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

# **Order**

The Environmental Quality Board (Board) by this order amends 25 *Pa. Code* Chapter 96 (relating to water quality standards implementation) to read as set forth in Annex A. The amendments will codify, with some revisions, 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 limits for nitrogen, phosphorus and sediment to meet those limits by working with other facilities or with nonpoint sources, or both. It helps the Commonwealth achieve its Chesapeake Bay nutrient reduction goals from the agriculture sector, and 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 order was adopted by the Board at its meeting of \_\_\_\_\_

# 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 Roda, Program Analyst, Water Planning Office, P.O. Box 2063, Rachel Carson State Office Building, Harrisburg, PA 17105-2063, (717) 772-4785, or Kristen Furlan, Assistant Counsel, Bureau of Regulatory Counsel, P.O. Box 8464, Rachel Carson State Office Building, Harrisburg, PA 17105-8464, (717) 787-7060. 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 final-form rulemaking is available electronically through the DEP Web site (http://www.dep.state.pa.us).

## C. Statutory Authority

The final-form rulemaking is being made under the authority of section 691.5(b) of the Pennsylvania Clean Streams Law (35 P.S. §§ 691.5(b)), which provides for the adoption of regulations necessary for implementation of the Clean Streams Law; sections 691.202, 691.307 and 691.402 of the Pennsylvania Clean Streams Law (35 P.S. §§ 691.202, 691.307 and 691.402), which authorize the Department to establish requirements related to pollution and potential pollution; and section 1920-A of the

Administrative Code of 1917 (71 P.S. §510-20(b)), which authorizes the Board to promulgate rules and regulations as may be determined by the board for the proper performance of the work of the department.

# D. Background and Purpose

The Chesapeake Bay is polluted from nutrients and sediment and in 2005 water quality standards under the Federal Clean Water Act to address this pollution came into effect. To meet these requirements under Federal law, the U.S. Environmental Protection Agency (EPA) 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 this Commonwealth'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 legal requirements. First, it refocused and expanded the standing Chesapeake Bay Advisory Committee of the Department, to include local government associations, the agricultural community and multiple associations. This Committee was tasked with discussing the wide variety of issues surrounding the Commonwealth'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 9-month period, the Department developed a revised plan to address the legal mandate. The plan included permitting requirements for sewage treatment plants and other "point sources" governed by the Federal National Pollutant Discharge Elimination System (NPDES), regulations controlling agricultural run-off and the Nutrient Credit Trading Policy.

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. The other compliance alternatives identified for NPDES permittees were: implementation of nutrient reduction treatment technology, retirement of existing onlot 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 50% 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.

Another important example is the Harrisburg Authority. The authority underwent a public bidding process, the first of its kind, to help it incorporate nutrient credits into its

compliance plan for meeting nitrogen and phosphorous limits. The authority used the bids to help estimate design and construction costs to compare the costs of three different approaches for compliance: one that completely relied on treatment plant upgrades, one that completely relied on nutrient trading, and one that combined trading with construction. Working with its consultant, the Harrisburg Authority determined that the lowest cost of compliance would be a combination of trading and construction. By purchasing nutrient credits, the authority estimates that it will save \$28 million over the next 20 years, which will save ratepayers an estimated \$48 per year on sewer service charges.

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 (BMPs) beyond those needed to meet compliance goals.

Since the publication of the interim final policy and as of May 2010, the Department has received 89 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, 59 have been approved, for a total of 2,999,765 nitrogen credits and 249,543 phosphorous credits. There have also been 8 contracts entered into for the use of credits toward permit compliance.

The Department and its partners continue to seek enhancements to the Department's nutrient trading program. For example, PENNVEST has been authorized by the EPA as well as by the PENNVEST Board to invest up to \$50 million to facilitate the nutrient credit trading program. PENNVEST is also preparing to provide 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, the proposed rulemaking and this final-form rulemaking. The Department presented a summary of comments received on the proposed rulemaking to the Water Resources Advisory Committee (WRAC) on April 14, 2010 and then presented the final-form rulemaking to the WRAC on May 11, 2010. At that meeting, the WRAC endorsed the final-form rulemaking. The Department presented a summary of comments received on the proposed rulemaking to the Agricultural Advisory Board (AAB) on April 21, 2010. The AAB raised few comments or concerns.

The 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 the EPA on this program for the past several years, and the 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 the EPA and other states, including the Commonwealth.

The Commonwealth 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.

These amendments will provide clear and certain standards for nutrient credit trading in this Commonwealth and thereby support the Department's efforts to implement its Nutrient Credit Trading Program. In order to ensure the continued effectiveness of the program and to meet any new Federal or commonwealth requirements, the Department will periodically review the nutrient trading program and recommend any modifications that may be advisable.

# E. Summary of Regulatory Requirements and Major Changes to the Proposed Rulemaking

Definitions (§ 96.8(a)). The final-form rulemaking adds a number of definitions to Chapter 96 to clarify various new terms. Most of the definitions were taken from the Nutrient Credit Trading Policy, with revision in some cases based on the Department's experience in implementing the program since the policy was finalized, and also based on public comments and comments from stakeholders. Some of the definition revisions are intended solely for clarification or style.

There are several substantive changes to definitions from the proposed rulemaking. The Department added a subparagraph to the definition of "BMP—Best management practice" to conform to the definition in the Department's final-form rulemaking amending Chapter 102 (relating to erosion and sediment control). That final-form rulemaking was approved by the Board at its meeting of May 17, 2010. The Department retained the four existing subparagraphs in order to ensure adequate flexibility for point and nonpoint source pollutant reduction activities.

