

Regulatory Analysis Form

(Completed by Promulgating Agency)



IRRC

Independent Regulatory Review Commission

SECTION I: PROFILE

(1) Agency: Department of Environmental Protection

(2) Agency Number:

Identification Number: #7-451

IRRC Number: 2821

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INDEPENDENT REGULATORY
REVIEW COMMISSION

(3) Short Title: Water Quality Standards Implementation

(4) PA Code Cite: 25 Pa. Code, Chapter 96

(5) Agency Contacts (List Telephone Number, Address, Fax Number and Email Address):

Primary Contact: Michele Tate, Regulatory Coordinator, Phone No. 717-783-8727
The Policy Office, PO Box 2063, Harrisburg, PA 17105-2063
Email; mtate@state.pa.us

Secondary Contact: Kelly Heffner, Director, Phone No. 717-783-8727
The Policy Office, PO Box 2063, Harrisburg, PA 17105-2063
Email; kheffner@state.pa.us

(6) Primary Contact for Public Comments (List Telephone Number, Address, Fax Number and Email Address) –
Complete if different from #5:

Environmental Quality Board
P.O. Box 8477
Harrisburg, PA 17105-8477
regcomments@state.pa.us

(All Comments will appear on IRRC'S website)

(7) Type of Rulemaking (check applicable box):

- Proposed Regulation
- Final Regulation
- Final Omitted Regulation
- Emergency Certification Regulation;
 - Certification by the Governor
 - Certification by the Attorney General

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(8) Briefly explain the regulation in clear and nontechnical language. (100 words or less)

The proposed rulemaking provides a cost-effective means for facilities subject to meet new limits for nitrogen, phosphorus and sediment to meet those limits by working with other facilities and/or with nonpoint sources. It helps the Commonwealth achieve its Chesapeake Bay nutrient reduction goals from the agriculture sector, provides a source of revenue to farmers while advancing the restoration and protection of the water quality of the Chesapeake Bay. It codifies the Department's existing guidance on nutrient and sediment credit trading. The proposed rulemaking will provide clear and certain standards for nutrient and sediment credit trading in Pennsylvania and thereby support the Department's efforts to implement that program.

(9) Include a schedule for review of the regulation including:

- | | |
|---|-------------------------------------|
| A. The date by which the agency must receive public comments: | <u>March 2010</u> |
| B. The date or dates on which public meetings or hearings will be held: | <u>No hearings are anticipated.</u> |
| C. The expected date of promulgation of the proposed regulation as a final-form regulation: | <u>Fall 2010</u> |
| D. The expected effective date of the final-form regulation: | <u>Fall 2010</u> |
| E. The date by which compliance with the final-form regulation will be required: | <u>Fall 2010</u> |
| F. The date by which required permits, licenses or other approvals must be obtained: | <u>Fall 2010</u> |

(10) Provide the schedule for continual review of the regulation.

This regulation when final will be reviewed in accordance with the sunset review schedule published by the Department to determine whether the regulation effectively fulfills the goals for which it was intended.

SECTION II: STATEMENT OF NEED

(11) State the statutory authority for the regulation. Include specific statutory citation.

Pennsylvania Clean Streams Law (35 P.S. §§ 691.1 – 691.1001; the Federal Water Pollution Control Act (33 U.S.C.A. §§ 1251 - 1387); and 40 CFR Part 122

(12) Is the regulation mandated by any federal or state law or court order, or federal regulation? Are there any relevant state or federal court decisions? If yes, cite the specific law, case or regulation as well as, any deadlines

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for action.

No.

(13) State why the regulation is needed. Explain the compelling public interest that justifies the regulation. Describe who will benefit from the regulation. Quantify the benefits as completely as possible and approximate the number of people who will benefit.

The Chesapeake Bay is polluted from nutrients (and sediment), and in 2005 new water quality standards under the federal Clean Water Act to address this pollution came into effect. To meet these new requirements under federal law, the U.S. Environmental Protection Agency and the affected states developed a maximum nutrient load, or "cap load," for each major tributary. More than half, about 22,612 square miles in 40 counties, of our Commonwealth is within the Chesapeake Bay Watershed. As a result, approximately 200 municipal sewage treatment plants and others discharging nutrients to Pennsylvania's Bay tributaries must cap those discharges or they will be in violation of the downstream water quality standards, under federal and state law.

The Legislative Budget and Finance Committee's "Chesapeake Bay Tributary Strategy Compliance Cost Study" determined (based on 2009 values) that the cost for the nutrient removal technology upgrades for the 183 of the approximately 200 facilities would be \$1.4 Billion. This cost is only for the upgrade construction costs, it does not include operation and maintenance which was identified to be \$61 Million each year. It should also be noted that the dollar amount does not include costs for other reductions outside these facilities that would be needed to meet the compliance plan. Regardless of final price, ultimately that cost of compliance is paid by the local rate payer. Given the magnitude of financial resources needed, innovative strategies with the potential to reduce costs are needed, and that is the purpose of the nutrient trading program.

It is known that the cost per pound of nutrient removal could range from \$1 for some agricultural practices, to \$8-30 for some treatment plant processes, to thousands of dollars for some stormwater controls and trading allows for the most cost-effective alternative to be chosen. For example, by participating in the trading program Fairview Township announced a cost savings of approximately 75% for their ratepayers. Rather than upgrade, the township chose to trade meaning a lower compliance cost than originally estimated.

The Nutrient Credit Trading Policy was actually one of several compliance alternatives provided to NPDES permittees required to reduce their effluent discharges, under the Department's plan. These alternatives provide those sewage treatment plants with options that have the potential to reduce compliance costs substantially. It is a voluntary program that provides economic incentives for increased pollutant reductions beyond those required by law now and provides cost savings for those required to achieve the pollutant reductions.

(14) If scientific data, studies, references are used to justify this regulation, please submit material with the regulatory package. Please provide full citation and/or links to internet source.

- Water Quality Trading Policy, UNITED STATES ENVIRONMENTAL PROTECTION AGENCY, Office of Water, January 13, 2003, <http://www.epa.gov/owow/watershed/trading/finalpolicy2003.html>
- Frequently Asked Questions About Water Quality Trading, UNITED STATES ENVIRONMENTAL

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PROTECTION AGENCY, Office of Water,

<http://www.epa.gov/owow/watershed/trading/tradingfaq.html>

- Water Quality Trading Toolkit for Permit Writers, UNITED STATES ENVIRONMENTAL PROTECTION AGENCY, Office of Water, August 2007, <http://www.epa.gov/owow/watershed/trading/WOTToolkit.html>
- Final Trading of Nutrient and Sediment Reduction Credits- Policy and Guidelines, PA DEPARTMENT OF ENVIRONMENTAL PROTECTION, December 29, 2006, http://www.depweb.state.pa.us/chesapeake/lib/chesapeake/dec29_2006/finalpolicy_12-28.pdf
- Appendix A: Nutrient Trading Criteria Specific for the Chesapeake Bay Watershed, PA DEPARTMENT OF ENVIRONMENTAL PROTECTION, December 29, 2006, http://www.depweb.state.pa.us/chesapeake/lib/chesapeake/dec29_2006/finalappendixa_12-28.pdf
- PA Nutrient Trading Website, <http://www.dep.state.pa.us/river/Nutrient%20Trading.htm>
- Bay Resource Library Website, <http://www.chesapeakebay.net/bayresourcelibrary.aspx?menuitem=13998>

(15) Describe who and how many will be adversely affected by the regulation. How are they affected?

The proposed rulemaking codifies the Department's existing guidance on nutrient and sediment credit trading and provides clear and certain standards for nutrient and sediment credit trading in Pennsylvania and thereby supports the requests that the Department has received from the regulated community. It is not anticipated that this proposed rulemaking will have an adverse affect on any group because it does not impose obligations on anyone unless they opt to take advantage of the cost-saving benefits of the trading program.

(16) List the persons, groups or entities that will be required to comply with the regulation. Approximate the number of people who will be required to comply.

This proposed rulemaking does not require specific entities to comply unless they opt to take advantage of the cost-saving benefits of the trading program. Those that may be able to take advantage of the cost-savings of the program are:

- any facility subject to new cap loads for nutrients or sediment related to restoration and protection of the Bay, mostly wastewater treatment facilities;
- any farmer who may voluntarily choose to implement nutrient or sediment reduction measures and thereby earn revenue;
- any developer that seeks to create a new or expanding discharge that must meet the zero net load; and
- any aggregator that seeks to arrange for the sale of credits generated by another person, or arranges for the credits to be certified, verified and registered.

SECTION III: COST AND IMPACT ANALYSIS

(17) Provide a specific estimate of the costs and/or savings to the **regulated community** associated with compliance, including any legal, accounting or consulting procedures which may be required. Explain how the dollar estimates were derived.

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The proposed rulemaking does not impose new costs to the regulated community but rather reduces costs for achieving compliance in lieu of completing an upgrade to include nutrient removal capabilities. For example, in 2008 Fairview Township decided to use credits to meet its nutrient reduction obligation, and in so doing announced a cost savings of approximately 75%. Mount Joy Borough Authority investigated costs of upgrading and found that by installing the first level of nitrogen treatment they could reduce nitrogen by about fifty percent for about \$8 per pound but in order to reach their cap loads an additional upgrade would increase the price to about \$12 per pound. Instead, Mount Joy contracted with a local farmer and invested in more than 900 acres of no-till agriculture to meet their permit cap at a cost of only \$3.81 for every pound reduced.

