is all the more important that strict Sediment and Stormwater Regulations be put in place. While some may balk at the so called higher costs that the regs might require, in the long run, money will be saved by the State and residents if construction is done properly and does not have to be continually redone.

We suggest that the DNREC Sediment and Stormwater Program might do well to investigate the system set up by the Brownfields Remediation Program to streamline the process that plans follow. This helps all those involved know just how long each section of the plan will take. With a concise schedule, developers, owners of land, construction companies and state personnel have better opportunity to prepare and usually, to save money.

### ***Comment Response***

The value stream mapping process was completed with input from delegated agencies, planning agencies, DeIDOT, and designers and the result of that process was the basis for the three-step review process proposed in the revised regulations.

## **Mable Granke, concerned citizen**

**3/26/2012**

### ***Comment***

This statement is to indicate that I support the proposed regulations put forth in Regulation No. 5101. It has become most important that careful attention be given to how the land is developed. Sussex County after heavy rainfall has year experienced severe flooding in developments because sufficient attention had not been given or exercised to address the volume of runoff and thus the flood damage incurred. We must have the protection of regulations that require site plans include necessary protection from harmful runoff. The time and dollars spent now is an investment that can assure a safer future. Regulation No. 5101 needs to be adopted and put into effect immediately.

### ***Comment Response***

Comment so noted; no further action necessary.

## **Meliora Design**

**3/30/2012**

### ***Comment***

"Brownfield" This definition should at a minimum cite the federal definition of brownfield. The definition provided is somewhat ambiguous and this is federally defined term (the Brownfields Site definition is found in Public Law 107-118 (H.R. 2869) - "Small Business Liability Relief and Brownfields Revitalization Act" signed into law January 11, 2002). All terms that have federal definitions should be coordinated to incorporate or reference the federal definitions and not conflict.

### ***Comment Response***

The definition of "Brownfield" used in the revised Sediment and Stormwater Regulations is the definition found in 7 Del. C. § 9103 (3), to be consistent with other State regulations.

**Meliora Design****3/30/2012****Comment**

Section 5.3 (Conveyance Event Criteria, Cv) and Section 5.4 (Flooding Event Criteria, Fv) I think the intent of this section is good, but the details are not here (and maybe that is intentional). Essentially, they are saying that the design has to provide conveyance for the 10-year event and flood control for the 100-year, and prevent damage, but the specifics are not provided. Both sections encourage volume reduction and allow for consideration of that volume reduction in calculating flows. But the actual "rules" are a bit ambiguous. For example, the 10-year Conveyance Event allows for either a standards-based approach or a performance-based approach, but does not say what this means. Typically, a "standards-based" would be a peak flow rate reduction (i.e. post-development peak flows cannot exceed predevelopment peak flows), and a performance approach would demonstrate protection of the resource as intended by the regulations. But I am just guessing, the specifics are not provided. That is not necessarily a bad thing, and may indicate that they are struggling with the merging of traditional peak rate calculation methodologies/models with newer volume based requirements. The appropriate tools have not been available for designers, and as a result, designers tend to use detention basins and call them infiltration basins. I do know that the state has been updating their DURMM modeling tool based on the Small Storm Hydrology method and WinSLAMM, which is a good thing. So it may be that they are intentionally leaving the flow specifics somewhat vague in this section, as long as flooding and channel erosion are prevented (cited under both the Conveyance Event Criteria and the Flooding Event Criteria).

**Comment Response**

Extensive guidance for compliance with the Conveyance and Flooding Event criteria is included in the Technical Document.

**Meliora Design, LLC****3/30/2012****Comment**

Section 1.1.1.2 This comment is related to nomenclature more than substance, as the intent of this section is very good. This section cites "additional impervious areas such as roads and parking lots" as the cause of accelerated erosion and nonpoint source runoff. Section 1.1.2 notes that the "regulation of stormwater runoff from land development activities will control stormwater runoff, soil erosion, etc." While the intent of these two sections is good, the language may cause some confusion or dispute. Stormwater problems are caused by both impervious surfaces and pervious surfaces that have been altered (such as lawns, athletic fields, etc.). All land development activities have the potential to adversely affect stormwater quantity and quality, not just impervious surfaces. By stating that impervious surfaces are the source of the problem, but that all land development activity may be regulated, this section could be misconstrued (i.e. a golf course is not a stormwater problem and should not be required to "fix" the problem). This section is very good in that it does recognize that "the removal of stable ground cover" is a problem. The issue is nomenclature and the opportunity for intent to be misconstrued.

**Comment Response**

Section 1.1.1.2 of the proposed regulations is written in accordance with 7. Del. C. Ch. 40.

**Meliora Design, LLC****3/30/2012****Comment**

Section 1.3.2 This section does not grandfather plans that were approved more than three years ago, and also stipulates that "earthmoving" alone without infrastructure improvements does not constitute "commencement". These are excellent provisions.

**Comment Response**

Comment so noted; no further action necessary.

**Meliora Design, LLC**

**3/30/2012**

***Comment***

Section 1.4.1 Exempting agricultural activities that have a soil and water conservation plan makes sense and is appropriate, and it strengthens the Department's implementation of soil and water conservation plans for Ag by including the language in the regulation.

***Comment Response***

Comment so noted; no further action necessary.

**Meliora Design, LLC**

**3/30/2012**

***Comment***

Section 1.4.2 The regulations apply at a threshold of 5,000 square feet of disturbance. This is very proactive and recognizes that the cumulative effects of many small projects (that are below the 1 acre NPDES threshold) can be significant. Equally important, this section does not automatically exempt individual disturbances that accumulate to 5,000 square feet. The benefits of addressing many small projects can be significant. If DNREC has not already done so, a simplified design and approval process for "small sites" would assure greater compliance and success.

***Comment Response***

Standard Plan criteria has been established for "small sites" such as single family homes, agricultural structures, and utility construction within the Technical Document. The door has been left open to allow for regulated groups to proposed conditions for future Standard Plan options as well.

