

# DEPARTMENT OF NATURAL RESOURCES AND ENVIRONMENTAL CONTROL

## DIVISION OF WATER RESOURCES

Statutory Authority: 7 Delaware Code, Chapters 40, 60, 66 and 72 (7 Del.C., Chs. 40, 60, 66 & 72)

7 DE Admin. Code 7403

### PROPOSED

#### REGISTER NOTICE SAN#2002- 06

**1. TITLE OF THE REGULATION:**

7403 Regulations Governing the Pollution Control Strategy for the Indian River, Indian River Bay, Rehoboth Bay and Little Assawoman Bay Watersheds, Delaware.

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

The Department of Natural Resources and Environmental Control (DNREC) plans to conduct a public hearing to gather comments on the proposed Pollution Control Strategy for the Inland Bays including the proposed **Regulations Governing the Pollution Control Strategy for the Indian River, Indian River Bay, Rehoboth Bay, and Little Assawoman Bay Watersheds**. The proposed Strategy includes both voluntary and regulatory actions which need to be implemented in order to achieve the nitrogen and phosphorus load reductions required by the Total Maximum Daily Loads for these watersheds. The proposed regulations would impact multiple sources of nutrients including point sources, stormwater, and onsite wastewater treatment and disposal systems. These regulations replace the previously proposed regulations that appeared in the May 1, 2007 *Delaware Register of Regulations*.

**3. POSSIBLE TERMS OF THE AGENCY ACTION:**

Following the adoption of the proposed Regulations, various programs to reduce nutrient pollutant loadings will be implemented.

**4. STATUTORY BASIS OR LEGAL AUTHORITY TO ACT:**

The authority to develop this Pollution Control Strategy and the associated Regulations is provided by Title 7 of the **Delaware Code**, Chapters 40, 60, 66, and 72 and in Title 29 of the **Delaware Code**, Sections 8014(5) and 8025.

**5. OTHER REGULATIONS THAT MAY BE AFFECTED BY THE PROPOSAL:**

None.

**6. NOTICE OF PUBLIC COMMENT:**

A public hearing for the proposed **Regulations Governing the Pollution Control Strategy for the Indian River, Indian River Bay, Rehoboth Bay and Little Assawoman Bay Watersheds** will be held at 6:00 PM on Monday, June 23, at Georgetown CHEER Community Center, 20520 Sandhill Road, Georgetown, Delaware 19947.

If you do not want to attend the public hearing, you may submit written comments during the public comment period beginning with this notice and ending at 4:30 PM on Monday, June 30, 2008. Please send written comments to John Schneider, Department of Natural Resources and Environmental Control, Division of Water Resources, Watershed Assessment Section, 820 Silver Lake Boulevard, Suite 220, Dover, DE 19904-2464; facsimile: (302) 739-6140; email: ([john.schneider@state.de.us](mailto:john.schneider@state.de.us)). All written comments must be received by 4:30 PM, Monday, June 30, 2008. Electronic submission is preferred.

Copies of the proposed regulations and technical support documents for these watersheds are available by mail from Maryann Pielmeier, DNREC, DWR, Watershed Assessment Section, 820 Silver Lake Blvd., Suite 220, Dover, DE 19904-2464, via telephone by calling (302) 739-9939, via e-mail by contacting [maryann.pielmeier@state.de.us](mailto:maryann.pielmeier@state.de.us), or from the DNREC website at the following URL: [http://www.dnrec.state.de.us/water2000/Sections/Watershed/ws/ib\\_pcs.htm](http://www.dnrec.state.de.us/water2000/Sections/Watershed/ws/ib_pcs.htm)

7. **PREPARED BY:**

<u>John Schneider</u>	<u>302-739-9939</u>	<u>May 19, 2008</u>
NAME	PHONE	DATE

**7403 Regulations Governing The Pollution Control Strategy For The Indian River, Indian River Bay, Rehoboth Bay And Little Assawoman Bay Watersheds**

**FORWARD**

For years, various governmental and private entities have encouraged the use of voluntary practices in order to reduce nutrient loading into the Indian River, Indian River Bay, Rehoboth Bay, Little Assawoman Bay and their tributaries (the Inland Bays) such that water quality standards are achieved in support of their designated uses. While reducing pollutant loads to an extent, these attempts have not resulted in the desired outcome of controlling pollution and improving water quality. In order to achieve the Total Maximum Daily Loads (TMDLs), determined through vigorous research and modeling, the following Pollution Control Strategy regulations must be implemented.

In addition, the Department will consider the use of water quality trading to achieve point and nonpoint source load reductions. All trading proposals will be in support of the TMDL required load reductions and are subject to Department approval.

It is the policy of the Department of Natural Resources and Environmental Control to implement each component of the Pollution Control Strategy and these Regulations in a timely fashion. The Department supports review of all related ordinances, regulations and laws in order to promote consistency among all legal instruments.