The Department revised the definition of the term to "DMR-Discharge monitoring report" to adopt the definition of the term as it is stated in the concurrent rulemaking replacing Chapter 92 with Chapter 92a.

The Department removed references to "offsets" from the definitions of "certification," "registration," "threshold," "trading ratio" and "verification," as offsets do not get certified, verified and registered, and may not be traded under the final-form rulemaking. Deletion of the word "offset" is made throughout the final-form rulemaking, where applicable, for the same reason.

The final-form rulemaking amends the definition of "edge of segment ratio" by deleting "land-applied" because land application is not a necessary prerequisite to the use of the edge of segment (EOS) ratio. The rulemaking also deletes "nonpoint" from the definition because the edge of segment ratio may be employed when calculating credits generated by point sources, too.

The final-form rulemaking amends the definition of "offset" to conform better to the definition in the NPDES permit and the one used in a Department implementation guideline, namely its *Chesapeake Bay Tributary Strategy Implementation Plan for Sewage Facilities Planning*, dated April 24, 2007.

The final-form rulemaking adds a definition for the term "pollutant reduction activity" because the term is used throughout the rulemaking. The definition was created for this rulemaking and applies to activities by both point and nonpoint sources.

The final-form rulemaking expressly defines the "reserve ratio" as "10 %". This number was included in order to ensure the regulated community that the reserve ratio will be consistent among persons receiving certifications.

The final-form rulemaking clarifies in the definition of "threshold" that the activities and performance standards required beyond baseline compliance are specified in subsection (d)(3).

The final-form rulemaking clarifies the definition of "tradable load" by indicating that it applies to an amount of non-point source pollutant reductions. The tradable load was defined in order to ensure that reductions needed by nonpoint sources to meet Pennsylvania's Chesapeake Bay Tributary Strategy (Tributary Strategy) would not be traded away.

The final-form rulemaking amends the definition of "verification" to cover situations in which a technology, rather than a practice, will be used to generate credits. Sometimes for these projects the verification plan will be set forth in a permit or other Department approval needed for the project.

General provisions (§ 96.8(b), (i) and (k)). The final-form rulemaking contains several subsections with overarching provisions. Subsection (b) sets forth the core concepts and basic requirements of the trading program. Subsection (i) contains provisions regarding the interaction of this section and important provisions elsewhere in this title regarding protection of water quality. Subsection (k) makes it clear that this final-form rulemaking is not intended to limit the Department's existing authority to allow the use of credits or offsets in other contexts.

Methodology for calculating credits and offsets (§ 96.8(c)). 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 the EPA. This includes the use of several complex models and

the scientific research related to them. Subsection (c) identifies those models and the 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 ongoing effort and the language of this subsection allows for the use of the most up-to-date versions of the models and most current research. Changes from the proposed rulemaking in this subsection are designed to add certainty, clarity and transparency.

An important provision in this subsection is paragraph (2), which allows the person seeking certification to use pollutant removal efficiencies, edge of segment ratios and delivery ratios that are consistent with the most up-to-date version of the Chesapeake Bay Watershed Model (the version at the time of writing this Order is Version 4.3) in calculating credits. The removal efficiencies represent average nutrient and sediment reduction performance capabilities for various BMPs. They undergo extensive peer review by a technical review team managed by the EPA Chesapeake Bay Program. 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. The final-form rulemaking states that the pollutant removal efficiencies and edge of segment and delivery ratios will be available on the Department's Nutrient Credit Trading website: (http://www.dep.state.pa.us Keyword: "Nutrient Trading").

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 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.

Eligibility requirements (§ 96.8(d)). This subsection describes the various requirements for a source to be able to generate credits for use under the final-form rulemaking. There are two components. First, the generator shall meet "baseline" requirements, which essentially are the legal requirements that apply to that operation. For a nonpoint source, these are the legal requirements and pollutant load associated with the location applicable on January 1, 2005 or later.

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 reduction 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 under the final-form rulemaking. The Department has received numerous proposals for the generation of credits that achieve these requirements and has approved many of them.

Subsection (d) also addresses a person's compliance status as a consideration in the Department's certification decision. In the final-form rulemaking, the Department has narrowed subsection (d)(4) to apply when past or current noncompliance indicates a lack of ability or intention to comply with the stated items. The Department does not intend to let minor infractions exclude a person from engaging in trading.

Certification, verification and registration (§ 96.8(e), (f) and (g)). These subsections describe the procedural requirement that the Department has in place to ensure that credits 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 certification requests, the Department evaluates detailed requests for approval of a pollutant reduction activity, for the purpose of certifying that activity as being capable of generating credits. A person may want to have a proposed pollutant reduction activity certified to obtain from the Department the number of credits that can be expected, prior to completing the activity.

Calculation of the number of credits a certified pollutant reduction activity may generate will include all appropriate adjustments such as the reserve and delivery ratios, with particular attention being paid to the requirements of subsection (c) (methodology). The result is a letter from the Department indicating the pollutant reduction activity being certified and the amount of credits that may be generated. The person can use the certification to market the anticipated credits. The Department's certification decision is a final action.

Certification requirements have been clarified in the final-form rulemaking to explain elements of the calculation for a point source generating credits, and to explain, consistent with the definition of "reserve ratio", that a credit calculation for a point or nonpoint source must include a 10% set aside for the Department's credit reserve.

Certification requirements now also include a restriction on certification of requests that include a pollutant reduction activity related to farmland conversion. This is described more fully in Part F, below.

