

# Regulatory Analysis Form

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(1) Agency

Department of Environmental Protection

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7-421

INDEPENDENT REGULATORY  
REVIEW COMMISSION

IRRC Number: 2659

(3) Short Title

Water Quality Standards – Triennial Review

(4) PA Code Cite

25 PA Code, Chapter 93 and  
Chapter 16

(5) Agency Contacts & Telephone Numbers

Primary Contact: Michele Tate 783 -1303  
Secondary Contact: Kelly Heffner 783-1303

(6) Type of Rulemaking (Check One)

- Proposed Rulemaking  
 Final Order Adopting Regulation  
 Final Order, Proposed Rulemaking Omitted

(7) Is a 120-Day Emergency Certification  
Attached?

- No  
 Yes: By the Attorney General  
 Yes: By the Governor

(8) Briefly explain the regulation in clear and nontechnical language.

Section 303(c)(1) of The Clean Water Act requires that states periodically, but at least once every 3 years, review and revise as necessary, their water quality standards. This proposed rulemaking constitutes Pennsylvania's current triennial review of its water quality standards. The proposed regulation will merge sections of Chapter 16, Water Quality Management Strategy – Statement of Policy into Chapter 93, Water Quality Standards. The sections proposed to be moved are: portions of § 16.61 (relating to special provisions for the Great Lakes System), and updated and revised criteria from Appendix A Table 1 (relating to criteria for toxic substances). In §§ 93.1, 93.7 and 93.8, there are language or typographic corrections proposed to add clarity. In § 93.9a-93.9z, several changes to the drainage lists are proposed to clarify stream names, segment boundaries and to add MF use designations for the presence of migratory fish within the Mid-Atlantic slope basins of the Delaware, Susquehanna and Potomac Rivers.

(9) State the statutory authority for the regulation and any relevant state or federal court decisions.

The Pennsylvania Clean Streams Law, Act of June 22, 1937 (P.L. 1987, No. 394) as amended, 35 P.S. § 691.1 et seq.

Section 1920-A of The Administrative Code of 1929, as amended, 71 P.S. § 510-20.

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**(10) Is the regulation mandated by any federal or state law or court order, or federal regulation? If yes, cite the specific law, case or regulation, and any deadlines for action.**

Although this regulation is not specifically mandated by Federal or state law or regulations, the federal Clean Water Act and 40 CFR 131.20 requires that states review their water quality standards and modify them, as appropriate, at least once every three years. This regulation fulfills this requirement for Pennsylvania's triennial review of water quality standards.

**(11) Explain the compelling public interest that justifies the regulation. What is the problem it addresses?**

Water quality standards are an important element of the Commonwealth's water quality management program in that they set general and specific goals for the quality of Pennsylvania's streams. The water quality standards can affect all sources of wastewater discharge since the Department must regulate these sources to ensure that the instream water quality standards are met. The standards are used as program objectives in the control of both point and non-point sources of pollution. Section 303(c)(1) of the Clean Water Act requires that states periodically, but at least once every 3 years, review and revise as necessary, their water quality standards. These proposals constitute Pennsylvania's current triennial review of its water quality standards.

**(12) State the public health, safety, environmental or general welfare risks associated with non-regulation.**

Section 303(c)(1) of The Clean Water Act requires that states periodically, but at least once every 3 years, review and revise as necessary, their water quality standards. Without this regulation, the discharge of pollutants to waters of the Commonwealth will cause environmental degradation and public health hazards. Without the amendments, the program may be administered in a manner more stringent than federal regulations, without a compelling reason, and there may be unclear or obsolete provisions in the regulations. This may have an indirect impact on the public health or environment because of the associated non-compliance stimulated by overly stringent or unclear regulations.

**(13) Describe who will benefit from the regulation. (Quantify the benefits as completely as possible and approximate the number of people who will benefit.)**

Overall, the citizens of the Commonwealth will benefit from the regulation since it will provide the appropriate level of water quality protection for the surface waters in Pennsylvania. The revised regulation helps to assure that pollution control actions are as cost-effective as possible and that pollution control costs are equitably distributed. The new language makes it easier for citizens to understand how water quality standards are implemented. It also assures that the water quality program requirements more closely mirror federal requirements.

Persons required to renew an existing or obtain a new NPDES permit may benefit because of the clarification provided in the amendments as well as increased consistency with federal regulations. This may include municipalities, municipal authorities and industries impacted by the NPDES permitting program.