**1.0 Authority and Scope**

- 1.1 These Regulations are adopted by the Secretary of the Department of Natural Resources and Environmental Control under and pursuant to the authority set forth in 7 Del.C. Ch. 40, 60, 66 and 72 and in 29 Del.C. §§8014(5) and 8025.
- 1.2 These Regulations apply to the public and private lands draining into the Indian River, Indian River Bay, Rehoboth Bay and Little Assawoman Bay and their tributaries (collectively referred to as “the Inland Bays”).
- 1.3 Unless otherwise stated in these Regulations, the effective date of these Regulations is 60 days from the date of publication of the final Regulations.
- 1.4 Proposed major subdivision plans, site plans, concept plans, initial stage calculation sheets, requests for service level evaluation, or requests for scoping meetings which have been received by DeIDOT prior to the effective date of this regulation for a development proposal, for the purpose of securing a letter of no objection, support facilities report, entrance location, or entrance approval, are not subject to the buffer and stormwater requirements of these Regulations, Sections 4 and 5. If after 5 years from the effective date, an application for the project has not been submitted to the appropriate county or local government and substantial expenditures have not been made for the project to proceed, all stormwater and buffer provisions of these Regulations will be applicable to the project.
  - 1.4.1 In instances where submissions to DELDOT are not required prior to filing an application with Sussex County or local government, projects for which applications have been submitted to the County or a municipality prior to the effective date of these Regulations are not subject to the buffer and stormwater provisions, Sections 4 and 5, of these Regulations.

- 1.4.2 For projects within the County, the effective date of Sections 4 and 5 shall be 10 calendar days after the date of publication of the final Regulations in the *Delaware Register of Regulations*. For projects on lands located within municipalities as of the date of publication of these Regulations, the effective date of Sections 4 and 5 of these Regulations shall be one year from the date of publication of the final Regulations in the *Delaware Register of Regulations*.
- 1.5 Section 6 of these Regulations will become effective 30 days from the date of publication of the final Regulations.
- 1.6 Section 7 of these Regulations will become effective 180 days from the date of publication of the final Regulations.
- 1.7 New systems, as described in Sections 8.2.1 and 8.3.1 of these Regulations, that have submitted a Site Investigation Report (SIR) and a Preliminary Groundwater Impact Assessment (PGIA) or a Site Selection and Evaluation Report (SSER) within 60 days from the date of publication of the final Regulations, are not subject to the general onsite wastewater treatment and disposal system provisions of these Regulations.
- 1.8 Section 8.4 of these Regulations shall be effective for all permit applications whose site evaluations have been submitted to the Department 60 days or more after the date of publication of the final Regulations when those sites lie within 1000 feet of the mean high water line of the Indian River, Indian River Bay, Rehoboth Bay, or Little Assawoman Bay or their tributaries, or from their associated tidal wetlands shown on Delaware's 1992 State Wetland Mapping Project Maps. The 1000 foot boundary line from these tidal wetland and water areas is depicted on the map entitled "Areas Requiring Early Implementation of PSN3" contained in Appendix B of this Regulation.
- 1.9 All complete permit applications received on or after January 1, 2015 for new and replacement systems throughout the Inland Bays Watershed shall comply with Section 8.4 of these Regulations.

## **2.0 Definitions**

The following words and terms, when used in these Regulations, should have the following meaning unless the context clearly indicates otherwise:

"**Best Management Practice (BMP)**" means a system or procedure that has been determined to be an effective, practical means of preventing or reducing nonpoint source pollution. These include conservation practices or management measures which control soil loss and reduce water quality degradation caused by nutrients, animal wastes, toxins, sediment, and runoff.

"**Buffer**" means an existing or purposely established area of vegetation which protects water resources from pollution.

"**Certified Service Provider**" means an individual representative of a manufacturer/supplier who holds a Department Class E System Contractor or Class H System Inspector license, or a Class E System Contractor who is certified, through Department approved training, on the operation and maintenance of the advanced treatment unit or system, or a Class H System Inspector who has become certified through Department approved training on the operation and maintenance of the advanced treatment unit or system, or a homeowner who has obtained Department individual home service provider certification and has been through Department approved training on the operation and maintenance of their advanced treatment unit or system. The Department homeowner certification allows the homeowner to operate and maintain their advanced treatment unit or system at their primary place of residence.

"**Clean Water Act (CWA)**" means the Federal Water Pollution Control Act, 33 U.S.C. §§1251-1387.

"**Department**" means the Delaware Department of Natural Resources and Environmental Control.

"**Drainfield**" means a system of open-jointed or perforated piping, alternative distribution units, or other seepage systems for receiving the flow from septic tanks or other treatment facilities and designed to distribute effluent for oxidation and adsorption by the soil within the zone of aeration.