A paragraph has been added to subsection (e) to affirm that a person to whom the Department issues a certification under this section shall comply with the terms and conditions of the certification. Failure to comply will expose the person to all available remedies, including the remedies available under the Clean Streams Law. Provisions have also been added to subsection (e) to specify a typical certification term of 5 years, to describe the process for renewal of a certification, and to provide for revocation of a certification in the event of failure to comply with conditions of a certification.

A second important procedural requirement and a key component of the certification decision is a review of the "verification" plan. This plan is required by § 96.8(e)(5). This paragraph has been amended to clarify that one of the two methods listed for verification must be selected, namely self-verification (which can include

submission of discharge monitoring reports by a point source) and third-party verification.

The verification process, itself, has been moved into its own subsection (f) (relating to verification requirements for the Chesapeake Bay). Verification is a condition of "registration," the final step, under § 96.8(f)(1). Verification can take a number of forms, but it must demonstrate that the pollutant reduction activity was implemented as described in the certification. The Department may also conduct other verification activities, in addition to those in the plan submitted under § 96.8(f)(4).

The final procedural step in these subsections is "registration," under § 96.8(g). This is the Department's accounting mechanism to track verified credits before they are used to comply with the NPDES permit effluent limits for the Bay.

Under § 96.8(g)(3), the Department will not register credits 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 also*, § 96.8(d)(4) and (6).

Use of credits and offsets (§ 96.8(h)). This subsection addresses the obligations of persons who use credits and offsets to meet permit requirements. This underscores that the use of credits and offsets 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, § 96.8(h)(1) and (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 § 96.8(k).

Credit and offset failure is addressed in § 96.8(h)(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, while reminding facility operators of their obligation to meet permit effluent limitations, conditions and stipulations.

Two key components of this subsection are "the Department determines that replacement credits will be available," and "the existence of an approved legal mechanism that is enforceable by the Department." An example is the use of the credit reserve.

Water quality and Total Maximum Daily Loads (TMDLs) (§ 96.8(i)). This provision 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

antidegradation requirements that are part of the Commonwealth's water quality regulations. This subsection makes it clear that those and other existing regulatory requirements take precedence over any decisions made under this final regulation.

Public participation (§ 96.8(j)). The Department is committed to a transparent process in the implementation of its trading program. Therefore, the final-form rulemaking codifies the current process of publishing notice in the *Pennsylvania Bulletin* whenever (1) a credit proposal is submitted and is administratively complete; and (2) the Department makes a final decision on certification.

Use of credits and offsets generally (§ 96.8(k)). While this final-form rulemaking only authorizes trading to meet the nutrient and sediment cap loads for the Chesapeake Bay, it is not intended to foreclose the use of credits or offsets in other contexts.

# F. Summary of Major Comments and Responses on the Proposed Rulemaking

The Board approved publication of the proposed rulemaking at its meeting of November 17, 2009. The proposed rulemaking was published at 40 Pa. B. 876 (February 13, 2010), with a 30-day public comment period. The public comment period closed on March 15, 2010.

A number of commentators pointed out concerns with the terms "offset" and "credit," suggesting, among other things, that they be addressed separately and that offsets not be subject to the certification, verification and registration processes set forth in the rulemaking. In response, the Department made a number of revisions to the final-form rulemaking to address the concerns raised by the commentators. Specifically, the definition of "offset" has been revised to more accurately reflect the use of the term and to match more closely the permit definition. The term was also removed from many sections of the final-form rulemaking, which was clarified such that offsets are approved rather than being treated the same as credits.

Several commentators requested that the definition of "baseline", and also the point source baseline requirements in subsection (d), be changed so as not to prevent sources from generating Bay-related credits if a local TMDL limit results in greater reductions than those needed to comply with Bay annual cap loads. Several commentators stated that more guidance is needed on how a TMDL may affect baseline, and that it was not clear if a participant needed to meet the TMDL requirements before they could be considered in baseline or if they only needed to meet their state regulatory requirements for baseline before they start trading. In addition, one commentator thought the term "similar allocation" in paragraph (ii) of this definition and in Subsection (d)(2)(ii) was unclear. That commentator recommended that the Department work with stakeholders to address these concerns and use greater detail in setting forth its intent in the final-form regulation. Similar comments were received relating to proposed subsection (h). No changes were made to the final-form rulemaking. In the 2003 "Water Quality Trading Policy Statement", EPA outlined that baselines for generating credits should be derived from and be consistent with water quality standards. The policy states

that where a TMDL has been approved or established by EPA the applicable point source waste load allocation or nonpoint source load allocation would establish the baseline for generating credits. The final-form rulemaking is consistent with this EPA Guidance and provides consistency across sectors.

Two commentators request that "liquidity in the market" be removed from the definition of "credit reserve." The Department made this change.

One commentator stated that the definition of "credit" should reflect how a delivery ratio, when applied to a point source cap load, determines how many credits are needed. No change has been made to the final-form rulemaking. The authorizing language in NPDES permits will contain the conditions by which credits may be applied toward compliance with point source cap loads.

Several comments sought clarification on the meaning of the term "defined compliance point" in the definition of delivery ratio. The Department responds that a compliance point is typically defined in a TMDL.

One commentator requested clarification on the definition of "DMR - Discharge monitoring report" in light of the fact that in Section 92.1 a DMR is the same as an NPDES reporting form. Clarification has been added by adopting the definition of the term as it is stated in the concurrent rulemaking replacing Chapter 92 with Chapter 92a.