In addition, the figures below serve as an example of how the costs can differ between compliance options. This cost difference can mean a lot to the regulated community, local governments and most importantly ratepayers. Note, the example below is an estimate and additional facility specific factors (O&M, age, growth etc) would need to be considered when choosing between a construction upgrade or trading.

From the Legislative Budget and Finance Committee's "Chesapeake Bay Tributary Strategy Compliance Cost Study", the cost for nutrient removal technology upgrades for 183 of the approximately 200 facilities was \$1.4 Billion and would cost \$61 Million each year for operation and maintenance. The compliance plan identified that a reduction of 5.18 Million pounds of nitrogen is to be achieved by the establishment of the cap loads for the restoration and protection of the Bay. Based on the values from the study and the reductions needed, the cost per pound is approximately \$25/year over a 20 year period.

In that study most facilities that were interviewed believed the cost of a credit would be \$7-9 per pound. The cost difference is in the value of the credit compared to the cost of the construction upgrade. From the example above the comparison would be \$25 per pound compared to \$9 per pound. The nutrient trading program allows for a facility to choose the most efficient option.

The true cost difference or cost savings for the regulated community will vary in reality due to individual situations. The key to the program and this proposed rulemaking is that it provides the regulated community flexibility in achieving overall compliance.

(18) Provide a specific estimate of the costs and/or savings to **local governments** associated with compliance, including any legal, accounting or consulting procedures which may be required. Explain how the dollar estimates were derived.

As in #17, the proposed rulemaking does not impose new costs but rather provides an option that can reduce costs for achieving compliance. In fact this rulemaking would primarily benefit local government entities that own or operate sewage treatment facilities, by providing a more cost-effective means of meeting new regulatory requirements.

(19) Provide a specific estimate of the costs and/or savings to **state government** associated with the implementation of the regulation, including any legal, accounting, or consulting procedures which may be required. Explain how the dollar estimates were derived.

Market-based programs such as trading provide incentives for entities to create credits by going beyond any

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statutory or regulatory obligations which may reduce subsidies needed in the future. By providing for a means to effectively achieve environmental regulatory goals at less expense than traditional command and control regulations it may also reduce infrastructure financing needs.

There is no additional cost incurred to state government than what is currently budgeted for with this proposed rulemaking.

(20) In the table below, provide an estimate of the fiscal savings and costs associated with implementation and compliance for the regulated community, local government, and state government for the current year and five subsequent years.

The true cost difference or cost savings for the regulated community will vary in reality due to individual situations.

	Current FY Year	FY +1 Year	FY +2 Year	FY +3 Year	FY +4 Year	FY +5 Year
SAVINGS:	\$	\$	\$	\$	\$	\$
Regulated Community						
Local Government						
State Government						
Total Savings						
COSTS:						
Regulated Community						
Local Government						
State Government						
Total Costs						
REVENUE LOSSES:						
Regulated Community						
Local Government						
State Government						
Total Revenue Losses						

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(20a) Provide the past three year expenditure history for programs affected by the regulation.

Program	FY -3 '05-'06	FY -2 '06-'07	FY -1 '07-'08	Current FY '08-'09
Environmental Program Management (#161-10382)	\$37,049,000	\$36,868,000	\$39,909,000	\$41,800,000
Environmental Protection Operations (#160-10381)	\$87,897,000	\$89,847,000	\$98,582,000	\$102,149,000

(21) Explain how the benefits of the regulation outweigh any cost and adverse effects.

The primary benefit of the policy and thus this proposed rulemaking is that it provides a cost-effective means for facilities subject to new limits for nitrogen, phosphorus and sediment to meet those limits by working with another facility and/or nonpoint source. It also helps the Commonwealth achieve its Chesapeake Bay nutrient reduction goals from the agriculture sector, provides a source of revenue to farmers while advancing the restoration and protection of our local streams and the water quality of the Chesapeake Bay.

(22) Describe the communications with and input from the public and any advisory council/group in the development and drafting of the regulation. List the specific persons and/or groups who were involved.

The Department has consulted with a number of boards and committees throughout the process of developing the Nutrient Credit Trading Policy, and most recently, this proposed rulemaking. Specifically, the Department presented to the Water Resources Advisory Committee (WRAC), once on June 19, 2009 and again on July 22, 2009 with a revised draft in response to comments. The WRAC endorsed, with provisions, the proposed rulemaking package at their July meeting. The proposed rulemaking was presented to the Agricultural Advisory Board (AAB) on August 19, 2009 where very few comments or concerns were raised. At the request of AAB, the Department will provide an additional presentation during the rulemaking's public comment period. The proposed rulemaking and preamble reflect the provisions made by the WRAC during the July meeting.

(23) Include a description of any alternative regulatory provisions which have been considered and rejected and a statement that the least burdensome acceptable alternative has been selected.

The Nutrient Credit Trading Policy was one of several compliance alternatives provided to NPDES permittees required to reduce their effluent discharges, under the Department's plan. Absent the nutrient trading program the other compliance alternatives identified for NPDES permittees would be: implementation of nutrient reduction treatment technology, retirement of existing on-lot septic systems, wastewater reuse and land application.

(24) Are there any provisions that are more stringent than federal standards? If yes, identify the specific provisions and the compelling Pennsylvania interest that demands stronger regulations.

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No.

(25) How does this regulation compare with those of other states? How will this affect Pennsylvania's ability to compete with other states?

There are only a handful of states with trading programs and in large part Pennsylvania has been leading the way in developing a nutrient trading program. Pennsylvania is one of the first programs in the country to have both nonpoint sources and point sources utilizing a nutrient credit trading program and to have facilities using credits towards compliance.

Of the trading programs developing for the Chesapeake Bay, Pennsylvania's provides the most flexibility and is perhaps the most cost effective program. The proposed rulemaking will provide clear and certain standards for nutrient credit trading in Pennsylvania and will not affect our ability to compete with other states.

(26) Will the regulation affect any other regulations of the promulgating agency or other state agencies? If yes, explain and provide specific citations.

No.

(27) Submit a statement of legal, accounting or consulting procedures and additional reporting, recordkeeping or other paperwork, including copies of forms or reports, which will be required for implementation of the regulation and an explanation of measures which have been taken to minimize these requirements.

This proposed rulemaking does not include additional requirements beyond those currently implemented.

(28) Please list any special provisions which have been developed to meet the particular needs of affected groups or persons including, but not limited to, minorities, elderly, small businesses, and farmers.

The Nutrient Trading Policy and Program were designed through an open dialog process with participation from the agricultural community, builders, local government organizations, and private businesses and consultants. Throughout this collaborative process many provisions were drafted and discussed. This program and the proposed rulemaking are a showcase of the collaborative effort. The nutrient trading program offers a voluntary opportunity for participation across various business sectors and business sizes such as:

- any facility subject to new cap loads for nutrients or sediment related to restoration and protection of the Bay, mostly wastewater treatment facilities;
- any farmer who may voluntarily choose to implement nutrient or sediment reduction measures and thereby earn revenue;
- any developer that seeks to create a new or expanding discharge that must meet the zero net load; and
- any aggregator that seeks to arrange for the sale of credits generated by another person, or arranges for the credits to be certified, verified and registered.

**FACE SHEET
FOR FILING DOCUMENTS
WITH THE LEGISLATIVE REFERENCE
BUREAU**

(Pursuant to Commonwealth Documents Law)

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INDEPENDENT REGULATORY
REVIEW COMMISSION

DO NOT WRITE IN THIS SPACE

Copy below is hereby approved as to form and legality.
Attorney General

By: Angela M. Elliott
(Deputy Attorney General)

JAN 26 2010

DATE OF APPROVAL

Check if applicable
Copy not approved. Objections attached.

Copy below is hereby certified to be true and
correct copy of a document issued, prescribed or
promulgated by:

DEPARTMENT OF ENVIRONMENTAL
PROTECTION
ENVIRONMENTAL QUALITY BOARD

(AGENCY)

DOCUMENT/FISCAL NOTE NO. 7-451

DATE OF ADOPTION November 17, 2009

BY John Hanger

TITLE JOHN HANGER
CHAIRPERSON

EXECUTIVE OFFICER CHAIRMAN OR SECRETARY

Copy below is hereby approved as to form and legality
Executive or Independent Agencies

BY Andrew C. Clark

DATE OF APPROVAL DEC 10 2009

(Deputy General Counsel)
(Chief Counsel - Independent Agency)
(Strike inapplicable title)

Check if applicable. No Attorney General Approval
or objection within 30 days after submission.

NOTICE OF PROPOSED RULEMAKING

**DEPARTMENT OF ENVIRONMENTAL PROTECTION
ENVIRONMENTAL QUALITY BOARD**

Water Quality Standards Implementation

25 Pa. Code, Chapter 96

1911

1912

1913

1914

**Notice of Proposed Rulemaking
Department of Environmental Protection
Environmental Quality Board
(25 Pa. Code, Chapter 96)
Water Quality Standards Implementation**

Preamble

The Environmental Quality Board (Board) proposes to amend 25 *Pa. Code*, Chapter 96 (relating to Water Quality Standards Implementation) to read as set forth in Appendix A. The amendments would codify into regulation the Department's existing guidance entitled Final Trading of Nutrient and Sediment Reduction Credits – Policy and Guidelines (No. 392-0900-001, December, 2006) as it relates to the Chesapeake Bay (“Nutrient Credit Trading Policy”). That policy provides a cost-effective means for facilities subject to meet new limits for nitrogen, phosphorus and sediment to meet those limits by working with other facilities and/or with nonpoint sources. It helps the Commonwealth achieve its Chesapeake Bay nutrient reduction goals from the agriculture sector, provides a source of revenue to farmers and other property owners while advancing the restoration and protection of the water quality of the Chesapeake Bay.