"**End of Pipe**" means the location where effluent discharges from the end of the advanced pretreatment unit before ultimately dispersing into the soil drainfield. This is the location where nitrogen and

phosphorus sampling may occur in order to determine compliance with the applicable performance standard.

**“High potential for phosphorus mobility”** means an area where:

- the site’s soils have a Fertility Index Value (FIV) of greater than 100 for phosphorus or a soil test value of over 100 parts per million (ppm) by the Mehlich 3 soil test; and
- the groundwater phosphorus content is above 0.034 mg/l and there is an indication that ground-water is anoxic due to low dissolved oxygen or oxidation reduction potential below 200 mV; and
- the disposal area contains soils with a seasonal high water table above 27 inches.

**“Indian River Watershed”** means the lands that drain into the Indian River and its tributaries as illustrated by the Delaware watershed map available from the Watershed Assessment Section, Division of Water Resources, Department of Natural Resources and Environmental Control.

**“Indian River Bay Watershed”** means the lands that drain into the Indian River Bay and its tributaries as illustrated by the Delaware watershed map available from the Watershed Assessment Section, Division of Water Resources, Department of Natural Resources and Environmental Control.

**“Innovative and Alternative (IA) onsite wastewater treatment and disposal systems”** means anything other than a conventional onsite wastewater treatment and disposal system.

**“Little Assawoman Bay Watershed”** means the lands that drain into the Little Assawoman Bay and its tributaries as illustrated by the Delaware watershed map available from the Watershed Assessment Section, Division of Water Resources, Department of Natural Resources and Environmental Control.

**“Major subdivision”** means a subdivision of land involving a proposed new street or the extension of an existing street.

**“Mean high water (MHW)”** means the point on the bank, tidal flat, beach or shore, up to which the presence or action of the water leaves a distinct mark, either by erosion, destruction of terrestrial vegetation (non-aquatic), physical markings or characteristics, and known vegetation lines, and may be further identified by tidal gauge data, or any other suitable means of delineating the mean height reached by a rising tide.

**“National Pollutant Discharge Elimination System (NPDES)”** means the program prescribed by the Federal Water Pollution Control Act for point sources of pollution.

**“Nonpoint source (NPS) pollution”** means pollution originating from diffuse areas having no well-defined source.

**“Nutrient”** means any element or compound essential as a raw mineral for organism growth and development and, for the purpose of this regulation, is limited to nitrogen and phosphorus.

**“Onsite wastewater treatment and disposal system (OWTDS)”** means a conventional or innovative and alternative wastewater treatment and disposal systems installed or proposed to be installed on the land of the owner or on other land to which the owner has the legal right to install the system.

**“Ordinary high water mark”** means, for nontidal waters, the line where the presence and action of water are continuous enough during ordinary rainfall years to leave a mark upon the soil of the bed or banks of the waterbody.

**“Performance Standard Nitrogen level 1 (PSN1)”** means where total nitrogen levels achieve either:

- an average annual concentration of 5 mg/l (parts per million (ppm)) total nitrogen in effluent sampled at the end-of-pipe of the pretreatment unit; or
- a 90% reduction in the effluent total nitrogen concentration when compared to the influent total nitrogen concentration; or
- an average annual concentration of 5 mg/l beneath any permitted wastewater spray irrigation field as verified by monitoring in-field lysimeters, providing that the design percolate concentration does not exceed 5 mg/l on an average annual basis.

Discharge limitations are to be expressed as a mass, based on average design flows (221 gallons per day per unit for residential systems).

**“Performance Standard Nitrogen level 2 (PSN2)”** means where total nitrogen levels achieve either:

- an average annual concentration of 10 mg/l (parts per million (ppm)) total nitrogen in effluent sampled at the end-of-pipe of the pretreatment unit; or

- an 80% reduction in effluent total nitrogen concentration when compared to the influent total nitrogen concentration; or
- an average annual concentration of 10 mg/l beneath any permitted wastewater spray irrigation field as verified by monitoring in-field lysimeters, providing that the design percolate concentration does not exceed 10 mg/l on an average annual basis.

Discharge limitations are to be expressed as a mass, based on average design flows (221 gallons per day per unit for residential systems).

**“Performance Standard Nitrogen level 3 (PSN3)”** means where total nitrogen levels achieve either:

- an average annual concentration of 20 mg/l (parts per million (ppm)) total nitrogen in effluent sampled at the end-of-pipe of the pretreatment unit; or
- a 50% reduction in effluent total nitrogen concentration when compared to the influent total nitrogen concentration.