**Meliora Design, LLC**

**3/30/2012**

***Comment***

Section 1.4.3 I am not exactly sure how this section would be applied. It's important that the Department have flexibility when other State and Federal laws apply, but I am unclear how extensively this could be applied as an "out", or the types of sites (and how many) could be affected. This may be more of a legal question.

***Comment Response***

This is intentionally a much broader statement of Section 3.1.3 of the current Sediment and Stormwater Regulations which gives the example of sites that discharge a combination of stormwater and wastewater under a NPDES discharge permit.

**Meliora Design, LLC**

**3/30/2012**

***Comment***

Section 1.5.3 It would be good to describe the definition of "hardship" as this is not included in the Definitions. It is important for the department to have the ability to address hardship situations, but again, this cannot be abused.

***Comment Response***

Variances to specific areas of the regulations will follow the provisions of 7. Del. C. Ch. 60, which is determined by the Department Secretary. This is not a process that will be taken lightly and all factors will be considered in determining if a hardship is realized and granting a variance from any aspect of the regulations.

**Meliora Design, LLC**

**3/30/2012**

**Comment**

Section 1.5.6 Fifteen (15) days is scarcely enough time for a substantially affected person to identify that a project has been approved, to review the conditions, and to appeal to the EAB.

**Comment Response**

The time frames are in accordance with those established in 7. Del. C. Ch. 60.

**Meliora Design, LLC**

**3/30/2012**

**Comment**

Section 1.6.2 Requirement of a financial guarantee for stormwater improvements is excellent.

**Comment Response**

Comment so noted; no further action necessary.

**Meliora Design, LLC**

**3/30/2012**

**Comment**

Section 1.7 Again, it is important that the Department have the ability to define Offset Provisions, however, the specifics of these provisions should be reviewed when published. The Offset Provisions must be rigorous enough to discourage their use unless required as a "last resort", and also should provide for protection of the stream segment/sub-watershed in which the project is located.

**Comment Response**

An offset procedure has been proposed. Initially, all projects in the state that wish to utilize the offset/fee-in-lieu option will need to demonstrate to DNREC that they have achieved compliance with the Resource Protection Event requirements to the maximum extent practicable (MEP) on the site. Once this process has been established over a reasonable time period, this responsibility may revert to the Delegated Agencies' level with Departmental oversight.

**Meliora Design, LLC**

**3/30/2012**

**Comment**

"Adverse Impact" I like the inclusiveness and open-ended nature of this definition.

**Comment Response**

Comment so noted; no further action necessary.

**Meliora Design, LLC**

**3/30/2012**

**Comment**

"Licensed Professional" includes Landscape Architects, Surveyors, and Engineers under the sections cited. All stormwater calculations should be approved and sealed by an Engineer.

**Comment Response**

The term "Licensed Professional" has been used in the regulations to allow for licensed surveyors and landscape architects to seal plans within their area of licensure. The State of Delaware professional licensing provisions allow engineers, landscape architects, and land surveyors to perform stormwater calculations.

**Meliora Design, LLC**

**3/30/2012**

***Comment***

The definition is good, but other jurisdictions (i.e. Philadelphia) allow an exemption for repaving but ANY disturbance of the subbase under the surface course constitutes "disturbance". This can have large implications for roadway projects (which have large stormwater impacts) and is worth suggesting. In other words, if the subbase is altered or disturbed at all, the project is subject to the regulations. The definition is better defined under "land disturbing activity".

***Comment Response***

The Department's policy has been if a subbase of an existing paved area is disturbed but not expanded, it is subject to the erosion and sediment control requirements of the regulations during the construction phase. Any expansion of existing paved areas is viewed as new development and is subject to both erosion and sediment control and stormwater management requirements.

**Meliora Design, LLC**

**3/30/2012**

***Comment***

"Runoff reduction practices" this is also a good definition, but it indicates that practices "that delay the delivery of stormwater to a surface discharge" are included. It should be expanded so that delayed delivery is designed to replicate the natural system of infiltration, shallow interflow, and discharge and does NOT include extended surface basin detention as "runoff reduction".

***Comment Response***

The compliance criteria for runoff reduction practices are included in the updated Stds & Specifications for Post Construction Stormwater BMPs contained in Article 3.06.2 of the Technical Document. Wet extended detention ponds do not receive a credit for runoff reduction. Dry extended detention ponds receive a 10% runoff reduction credit. These credits were established based on extensive research on the performance of the practices included in the Stds & Specs and with concurrence of the Center for Watershed Protection.

**Meliora Design, LLC**

**3/30/2012**

***Comment***

Of course, the training, availability, and Department support of the review staff are critical to the successful implementation of the regulations. The Department should define its process for effective support and implementation of this Three Step Process. Section 3.4.2 allows the Department to "start the process" over if there are significant design changes in the size and location of the BMPs. This provision is important, however, the Department may benefit from further definition of "significant design changes". If the changes are to the Developer's benefit, then repeating the process is warranted. But if the changes improve the Plan to the benefit of State waters, then some leniency should be allowed.

***Comment Response***

3.4.2 states "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". DNREC believes this guidance is adequate. Whether a plan needs to repeat the preliminary step or not will be determined on a case-by-case basis.

**Meliora Design, LLC**

**3/30/2012**

***Comment***

Similarly, it would be in the Department's interest to define the review process such that new comments are not generated with each submission. In other words, the development community needs to have some comfort level regarding the review process, anticipated approval timeline, and specific requirements. Uncertainty regarding the approval process and timeline may result in more "pushback" on the part of the design community and property owners than the regulations warrant. It is essential that the Department provide adequate numbers of trained staff to meet the timelines defined in Section 3.5, and to provide the technical support to the applicants so that submitted plans successfully meet the regulations.