This proposal was adopted by the Board at its meeting of November 17, 2009.

A. Effective Date

These amendments will go into effect upon publication in the *Pennsylvania Bulletin* as final rulemaking.

B. Contact Persons

For further information contact Ann Smith, Program Analyst, Water Planning Office, P.O. Box 2063, 2nd Floor, Rachel Carson State Office Building, Harrisburg, PA 17105-2063, (717) 772-4785, or Douglas Brennan, Director, Bureau of Regulatory Counsel, P.O. Box 2063, 9th Floor, Rachel Carson State Office Building, Harrisburg, PA 17105-2063, (717) 787-7060. Information regarding submitting comments on this proposal appears in Section J of this preamble. Persons with a disability may use the AT&T Relay Service by calling 1-800-654-5984 (TDD users) or 1-800-654-5988 (voice users). This proposal is available electronically through the DEP Web site (<http://www.dep.state.pa.us>).

C. Statutory Authority

The proposed rulemaking is being made under the authority of the Pennsylvania Clean Streams Law (35 P.S. §§ 691.1 – 691.1001; the Federal Water Pollution Control Act (33 U.S.C.A. §§ 1251 - 1387); and 40 CFR Part 122.

D. Background and Purpose

The Chesapeake Bay is polluted from nutrients (and sediment) and in 2005 new water quality standards under the federal Clean Water Act to address this pollution came into effect. To meet these new requirements under federal law, the U.S. Environmental Protection Agency and the affected states developed a maximum nutrient load, or “cap load,” for each major tributary. As a result, approximately 200 municipal sewage treatment plants and others discharging nutrients to Pennsylvania’s Bay tributaries must cap those discharges or they will be in violation of the downstream water quality standards, under federal and state law.

In January 2006 the Department initiated an intensive stakeholder process related to these new legal requirements. First, it refocused and expanded the standing DEP Chesapeake Bay Advisory Committee, to include local government associations, the agricultural community, and multiple associations. This committee was tasked with discussing the wide variety of issues surrounding Pennsylvania’s compliance strategy and to consider various approaches to meeting the federally driven water quality obligations.

After receiving input through a series of meetings held over a nine month period, the Department developed a revised plan to address the new legal mandate. The plan included new permitting requirements for sewage treatment plants and other “point sources” governed by the federal National Pollutant Discharge Elimination System (NPDES), new regulations controlling agricultural run-off, and the Nutrient Credit Trading Policy.

The Nutrient Credit Trading Policy was actually one of several compliance alternatives provided to NPDES permittees required to reduce their effluent discharges, under the Department’s plan. The other compliance alternatives identified for NPDES permittees were: implementation of nutrient reduction treatment technology, retirement of existing on-lot septic systems, wastewater reuse and land application. Nutrient trading provides those sewage treatment plants with options that have the potential to reduce compliance costs substantially. For example, in 2008 Fairview Township decided to use credits to meet its nutrient reduction obligation, and in so doing announced a cost savings of approximately 75%. Mount Joy Borough Authority investigated costs of upgrading and found that by installing the first level of nitrogen treatment they could reduce nitrogen by about fifty percent for about \$8 per pound but in order to reach their cap loads an additional upgrade would increase the price to about \$12 per pound. Instead, Mount Joy contracted with a local farmer and invested in more than 900 acres of no-till agriculture to meet their permit cap at a cost of only \$3.81 for every pound reduced.

The Department’s nutrient credit trading program is built upon the core elements prescribed for any valid trading program. For example, credits can only be generated for nutrient reductions above and beyond those required for regulatory compliance. There are also caps on the total tradable credits for “nonpoint sources” at the excess level available in the watershed from best management practices beyond those needed to meet compliance goals.

Since the publication of the interim final policy and as of August 2009, the Department has received 73 proposals that have been submitted for review to generate nutrient reduction credits in the Chesapeake Bay watershed, mostly but not exclusively by farmers. Of those, 45 have been approved, for a total of 1,651,336 nitrogen credits and 174,086 phosphorous credits. After subtracting the credits that have already been purchased or those that were generated in a previous compliance year, a total of 1,536,597 nitrogen credits and 171,541 phosphorous credits are available for sale.

The Department and its partners continue to seek enhancements to its nutrient trading program. For example, PENNVEST has been authorized by EPA as well as by the PENNVEST Board to invest up to \$50 million to facilitate the nutrient credit trading program. It recently approved a \$7 million loan to a technology provider for a project at a large dairy and poultry farm in Lancaster County. PENNVEST is also studying the possibility of providing an exchange role to facilitate the use of credits by sewage treatment plants. Further, the Department regularly meets with stakeholders to improve the trading program.

The Department has consulted with a number of boards and committees throughout the process of developing the Nutrient Credit Trading Policy, and most recently, this proposed rulemaking. The Department has also presented the proposed rulemaking to the Water Resources Advisory Committee (WRAC), once in June and again in July with a revised draft in response to comments. The WRAC endorsed, with provisions, the proposed rulemaking package at their July meeting and it was presented to the Agricultural Advisory Board (AAB) at the meeting on August 19th where very few comments or concerns were raised. The proposed rulemaking and preamble reflect the comments made by the WRAC during the July meeting. At the request of AAB, the Department will provide an additional presentation during the public comment period.

EPA supports credit trading generally, having published a national policy in that regard in 2003, and a detailed NPDES permit writer's manual on the subject in 2007. The Department has conferred with EPA on this program for the past several years, and EPA agrees with the approach. There are no federal regulations for nutrient credit trading, although there are several air quality-related trading programs administered by EPA and other states, including Pennsylvania.

Pennsylvania has been leading the way nationally in developing its nutrient trading program and it is one of the first programs in the country to have both nonpoint sources and point sources utilizing a nutrient credit trading program. Harnessing market forces can be an effective way to achieve environmental regulatory goals at less expense than traditional command and control regulations. Market-based programs such as trading provide incentives for entities to create credits by going beyond any statutory or regulatory obligations.

The proposed rulemaking will provide clear and certain standards for nutrient credit trading in Pennsylvania and thereby support the Department's efforts to implement its nutrient credit trading program.

E. Summary of Regulatory Requirements

Definitions (§96.8a). The proposed rulemaking adds a number of definitions to Chapter 96 to clarify various new terms added by the proposed rulemaking. Most of the definitions were taken from the Nutrient Credit Trading Policy, with slight revision in some cases based on the Department's experience in implementing the program since the policy was finalized, and also based on comments from stakeholders.

General provisions (§§ 96.8b, 96.8h, 96.8j). The proposed rulemaking contains several sections with over-arching provisions. § 96.8b sets forth the core concepts and basic requirements of the trading program. § 96.8h contains provisions regarding the interaction of this section and important provisions elsewhere in this Title regarding protection of water quality. § 96.8j makes it clear that this proposed rulemaking is not intended to foreclose the use of credits or offsets in other contexts outside of their use to comply with the nutrient and sediment cap loads for the Chesapeake Bay.

Methodology for calculating credits and offsets (§ 96.8c). Much of the methodology for establishing the water quality standards for the Chesapeake Bay, and determining effectiveness of various activities to meet those standards, is based on scientific work done by EPA. This includes the use of several complex models and the scientific research related to them. Section 96.8c identifies those models and that research, and establishes them as a basis for the Department's decisions regarding, among other things, the amount of reductions (and therefore credits) to assign to a given pollutant reduction activity. These models and the related research are an on-going effort and the language of this subsection allows for the use of subsequent versions of the models and more current research.

An important provision in this subsection is § 96.8c (2), which allows the Department to use pollutant removal efficiencies, edge of segment ratios and delivery ratios that are approved by EPA, in calculating credits. The removal efficiencies represent average nutrient and sediment reduction performance capabilities for various "best management practices" ("BMPs") at farms. They undergo extensive peer review by a technical review team managed by the EPA Chesapeake Bay Program. Any recommendations are then reviewed by the EPA Chesapeake Bay Program committee and subcommittee process. These efficiencies change with the science of the models and related research. Current BMP efficiencies are accessible on the Department's Nutrient Credit Trading website: (<http://www.dep.state.pa.us/river/Nutrient%20Trading.htm>).

The edge of segment and delivery ratios are used to identify the fate and transport of nutrients and sediment from their initial creation at a certain location to the Bay. For example, a pound of nitrogen reduced to cropland in the upper reaches of the Susquehanna has much less impact than a pound reduced near the border with Maryland. The delivery ratio accounts for that difference.

At the WRAC meeting in July, the Department was asked to solicit comment on the application of delivery ratios to permit limits, when used in the trading program.

Therefore, the Department is soliciting comments on whether delivery ratios should be applied to permit limits when trading is chosen as the compliance option.

Eligibility requirements (§ 96.8d). This subsection describes the various requirements for a source to be able to generate credits for use under the proposed regulation. There are two components. First, the generator must meet “baseline” requirements, which essentially are the legal requirements that apply to that operation.