Several commentators stated that it was unclear how the edge of segment ratio reflects pollutant contributions associated with groundwater flows and asked if the ratio really reflects pollutant contributions associated with groundwater flows. The comments requested clarification to address the comparison between the relatively short amount of time it takes for surface runoff of pollutants into streams, saying it should take considerably longer for groundwater contributions to occur in those same streams. The Department responds that the edge of segment ratios were developed by dividing the amount of nutrients coming from the model segment (the EOS loads) by the total amount of nutrients applied to the land within the segment (the input loads). The total nitrogen inputs are first adjusted to subtract out the amount of nitrogen that would be removed by crop uptake.

Several commentators questioned the use of the EOS factor on a specific farm field, since the EOS was not developed for site specifics, but rather larger watershed segments. The Department responds that the EOS factor is the best science that is currently available to make this correlation. As the science and values evolve, the Department will make additions to the quantification and application of the ratio.

Two commentators suggested that the credit reserve of 10% should be set in the regulation in order to add certainty to the rulemaking. The Department has made this revision in the definition of "reserve ratio".

One commentator questioned what criteria and process will be used by the Department in determining what is "reasonably attainable" in the definition of "tradable load." The Department has retained this language in the final-form rulemaking, as flexibility is needed. During program development, Pennsylvania recognized that the Chesapeake Bay Watershed model estimates were based on the assumption that everyone who can reduce nutrients and sediment will do so to the maximum extent. This is commonly referred to as the "everything, everywhere, by everybody" (E3) scenario. The E3 scenario likely overestimated the maximum feasible nutrient and sediment load reductions, so Pennsylvania made adjustments to the estimates to better represent a feasible effort. Pennsylvania reduced nonpoint source reductions in E3 by 10% and estimated the reductions for those BMPs in the Tributary Strategy that were not included in the E3 scenario. After adjusting the E3 scenario estimates, Pennsylvania estimated the maximum allowable credits as the difference between the load estimates from the revised E3 scenario and the Tributary Strategy loadings goal. The scenario values and the tradable load values will change as new BMPs are developed or the efficiencies of existing BMPs are revised. The Department notes that the modifier "reasonable" is found in other environmental regulations, as well, where the exercise of judgment and flexibility are similarly appropriate.

Two commentators suggested that offsets should not be mentioned in the definition of "threshold" and that the definition of "tradable load" should somehow incorporate the term "threshold". It was also stated that the statement "reasonably attainable" in the definition of the tradable load is ambiguous and open-ended. The term "offset" has been removed from the definition of threshold. Additionally, when the tradable load was developed it did not include reductions associated with threshold so it would be inappropriate to add "threshold" to the definition. Information on how the tradable load was developed can be found on the Department's Nutrient Trading website. No changes have been made regarding the term "reasonably attainable." The Department will need flexibility regarding the information generated by TMDL models and water quality standards, and it is not possible to have a more accurate terminology.

One commentator suggested that it was unclear what is meant by "water quality" or what would be included in "other considerations" as set forth in the definition of "trading ratios". The commentator stated that if the Department intends to impose a trading ratio, reserve, or other reduction on the sale of credits from a point source seller to a point source buyer, then the regulations should set forth the specific amounts. The Department responds that much of the definition of the term "trading ratio" is taken from EPA's 2003 "Water Quality Trading Policy Statement". The phrases "water quality" and "other considerations" are used in the definition of "trading ratios" because when calculating the reductions, trading ratios need to be considered and used as appropriate to help ensure the trade provides the desired level of nutrient reductions and water quality benefits. Point source credits are calculated based on reductions to the Chesapeake Bay and will include the application of the delivery ratio and reserve ratio. This information on the applicable trading ratios for calculating credits is readily available on the Department's Nutrient Trading website. The authorizing language in NPDES permits will contain the conditions by which credits may be applied toward compliance and will

address what ratios may be used by a permittee when credits are applied toward permit compliance.

Several commentators stated that there is ambiguity in how the Department will have the ability to readjust BMP reduction efficiencies, thresholds and delivery ratios. The comments stated that to maintain confidence and stability in the trading program, it must be stated clearly in the regulation that once credits are verified, registered and sold, the number of credits is guaranteed for the current or future years for which they are purchased and cannot be reduced based on further review of how they were originally determined. The Department responds that flexibility in the BMP efficiencies and in the edge of segment and delivery ratios is needed to ensure the actions undertaken within the program reflect the water quality standards downstream. The Chesapeake Bay model is ever evolving to accurately measure and model the progress that is made in reaching a restored Bay. To balance this flexibility the Department has added section subsection (e)(8), which outlines that a pollutant reduction activity will generally be certified for a duration of 5 years.

One commentator stated that the proposed regulation fails to establish objective standards. A major concern is that the regulated community is not apprised of the specific criteria that the Department will use such as: the specific reserve factor, if any, that would apply to point source trades; how trades will be calculated based upon the deliverable loads of the seller; and how trades will be calculated based upon the deliverable loads of the purchaser. The final regulation should identify the underlying criteria for how trades can occur. The Department responds that the final-form rulemaking identifies how credits and offsets may be used in the Chesapeake Bay Watershed. Subsection (h) refers to the use of credits to meet NPDES permit requirements. Credits are calculated based on what is delivered to the Chesapeake Bay. The authorizing language in NPDES permits will contain the conditions by which credits may be applied toward compliance, which will address delivered loads. The Department has provided clarification in the definition of "reserve ratio" that it will be 10%. The final-form rulemaking states that information on the delivery and edge of segment ratios will be available on the Department's Nutrient Trading website.

One commentator stated that the rules governing the trading market must be consistent and predictable to encourage investment and participation and that, therefore, the Board and DEP need to work with stakeholders to develop greater specificity in the criteria, procedures and standards in the final-form regulation. The Department worked with stakeholders to develop the final-form rulemaking and added greater specificity to it. The Department added clarity by identifying where ratios and efficiencies can be found, clarifying the three-step process related to certification, verification and registration, providing a timeframe for certification and clarifying permittee responsibility.