***Comment Response***

The plan review process is defined in great detail in the Technical Document. Submittal examples have been provided, and training will be offered to Delegated Agency personnel as well as licensed professionals who will be submitting plans for approval.

**Meliora Design, LLC**

**3/30/2012**

***Comment***

Section 3.7 This section allows for "standard plans". This is excellent in that it will allow small property owners to meet the requirements with minimal professional design support and cost. This also allows relief from some of the detailed review process. This approach has been applied successfully in other jurisdictions (most notably Seattle) and is critical for implementation of the new regulations on "small sites". The Department also retains the right to require a detailed plan (Section 3.7.5), which is good because no site is "guaranteed" that a standard plan may be applied. Rather, the decision rests with the Department.

***Comment Response***

Comment so noted; no further action necessary.

**Meliora Design, LLC**

**3/30/2012**

***Comment***

Section 3.8 This section defines Plan Certification requirements. Again, any stormwater calculations should be approved by a Licensed Engineer, not simply a Licensed Professional.

***Comment Response***

The term "Licensed Professional" has been used in the regulations to allow for licensed surveyors and landscape architects to seal plans within their area of licensure. The State of Delaware professional licensing provisions allow engineers, landscape architects, and land surveyors to perform stormwater calculations.

**Meliora Design, LLC**

**3/30/2012**

***Comment***

The "three step process" is excellent, including the requirement for a Project Application Meeting. This will provide the regulators with the ability to influence the design before the Owner has spent any significant design fees, and therefore should allow for greater flexibility and incorporation of measures recommended by the Department. This is required before the Preliminary Plan submission. In many situations, the "Preliminary Plan" is actually closer to a final plan, the owner has expended significant design fees, and everyone is resistant to any plan changes or improvements. The Project Application Meeting is an excellent requirement.

***Comment Response***

Comment so noted; no further action necessary.

**Meliora Design, LLC**

**3/30/2012**

**Comment**

Section 4.4.3 The limitation of twenty acres of disturbance at one time to a discharge point is good.

**Comment Response**

Comment so noted; no further action necessary.

**Meliora Design, LLC**

**3/30/2012**

**Comment**

Section 5.1.1 Including description of "low impact development" practices as part of the requirement is very good and very clear.

**Comment Response**

Comment so noted; no further action necessary.

**Meliora Design, LLC**

**3/30/2012**

**Comment**

Section 5.1.3 I am a little unclear as to how this would apply to practices on an individual parcel that are part of a larger site stormwater system (i.e. rain gardens on individual lots). I am not clear how this would be implemented. It may be beneficial to have stormwater practices on individual parcels that are maintained as part of a larger system (and such a maintenance approach will likely have greater longterm success).

**Comment Response**

On-lot controls such as rain gardens would be the maintenance responsibility of individual lot owners, or placed within easements if maintained as part of the larger system.

**Meliora Design, LLC**

**3/30/2012**

**Comment**

Section 5.1.6 The exemption for "regrading and replacement of existing pervious areas" could potentially be applied to areas such as golf courses and athletic fields. These areas meet the definition of pervious but have significant stormwater impacts.

**Comment Response**

This section stipulates that the disturbed area must return to the original hydrologic condition and land cover at the conclusion of the project. A recent article by Stier and Soldat in the Fall 2011 edition of Watershed Science Bulletin dispels many long-held beliefs about urban turf areas being a major source of runoff and nutrient loadings. Although research by Pitt and others have found that lawn areas are often compacted during the land development process, Stier and Soldat's findings indicate this is a temporary condition. Once established, turf areas generally contribute a relatively small percentage of the annual runoff in an urban environment, and that is predominately during frozen or saturated conditions.

**Meliora Design, LLC**

**3/30/2012**

***Comment***

Section 5.2 Resource Protection Event Criteria (RPv) The 1-year (or 99% probability) storm is a significant rainfall event (i.e. 2.72 inches for Wilmington; 2.81 inches for Lewes). Setting the criteria that wooded or meadow areas that are developed have to a "wooded" condition is a high standard and if successfully implemented, can mitigate the adverse effects of land development (Section 5.2.3.1). For areas that are not in woods or meadow before development, the performance must meet "an equivalent 0% effective imperviousness" (Section 5.2.3.2). This is also strong in that it will likely result in stormwater controls that improve existing conditions, rather than simply maintaining them. However, it is essential that the department provide more specific technical guidance for implementation of this criteria, as it could easily be "manipulated", and different pervious surfaces have very different performances. Much more guidance is needed for implementation.

***Comment Response***

A significant amount of guidance for compliance with Resource Protection Event criteria is included in the Technical Document to support the regulations.

**Meliora Design, LLC**

**3/30/2012**

***Comment***

The requirement for an "offset" for unmanaged RPv is also good, so that the RPv is met. However (as mentioned earlier) the "offset" requirements need to be clearly defined and rigorous. It should not be easy to pay a fee in lieu. If mitigation is provided at another site, there needs to be assurance that there will not be adverse effects at the original project site because the requirements were not met at that location. The implications of "offsets" warrant additional consideration in the drainage areas to headwater streams, impaired waters, etc. Offsets are a necessary option, but require clear guidance and criteria, and should not be "too easy" to obtain, but rather be the option of last resort.

***Comment Response***

An offset procedure has been proposed. Initially, all projects in the state that wish to utilize the offset/fee-in-lieu option will need to demonstrate to DNREC that they have achieved compliance with the Resource Protection Event requirements to the maximum extent practicable (MEP) on the site. Once this process has been established over a reasonable time period, this responsibility may revert to the Delegated Agencies' level with Departmental oversight.

**Meliora Design, LLC**

**3/30/2012**

***Comment***

The option of Alternative Criteria defined by a watershed plan is also a good option, and allows the Department to impose the requirements specific to the needs of a given watershed. This seems especially important in impaired watersheds where higher criteria may be warranted. It would seem that some language indicating that the Alternative Criteria cannot be less rigorous is warranted.