## Regulatory Analysis Form

**(14) Describe who will be adversely affected by the regulation. (Quantify the adverse effect as completely as possible and approximate the number of people who will be adversely affected.)**

Persons proposing new or expanded activities or projects which result in discharges to waters of the Commonwealth may be adversely affected by the proposed regulations since they are required to provide effluent treatment according to the water quality criteria and designated use. This proposal, intended to update the water quality standards for the Commonwealth, may result in higher design engineering, construction, and treatment costs to meet the more stringent criteria for selected parameters. The proposal will be implemented through the National Pollutant Discharge Elimination System (NPDES) since the stream use designation and water quality criteria are the major bases for determining allowable stream discharge effluent limitations.

**(15) 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.)**

See Question #14. Persons with proposed or existing discharges into surface waters of the Commonwealth must comply with the regulation.

**(16) Describe the communications with and inputs from the public in the development and drafting of the regulation. List the persons and/or groups who were involved, if applicable.**

The Water Resources Advisory Committee (WRAC) was briefed on the scope of the regulation at the March 8, 2006, May 10, 2006 meetings, and during a special October 13, 2006 meeting. WRAC was also provided a draft of the proposed rulemaking at the May 9, 2007 meeting and WRAC voted to present this triennial review rulemaking to the EQB. The public will be afforded the opportunity to comment on this proposal during a public comment period, which is to also provide for public hearings.

**(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.**

Costs and savings cannot be determined because of site-specific considerations and because there is no historical accounting of costs that would enable a comparative cost analysis to be conducted.

## Regulatory Analysis Form

**(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.**

No costs will be imposed directly upon state or local governments by this regulation.

**(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.**

This proposal is based on and will be implemented through existing Department programs, procedures and policies. There are no additional implementation costs associated with this regulation.

## Regulatory Analysis Form

**(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.**

Year	Current FY 2007	FY +1 2008	FY +2 2009	FY +3 2010	FY +4 2011	FY +5 2012
<b>SAVINGS:</b>	\$	\$	\$	\$	\$	\$
<b>Regulated Community</b>	Not Measurable					
<b>Local Government</b>	“					
<b>State Governments</b>	“					
<b>Total Savings</b>	“					
<b>COSTS:</b>						
<b>Regulated Community</b>	Not Measurable					
<b>Local Government</b>	“					
<b>State Governments</b>	“					
<b>Total Costs</b>	“					
<b>REVENUE LOSSES:</b>						
<b>Regulated Community</b>	Not Measurable					
<b>Local Government</b>	“					
<b>State Governments</b>	“					
<b>Total Revenue Losses</b>	“					

**(20a) Explain how the cost estimates listed above were derived.**

Not Applicable.

## Regulatory Analysis Form

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

Program Year	FY-3 2004-2005	FY-2 2005-2006	FY-1 2006-2007	Current FY 2007-2008
Env. Prot. Operations (160)	\$85,898,000	\$87,897,000	\$89,847,000	\$98,582,000
Env. Program Mgmt. (161)	\$37,594,000	\$37,049,000	\$36,868,000	\$39,909,000

**(21) Using the cost-benefit information provided above, explain how the benefits of the regulation outweigh the adverse effects and costs.**

The benefits to the citizens of the Commonwealth will accrue from protecting the surface waters of the Commonwealth at the appropriate level.

**(22) Describe the nonregulatory alternatives considered and the costs associated with those alternatives. Provide the reasons for their dismissal.**

There were no non-regulatory alternatives available to consider in this case.

**(23) Describe alternative regulatory schemes considered and the costs associated with those schemes. Provide the reasons for their dismissal.**

There were no alternative regulatory schemes to consider in achieving the correct level of protection for the waters of the Commonwealth.

## Regulatory Analysis Form

**(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.**

No. The proposed regulations are not more stringent than the companion federal standards allow.

**(25) How does the regulation compare with those of other states? Will the regulation put Pennsylvania at a competitive disadvantage with other states?**

Other states are also required to maintain water quality standards with similar requirements. The proposed amendments will not put Pennsylvania at a competitive disadvantage to other states.

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

No other regulations or state agencies are affected by this proposal.