A commentator requested more transparency regarding information the Department uses in calculating credits and offsets. The Department responds that this information will be readily available on the Department's Nutrient Trading website.

One commentator asked that the final-form regulation address timetables and notification requirements regarding eligibility determinations, credit certifications, verifications or other types of decisions to be made by the Department, to increase predictability. In the final-form rulemaking, eligibility determinations will be made as part of the credit certification action. Consistent with current practice, the Department will attempt to issue decisions on certification within 60 days of receipt of a complete proposal. This time period will also include a 30-day period for informal comments from the public. The final-form rulemaking does not include a time period because projects vary widely in scope, some requiring significantly more review. In addition to maintaining communication with submitters during the Department's review, the Department will publish notice in the Pennsylvania Bulletin when it makes a final certification decision, per subsection (j). The Department's website and on-line trading platform, which is called NutrientNet, will contain information about certified projects as well as market pricing.

One commentator expressed concern about being able to appeal if credits are not registered and to be able to use credits in a later water year. The Department responds that the final-form rulemaking does not include an appeal process, as it is not necessary and the Department does not typically set forth appeal processes in its regulations. For the nutrient trading program, the Department's certification action (approval or denial) is a final action of the Department that is intended to be appealable.

Comments were submitted in support of, and questioning, the use of "delivery ratios" to calculate credits. Some commentators also thought that a delivery ratio should not be applied to credits generated by a point source. The Department responds that credits are calculated based on what is delivered to the Chesapeake Bay and will include the application of the reserve ratio. The authorizing language in NPDES permits will contain the conditions by which credits may be applied towards compliance. The permit conditions will address the issue raised regarding delivered loads.

Several comments were submitted regarding clarification on how the proposed rulemaking affects point source to point source trades. One commentator believed that point source to point source credits should be certified as pound for pound without the 10 percent reserve ratio or with a less restrictive reserve ratio. These commentators also felt that point source credits should not be subject to the reserve ratio because there is a certainty that the credits were actually generated by virtue of certification on the DMR by the permittee. One commentator stated that the regulation should be clarified to indicate that pollution reduction failures and uncertainty are generally associated with nonpoint source projects. The Department has not made these changes. The credit reserve is intended to provide an insurance pool of credits in times of need, and it will be populated by a 10% reserve ratio applied across the board.

One commentator suggested that point sources should not have to wait until the end of the water year to receive certification and verification, as verification can be done through DMRs. One commentator suggested that a signed DMR should replace the certification and verification process for point sources. The final-form rulemaking has

been amended to clarify that a point source may obtain certification of a pollutant reduction activity prior to the end of the compliance year, the definition of DMR has been expanded, "pollutant reduction activity" has been defined and includes "effluent control", subsection (c)(5) has been revised regarding the use of DMR and offset information as an acceptable methodology, and subsection (e)(3)(iv) has been added for calculating reductions generated by a point source. As outlined in subsection (e)(5)(ii)(A), the verification plan can be self verification, which can include the signed DMR.

One commentator requested a mechanism to transfer the long-term responsibility for ensuring that nutrient credits are in place to offset the pollution loads generated by a new development from the builder or developer to a third party once a project is completed. The Department responds as follows. The Department has not made any revisions to the final-form rulemaking to include this mechanism because the mechanism that the commentator seeks is related to Act 537 planning and guidance is available in the Department's "Implementation Plan for Sewage Facilities Planning" document. Specifically, the Act 537 planning submission must include assurances that will be provided to guarantee the long-term operation, maintenance and compliance of the treatment facility, in accordance with 25 Pa. Code §§ 71.65, 71.71 and 71.72 (relating to individual and community sewerage systems; general requirements; sewage management programs for Department permitted sewage facilities and community onlot systems). If a developer or municipality chooses to purchase credits for compliance they are only required to purchase credits sufficient to satisfy each NPDES permit cycle but they must have assurances in place, as they would for other permit obligations, to address long term operation and maintenance. A formal agreement between the municipality and a permittee that establishes the permittee's responsibility for operating and maintaining the system in compliance with its permit by providing credits, and the responsibility of the municipality or local agency for oversight of the system, would normally be an acceptable assurance.

One commentator requested that the Department replace general references to other laws and regulations to the specific laws and regulations. The Department has not made these revisions to the final-form rulemaking since the applicable laws and regulations are dynamic. The approach in the final-form regulation is consistent with that in some Pennsylvania environmental statutes, such as the Oil and Gas Act, 58 P.S. §§601.101-601.605, and the Safe Drinking Water Act, 35 P.S. §§721.1-721.17.

One commentator recommended that a "stormwater BMP offset" option be developed as part of the state's Chapter 102 regulations and that such an option may also have applicability to the nutrient credit trading program. Under a "stormwater BMP offset" program, the commentator suggested that builders, developers and other applicants would be permitted to fund off-site stream buffers or other BMP in return for offsets of certain post-construction stormwater management BMP requirements. The commentator stated that applicants would still need to install all erosion and sedimentation control measures, as well as stormwater facilities to control the runoff rate to pre-development conditions but would offset stormwater infiltration areas. The final-form rulemaking will allow the use of credits to meet permit effluent limits for pollutants

(namely, nitrogen and phosphorus) and sediment. The proposed amendments in the final Chapter 102 rulemaking would specifically authorize trading and credits for riparian buffers in the stormwater context. These provisions of the Chapter 102 amendments are consistent with and would build upon the amendments in this final-form rulemaking.