***Comment Response***

These provisions would presumably be included in a watershed plan that would support any alternative criteria.

**Meliora Design, LLC**

**3/30/2012**

**Comment**

This criteria also makes sense, as it imposes less stringent requirements for redevelopment. But only for those portions of the site that were previously developed. Woods or meadow are held to the same criteria as new development. The same ambiguity that exists in 5.2.3.2 (i.e. what does equivalent effective impervious mean?), applies here and requires further clarification.

**Comment Response**

Redevelopment criteria is further defined in the Technical Document.

**Michael L Richards**

**3/25/2012**

**Comment**

This is my letter of support re the new regulations you have proposed. The developers have gotten away with WAY TOO much for way too long. We all must work to save Planet Earth!

**Comment Response**

Comment so noted; no further action necessary.

**Mike Riemann, Becker Morgan Group**

**2/21/2012**

**Comment**

DNREC mentioned that if a project was approved under the old regs, but did not start construction, the developer could request for one 3 year extension, even if this was after the adoption of the new regs. Effectively giving the developer six years. I am not sure the language in the regs reads the same.

**Comment Response**

The proposed change to the regulatory language is as follows: 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 may have the plan approval extended for a maximum of one additional three year time period. If construction does not commence during the second three-year approval period, the plan approval shall not be extended.

**Mike Riemann, Becker Morgan Group**

**2/21/2012**

**Comment**

Can any project under construction prior to the new regs proceed under the current regs with 3 year extensions requested 90 days prior to plan expiration?

**Comment Response**

As long as construction continues during the approval period, a project may continue to be extended under the regulations in place at the time of original approval. If construction ceases for a 3-year approval period, the plan will not be extended. The plan will need to be upgraded to comply with the revised regulations.

**Paul Morrill, Committee of 100**

**2/27/2012**

***Comment***

The proposed regs say this about plans that have been approved, but construction has not commenced: 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.

The Technical Document, Article 2, 2.02 says this:

Plans that have been approved prior to the effective date of the regulations where construction has not commenced prior to Plan expiration may have the plan approval extended under the requirements of the previous regulations for a maximum of one additional three year time period. If construction has not commenced following the second three-year approval period, the approved plan will expire and a new plan compliant with the current version of the Delaware Sediment and Stormwater Regulations will be required to be approved by the Department or Delegated Agency prior to construction beginning on the project.

The regs seem to prohibit an extension, while the tech doc appears to allow one 3 year extension.

***Comment Response***

The proposed change to the regulatory language is as follows: 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 may have the plan approval extended for a maximum of one additional three year time period. If construction does not commence during the second three-year approval period, the plan approval shall not be extended.

**Positive Growth Alliance**

**3/29/2012**

***Comment***

We have heard there is a possibility that DNREC believes the Technical Document to the Stormwater Regs is not subject to the Administrative Procedures Act, either in its original version or in any future modified versions. An examination of the Act reveals that the Technical Document or any substantive modification absolutely is required to undergo the full public procedure, nor do any of the exclusions in the act apply to it.

We request that it be made clear that the Technical Document is subject to the public participation procedure described in the Administrative Procedures Act.

***Comment Response***

Sediment and Stormwater Program staff sought direction from the Deputy Attorney General's office with regard to the public notice requirements of the Technical Document. The Technical Document is an interpretive document and not a binding regulation. The Department is given authority under 7. Del. C. 4006(b) to provide technical assistance to local agencies in implementing Chapter 40 and also to develop standards, guidelines, and criteria for program elements. The Technical Document serves that purpose, in addition to providing guidance to the public, interested professionals, Delegated Agencies, and others regarding methods of meeting the standards set out in the Regulations. The Department does not intend to enforce the Technical Document as a binding regulation; rather, only standards of the Regulations will be enforced.

## **Positive Growth Alliance**

**3/27/2012**

### ***Comment***

Citizens are required to follow state laws and regulations. In regards to complying with DNREC regulations, if we do not, we are subject to delay and extra expense at a minimum and arrest, fines, or incarceration at the worst. DNREC is also required to follow laws, inconvenient though it may be.

Specifically, Title 29, Chapter 104, the Regulatory Flexibility Act, requires that DNREC submit proposed regulations to the appropriate General Assembly committees and ask for their comments.

§ 10405. Transmission of rule to General Assembly standing committees; comments.

The agency prescribing such rule shall transmit such rule to, and obtain the comments, if any, of, the appropriate standing committees of the General Assembly with oversight responsibilities for legislation affecting that agency with respect to the impact on individuals and/or small businesses resulting from implementation of such rules

Some members of the House Natural Resources Committee have not received the Regulatory Flexibility Analysis from DNREC, much less been given the opportunity to make comments on it. We believe that DNREC has the legal obligation make a serious effort to fulfill this responsibility to the elected representatives of the citizens they serve.

Since it has been 7 years since stormwater regulations have been revised, it is hardly a heavy burden. No new regulations should be promulgated until DNREC has proven they have hand delivered to every member of appropriate committees, or used another provable method.

### ***Comment Response***

Sediment and Stormwater Program staff provided a response based upon the Regulatory Flexibility Act requirements in accordance with Department policy and procedures.

## **Positive Growth Alliance**

**3/27/2012**

### ***Comment***

There is another way that the Regulatory Flexibility Act response for this regulation revision is inadequate. All of the comments regarding meeting requirements of the Act are based on earlier versions of regulatory revisions that did not comply with Regulatory Flexibility Act requirements in any way. We believe an analysis of at least the 2005 revision would be necessary to make any comments in 2012 relevant.

### ***Comment Response***

Sediment and Stormwater Program staff provided a response based upon the Regulatory Flexibility Act requirements in accordance with Department policy and procedures.