**“Performance Standard Phosphorus level 1 (PSP1)”** means where total phosphorus levels achieve either:

- an average annual concentration of 3.9 mg/l (parts per million (ppm)) total phosphorus in effluent sampled at the end-of-pipe of the pretreatment unit; or
- a 75% reduction in effluent total phosphorous concentration when compared to the influent total phosphorus; or
- an average annual concentration of 3.9 mg/l beneath any permitted wastewater spray irrigation field as verified by monitoring in-field lysimeters, providing that the design percolate concentration does not exceed 3.9 mg/l on an annual average basis.

Discharge limitations are to be expressed as a mass, based on average design flows (221 gallons per day per unit for residential systems).

**“Performance Standard Phosphorus level 2 (PSP2)”** means where total phosphorus levels achieve either:

- an average annual concentration of 7.85 mg/l (parts per million (ppm)) total phosphorus in effluent sampled at the end-of-pipe of the pretreatment unit; or
- a 50% reduction in effluent total phosphorus concentration when compared to the influent total phosphorus concentration.

Discharge limitations are to be expressed as a mass, based on average design flows (221 gallons per day per unit for residential systems).

**“Person”** means any individual, business enterprise, or business entity, including but not limited to, a trust, firm, joint stock company, partnership corporation (including government corporation), limited liability company or association, any state, municipality, commission, or political subdivision of a state, any federal agency, any interstate body, or other such entities as allowed by law.

**“Point source pollution”** means pollution discharged directly from a specific site such as a municipal sewage treatment plant or an industrial outfall pipe.

**“Pollution Control Strategy (PCS)”** means a document that specifies actions necessary to systematically achieve pollutant load reductions specified by a Total Maximum Daily Load for a given waterbody. The regulatory actions are included in these Regulations.

**“Pre-engineered plan”** means a design using packaged mechanical devices such as equipment of cataloged design which complies with all applicable regulations and approved by the Department, or listed by a third party testing authority for a specific application recognized and approved by the Department.

**“Primary water features”** means State-regulated wetlands and those waters depicted by the United States Geological Survey on the National Hydrography Dataset as perennial, and identified on maps developed by the Department and adopted as part of this Regulation in Appendix A. Such features may be adjusted in accordance with Section 9.2 of these Regulations.

**“Rehoboth Bay Watershed”** means the lands that drain into the Rehoboth Bay and its tributaries as illustrated by the Delaware watershed map available from the Watershed Assessment Section, Division of Water Resources, Department of Natural Resources and Environmental Control.

**“Secondary water features”** means those waters depicted by the United States Geological Survey on the National Hydrography Dataset as intermittent, and those forested ditches that flow within or are directly adjacent to forested lands, and identified on maps developed by the Department and adopted as part of this Regulation in Appendix A. Such features may be adjusted in accordance with Section 9.2 of these Regulations.

**“Site plan”** means a drawing illustrating proposed residential planned communities, conditional uses, dwellings, multiple family dwellings, townhouses, houses of worship, hotels, motels or motor lodges, docks or piers, footbridges or walkways, business and office buildings, commercial buildings or industrial buildings, mobile home parks, campgrounds, borrow pits, or amusement places, circuses, or carnival grounds.

**“State-regulated wetlands”** means those wetlands depicted on maps adopted pursuant to 7 Del.C. Ch. 66 or otherwise field verified or adjusted.

**“Systematically eliminate”** means to require the elimination of waste loading into the affected waterbody by point sources on a firm, fixed schedule as approved by the Department. This elimination must occur within five years of the expiration of the facility’s current NPDES permit unless a longer period of time is provided for in a State or Federally enforceable Consent Order, Decree, or Administrative Order.

**“Total Maximum Daily Load (TMDL)”** means the amount of a given pollutant that may be discharged to a waterbody from point, nonpoint, and natural background sources and still allows attainment or maintenance of the applicable narrative and numerical water quality standards. A TMDL is the sum of the individual Waste Load Allocations (WLAs) for point sources and Load Allocations (LAs) for nonpoint sources and natural background sources of pollution. A TMDL may include a reasonable margin of safety (MOS) to account for uncertainties regarding the relationship between mass loading and resulting water quality. In simplistic terms, a TMDL matches the strength, location and timing of pollution sources within a watershed with the inherent ability of the receiving water to assimilate the pollutant without adverse impact.

**“Treatment train”** means a series of best management practices for stormwater.

**“View corridor”** means selective removal, pruning, and/or thinning of natural vegetation within a defined corridor in order to provide a view of a water feature.

**“Watershed”** means a region or area delineated by a topographical divide and draining ultimately to a particular watercourse.