Two commentators suggested changes to the definition of "BMP-Best management practices." The suggested revisions have not been made in the final-form rulemaking; however, subparagraph (iii) has been added to the definition of "BMP-Best Management Practice" to include the activities related to stormwater. This added definition mirrors the BMP definition included in the concurrent Chapter 102 final-form rulemaking.

Two commentators asked that the Department publish an advance notice of final rulemaking in order to allow an additional public comment period. The Department does not intend to do this. During the drafting process of the proposed rulemaking, the Department solicited comments during a number of stakeholder meetings, and the proposed rulemaking is based on *Nutrient and Sediment Reduction Credit Trading - Final Policy and Guidelines*, which involved two comment periods.

Commentators questioned referencing a specific version of the Chesapeake Bay model and other models and technical references in subsection (c), saying most of the references are already out of date. For the most part, the Department has not removed the references as they serve as background material to the Chesapeake Bay program and watershed model.

One commentator asked how the regulated community will know what other sources the Department may rely upon under subsection (c)(6), which includes the sentence, "The Department may also rely on other published or peer-reviewed scientific sources." The commentator asked whether the Department will publish a list in the *Pennsylvania Bulletin* The Department will not publish a list of all published and peer reviewed scientific sources that may be available. Subsection (c)(6) provides flexibility to the regulated community in what methodology they propose to use for calculating reductions but the important component to the methodology is that it must fall within the outlined criteria.

One commentator asked for explicit regulatory language to prohibit changes in the credit calculation methods for certifications covering multiple years. The commentator stated that there needs to be certainty and predictability for both the sellers who are making investments in BMPs and buyers who are relying on those credits being available. Similarly this commentator stated that subsection (e)(5)(ii) and (iii) creates a timeline bottleneck in which many credits must be certified in the fall and early winter, so that the entity implementing the BMPs can have an idea how many credits will be available for sale if he goes through the expense of implementing the BMPs in the spring. The Department has added subsection (e)(8) to address the duration of credit certification. By the addition of subsection (e)(8), the Department does not feel a bottleneck will occur as the commentator expressed. The term of a certification will

generally be five years, during which time the Department would not anticipate changing the terms of the certification. If, at the end of the 5-year period the holder of the certification wishes to renew it, the certification may be renewed.

One commentator asked how a generator will know what the applicable threshold is. The Department has added certainty to the threshold provisions by removing the words "by the Department" from subsection (d)(1). Applicable threshold requirements are set forth in subsection (d)(3).

One commentator stated that the nonpoint source baseline requirements, while logical, could result in unintended consequences due to the details of compliance with current regulations. For example, in Chapter 83 there is a wide range in management that can be used to meet the requirements of the chapter. A plan for a farm could be written with all surface application of manure or with all manure being injected; the commentator questioned which manure management activity would meet baseline compliance and stated that the answer has major implications for calculating credits. The commentator explained, for example, that if the plan for surface application is the baseline and is modified to all manure being injected then the management change could be used to generate credits but if the plan already calls for the injection of the manure this could not be used to generate credits. It was suggested by this comment and several others that in addition to simply requiring compliance with current regulations, additional criteria may be required, such as using the existing compliance management on a certain date as the baseline. These commentators stated that setting a specific date in the regulation the Department would ensure that operations do not go backward in management just to generate nutrient credits. The Department has revised the final-form rulemaking to include January 1, 2005 as the date for baseline, unless a revision to baseline has been made since that date, in which case the revised requirements must be met. For example, if the final-form revisions to Chapter 102 are finalized then an agricultural operation may need to meet those requirements for baseline.

Two commentators suggested that a reference be added to the nonpoint source baseline provision that an operation must also meet section 92.5a (CAFOs), if applicable to their operation. This reference has been added to the final-form rulemaking.

Two commentators suggested that additional information be included in subsection (d)(3)(i)(B) so that no applications of mechanically applied manure be allowed in the 35 feet of permanent vegetation between the field and surface water. These commentators recommended the use of language from Chapter 83 (relating to State Conservation Commission), which is, "There is no mechanical application of manure within the buffer area". The Department revised the final-form rulemaking to include this language.

Several commentators felt the threshold provisions contained too much flexibility. One commentator asked whether the "other requirements" will be promulgated as regulations and, if not, how generators will know what they are. The commentator expressed concern about enforceability if the requirements are not set out in the

regulations. The commentator expressed similar concerns for subsections (d)(5), concerning other eligibility requirements, and (e)(3)(v), concerning calculation requirements. The Department responds that flexibility in this rulemaking is needed to ensure the actions undertaken within the program reflect the water quality standards downstream and reflect changes related to the protection and restoration of the Chesapeake Bay. The Department will establish requirements in the most prudent manner available under the circumstances, taking into account many factors. By way of example, if EPA establishes a TMDL that necessitates a quick determination by the Department, then the Department will likely post notice on its Nutrient Trading website and make case-by-case determinations until a regulatory amendment, if necessary, is adopted.

Several commentators questioned the "compliance status" provision in subsection (d)(4), saying it is too broad and should be eliminated. The Department responds that it has narrowed subsection (d)(4) to apply when past or current noncompliance indicates a lack of ability or intention to comply with the stated items. The Department does not intend to let minor infractions exclude a person from engaging in trading.

One commentator asked what the appeal process is for someone under subsection (d)(6), and suggested it should be cross-referenced or set forth in the final-form regulation. The Department responds that the final-form rulemaking does not include an appeal process, as it is not necessary and the Department does not typically set forth appeal processes in its regulations.