## **Positive Growth Alliance**

**3/27/2012**

### ***Comment***

Finally, we remind DNREC that the stormwater revisions of 2005 have had virtually no chance to be tested. Due to the economic downturn that started in 2007, very few projects have actually been built that had to comply with the 2005 regs. Given the state of the economy, we believe the Department should wait until there has been adequate testing of those regs before moving forward with the proposed revisions.

### ***Comment Response***

The 2005 changed to the Regulations changed the heirarchy of preferred SWM practices to include Green Technology BMPs as the preferred practices, but the goal remained 80% TSS removal for quality management. The Minner Task Force recommendations recognized the need to address volume management. Since that time, EPA also appears to be placing a greater emphasis on runoff reduction to meet watershed management goals. The proposed revisions reflect this change in policies.

## Positive Growth Alliance

3/27/2012

### **Comment**

The "fee in lieu" is in violation of both the Delaware Supreme Court advisory opinion of April 20, 1990, (identified as 575 A.2d 1186:1190 Del. LEXIS 203, Number 80, 1990) and existing state law. The opinion makes clear that new fees or fee increases require a 3/5 vote of the Delaware General Assembly.

The "fee in lieu" is also in violation of state law. Title 7, Chapter 40 states, in regards to fees:

§ 4005. Program funding and financial assistance.

(a) The Department, conservation districts, counties or municipalities are authorized to receive from federal, state, or other public or private sources financial, technical or other assistance for use in accomplishing the purposes of this chapter. The Department may allocate, as necessary or desirable, any funds received to conservation districts, counties or municipalities for the purpose of effectuating this chapter.

(b) The conservation districts, counties and municipalities shall have authority to adopt a fee system to help fund program implementation. That fee system shall be implemented by the designated plan approval agency to fund overall program management, plan review, construction review, enforcement needs and maintenance responsibilities. In those situations where the Department becomes the designated plan approval agency, the Department may assess a plan review and inspection fee. That fee shall not exceed \$80 per disturbed acre per project. There shall be no duplication of fees by the various implementing agencies for an individual land disturbing activity and the fee schedule shall be based upon the costs to the Department, conservation districts, counties or municipalities to implement and administer the program. In addition, the Department of Transportation is authorized to act as the designated plan approval agency in those situations where a public utility engages in land-disturbing activity for which a permit is required because of a project initiated by the Department of Transportation, subject to the following provisions:

(1) If the land-disturbing activity takes place on an existing right-of-way of the Department of Transportation, that Department is permitted to assess and collect a fee for this purpose which shall not exceed \$125 per acre, with a \$250 minimum.

(2) If the land-disturbing activity takes place adjacent to but not upon an existing right-of-way of the Department of Transportation, the fee contemplated by paragraph (b)(1) of this section is waived.

(c) Authority is also granted to the Department, conservation districts, counties or municipalities to establish a stormwater utility as an alternative to total funding under the fee system. The stormwater utility shall be developed for the designated watersheds and may fund such activities as long range watershed master planning, watershed retrofitting, and facility maintenance. This fee system shall be reasonable and equitable so that each contributor of runoff to the system, including state agencies, shall pay to the extent to which runoff is contributed. Criteria for the implementation of the stormwater utility shall be established in regulations promulgated under this chapter. The implementation of a stormwater utility will necessitate the development of a local utility ordinance prior to its implementation.

I have underlined the relevant parts of the statute. It appears that DNREC may charge no more than \$80 per disturbed acre for plan review and inspection. It also may be possible to charge a fee for overall program management, plan review, construction review, enforcement needs and maintenance responsibilities. The "fee in lieu" has nothing to do with those items.

### **Comment Response**

The "fee-in-lieu" is not a fee applied to all projects requiring Sediment and Stormwater approval. The fee-in-lieu is an offset compliance option for sites that are not able to meet Resource Protection event requirements due to engineering reasons on a particular site. Therefore, this represents an equivalent cost of providing onsite stormwater management measures to comply with the regulations.

**Positive Growth Alliance**

**3/27/2012**

***Comment***

If the "fee in lieu" is not legal, that creates serious problems with the DNREC statement in the Regulatory Flexibility Analysis on page 4 that "There are sites that may not be able to comply with runoff reduction requirements due to site conditions. Those sites are offered an offset fee-in-lieu option for compliance." Obviously, DNREC will have to develop some other method to prevent the owners of thousands of acres from suffering a total taking.

***Comment Response***

The "fee-in-lieu" is not a fee applied to all projects requiring Sediment and Stormwater approval. The fee-in-lieu is an offset compliance option for sites that are not able to meet Resource Protection event requirements due to engineering reasons on a particular site. Therefore, this represents an equivalent cost of providing onsite stormwater management measures to comply with the regulations.

**Ralph Scott III, Scott's Furniture**

**3/1/2012**

***Comment***

With tonight's hearing looming large, I wanted to briefly pass along some Sussex sentiments. I own this business, am on Board of Directors of Bridgeville Building & Loan Assn., and Greater Seaford Chamber of Commerce, and am active and informed in & by several Citizen Groups. With the struggling economy, the last thing any & all businesses & agriculture needs is more restrictive regulations & controls. Tax increases to Fund these proposed increased regulations would be the Final Crippling blow to OUR Delaware Way.

***Comment Response***

A Regulatory Flexibility Act response has been completed to address how the proposed regulation revisions will affect small businesses. No tax increases are proposed with the revisions to the regulations.

**Richard Schneider**

**3/30/2012**

***Comment***

We strongly support Delaware's Sediment and Stormwater Regulations and Technical Documents. To protect our waterways and the aquatic life in those waterways, all efforts should be used to provide clean water. Proper regulations are necessary. We thank DNREC for your efforts to protect our waterways for the benefit of all the aquatic life, wildlife and the citizens of Delaware.

***Comment Response***

Comment so noted; no further action necessary.