The second requirement is “threshold.” This requirement is defined as either a 100 foot manure set back, a 35 foot vegetative buffer or a 20% adjustment made to the overall reduction. It provides an added level of nutrient and sediment reductions that would not necessarily be accomplished without the financial incentives of trading. Threshold therefore adds to the nutrient reduction benefits for the Bay, especially from the agriculture sector.

Therefore, only after demonstrating (1) compliance with the applicable legal requirements (baseline) and (2) achieving an additional set of pollutant reductions (threshold), can a person begin to generate credits or offsets (by further reductions) under this proposed rulemaking. The Department has received numerous proposals for the generation of credits that achieve these requirements and has approved many of them.

Certification, verification and registration (§96.8e, §96.8f.). These subsections describe the procedural requirement that the Department has in place to ensure that credits and offsets are calculated correctly and accomplish pollutant reductions.

The first step is “certification,” which is typically done in advance of any pollutant reduction activities. In reviewing these requests, the Department evaluates detailed requests for approval of credit and offset-generation activities, for the purpose of assigning a specific number of credits to the activity. A person may want to have their proposed pollutant activities certified in order to obtain from the Department the number of credits or offsets which can be expected prior to completing the activity.

The number of credits assigned would have applied all appropriate adjustments such as the reserve and delivery ratios with particular attention being paid to the requirements of subsection §96.8c (methodology). The result is a letter from the Department indicating the amount and types of certified credits or offsets, which in the case of credits the generator can then use to market them.

A second important procedural requirement and a key component of the certification decision is a review of the “verification” plan submitted by the proponent of the credits or offsets, followed by actual verification. This plan is required by § 96.8e(4), and it is also a condition of “registration,” the final step, under § 96.8f(2)(iii). Verification can take a number of forms, but it must demonstrate that the pollutant reduction activities were implemented as described in the proposal that was certified. The Department may also conduct other verification activities, in addition to those in the plan submitted by the generator, under § 96.8f(2)(iv).

The final procedural step in these subsections is “registration,” under § 96.8f. This is the Department’s accounting mechanism to track verified credits and offsets before they are used to comply with the NPDES permit effluent limits for the Bay.

The Department will not register credits or offsets for persons who demonstrate a lack of ability or intention to comply with the requirements of this section, Department regulations or other relevant requirements. See, § 96.8d(4), §96.8d(6), § 96.8f(3).

Use of Credits and Offsets (§ 96.8g). The provisions of the proposed rulemaking described above apply to persons generating credits and offsets. This section addresses the obligations of persons who use them to meet permit requirements. This underscores that the use of credits and offsets in this proposed regulation only applies to the nutrient and sediment effluent limits in NPDES permits for the purposes of restoration and protection of the water quality of the Chesapeake Bay. See, § 96.8g(1), § 96.8g(2). This language is not intended to limit the Department’s existing authority to allow the use of credits or offsets in other contexts. See, § 96.8j.

Credit and offset failure is addressed in § 96.8g(5). There are several factors that come into play with this issue. First, it is important that credits and offsets generate real reduction in pollutant loads delivered to the Bay. In addition, the one sector most likely to purchase credits, the sewage treatment plant operators, has expressed concern over purchasing credits and then later being subject to enforcement action by the Department if the credits are not accepted due to credit failure. This subsection seeks to address both concerns.

Two key components of this section are “the Department determines that replacement credits will be available,” and “the existence of an approved legal mechanism that is enforceable by the Department.” Examples of these are the use of the credit reserve, a dedicated credit reserve for a particular project, financial guarantees under legal instruments such as escrows, and a Clean Streams Law “credit generation” permit.

Water quality and TMDLs (§ 96.8h). This proposed rulemaking is aimed at protecting and restoring the water quality of the Chesapeake Bay. However, there may be local water quality issues that can affect a decision on a credit or offset proposal. This would be most likely if the receiving waterbody at the location where the credits or offsets will be generated is listed as “impaired” through the Department’s formal listing process under the Clean Water Act. There are also local anti-degradation requirements that are part of Pennsylvania’s water quality regulations. This section makes it clear that those and other existing regulatory requirements take precedence over any decisions made under this proposed rulemaking.

Public Participation (§ 96.8i). The Department is committed to a transparent process in the implementation of its trading program. Therefore, the proposed rulemaking would codify the current process of publishing notice in the *Pennsylvania Bulletin*

whenever (1) a credit or offset proposal is submitted and is administratively complete, and (2) whenever the Department makes a final decision on certification.

F. Benefits, Costs and Compliance

Benefits

Harnessing market forces can be an effective way to achieve environmental regulatory goals at less expense than traditional command and control regulations. Market-based programs such as trading provide incentives for entities to create credits by going beyond any statutory or regulatory obligations. The proposed rulemaking will provide clear and certain standards for nutrient credit trading in Pennsylvania and thereby support the Department's efforts to implement its nutrient credit trading program.

Compliance Costs

The proposed rulemaking does not create any new compliance requirements. It is essentially a voluntary program that provides economic incentives for increased pollutant reductions beyond those required by law now.

Compliance Assistance Plan

While there are no new compliance requirements in this proposed rulemaking, the Department has an active and comprehensive outreach and education effort. For example, the Department meets with a core group of stakeholders periodically to update them on recent developments and to discuss ways to improve the program. Department staff will continue to attend public meetings of various kinds to describe the program and assist with its use by interested persons.

Paperwork Requirements

There are no paperwork requirements as that term is normally used, because this is a voluntary program. The proposed rulemaking does contain requirements for submittal of certain information, as seen in § 96.8e. However, the cost of these requirements would normally be returned through revenue earned in the sale of the credits, or avoidance of more expensive compliance methods if offsets were not used.

G. Pollution Prevention

The Federal Pollution Prevention Act of 1990 established a national policy that promotes pollution prevention as the preferred means for achieving state environmental protection goals. The Department encourages pollution prevention, which is the reduction or elimination of pollution at its source, through the substitution of environmentally-friendly materials, more efficient use of raw materials, and the incorporation of energy efficiency strategies. Pollution prevention practices can provide greater environmental protection with greater efficiency because they can result in

significant cost savings to facilities that permanently achieve or move beyond compliance. This rulemaking is essentially a pollution prevention incentive program, as described previously in this Preamble.

H. Sunset Review

This regulation when final will be reviewed in accordance with the sunset review schedule published by the Department to determine whether the regulation effectively fulfills the goals for which it was intended.

I. Regulatory Review

Under Section 5(a) of the Regulatory Review Act (71 P.S. § 745.5(a)), on February 3, 2010, the Department submitted a copy of these proposed amendments to the Independent Regulatory Review Commission (IRRC) and the Chairpersons of the House and Senate Environmental Resources and Energy Committees. In addition to submitting the proposed amendments, the Department has provided IRRC and the Committees with a copy of a detailed regulatory analysis form prepared by the Department. A copy of this material is available to the public upon request.

Under section 5(g) of the Regulatory Review Act, IRRC may convey any comments, recommendations or objections to the proposed regulations within 30 days of the close of the public comment period. The comments, recommendations or objections shall specify the regulatory review criteria that have not been met. The Act specifies detailed procedures for review of these issues by the Department, the General Assembly and the Governor prior to final publication of the regulations.