### **3.0 Point Source Implementation**

- 3.1 Permitted discharges of nutrients into the Indian River, Indian River Bay, Rehoboth Bay, Little Assawoman Bay or their tributaries under the NPDES program shall be systematically eliminated through their NPDES renewal process.
- 3.2 Subject to approval by the Department, point sources may choose to engage in water quality trading on a case-by-case basis in accordance with the following:
  - 3.2.1 Trades must occur within the same watershed (Indian River, Indian River Bay, Rehoboth Bay, or Little Assawoman Bay) as the point source discharge is located.
  - 3.2.2 Trades must involve a trading ratio of at least 2:1 between nonpoint sources and point sources.
  - 3.2.3 The nutrient load reduction involved in the trade must constitute reductions that occur beyond the baseline or the point or nonpoint source nutrient reductions required under the TMDL and this Pollution Control Strategy.

### **4.0 Buffer Zone Established**

This section requires riparian buffers in order to protect and improve water quality.

- 4.1 Applicability.
  - 4.1.1 A buffer is only required for new major subdivisions and new activities requiring a site or major subdivision plan approval by Sussex County or other local government. For redevelopment projects, new improvements within the respective buffer shall be permitted at the existing set back or greater in accordance with applicable county or local ordinances.

- 4.1.2 This buffer provision does not apply to major subdivisions, site plans, or individual lots used for detached single family homes recorded prior to effective date of this regulation.
- 4.1.3 This buffer provision does not apply to any land or buildings deemed to be in agriculture use as prescribed in 9 Del.C. 6902(b).
- 4.1.4 On-lot improvements requiring a site plan impacting less than 5000 square feet are excluded.
- 4.1.5 Excluded from the buffer provisions of this Regulation are permitted water-dependent facilities (maritime, recreational, educational or fisheries activities that cannot exist outside of the buffer by reason of the intrinsic nature of their operation) and the permitted installation, operation, repair or maintenance of any sanitary sewer system, stormwater facility, culvert, bridge, public utility, street, drainage facility, pond, recreational amenity, pier, bulkhead, boat ramp, waterway improvement project or erosion-stabilization project that has received the joint approval of the appropriate federal, state and local agencies.
- 4.1.6 Isolated, stormwater and farm ponds are excluded from the buffer provisions.
- 4.2 For purposes of this Section, buffers are hereby established for primary and secondary water features.
  - 4.2.1 Buffers of 100 feet are hereby established landward from State-regulated wetlands, or landward from the mean high water line of all tidal waters, whichever extends farther upland, and landward from the ordinary high water mark of all other primary water features.
  - 4.2.2 Buffers of 60 feet are hereby established landward from the ordinary high water mark of all secondary water features.
- 4.3 Buffer widths may be reduced to the widths specified below when combined with the provisions outlined in Section 5 and contingent upon the creation of a development-wide nutrient management plan created by a certified nutrient consultant and implemented by a certified nutrient handler in accordance with the Regulations Governing the Nutrient Management Program.
  - 4.3.1 Buffers of 50 feet are hereby established landward from State-regulated wetlands, or the mean high water line of all tidal waters, whichever extends farther upland, and from the ordinary high water mark of all other primary water features.
  - 4.3.2 Buffers of 30 feet are hereby established landward from the ordinary high water mark of all secondary water features.
- 4.4 When Section 4.3 applies, the applicant shall ensure that deed restrictions and the homeowner's association bylaws include the following statement: "This development is subject to a nutrient management plan, which shall be implemented by a certified nutrient handler. The nutrient management plan is designed to reduce pollutants entering the Inland Bays. The nutrient management plan must be maintained and implemented in accordance with the Inland Bays Pollution Control Strategy and Regulations of the Pollution Control Strategy for the Indian River, Indian River Bay, Rehoboth Bay and Little Assawoman Bay Watersheds, Delaware." In addition, the following requirements must also be met:
  - 4.4.1 The homeowner's association must retain the nutrient management plan on file and maintain records of nutrient applications. A summary of nutrient application records must be submitted to the Delaware Department of Agriculture, Nutrient Management Program on an annual basis.
  - 4.4.2 The homeowner's association must sign and accept any and all responsibility for implementation of these requirements.
- 4.5 In order to protect buffers and thus water quality, no landowner or their representative shall extend lot lines into buffers.
- 4.6 Determination of the areas of State jurisdiction, including the limit of State-regulated wetlands as mapped or otherwise field adjusted, the mean high water line of tidal waters and the ordinary high water line of non-tidal waters and the upland edge of buffers will be made by the Department.
- 4.7 No person shall submit final site plans or final major subdivision plats without including buffers as defined and described in these regulations that are clearly demarcated, designated, and recorded on such plans or plats.