**Ring Lardner, Davis, Bowen & Friedel**

**3/1/2012**

***Comment***

Some things I wanted to put onto the public comment is the concern that we have, at least in the design community, is how do the regulations mesh with the local land use agencies such as DeIDOT roadway requirements, curb and gutter, with other land use agencies, how they deal with stormwater management, open space and buffers. And they don't all work well together, so that is a concern we have right now going into these new regulations. That's something we need to look at, working with those local land use agencies in order for those all to work together.

***Comment Response***

DNREC does not have jurisdiction over local land use decisions and has been successfully challenged in court. Many of the larger jurisdictions offer a planning option for clustering development in favor of preserving open space. In Kent County a density bump is offered for residential development within the growth zone, and in Sussex County the clustering option allows for higher density on a particular project site when a portion of the site is left undisturbed. Higher density results in curbed roadways which can make it more difficult to accomplish runoff reduction through traditional green technology BMPs. The traditional "pipe to pond" solution at the site level has not been shown to meet the desired goal of mimicking natural hydrologic conditions at the watershed level. The 40+ BMP options in the Post Construction Standards and Specifications will be applicable to helping achieve runoff reduction goals. Some stormwater management will need to take place on lots to meet runoff reduction goals and we now have BMPs to help accomplish that.

**Ruth Panella**

**3/31/2012**

***Comment***

I fully support Delaware's proposed Sediment and Stormwater Regulations and Technical Document (Reg. No 5101). It is imperative to health to 1. focus on reducing polluted runoff volume, 2. protect drinking water supplies and streams and rivers, 3. safekeep natural landscapes that are helpful in both prevention of damaging runoff as well as beauty, 4. have the result fo DNREC's access to and use of updated science, technology, and experience to inform beneficial-to-all decisions.

***Comment Response***

Comment so noted; no further action necessary.

## Sally Ford, Land Design

2/14/2012

### **Comment**

The inability of DNREC to issue a Notice of Completion per the definition found on page 8 of the regulations will have a severe economic impact. • Standard subdivisions do not have individual homes shown on lots, thus once they have completed all roads, utilities, grading, stormwater management and stabilization they should qualify for a "Notice of Completion" and termination of the NOI.

o Single lot construction qualifies for the Standard Plan per Appx. 3.01.1.1 of the Technical Documents.

o The developer is not going to want to keep the NOI open paying a fee of \$195 each year, renewing Stormwater Plans every 3 years for a fee (and chance that new regulation may require additional revisions) waiting for the last home to be built.

o If "Notice of Completion" and NOI's can not happen until the "last" home is built, developers will not sell lots to those unable to build immediately

- young people hoping to build in the future would not be able to buy vacant lots

- middle age people who want a lot for retirement or investors who want a piece of land for future prospects would not buy have the option of vacant lots

- This will have a definite impact on sales and the economy.

o An approved site plan (commercial or residential) which has completed all roads, utilities, grading, stormwater management and stabilized all remaining land (only building construction remaining), should qualify for a "Notice of Completion" and termination of the NOI.

o If future disturbance is greater than 1 acre per Appx. 3.01.1.2 of the Technical Documents, they would need to file a NOI prior future construction

o If the amount of impervious is more than the original approved Stormwater Plans, then they would need to provide additional stormwater management as needed under these new regulations.

If "Notice of Completion" and NOI's can not happen until the "last" building is built, there will be even more projects that have started but not built out, that will never be completed. The economy is slow, banks are not lending and homes are not selling – few have the money and incentive to continue building. This policy/regulation is really detrimental to the economy of today and of the future.

The \$195 annual NOI fee is a revenue generator, because it will be years before projects will be able to get their "Notice of Completion".

### **Comment Response**

The issues raised in these comments ultimately center on Federal requirements for coverage under the NPDES Construction General Permit (CGP). The current and proposed revisions to the Delaware Sediment & Stormwater Regulations (DSSR) are intended to make compliance with these requirements as seamless as possible, but they must be adhered to. Under Federal NPDES regulations, individual lots that are part of a larger common development plan that disturbs more than 1 acre must seek and maintain permit coverage until the conditions for termination are met. While there are provisions for homebuilders to seek co-permittee status and to terminate their co-permittee status once their obligations have been met on their individual lots, the owner/developer of the overall project must maintain coverage until the entire project is complete. The owner/developer could conceivably terminate a project, however no further construction activity (including individual lot construction) can occur unless the project is re-activated with an approved Sediment & Stormwater Plan and the filing of a new NOI.

**Scott Kidner, Delaware Association of Realtors**

**3/1/2012**

**Comment**

You've heard a great deal of information about cost benefit analysis. Definitely needs to be done, given the complexity of the document before you. Not only that. The world in which we are operating has dramatically changed. When we started this five years ago, or when you guys said seven years when John started all of this, the world is very, very different. The rate of conversion of land has -- well, look at the building permit numbers. There isn't any.

**Comment Response**

Through a collaborative process with an ad hoc committee established by Committee of 100, additional example projects were completed with the goal of having the ad hoc committee evaluate the economic impact of compliance with the proposed regulations on both greenfield and redevelopment projects. Resulting from this process, the redevelopment requirement was revised from 50% to 30% reduction in effective impervious, and the fee-in-lieu amount reduced from \$23/cf to \$18/cf for compliance. The Department feels that having gone through this process has resulted in a valid assessment of the economic impacts to those that will be most affected.

**Scott Kidner, Delaware Association of Realtors**

**3/1/2012**

**Comment**

The grandfathering. I would offer and submit, we'll have additional comments from the realtors here shortly, but grandfathering. Anybody who's got a plan in the system now gets grandfathered. Even with a one-year, potentially a three-year, these things slip. You're in the system, you've already got it in. That should be your grandfathering time hat.

**Comment Response**

Regulations 1.3.2.1 has been updated from what was first published in the Register. Plans approved under previous requirements will have a six-year window following the effective date of the revised regulations to commence construction, otherwise the project will expire and will require compliance with the revised regulations. Once construction commences, so long as construction continues, the plan may be extended for three-year approval periods until construction is complete.