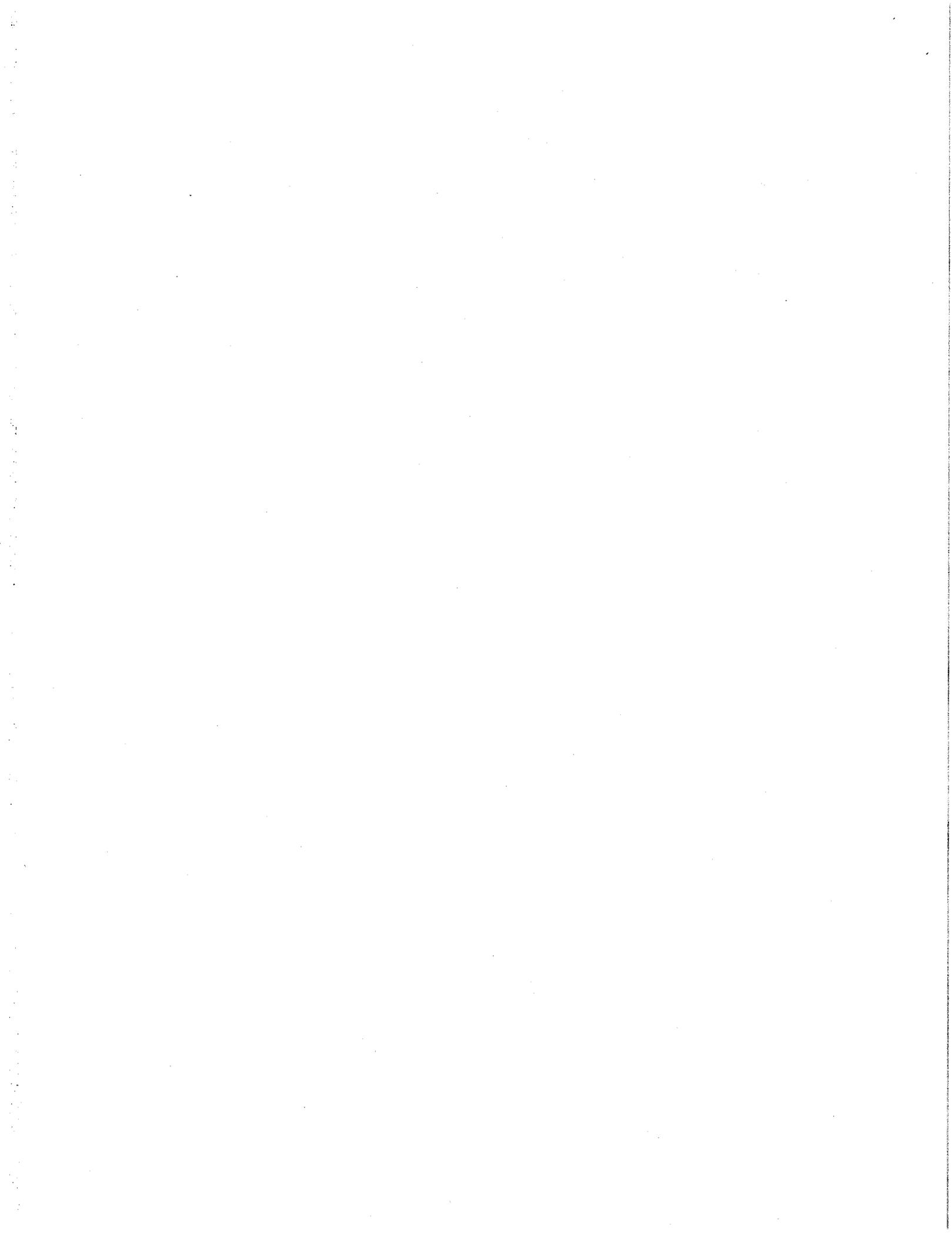
J. Public Comments

Written Comments - Interested persons are invited to submit comments, suggestions, or objections regarding the proposed regulation to the Environmental Quality Board, P.O. Box 8477, Harrisburg, PA 17105-8477 (express mail: Rachel Carson State Office Building, 16th Floor, 400 Market Street, Harrisburg, PA 17101-2301). Comments submitted by facsimile will not be accepted. Comments, suggestions or objections must be received by the Board by March 15, 2010. Interested persons may also submit a summary of their comments to the Board. The summary may not exceed one page in length and must also be received by the Board by March 15, 2010. The one-page summary will be provided to each member of the Board in the agenda packet distributed prior to the meeting at which the final regulation will be considered.

Electronic Comments - Comments may be submitted electronically to the Board at RegComments@state.pa.us and must also be received by the Board by March 15, 2010. A subject heading of the proposal and a return name and address must be included in each transmission.

BY:

JOHN HANGER
Chairperson,
Environmental Quality Board



Editor's Note: This regulation is new and is written in regular type to enhance readability.

ANNEX A

TITLE 25. ENVIRONMENTAL PROTECTION

PART I. DEPARTMENT OF ENVIRONMENTAL PROTECTION

SUBPART C. PROTECTION OF NATURAL RESOURCES

ARTICLE II. WATER RESOURCES

CHAPTER 96. WATER QUALITY STANDARDS IMPLEMENTATION

- 96.8 Use of offsets and tradable credits from pollution reduction activities in the Chesapeake Bay watershed.
- (a) Definitions.
 - (b) Chesapeake Bay water quality.
 - (c) Methodology.
 - (d) Eligibility requirements for the Chesapeake Bay.
 - (e) Certification requirements for the Chesapeake Bay.
 - (f) Registration requirements for the Chesapeake Bay.
 - (g) Use of credits and offsets to meet NPDES permit requirements for the Chesapeake Bay.
 - (h) Water quality and TMDLs.
 - (i) Public Participation.
 - (j) Use of credits and offsets generally.

§96.8. Use of offsets and tradable credits from pollution reduction activities in the Chesapeake Bay watershed.

(a) Definitions. The following words and terms, when used in this section, have the following meanings, unless the context indicates otherwise:

Aggregator — A person that arranges for the sale of credits generated by another person, or arranges for the credits to be certified, verified and registered.

Agricultural operation — The management and use of farming resources for the production of crops, livestock or poultry, or for equine activity.

Baseline —

- (i) The compliance activities and performance standards which must be implemented to meet current environmental laws and regulations related to the pollutant for which credits or offsets are generated.

(ii) The term includes allocations established under this chapter, in a TMDL or similar allocation, for those pollutants.

BMP — Best management practice—

(i) Schedules of activities, prohibitions of practices, maintenance procedures and other management practices to prevent or reduce pollutants to surface waters of this Commonwealth.

(ii) The term includes treatment requirements, operating procedures and practices to control plant site runoff, spillage or leaks, sludge or waste disposal, or drainage from raw material storage.

(iii) The term also includes riparian buffers, soil and slope stabilization measures, control of fertilization practices, and other actions and measures designed to reduce erosion and runoff of soil, sediment and pollutants from the land surface during precipitation events; or to reduce the contamination of groundwater with pollutants that may affect surface waters.

(iv) The term includes BMP measures developed under this Title to reduce pollutant loading to surface waters.

Certification — Written approval by the Department of the use of a proposed or implemented pollutant reduction activity to generate credits or offsets, before those credits and offsets are verified and registered by the Department to be used to comply with NPDES permit effluent limitations.

Credit — The tradable unit of compliance that corresponds with a unit of reduction of a pollutant as recognized by the Department which, when certified, verified, and registered by the Department, may be used to comply with NPDES permit effluent limitations.

Credit reserve — Credits set aside by the Department to address pollutant reduction failures and uncertainty, and to provide liquidity in the market.

Delivery ratio — A ratio that compensates for the natural attenuation of pollutants as they travel in water before they reach a defined compliance point.

Edge of segment ratio — A ratio that identifies the amount of land-applied pollutants expected to reach the surface waters at the boundary of a Chesapeake Bay Watershed Model segment through surface runoff and groundwater flows from nonpoint sources within a watershed segment.

Nutrient—nitrogen and phosphorus.

Offset — The non-tradable unit of compliance that corresponds with a unit of reduction of a pollutant as recognized by the Department which, when certified, verified and registered by the Department, may be used to comply with NPDES permit effluent limitations.

Pollutant — nutrients and sediment.

Registration — An accounting mechanism used by the Department to track certified and verified credits and offsets before they may be used to comply with NPDES permit effluent limitations.

Reserve ratio — A ratio that is applied to the pollutant reductions generated, which establishes the credits to be set aside for the Department's credit reserve.

Threshold — Activities and performance standards beyond baseline compliance which are required by the Department before credits or offsets will be certified.

Tradable load — The amount of pollutant reductions determined to be the projected future pollutant load which is the difference between the total reductions theoretically possible from maximum implementation of reduction activities, and the reductions associated with a level of reduction activities identified by the Department as reasonably attainable.

Trade — A transaction that involves the sale or other exchange, through a contractual agreement, of credits that have been certified, verified and registered by the Department.

Trading ratios — Ratios applied by the Department to adjust pollutant reductions when certifying credits or offsets for a pollutant reduction activity, to address uncertainty, water quality, reduction failures or other considerations. These ratios may include a delivery ratio, an edge of segment ratio and a reserve ratio.

Verification — Implementation of the verification plan contained in a certification as required by the Department, prior to registration of the credits or offsets for use in an NPDES permit to comply with NPDES permit effluent limitations.

(b) Chesapeake Bay water quality.

- (1) Credits and offsets may be used to meet legal requirements for restoration, protection and maintenance of the water quality of the Chesapeake Bay.
- (2) Credits and offsets must be generated only from pollutant reduction activity that has been certified, verified and registered by the Department under this section.
- (3) Credits and offsets may be used by permittees to meet effluent limits for nitrogen, phosphorus and sediment expressed as annual loads in pounds contained in NPDES permits that are based on compliance with water quality standards established under the Federal Water Pollution Control Act, 33 U.S.C.A. §§ 1251 – 1376, specifically for restoration, protection and maintenance of the water quality of the Chesapeake Bay.
- (4) The use of credits and offsets must involve comparable pollutants. For example, nitrogen credits or offsets may only be used to meet nitrogen effluent limits.
- (5) The use of credits and offsets must comply with legal requirements under applicable laws and regulations, including the requirements of this section.

(6) Credits and offsets may not be used to comply with technology-based effluent limits, except as expressly authorized by Federal regulations administered by the EPA.

(c) Methodology.

(1) The Department may use any of the methods contained in this subsection when calculating and certifying credits and offsets.

(2) Credits and offsets may be calculated by use of pollutant removal efficiencies for BMPs, and edge of segment and delivery ratios addressing fate and transport of pollutants, approved by the EPA Region III Chesapeake Bay Program Office for use with the Chesapeake Bay Watershed Model Version 4.3 or any subsequent versions.

(3) The Department may rely on results from the following modeling tools, as amended or updated, to approve other pollutant removal efficiencies for BMPs:

(i) Science Algorithms of the EPA Models-3 Community Multiscale Air Quality (CMAQ) Modeling System, Atmospheric Modeling Division, National Research Laboratory, U.S. Environmental Protection Agency, EPA/600/R-99/030, (Daewon Byun and Kenneth L. Schere, 2006).

(ii) EPA Watershed Model (Donigian et al. 1994; Linker 1996; Linker et al. 2000).