- 4.8 Property owner(s) shall maintain the buffer in perpetuity in accordance with these regulations. Property owners shall install boundary signs or markers or distinctive vegetation identifying the upland edge of the buffer.
- 4.9 Buffer property owners or managers shall manage buffers to maintain their water quality benefits.
- 4.10 Allowable uses within the buffer are:
  - 4.10.1 Flood control structures, where permitted,
  - 4.10.2 Utility rights of way/structures, where permitted,
  - 4.10.3 Stormwater best management practices may be placed within the buffer, but no closer than 25 feet to the feature being buffered, provided that the buffer is in open space,
  - 4.10.4 Unpaved, pervious single-track trails or footpaths no wider than 5 feet, or pervious or impervious footpaths that encompass 5% or less of the buffer area, (in instances where the trail area is greater than 5% of the buffer area, the buffer will require 1/1 mitigation on a per square foot basis), and
  - 4.10.5 Road crossings, where permitted,
- 4.11 In instances where a buffer is required adjacent to a tax ditch, the maintenance right-of-way may be included as part of the buffer. Access to the ditch for maintenance purposes shall be preserved.

## **5.0 Sediment and Stormwater Controls**

- 5.1 Sediment and stormwater runoff shall be managed for nutrient reductions where practicable.
- 5.2 When the Delaware Sediment and Stormwater Regulations require the creation of a permanent sediment and stormwater management plan, that plan shall be designed and implemented to include design criteria to further reduce nutrient contributions. Consistency will be determined at the conceptual stormwater plan process step. Compliance will be determined before approval of final site or subdivision plans.
- 5.3 Compliance with 5.2 of these Regulations shall be achieved using one of the following methods:
  - 5.3.1 For properties that contain primary and/or secondary water features, establish buffers consistent with Section 4.2 of these Regulations; or
  - 5.3.2 For properties that contain primary and/or secondary water features, establish buffers consistent with Sections 4.3 and 4.4 of these Regulations in combination with any of the options listed in 5.3.3 of this Section; or
  - 5.3.3 For properties that utilize a reduced width buffer or do not contain primary or secondary water features, select any of the options listed in 5.3.3.1 – 5.3.3.4 below:
    - 5.3.3.1 Reduce nutrient contributions by the percentage required by the TMDL for the watershed in which the project is located, based on a comparison between the post-developed condition with and without stormwater quality management best management practices using the procedures outlined in the guidance document entitled, "Achieving Stormwater Pollution Control Strategy Reductions for Water Quality"; or
    - 5.3.3.2 Reduce nutrient contributions so as to achieve irreducible concentrations of nutrients using the procedures outlined in the guidance document entitled, "Achieving Stormwater Pollution Control Strategy Reductions for Water Quality"; or
    - 5.3.3.3 Reduce nutrient contributions using three practices within a treatment train using the procedures outlined in the guidance document entitled, "Achieving Stormwater Pollution Control Strategy Reductions for Water Quality"; or
    - 5.3.3.4 Establish 30% of project parcel as forest in common open space through preservation and protection of existing forest stands or creation of new forest stands in accordance with the guidance document entitled, "Forestry Guidance for Inland Bays Pollution Control Strategies." In order to comply with the stormwater management requirements of this section, to the extent practicable, the forested area shall be an integral component of the project's stormwater management plan.

- 5.4 When Sections 5.3.1 or 5.3.2 apply, the buffer zone shall be established in accordance with Section 4 of these Regulations.

## **6.0 On-site Wastewater Treatment and Disposal Systems—General**

- 6.1 This section of the Regulations of the Pollution Control Strategy for the Indian River, Indian River Bay, Rehoboth Bay and Little Assawoman Bay Watersheds complements sections of the Regulations Governing the Design, Installation and Operation of On-Site Wastewater Treatment and Disposal Systems. If inconsistencies exist, these Regulations of the Pollution Control Strategy for the Indian River, Indian River Bay, Rehoboth Bay and Little Assawoman Bay Watersheds control.
- 6.2 All cesspools or seepage pits are prohibited within Indian River, Indian River Bay, Rehoboth Bay and Little Assawoman Bay watersheds and shall be replaced in accordance with the Regulations Governing the Design, Installation and Operation of On-Site Wastewater Treatment and Disposal Systems and these Regulations of the Pollution Control Strategy for the Indian River, Indian River Bay, Rehoboth Bay and Little Assawoman Bay Watersheds.
- 6.3 Existing holding tanks must be operated in accordance with their permits and their conditions.
- 6.4 In instances where central sewer service will become available within five years, temporary holding tanks will only be permitted after the Department receives a letter (with an approved Certificate of Public Convenience and Necessity (CPCN) stating when central sewer will become available) from Sussex County, the appropriate municipality, or the wastewater utility.
- 6.5 Existing onsite wastewater treatment and disposal systems which are repaired or replaced and new systems on parcels recorded prior to 30 calendar days after the date of publication of these final Regulations in the Delaware Register of Regulations shall be subject to the setback requirements of these Regulations and the Regulations Governing the Design, Installation and Operation of On-Site Wastewater Treatment and Disposal Systems. However, if it is impossible to comply with such requirements due to lot size limitations, the system shall conform to the maximum extent practicable.
- 6.6 No new drainfields on parcels recorded 30 calendar days or more after the publication of these final Regulations in the Delaware Register of Regulations may be present within 100 feet landward from State-regulated wetlands, or landward from the mean high water line of all tidal waters, whichever extends farther upland, and landward from the ordinary high water mark of all other primary water features.
- 6.7 All innovative and alternative onsite wastewater treatment and disposal systems having flows of less than or equal to 2,500 gallons per day must comply with Performance Standard Nitrogen level 3.