**(27) Will any public hearings or informational meetings be scheduled? Please provide the dates, times, and locations, if available.**

See Question 16. The Environmental Quality Board will hold at least one public hearing and/or meeting in Harrisburg for the purpose of accepting comments on this proposal, which will be scheduled during the public comment period. The hearing will be held at the Rachel Carson State Office Building, 400 Market Street, Harrisburg, PA. The date and time of the hearing is currently pending.

## Regulatory Analysis Form

**(28) Will the regulation change existing reporting, record keeping, or other paperwork requirements? Describe the changes and attach copies of forms or reports which will be required as a result of implementation, if available.**

No additional reporting, record keeping, or other paperwork will be required.

**(29) 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.**

There are no such provisions in this proposed regulation.

**(30) What is the anticipated effective date of the regulation; the date by which compliance with the regulation will be required; and the date by which any required permits, licenses or other approvals must be obtained?**

The regulation will become final after review and approval by the Environmental Quality Board and publication in the Pennsylvania Bulletin as final-form rulemaking. New or renewed NPDES permits reflected by these regulatory changes will be issued according to current timelines that apply to permit applications.

**(31) Provide the schedule for continual review of the regulation.**

This regulation 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.

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REVIEW COMMISSION

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2659  
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Copy below is hereby approved as to form and legality,  
Attorney General

By: *M. Elliott*  
(Deputy Attorney General)

DEC 03 2007

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. 7-421

DATE OF ADOPTION October 16, 2007

BY: *Kathleen A. McGinty*

TITLE KATHLEEN A. MCGINTY  
CHAIRPERSON

EXECUTIVE OFFICER CHAIRMAN OR SECRETARY

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

BY: *Andrew C. Clark*

NOV 7 2007  
DATE OF APPROVAL

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

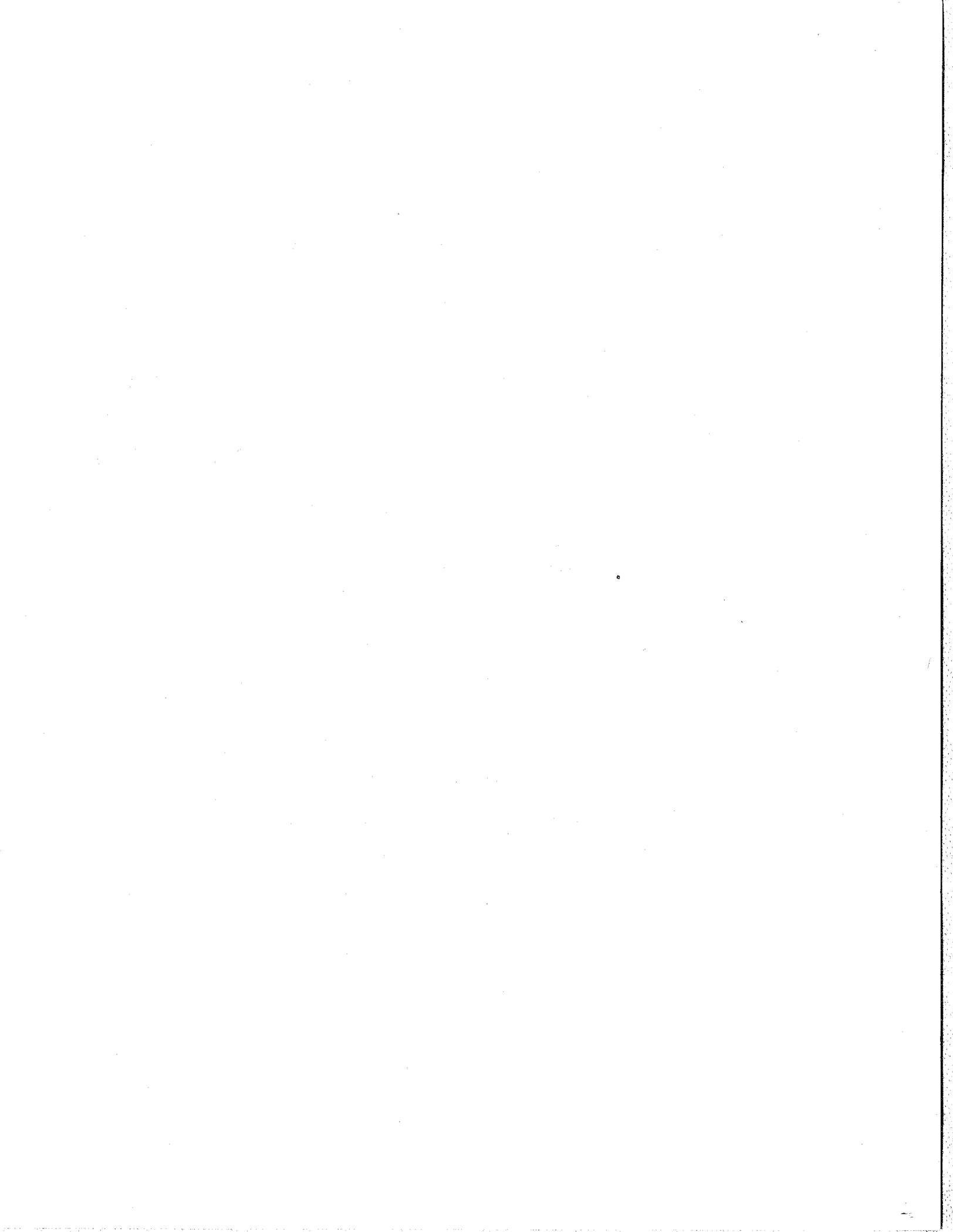
Check if applicable. No Attorney General Approval  
or objection within 30 days after submission.