(iii) EPA Chesapeake Bay Hydrodynamic Model (Wang and Johnson 2000).

(iv) EPA Estuarine water quality model (Cercio and Cole 1993, 1995a, 1995b; Thomann et al. 1994; Cercio and Meyers 2000; Cercio 2000; Cercio and Moore 2001; Cercio et al. 2002a).

(4) The Department may rely on the methods, data sources and conclusions in the following EPA documents, as amended or updated:

(i) *Technical Support Document for Identification of Chesapeake Bay Designated Uses and Attainability*. EPA 903-R-03-004. Region III Chesapeake Bay Program Office, Annapolis, Maryland (2003).

(ii) *Technical Support Document for Identification of Chesapeake Bay Designated Uses and Attainability—2004 Addendum*. EPA 903-R-04-006. Region III Chesapeake Bay Program Office, Annapolis, Maryland (2004).

(iii) *Chesapeake Bay Program Analytical Segmentation Schemes: Revision, decisions and rationales, 1983-2003*. EPA 903-R-04-008. CBP/TRS 268/04. Chesapeake Bay Program Office, Annapolis, Maryland (2004).

(iv) *Chesapeake Bay Program Analytical Segmentation Schemes: Revision, decisions and rationales, 1983-2003—2005 Addendum*. EPA 903-R-05-004. CBP/TRS 278/06. Chesapeake Bay Program Office, Annapolis, Maryland (2005).

(v) *Setting and Allocating the Chesapeake Bay Basin Nutrient and Sediment Loads: The Collaborative Process, Technical Tools and Innovative Approaches*. EPA 903-R-03-007. Region III Chesapeake Bay Program Office, Annapolis, Maryland (2006).

(vi) *Summary of Decisions Regarding Nutrient and Sediment Load Allocations and New Submerged Aquatic Vegetation (SAV) Restoration Goals*. April 25, 2003, Memorandum to the Principals' Staff Committee members and representatives of the Chesapeake Bay headwater states. Virginia Office of the Governor, Natural Resources Secretariat, Richmond, Virginia.

(vii) *The 2002 Chesapeake Bay Eutrophication Model*. EPA 903-R-04-004. U.S. Army Corps of Engineers, Engineer Research & Development Center, Environmental Laboratory (Cerco, C.F., and Noel, M.R., 2004).

(viii) *Ecosystem models of the Chesapeake Bay Relating Nutrient Loadings, Environmental Conditions and Living Resources Technical Report*. Chesapeake Bay Program Office, Annapolis MD (Kemp, M.W., R. Bartleson, S. Blumenshine, J.D. Hagey, and W.R. Boylen, 2000).

(ix) *Ambient Water Quality Criteria for Dissolved Oxygen, Water Clarity and Chlorophyll a for the Chesapeake Bay and Its Tidal Tributaries*. U.S. EPA 2003b. EPA 903-R-03-002. Chesapeake Bay Program Office, Annapolis, Maryland.

(5) For credits and offsets generated from point sources, the Department may rely on the information supplied by permittees in the DMR when calculating and certifying credits and offsets.

(6) When calculating and certifying credits and offsets, the Department may rely on additional methods, data sources and conclusions contained in the Pennsylvania Agronomy Guide published by Pennsylvania State University, and the Pennsylvania Technical Guide published by the federal Natural Resources Conservation Service. The Department may also rely on other published or peer-reviewed scientific sources.

(d) Eligibility requirements for the Chesapeake Bay.

(1) *General*. To generate credits and offsets, the generator must demonstrate a reduction in pollutant loads beyond those that are allowed under applicable baseline requirements, and any threshold established by the Department.

(2) *Baseline requirements to generate credits or offsets*.

(i) For non-point sources, baseline shall be the current requirements in regulations applicable to the sources at the location where the credits or offsets are generated, and the pollutant load associated with that location. For agricultural operations, this includes compliance with the erosion and sedimentation requirements for agricultural operations in Chapter 102, the requirements for agricultural operations under § 91.36 (relating to pollution control and prevention at agricultural operations) and the requirements for agricultural operations under §§ 83.201 – 83.381 (relating to nutrient management), as applicable.

(ii) For point sources, the baseline shall be the pollutant effluent load associated with effluent limitations contained in an NPDES permit based on the applicable technology-based requirements, or the load in a TMDL or similar allocation, whichever is more stringent.

(3) *Threshold requirements to generate credits or offsets.*

(ii) An agricultural operation must meet one of the following threshold requirements at the location where the credits or offsets are generated. For the purpose of this subparagraph the term “surface water” shall mean a perennial or intermittent stream with a defined bed or bank, a lake or a pond.

(A) Manure is not mechanically applied within 100 feet of surface water. This threshold can be met through one of the following:

(I) There are no surface waters on or within 100 feet of the agricultural operation.

(II) The agricultural operation does not mechanically apply manure, and applies commercial fertilizer at or below agronomic rates contained in the current Penn State University Agronomy Guide published by Pennsylvania State University.

(B) A minimum of 35 feet of permanent vegetation is established and maintained between the field and surface water. The area may be grazed or cropped under a specific management plan provided that permanent vegetation is maintained at all times.

(C) The overall amount of pollution reduction is adjusted by at least 20%, which is to be applied during the calculation of the reduction amount when the credits are certified by the Department.

(ii) The Department may establish any other threshold requirements necessary to ensure the effectiveness of the use of credits and offsets to meet legal requirements for restoration, protection and maintenance of the water quality of the Chesapeake Bay.

(4) *Compliance status.* Person(s) that are currently not in compliance with, or lack the ability or intention to comply with, any of the following are not eligible to generate credits or offsets, or to use credits or offsets to meet permit effluent limits.

(i) Department regulations, permits, schedules of compliance or orders.

(ii) Any law or regulation that addresses pollution of waters of the Commonwealth.

(iii) Contracts for the exchange of credits.

(5) *Other requirements.* The Department may establish other eligibility requirements to ensure the effectiveness of the use of credits and offsets to meet legal requirements for restoration, protection and maintenance of the water quality of the Chesapeake Bay.

(6) *Failure to meet eligibility requirements.* If the Department determines that a person no longer meets the eligibility requirements under this section, it may take appropriate action such as prohibiting the person from participating in any trading under this section and denial of requests for certification and registration of any credits and offsets.

(e) Certification requirements for the Chesapeake Bay.

(1) *General.* All credits and offsets must be certified by the Department before they may be applied to meet permit effluent limitations. Certification will serve as the Department's final determination of the appropriate amount of credits approved by the Department. Certification must be followed by verification and registration of the credits and offsets prior to their use to meet permit effluent limits.

(2) *Request for certification.* Persons who wish to have credits or offsets certified by the Department must submit a request in the format required by the Department.

(i) The request must contain information sufficient to demonstrate the following:

(A) The location where the pollutant reduction activity will be implemented will meet applicable eligibility requirements under subsection (d), and will continue to meet those requirements throughout the applicable period of time described in the request.

(B) The pollutant reduction activity must meet acceptable standards for construction and performance, including operation and maintenance, for the applicable period of time described in the request.

(C) The calculation requirements of this section have been met.

(D) The implementation of the pollutant reduction activity must be verified to the extent acceptable to the Department, as described in a verification plan that meets the requirements of (e)(4).

(ii) The request must contain the following additional information.

(A) A detailed description of how the credits or offsets will be generated, including calculations, assumptions and photos.

(B) A map illustrating the location(s) of the proposed activity.

(C) Details on the timing of credits or offsets, such as generation and delivery, any phase-in period and the timeframe for sale and use towards permit effluent limits.

(D) The water quality classification under Chapter 93, and any applicable impairment listings under §303(d) of the Federal Water Pollution Control Act, 33 U.S.C.A. §1313(d), for the nearest receiving stream segment.

(E) Information on any source of funding used to pay for any portion of the pollutant reduction activity, including the dollar amount and any conditions and restrictions regarding the use of those funds towards the generation or sale of credits or offsets.

(F) A description of how risks of failure of the pollutant reduction activity shall be managed, such as the use of financial guarantee mechanisms, contractual arrangements, permits, insurance products and reduction of the concentration of projects in a particular sub-watershed.

(G) A description of any preservation and conservation easements on lands where the pollutant reduction activity is to be implemented.

(H) Notations on documents submitted in the request which the person submitting the request claims to be confidential business information or a protected trade secret that are protected from disclosure by law, and a justification for such claims.

(I) The name(s) of the person(s) submitting the request and any other participants involved in the pollutant reduction activity.

(J) Professional qualifications of the person(s) who completed the calculations, conducted the baseline and threshold determinations and otherwise contributed to the technical merit of the request.

(K) Contact information for the person(s) submitting the request.

(3) *Calculation requirements.* The following credit and offset calculation requirements apply.

(i) All calculations must be approved by the Department.

(ii) The calculations must demonstrate that the pollutant reductions will be achieved from the activity proposed or implemented to generate credits and offsets for the applicable period of time.

(iii) The pollutant reductions must be expressed in pounds per year.

(iv) The calculations used must be based on methodologies that the Department determines are appropriate under (c).

(v) The Department may establish other calculation requirements necessary to ensure that the use of credits and offsets are effective in meeting water quality requirements, and to address uncertainty for reasons such as unforeseen events which may disrupt pollutant reduction activities. Such criteria may include the need to use trading ratios, risk-spreading mechanisms and credit reserves. These calculation requirements may reduce the amount of credits and offsets which will be certified for a pollutant reduction activity by the Department.