**Scott Kidner, Delaware Association of Realtors**

**3/1/2012**

**Comment**

And certainly, one of the biggest issues out there is the bonding, on 3.11.1. I think there's a little confusion about the delegated agency and you all requiring bonding. And the way the language reads, it looks as though both you and the delegated agency, whether it be the conservation district or someone else, could actually require two bonds. You could require one and the delegated agency could require one.

**Comment Response**

Proposed regulation section 1.6.2 is enabling language to allow the Department or the Delegated Agency to develop a process to require a financial guarantee. Financial guarantee procedures, including the time frame for returning a bond, would be subject to public notice requirements prior to adoption.

**Scott Kidner, Delaware Association of Realtors**

**3/1/2012**

***Comment***

Additionally, under 4.5.3, additional soil testing, there was some concern, an issue about -- when you're setting up your sediment fences and the like, why you all would

4 look at additional soil testing. We know that if you're looking at additional soil testing, that can involve additional requirements or changes in your stormwater plan. So I ask you guys to take a look at that.

***Comment Response***

Additional soil testing would be required of the owner and the results would be delivered to the owner by the independent testing lab. The Department or Delegated Agency would have no involvement to cause delay in the process.

**Shannon Pendelton, Catherine Smith, Jennifer Foulk, Carol, Jagiello, Faith Zerbe, Sharon Mendelson**

**3/30/2012**

***Comment***

I support Delaware's proposed Sediment and Stormwater Regulations and Technical Document. It is important that we take full advantage of the updated science, technologies and experiences that have been used to inform your regulatory proposal. Focusing on reducing the volume of polluted runoff in protecting drinking water supplies and stream/river flows, on protecting the natural landscapes that prevent needless polluted runoff and beautify our state at the same time, as well as ensuring DNREC and the community have the best information possible to ensure we are making good decisions are all high priority goals I support. Increasing pollution, flood damages and erosion harm our economy, jeopardize the safety of our communities, and deprive our children of a safe, beautiful and healthy future. Your regulations ensure Delaware and its residents will continue to benefit from healthy environments and only appropriate developments. Thank you for this well reasoned proposal and put the citizens of Delaware first.

***Comment Response***

Comment so noted; no further action necessary.

**Tari Pantaleo, Kenneth B. Keating, Peter Pray, Sami Salam, Rosemary Volpe, Sarah Bucic, John Irwin**

**3/26/2012**

***Comment***

I support Delaware's proposed Sediment and Stormwater Regulations and Technical Document. It is important that we take full advantage of the updated science, technologies and experiences that have been used to inform your regulatory proposal. Focusing on reducing the volume of polluted runoff in protecting drinking water supplies and stream/river flows, on protecting the natural landscapes that prevent needless polluted runoff and beautify our state at the same time, as well as ensuring DNREC and the community have the best information possible to ensure we are making good decisions are all high priority goals I support. Increasing pollution, flood damages and erosion harm our economy, jeopardize the safety of our communities, and deprive our children of a safe, beautiful and healthy future. Your regulations ensure Delaware and its residents will continue to benefit from healthy environments and only appropriate developments. Thank you for this well reasoned proposal and put the citizens of Delaware first.

***Comment Response***

Comment so noted; no further action necessary.

## **The Committee of 100**

**3/1/2012**

### ***Comment***

The proposed regulations are not without merit. There are environmental advantages to basing stormwater management on volume control rather than peak discharge. There are environmental and business advantages to planning stormwater impacts on a watershed basis, rather than on a site by site basis. Over time, implementing runoff reduction practices can lessen drainage flooding impacts and reduce stream bank erosion. Provisions in the regulations for offsets and the fee-in-lieu create opportunities for off-site pollution reduction practices that may be more economical, as well as more effective, than on-site facilities. It is also important to note that the regulations contain no TMDLs and that EPA has indicated that it accepts compliance with Delaware's proposed runoff reduction requirements as satisfying the Chesapeake Bay pollution reduction allocation for development within that watershed. The critical question remains, at what cost do these advantages come?

### ***Comment Response***

Through a collaborative process with an ad hoc committee established by Committee of 100, additional example projects were completed with the goal of having the ad hoc committee evaluate the economic impact of compliance with the proposed regulations on both greenfield and redevelopment projects. Resulting from this process, the redevelopment requirement was revised from 50% to 30% reduction in effective impervious, and the fee-in-lieu amount reduced from \$23/cf to \$18/cf for compliance. The Department feels that having gone through this process has resulted in a valid assessment of the economic impacts to those that will be most affected.

## **The Committee of 100**

**3/1/2012**

### ***Comment***

The Committee of 100 believes there are too many unanswered questions about the cost impact of the proposed revisions to the Delaware Sediment and Stormwater Regulations to support their immediate promulgation. We know projects will cost more under these regulations. We don't know how much more. We believe this uncertainty about the effect the revisions might have on project economics will have a chilling effect on development decisions in general and on redevelopment projects in particular. The state of the economy is such that more uncertainty is the last thing Delaware employers - and prospective employers - need. The Committee of 100 recommends that the effective date of the revisions be delayed for up to a year, while DNREC and the regulated community work together in a focused effort to understand the effects of the regulations on actual projects and how they might be mitigated. We stand ready to actively assist in that effort.

### ***Comment Response***

Through a collaborative process with an ad hoc committee established by Committee of 100, additional example projects were completed with the goal of having the ad hoc committee evaluate the economic impact of compliance with the proposed regulations on both greenfield and redevelopment projects. Resulting from this process, the redevelopment requirement was revised from 50% to 30% reduction in effective impervious, and the fee-in-lieu amount reduced from \$23/cf to \$18/cf for compliance. The Department feels that having gone through this process has resulted in a valid assessment of the economic impacts to those that will be most affected.