## **7.0 On-site Wastewater Treatment and Disposal System Operation, Maintenance and Inspection Program**

- 7.1 An operation, maintenance and inspection program for individual onsite wastewater treatment and disposal systems (OWTDS) is hereby established for the Indian River, Indian River Bay, Rehoboth Bay and Little Assawoman Bay watersheds.
- 7.2 All properties utilizing an OWTDS that are sold or otherwise transferred to other ownership shall have their systems pumped out and inspected prior to the completion of the sale.
- 7.2.1 For transfers of a new property, the certificate of completion will fulfill the requirements of this section.
- 7.2.2 If an inspection has occurred within the previous 36 months and the property owner can provide documentation of such pump out and inspection, then such documentation will fulfill the requirements of this section.
- 7.2.3 If the owner of an individual OWTDS provides proof of a licensed operator or has an annual service contract with a certified service provider then the requirements of this section have been met.
- 7.3 Pumpouts shall be performed by a licensed Class F Liquid Waste Hauler. Inspections shall be performed by a licensed Class H System Inspector.

- 7.4 Standard inspection forms, developed by the Department, shall be used by the system inspector. The property owner shall provide the system inspector with all available pertinent information. The completed inspection report shall detail the results of the inspection. The system inspector shall provide the Department and the property owner with a written copy of the inspection report.
- 7.5 The Department will maintain a list of all licensed Class H System Inspectors and certified service providers which will be available for review.

## **8.0 On-site Wastewater Treatment and Disposal System Performance Standards**

- 8.1 All OWTDSs in the Indian River, Indian River Bay, Rehoboth Bay and Little Assawoman Bay Watersheds are required to reduce their nutrient wastewater loads.
- 8.2 Requirements for large OWTDSs having flows greater than 20,000 gallons per day (gpd):
- 8.2.1 All new systems shall meet Performance Standard Nitrogen level 1 (PSN1).
- 8.2.2 All replacement systems shall meet Performance Standard Nitrogen level 2 (PSN2).
- 8.2.3 When the operation and maintenance permit expires for an existing system, the Department will require the system to meet Performance Standard Nitrogen level 2 (PSN2). If the Department deems that the OWTDS must be redesigned to meet PSN2, the owner or operator of the system will have up to 60 months from the permit expiration date to bring the OWTDS into compliance with the new standard.
- 8.2.4 Where the system location is identified as having high potential for phosphorus mobility, new OWTDSs shall meet a Performance Standard Phosphorus level 1 (PSP1).
- 8.2.5 When the operation and maintenance permit expires for an existing system, and the system location is identified as having high potential for phosphorus mobility, the system must comply with the Performance Standard Phosphorous level 1 (PSP1). If the Department deems that the system must be redesigned to meet PSP1, the owner or operator of the system will have up to 60 months from the permit expiration date to bring the OWTDS into compliance with the new standard.
- 8.3 Requirements for large OWTDSs having flows greater than 2,500 gpd but less than 20,000 gpd:
- 8.3.1 All new systems shall meet a Performance Standard Nitrogen level 2 (PSN2).
- 8.3.2 All replacement systems shall meet a Performance Standard Nitrogen level 3 (PSN3).
- 8.3.3 When the operation and maintenance permit expires for an existing system, the system must meet a Performance Standard Nitrogen level 3 (PSN3). If the Department deems that the large OWTDS must be redesigned, the owner or operator of the system will have up to 60 months from the permit expiration date to bring the OWTDS into compliance with the new standard.
- 8.3.4 When the operation and maintenance permit expires for an existing system and the system location is identified as having high potential for phosphorus mobility, the system must comply with the Performance Standard Phosphorous level 2 (PSP2).
- 8.4 Requirements for small OWTDSs having flows less than or equal to 2,500 gpd:
- 8.4.1 All new and replacement systems shall meet a Performance Standard Nitrogen level 3 (PSN3).
- 8.4.2 Department approval and use of advanced treatment units shall be in accordance with the Regulations Governing the Design, Installation and Operation of On-Site Wastewater Treatment and Disposal Systems and the Innovative and Alternative System Approval Checklist.
- 8.4.3 All permit applications shall be prepared in accordance with the Regulations Governing the Design, Installation and Operation of On-Site Wastewater Treatment and Disposal Systems and these Regulations.
- 8.4.4 To provide proper operation and maintenance of the innovative and alternative onsite wastewater treatment and disposal system, the permittee is required to adhere to Department permit conditions. These permit conditions require mandatory operation and maintenance for the life of the system by maintaining a service contract with a certified service provider.
- 8.4.5 In instances where central sewer will become available within five years, the requirements of Section 8.4 will be waived after the Department receives a letter (with an approved Certificate of

Public Convenience and Necessity (CPCN) stating when central sewer will become available) from Sussex County, the appropriate municipality, or the wastewater utility.