(vi) The annual sum of all credits certified from nonpoint sources must not exceed the applicable tradable load calculated by the Department. The tradable load for the Chesapeake Bay Watershed is

5.7 million pounds of nitrogen per year and 396,800 pounds of phosphorus per year, unless otherwise revised by the Department.

(vii) If state or federal funds are used to cost-share any portion of the pollutant reduction activity contained in the request for certification, the Department may allow the portion of the credits or offsets paid for by state and federal funds to be available for certification, unless restrictions have been placed on the funds by the provider of the funds.

(4) *Verification plan.* A request for certification shall contain a verification plan.

(i) The verification plan shall include the methods for credit and offset verification, such as the documentation of the implemented pollutant reduction activity, sufficient to allow the Department to verify that the qualifying reduction efforts approved were properly implemented during the applicable compliance period.

(ii) Verification plans may include the following methods, subject to approval by the Department.

(A) Self-verification by the person responsible for implementing the pollutant reduction activity.

(B) Third-party verification.

(5) *Certification by the Department.* The Department shall certify credits and offsets when it has determined that the requirements of (1) – (4) in this subsection have been met.

(i) Certifications may be made contingent on conditions that will ensure that the requirements of this chapter will be satisfied.

(ii) Credits and offsets must only be used to meet permit effluent limits for the compliance period for which they are certified, verified and registered by the Department under this section.

(iii) Requests for certification for multiple compliance periods may be approved by the Department, but they must be verified and registered separately for each compliance period.

(f) Registration requirements for the Chesapeake Bay.

(1) *General.* All credits and offsets used to comply with effluent limitations in NPDES permits must be registered by the Department before they may be applied to a permit to meet the effluent limitations.

(2) *Registration requirements.* The following registration requirements apply:

(i) Credits and offsets must be certified under the provisions of (e).

(ii) Credits must be addressed in a valid contract which ensures that the requirements of this section will be met. The Department may require submittal of trade contracts, establish basic contract elements and require approval of trade contracts before registration.

(iii) The credits and offsets must be verified prior to registration. The following applies to verification.

(A) Verification must be conducted as described in the verification plan as approved by the Department in the certification.

(B) Verification must ensure that the pollutant reduction activity has been implemented as described in the certification, and that other requirements such as baseline and threshold are met.

(C) The Department may conduct other verification activities such as monitoring, inspections and compliance audits, to further ensure that the pollutant reduction obligations are being met.

(iv) The Department will assign a registration number for reporting and tracking purposes.

(3) *Failure to implement.* The Department will not register credits and offsets if the person who generates the credits has not implemented, or who demonstrates a lack of ability or intention to implement, operations and maintenance requirements contained in the certification or the verification plan, or otherwise to implement the requirements of this section. The Department will not register credits and offsets submitted by an aggregator that is currently not complying, or demonstrates a lack of ability or intention to comply, with this section.

(g) Use of credits and offsets to meet NPDES permit requirements related to the Chesapeake Bay.

(1) Permittees will only be authorized to use credits and offsets through the provisions of their NPDES permit. The permit conditions will require appropriate terms such as record keeping, monitoring and tracking, and reporting in DMRs.

(2) Only credits and offsets generated from activities located within the Chesapeake Bay watershed may be used to meet NPDES permit requirements related to the Chesapeake Bay. Credits generated in either the Susquehanna or the Potomac basins may only be used in the same basin unless otherwise approved by the Department.

(3) Permittees must ensure that the credits and offsets that they apply to their permits for compliance purposes are certified, verified and registered by the Department under this section for the compliance period in which they are used.

(4) The Department may authorize a period not to exceed 60 days following the completion of the annual compliance period in an NPDES permit, for a permittee to come into compliance through the application of credits and offsets to the permit provided that the credits and offsets were registered during that compliance period.

(5) Permittees are responsible for enforcing the terms of their credit and offset contracts, where needed to ensure compliance with their permit. The Department may waive this requirement where the

pollutant reduction activity fails due to uncontrollable or unforeseeable circumstances such as extreme weather conditions, and timely notice is provided to the Department, if the following apply:

(i) The failure is not due to negligence or willfulness on the part of the permittee.

(ii) The Department determines that replacement credits will be available.

(iii) The Department determines that the requirements for restoration, protection and maintenance of the water quality of the Chesapeake Bay will be met due to the requirements of this section, which may include the type of methodologies used when calculating the certified credits, the existence of an approved legal mechanism that is enforceable by the Department, and the use of a credit reserve.

(5) The use of credits and offsets must be identified in DMR forms, which will be submitted at the end of each compliance year or as otherwise provided by the Department in the permit. Registered credits and offsets must only be used to meet permit effluent limits for the compliance period for which they are certified, verified and registered by the Department under this section.

(h) Water quality and TMDLs.

(1) Use of credits and offsets under this section will be allowed only where surface water quality will be protected and maintained as required by applicable regulations including this Chapter and Chapter 93, Department permits and schedules of compliance and orders.

(2) Use of credits and offsets under this section must ensure that there is no net increase in discharge of pollutants to the compliance point used for purposes of determining compliance with the water quality standards established by the states of Maryland and Virginia for restoration, protection and maintenance of water quality of the Chesapeake Bay.

(3) Where a TMDL has been established for the watershed where the permitted activity is located, the use of credits and offsets under this section will be consistent with the assumptions and requirements upon which the TMDL is based.

(4) Use of credits and offsets under this section will comply with the antidegradation requirements contained in Department regulations.

(i) Public participation.

The Department will publish a notice in the *Pennsylvania Bulletin* of the receipt of administratively complete requests for certifications of credits and offsets, and the Department's final determinations regarding those requests. This notice is not required to follow the requirements of § 92.61.

(j) Use of credits and offsets generally.

Nothing in this section shall preclude the Department from allowing the use of credits and offsets to be used to meet permit limits in areas other than those established for restoration, protection and maintenance related to the water quality of the Chesapeake Bay.



Rachel Carson State Office Building

P.O. Box 2063

Harrisburg, PA 17105-2063

February 3, 2010

Policy Office

717-783-8727

Kim Kaufman, Executive Director
Independent Regulatory Review Commission
14th Floor
333 Market Street
Harrisburg, PA 17101

Re: Proposed Rulemaking: Water Quality Standards Implementation
(25 Pa. Code, Chapter 96)

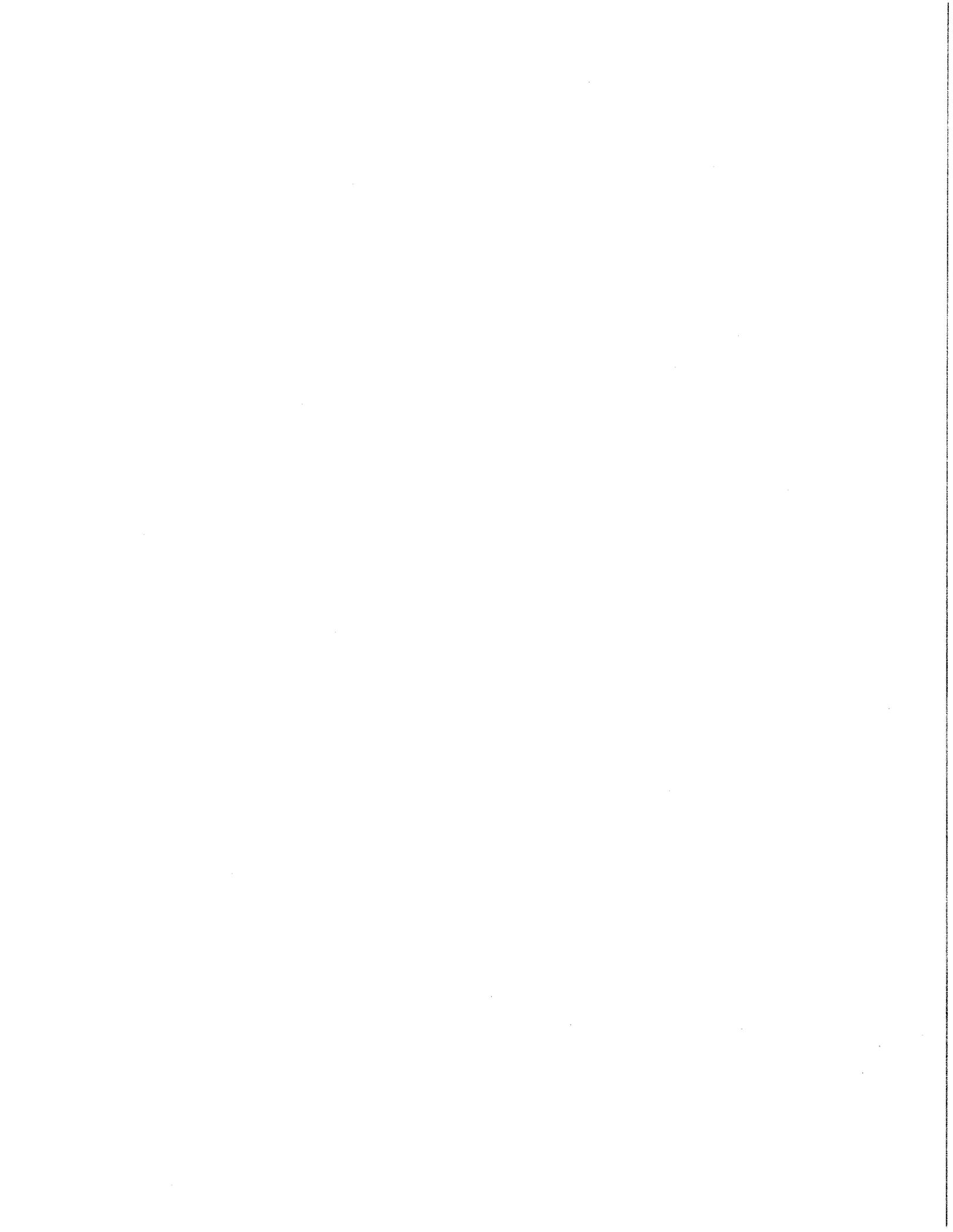
Dear Mr. Kaufman:

Enclosed is a copy of a proposed regulation for review and comment by the Independent Regulatory Review Commission pursuant to Section 5(a) of the Regulatory Review Act. The proposed rulemaking is scheduled for publication in the *Pennsylvania Bulletin* on February 13, 2010, with a 30-day public comment period. The Environmental Quality Board (EQB) adopted this proposal on November 17, 2009.