## **The Committee of 100**

**3/1/2012**

### ***Comment***

The Division of Watershed Stewardship is to be commended for the extensive, open process that resulted in the proposed revisions. Prompted in part by a request by The Committee of 100 for a test of the DURMMv2 model, the Division funded a design analysis of four land development projects by consulting engineers. The consultants took actual projects with designs approved under the current regulations and applied the new requirements to see what changes would be required. The results were instructive in giving an understanding of the significant changes in the design process itself and how they would affect the engineering community and add upfront costs to projects, at least initially. The exercise also indicated that the runoff reduction requirements could be met with existing BMPs. What it did not do is give a clear understanding of how much the size and number of those BMPs would increase and what the cost would be to construct them. It is that critical knowledge gap which has created uncertainty in the development community and is the reason why we are recommending an intensive effort to complete those studies (or other more representative projects) prior to implementing the new regulations.

### ***Comment Response***

Through a collaborative process with an ad hoc committee established by Committee of 100, additional example projects are being completed with the goal of having the ad hoc committee evaluate the economic impact of compliance with the proposed regulations on both greenfield and redevelopment projects. The most recent example projects developed a conceptual SWM plan based upon the BMP design criteria in the proposed Post Construction Stormwater BMP Standards and Specifications. Resulting from this process, the redevelopment requirement was revised from 50% to 30% reduction in effective impervious, and the fee-in-lieu amount reduced from \$23/cf to \$18/cf for compliance. The Department feels that having gone through this process has resulted in a valid assessment of the economic impacts to those that will be most affected.

## **The Committee of 100**

**3/1/2012**

### ***Comment***

We have brought to the attention of the Division that the Sunset provisions of the regulations conflict with those in the Technical Document. For the record, we believe that approved sediment and stormwater plans for projects that are not yet under construction should be renewable. The Technical Document references a three year extension. However, because of the lengthy recession, some approved plans have lapsed, even though the land use jurisdiction's sunset period has not ended.

### ***Comment Response***

Regulations 1.3.2.1 has been updated from what was first published in the Register. Plans approved under previous requirements will have a six-year window following the effective date of the revised regulations to commence construction, otherwise the project will expire and will require compliance with the revised regulations. Once construction commences, so long as construction continues, the plan may be extended for three-year approval periods until construction is complete.

## **The Committee of 100**

**3/1/2012**

### ***Comment***

In the Grandfather provision, plans that are in the review process prior to the effective date of the new regulations have one year from that date to be approved. In some jurisdictions, it can take up to three years to go through the approval process. The Grandfather period for sediment and stormwater plans approved under the current regulations should be extended to reflect that reality. To avoid flood of plan renewals in a short time frame and a market-distorting glut of construction brought on by regulatory deadlines, we recommend that previously approved and pending plans be given five years from the effective date of the new regulations to begin construction, unless the record plan has sunsetted previous to that date.

### ***Comment Response***

Each Delegated Agency currently has a different plan review process. DNREC developed an Interim Guidance Policy regarding the review, approval and extension of projects submitted prior to the effective date of revised regulations which lists the grandfathering "starting point" for each delegated agency. Section 3.5.6 of the regulations states that a project in the review process will have 18 months following the effective date of the revised regulations to gain approval under the previous regulations. The Interim Guidance policy has been updated to reflect that condition as well as to provide additional examples and timelines to clarify.

## **The Committee of 100**

**3/1/2012**

### ***Comment***

In addition to cost issues, we have concerns about the plan review process and the length of time it takes to get approvals. We are particularly concerned that DeIDOT has been added to the list of sign-offs needed prior to the initial stormwater planning meeting. Time limits must be placed on the plan approval process. In our opinion, DeIDOT and the Delegated Agencies should be required to enter into MOUs with DNREC committing to reasonable review schedules that are then enforced. We recognize that the private sector shares some of the blame for the revolving door reviews and we would welcome the opportunity to work with the Department on ways to make the process more transparent and accountable – and faster.

### ***Comment Response***

DNREC agrees to remove the tie to the DeIDOT process in the DNREC/Sediment and Stormwater Review process by removing this step from the plan review checklists.

The required project application meeting is essential to ensure as smooth a review process as possible. The project application meeting should not add time to the review process as this is held at the information gathering stage and is part of the background collection of information that a designer should be doing up front anyway. The three-step review process with defined submittal criteria is intended to standardize the submittals and expectations of reviews throughout the state. The standardized submittal format will also increase the speed at which reviews can be accomplished. The timelines established in Delaware Law for initial plan review comments are required statewide regardless of jurisdiction.

## **The Committee of 100**

**3/1/2012**

### ***Comment***

Finally, we are especially concerned about redevelopment projects under the proposed regulations. These are often tight urban sites with a high percentage of impervious surfaces and can be challenging and/or expensive for runoff reduction practices. We must not make it more expensive or more difficult to do redevelopment projects or they will not happen. Instead we will push development pressures to greenfields, contributing to more sprawl. The proposed regulations make some provision for redevelopment projects, but we must be prepared to adjust the requirements further if necessary. We should be prepared to accept a lower fee-in-lieu if required to make redevelopment work and be liberal in how we determine the watersheds eligible for offsets for a particular project. When dealing with redevelopment of sites within an impaired watershed, we should be willing to accept some improvement over current conditions and not demand overnight perfection.

### ***Comment Response***

The current Sediment and Stormwater Regulations require 100% compliance for both new and redevelopment which has been viewed as a disincentive for redevelopment projects. Section 5.6.1 of the proposed regulations states: "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." Redevelopment projects are being asked to provide a 30% reduction in the effective impervious of the existing impervious portion of the site being redeveloped (as compared to 100% compliance for greenfield development), and the soils on a redevelopment sites will be considered no higher than HSG 'C', resulting in a much lower runoff reduction requirement. Currently, at the Federal level, no lesser requirements for post construction stormwater management are proposed for redevelopment projects.