One commentator suggested that the regulation address the issue of eligibility for generation of nutrient credits as a result of idling of whole farms or substantial portions of farms and that the regulation should expressly prohibit the ability of nutrient credits to be generated and utilized in a manner that facilitates the idling and nonfarm development of farmland. The commentator also expressed concern with respect to the ability of nutrient credits to be generated through manipulation of federal conservation programs to finance long-term land-banking of farms for future nonfarm development. The Department has incorporated the requested protections into subsection (e).

One commentator suggested that the Department should make clear that projects already certified do not need to be recertified under the new standards and that the new regulations should only apply prospectively to new projects. The Department has added subsection (e)(9)(iv) to address this comment. If a proposal has been certified and the certification does not contain an expiration date, the recipient of the certification must submit a request for renewal at least 180 days prior to five years after the effective date of this final-form rulemaking. At that point, the certification, if renewed, will be updated to meet the requirements of section 96.8 and other applicable laws, water quality standards and requirements in effect at that time.

Subsection (e)(2)(i)(D) states the "implementation of the pollutant reduction activity must be verified to the extent acceptable to the Department...." The commentator asked what "the extent acceptable" to DEP means. The commentator wrote that there is a

reference to paragraph (4) and the "verification plan" but that it is unclear how the "extent acceptable" is identified. The commentator added that paragraph (2)(i)(D) appears to be unnecessary since verification is covered in paragraph (4). The Department responds that the words "to the extent acceptable to the Department" have been removed. Paragraph (2)(i)(D) remains in the final-form rulemaking as a useful reference point.

One commentator suggested that subsection (e)(2)(ii)(E) should require only that information on any source of "public or governmental" funding be provided. The commentator sought clarification on the terms "financial guarantee mechanisms," "contractual arrangements," and "insurance products" in subsection (e)(2)(ii)(F). The Department has not made these revisions. Information on all sources of funding is useful to help the Department assure the viability of a proposed credit generation operation. The questioned terms are used as an example of ways that a person may outline how failure of the pollutant reduction activity will be managed. For example, a person may provide an explanation that they have contracts with multiple farms but only half of those farms are submitted for certification and if needed the remainder could be used to address any nutrient reduction failure. Another example would be an explanation of the performance guarantee that is provided by the product manufacture.

Several commentators wondered if it is appropriate or necessary to include actual numbers for the tradable load, as had been proposed in subsection (e)(3)(vi). One comment suggested that the Department should provide public information on the genesis of the numbers. One comment stated the section should include the fact that tradable load for the Chesapeake Bay Watershed is for the Pennsylvania portion of the watershed. It was suggested that the numbers be deleted to allow the Department to periodically reevaluate tradable load without subsequent regulation changes. The Department has revised this subsection, which in the final-form rulemaking is subsection (e)(4)(i). The revisions include the removal of the specific tradable load amount, clarification that the tradable load is for the Commonwealth's portion of the Chesapeake Bay Watershed, and assurance that the specific loading can be found on the Department's Nutrient Trading Website.

One commentator questioned the phrase "... unless otherwise revised by the Department" in subsection (e)(3)(vi), which sets forth the level at which the sum of all credits may not exceed. The Department responds that the language, "...unless otherwise revised by the Department," has been removed from the final-form rulemaking.

Several commentators suggested that subsection (e)(3)(vii), concerning costsharing, should add some clarifying statement that the credits may be available "to the applicant" for certification, if the funding source provider allows. A commentator stated that this section should be struck because DEP should simply be following the rules established by the funding agency, not enforcing additional rules on the funding source. According to the commentator, such latitude on being able to approve or deny credits accrued from a BMP implementation project that was fully or partially subsidized by Federal funds limits the predictability for credit generation and thereby inhibits initiating nutrient trading activities and projects that would implement BMPs, reduce pollutant loads, and generate nutrient credits through the use of federal or state funds. The commentator is also concerned with how this provision may affect point source to point source trades. The Department responds that trading of cost-shared BMPs, where allowed by the grantor, encourages participation in BMP programs and remains constant with the goal of maximizing the rate of BMP implementation. Credits will only be restricted if the funding source restricts the use or ability of that funding to be used to generate marketable credits.

A commentator suggested that the regulation include a provision allowing a seller to use the credits in a subsequent water year when due to no fault of the seller the Department does not timely act upon the verification and certification. The commentator stated that protections can be built into such approach to assure that it will not result in more deliverable loads to the Chesapeake Bay than is otherwise provided for. The Department responds that, consistent with past practice and EPA guidance, the final-form rulemaking only allows credits generated by a pollutant reduction activity to be used to meet permit effluent limits for the compliance period for which they are certified, verified and registered. Currently, a credit has a shelf life of one year which means it can only be used for that year, though the activity that generated the reduction will be generally certified for 5 years.

A commentator questioned the reference to "basic contract elements" in proposed subsection (f)(2)(ii). The reference to "basic contract elements" has been removed from the final-form rulemaking.

Related to proposed subsection (f)(2)(ii), several commentators questioned, based on the definition of "registration", why a contract needs to be in place to buy or sell credits prior to those credits being registered. These commentators questioned whether the requirement creates a predicament for credit generators who may not yet have a customer but have actually created credits. The subsection, now subsection (g)(2)(ii) in the final-form rulemaking, still requires a valid contract that ensures that the requirements of section 96.8 will be met. This requirement will help ensure the integrity of the nutrient trading program. The requirement for a contract is also in the Department's Nutrient Trading guidance document.