This rulemaking codifies into regulation the Department's existing policy and guidance for nutrient credit trading as it relates to nutrient and sedimentation pollution in the Chesapeake Bay. In 2005, new water quality standards under the Federal Clean Water Act were announced to address nutrient and sediment pollution in the Chesapeake Bay. To meet these new requirements under federal law, the U.S. EPA and the affected states developed a maximum nutrient load (or "cap load") for each major tributary to the Chesapeake Bay. As a result, approximately 200 municipal sewage treatment plants and others discharging nutrients to Pennsylvania's Bay tributaries must cap those discharges or they will be in violation of the downstream water quality standards, under both state and federal law.

As a compliance alternative to meet cap loads, the Department developed a Nutrient Credit Trading Policy (guidance document number 392-0900-001: "Final Trading of Nutrient and Sediment Regulation Credits – Policy and Guidelines"). The policy, which is now being codified into regulations through this proposed rulemaking, provides guidance to facilities who voluntarily choose to work with other facilities and/or nonpoint sources to reduce nitrogen, phosphorus and sediment discharges into tributaries of the Chesapeake Bay. The regulations provide eligibility requirements and a methodology for calculating credits, including baseline and threshold requirements to generate credits, and include provisions for Departmental verification and certification of credits, and the use of credits and offsets generated from activities located within the Chesapeake Bay watershed to meet NPDES permit requirements related to the Chesapeake Bay. The proposed regulations also include a section on the use of credits and offsets to meet permit limits in other areas of the Commonwealth other than those areas identified for the restoration, protection and maintenance of the water quality of the Chesapeake Bay. Although no federal regulations on water quality trading exist, the Department worked closely on the





trading policy with the U.S. EPA, who is supportive of the framework the Department has developed to implement the program.

In addition to consultation with EPA, the Department has undertaken an intensive stakeholder process to solicit public input, including consultation with the Department's Chesapeake Bay Advisory Committee, the Water Resources Advisory Committee (WRAC), and the Agricultrual Advisory Board. On July 15, 2009, WRAC voted in support of the regulations and urged the Department to present the proposed rulemaking to the Board for approval.

The Department will provide your Committee with the assistance required to facilitate a thorough review of these proposals. Section 5(d) of the Regulatory Review Act provides that the Committee may, at any time prior to submittal of the final-form regulation, convey to the agency its comments, recommendations and objections to the proposed regulation and a copy of any staff reports deemed pertinent. The Department will consider any comments, recommendation or suggestions made by the Committees, as well as the Independent Regulatory Review Commission and public commentators, prior to final adoption of this rulemaking.

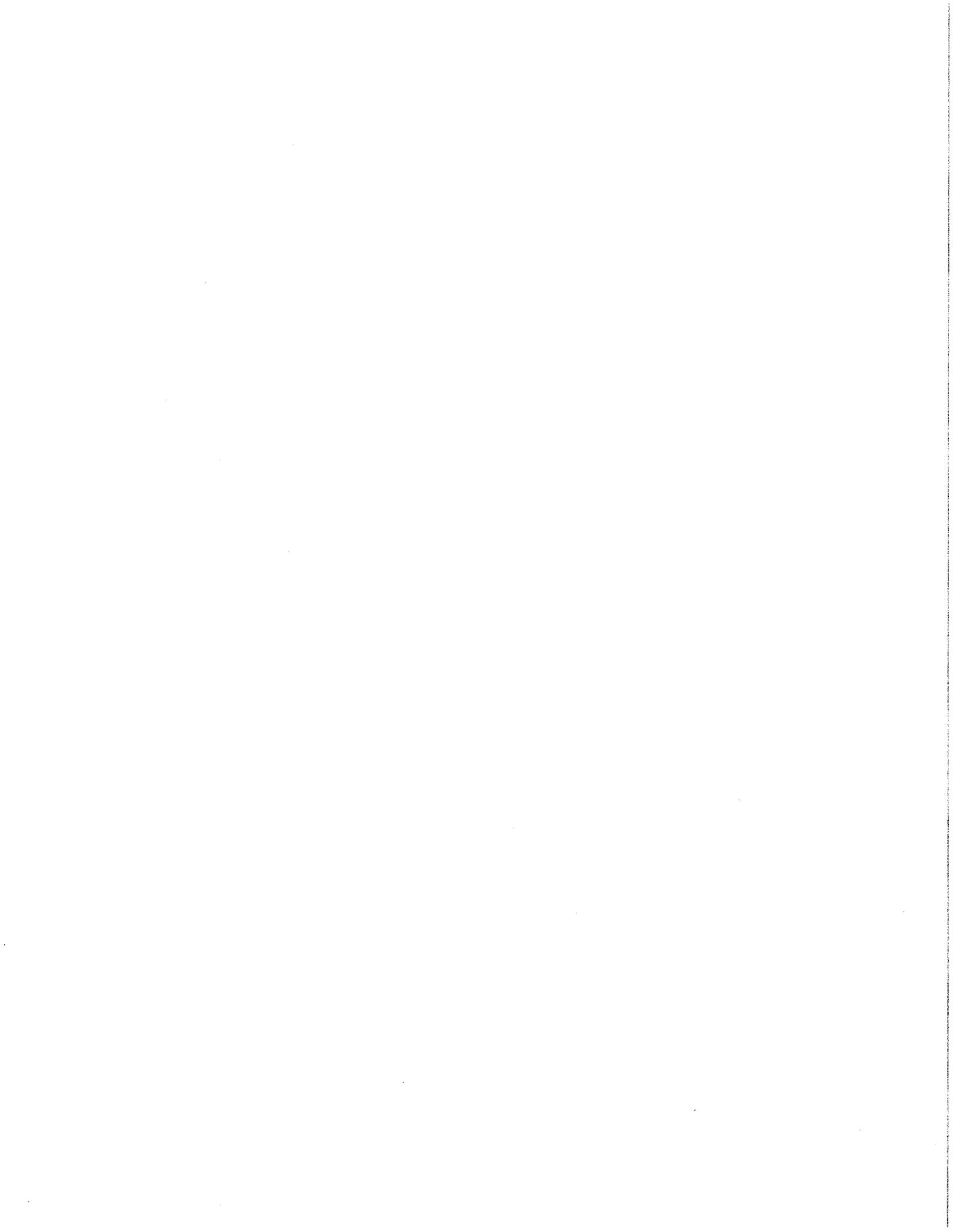
Please contact me at the number above if you have any questions or need additional information.

Sincerely,

A handwritten signature in cursive script that reads "Michele L. Tate".

Michele L. Tate
Regulatory Coordinator

Enclosures





**TRANSMITTAL SHEET FOR REGULATIONS SUBJECT TO
THE REGULATORY REVIEW ACT**

I.D. NUMBER: 7- 451
SUBJECT: water Quality standards Implementation
AGENCY: DEPARTMENT OF ENVIRONMENTAL PROTECTION

TYPE OF REGULATION

- Proposed Regulation
- Final Regulation
- Final Regulation with Notice of Proposed Rulemaking Omitted
- 120-day Emergency Certification of the Attorney General
- 120-day Emergency Certification of the Governor
- Delivery of Tolled Regulation
 - a. With Revisions
 - b. Without Revisions

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 INDEPENDENT REGULATORY
 REVIEW COMMISSION

FILING OF REGULATION

DATE	SIGNATURE	DESIGNATION
2-3-10		Majority Chair, HOUSE COMMITTEE ON ENVIRONMENTAL RESOURCES & ENERGY (Rep. Camille George)
2-3-10		Minority Chair, HOUSE COMMITTEE ON ENVIRONMENTAL RESOURCES & ENERGY
2-3-10		Majority Chair, SENATE COMMITTEE ON ENVIRONMENTAL RESOURCES & ENERGY (Senator Mary Jo White)
2-3-10		Minority Chair, SENATE COMMITTEE ON ENVIRONMENTAL RESOURCES & ENERGY
2/3/10		INDEPENDENT REGULATORY REVIEW COMMISSION
		ATTORNEY GENERAL (for Final Omitted only)
2/3/10		LEGISLATIVE REFERENCE BUREAU (for Proposed only)