8.5 Large systems will be operated and monitored in accordance with permit conditions, and the following:

8.5.1 Large systems shall be operated by a Department licensed operator. The class level of the operator required and frequencies of inspections will be in accordance with the Regulations for Licensing Operators of Wastewater Facilities.

8.5.2 Large systems shall be sampled as outlined in the permit conditions.

## **9.0 Enforcement, Challenges, and Waivers**

9.1 Enforcement of these regulations shall be as outlined in Title 7, Chapter 60, Section 6005 of the Delaware Code.

9.2 Technical errors related to primary and/or secondary water feature classifications may be brought to the Department's attention by following the procedures outlined in the guidance document entitled, "Procedures for Challenging the "Map of Water Features to be Buffered in the Inland Bays Watershed." If an on-site evaluation by the Department establishes that a technical error exists in the Map of Water Features to be Buffered in the Inland Bays Watershed that has been adopted by the Department as part of this Regulation, the map containing the error may be corrected by the Department after the Department documents, in writing, the results of the on-site evaluation, and the Department gives the public notice of any proposed correction. For purposes of this subsection, the term "public notice" shall consist of having notice of the proposed correction, the name of the property owner, location of the property in issue and a description of the error, published in a daily newspaper of general circulation throughout the State and a newspaper of general circulation in the county in which the activity is proposed. Such notice shall be published at least 20 days in advance of any correction to a map by the Department. If the Department determines that it has received a meritorious objection to any proposed correction set forth in a public notice, the Department may hold a public hearing if necessary in accordance with the procedures and laws required by the State of Delaware.

9.3 Technical errors related to the location of the tidal wetlands depicted on the map entitled "Areas Requiring Early Implementation of PSN3" may be brought to the Department's attention by following the procedures outlined in Title 7, Chapter 66 of the Delaware Code.

9.4 Waiver requests from the stormwater management requirements of Section 5 shall be determined through the procedures outlined in the Delaware Sediment and Stormwater Regulations.

9.5 Waiver requests for all other sections of these Regulations shall follow these procedures. Upon the applicant's request, the Secretary may grant a waiver from the strict application of this Regulation after an opportunity for formal public notification and review.

9.5.1 Notice shall be provided to the public including all contiguous property owners.

9.5.2 A public hearing will be held if a meritorious request is received within a reasonable time as stated in the advertisement.

9.5.3 A public hearing request shall be deemed meritorious if it exhibits a familiarity with the waiver request and has a reasoned statement of the waiver's probable impact.

9.5.4 No waiver shall be granted unless the said variance meets the following criteria:

9.5.4.1 The action will not result in substantial adverse effect on water quality, in general; and

9.5.4.2 The waiver must minimize the effects to the water quality goals of these Regulations to the greatest extent possible; and

9.5.4.3 A denial of the desired waiver would preclude a reasonable use of the property; and

9.5.4.4 The justification for the waiver is not related to a self-imposed special condition.

9.6 In addition to the waivers available in 9.4, the Secretary may grant hardship waivers from Sections 6.2 and 8.4 of these Regulations as outlined below.

9.6.1 The Secretary may consider the following factors in reviewing an application for a waiver based on hardship:

9.6.1.1 Advanced age or bad health of the applicant; or

- 9.6.1.2     Need of applicant to care for aged, incapacitated, or disabled relatives; or
- 9.6.1.3     Lack of funding programs and/or institutional opportunities for low and fixed income applicants.
- 9.6.2     Hardship waivers granted by the Secretary may contain but are not limited to conditions such as:
  - 9.6.2.1     Permits for the life of the applicant; or
  - 9.6.2.2     Limiting the number of permanent residents using the system; or
  - 9.6.2.3     Use of non-nutrient reducing on-site wastewater treatment and disposal systems for a specified period of time.
- 9.6.3     Documentation of hardship must be provided before the application is referred to the Secretary for action.
- 9.6.4     Department personnel shall strive to aid and accommodate the needs of the applicants for waivers due to hardship.
- 9.7        In the event that more than one waiver from these Regulations is required, the Secretary may coordinate the review of such waivers.

**10.0**    **Severability**

Should any section, paragraph, or other part of this document be declared invalid for any reason, the remainder shall not be affected.

**11.0**    **Other (Reserved)**

**11 DE Reg. 1602 (06/01/08) (Prop.)**