Many comments were submitted regarding proposed subsection (g)(5). Many stated that a broad exception needs to be included. It was suggested that if a permittee has purchased credits through a valid contract, and the credits later become unavailable through no fault of the permittee, then the permittee should not be penalized and should not risk enforcement action by the Department. One commentator said the expectations of the introductory sentence are unclear and asked what enforcement tools will be available to permittees. One commentator questioned if the permittee would still be responsible if PENNVEST becomes the nutrient credit clearinghouse.

The Department responds that this paragraph, now subsection (h)(5), is designed to offer protection to a permittee when credits are unavailable through no fault of the permittee. The Department has made efforts to provide mechanisms for assistance and to

help ensure that failure of credit availability in the market as a whole, during a major storm event, for instance, does not occur. The rulemaking now specifies that the Department will retain a 10% credit reserve, which will be set aside to address pollutant reduction failures and uncertainty. In addition, credit purchases through private aggregators or PENNVEST may help minimize risk. The Department is unable to extend the protection as far as the commentators requested, however, because the permittees are required by law to meet their effluent limits, regardless of the manner in which they have chosen to do so. A permittee can enforce the terms of its contract in the same manner that it can enforce any other contract; to some extent, this will be dependent upon the contract language. Similarly, if PENNVEST could not provide replacement credits, a permittee would still be responsible for meeting the terms of its permit. The Department's approach is consistent with EPA's "Water Quality Trading Policy," dated January 13, 2002, which states the following: "In the event of default by another source generating credits, an NPDES permittee using those credits is responsible for complying with the effluent limitations that would apply if the trade had not occurred."

One commentator suggested that proposed subsection (h)(2) is vague and should be eliminated. This commentator also asked if the New York State discharges going through Pennsylvania waterways impact Pennsylvania facilities from the right to trade if New York State is above its cap load. This commentator suggested that if this section means that trading will be based upon the consideration of deliverable loads, then the regulation should reflect how the adjustments will be made. Proposed subsection (h)(2), which is subsection (i)(2) in the final-form rulemaking, has not been deleted. The Department responds that in the 2003 "Water Quality Trading Policy Statement", EPA outlined that trading may be used to maintain water quality in waters where water quality standards are attained, in ways such as compensating for new or increased discharges of pollutants. Typically, compliance points are outlined in a defined TMDL. New York discharges going through Pennsylvania at this time do not impact Pennsylvania's ability to trade.

A comment was submitted that the public notices called for under section 92.61 (relating to public notice of permit application and public hearing) are significantly different than what the Department has been using for credit generating proposals and are not appropriate for this purpose. This commentator suggested that the last sentence of proposed subsection (i) should be deleted. The Department did not delete this sentence in the final-form rulemaking as the sentence makes clear that the public participation requirements for the Nutrient Trading Program are different from what is required for permit applications.

# G. 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 final-form rulemaking will provide clear and certain standards for nutrient credit trading in this Commonwealth and thereby support the Department's efforts to implement its nutrient credit trading program.

# **Compliance Costs**

The final-form 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 final-form rulemaking, the Department has an active and comprehensive outreach and education effort. 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 final-form rulemaking does contain requirements for submittal of certain information, as seen in § 96.8(e). However, the cost of these requirements will normally be returned through revenue earned in the sale of the credits, or avoidance of more expensive compliance methods if credits or offsets were not used.

# H. Pollution Prevention

The Federal Pollution Prevention Act of 1990 (42 U.S.C.A. §§ 13101—13109) 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 proposal is essentially a pollution prevention incentive program, as described previously in this order.

## I. Sunset Review

These amendments 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.

# J. 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 the notice of proposed rulemaking, published at 40 Pa.B. 876, to IRRC and the Chairpersons of the House and Senate Environmental Resources and Energy Committees (Committees) for review and comment.

Under section 5(c) of the Regulatory Review Act, IRRC and the Committees were provided with copies of the comments received during the public comment period, as well as other documents when requested. In preparing the final-form rulemaking, the Department has considered all comments from IRRC, the House and Senate Committees and the public.

Under section 5.1(j.2) of the Regulatory Review Act (71 P.S. § 745.5a(j.2), on \_\_\_\_(date)\_\_\_, the final-form rulemaking was deemed approved by the Committees. Under section 5.1(e) of the Regulatory Review Act, IRRC met on \_\_\_\_(date)\_\_\_\_, 2010, and approved the final-form rulemaking.

# **K.** Findings of the Board

The Board finds that:

- (1) Public notice of proposed rulemaking was given under sections 201 and 202 of the act of July 31, 1968 (P. L. 769, No. 240) (45 P.S. §§ 1201 and 1202) and regulations promulgated thereunder in 1 Pa. Code §§ 7.1 and 7.2.
- (2) A public comment period was provided as required by law, and all comments were considered.
- (3) These regulations do not enlarge the purpose of the proposal published at 40 Pa.B. 876.
- (4) These regulations are necessary and appropriate for administration and enforcement of the authorizing acts identified in Section C of this order.

# L. Order of the Board

The Board, acting under the authorizing statutes, orders that:

- (a) The regulations of the Department, 25 Pa. Code Chapter 96, are amended by adding § 96.8 to read as set forth in Annex A, with ellipses referring to the existing text of the regulations.
- (b) The Chairperson of the Board shall submit this order and Annex A to the Office of General Counsel and the Office of Attorney General for review and approval as to legality and form, as required by law.

- (c) The Chairperson of the Board shall submit this order and Annex A to IRRC and the Senate and House Committees as required by the Regulatory Review Act.
- (d) The Chairperson of the Board shall certify this order and Annex A and deposit them with the Legislative Reference Bureau, as required by law.
- (e) This order shall take effect immediately upon publication in the *Pennsylvania Bulletin*.

BY:

JOHN HANGER Chairperson Environmental Quality Board