NOTICE OF PROPOSED RULEMAKING

DEPARTMENT OF ENVIRONMENTAL PROTECTION  
ENVIRONMENTAL QUALITY BOARD

Triennial Review of Water Quality Standards

25 Pa. Code, Chapter 93



**NOTICE OF PROPOSED RULEMAKING**  
**DEPARTMENT OF ENVIRONMENTAL PROTECTION**  
**ENVIRONMENTAL QUALITY BOARD**  
**(25 PA. Code, Chapter 93)**  
**Triennial Review of Water Quality Standards**

**Preamble**

The Environmental Quality Board (Board) proposes to amend Chapter 93 (relating to water quality standards) to read as set forth in Annex A.

This proposal was adopted by the Board at its meeting of October 16, 2007.

**A. Effective Date**

These proposed amendments will be effective upon publication in the Pennsylvania Bulletin as final-form rulemaking.

**B. Contact Persons**

For further information contact Richard H. Shertzer, Chief, Division of Water Quality Standards, Bureau of Water Standards and Facility Regulation, 11<sup>th</sup> Floor, Rachel Carson State Office Building, P.O. Box 8467, (717) 787-9637 or Michelle Moses, Assistant Counsel, Bureau of Regulatory Counsel, 9<sup>th</sup> Floor, Rachel Carson State Office Building, P.O. Box 8464, Harrisburg, PA 17105-8464, (717) 787-7060. Persons with a disability may use the AT&T Relay Service by calling (800) 654-5984 (TDD users) or (800) 654-5988 (voice users). This proposal is available electronically through the Department of Environmental Protection's (Department) website (<http://www.depweb.state.pa.us>).

**C. Statutory Authority**

These proposed amendments are made under the authority of Sections 5(b)(1) and 402 of The Clean Streams Law (35 P.S. §§ 691.5(b)(1) and 691.402), which authorize the Board to develop and adopt rules and regulations to implement provisions of The Clean Streams Law and Section 1920-A of The Administrative Code of 1929 (71 P.S. § 510-20), which grants to the Board the power and duty to formulate, adopt and promulgate rules and regulations for the proper performance of the work of the Department. In addition, Section 303 of the Federal Clean Water Act (33 U.S.C.A. § 1313) sets forth requirements for water quality standards and the Federal regulations in 40 CFR 131.32 (relating to Pennsylvania) set forth certain requirements for portions of the Commonwealth's antidegradation program and the Federal regulation in 40 CFR 131.41 (relating to Bacteriological criteria for those states not complying with Clean Water Act section 303(i)(1)(A)) sets forth bacteria criteria for coastal recreation waters in the Commonwealth.

#### **D. Background and Purpose of the Amendment**

The water quality standards, which are generally codified in Chapter 93, are designed to implement the requirements of Section 5 and 402 of The Clean Streams Law and Section 303 of the Federal Clean Water (33 U.S.C.A. § 1313). This proposed rulemaking fulfills the federally required triennial review of water quality standards as mandated by the Federal Clean Water Act. The water quality standards consist of the existing and designated uses of the surface waters of this Commonwealth, along with the specific numerical and narrative criteria necessary to achieve and maintain those uses, and an antidegradation policy. Thus, water quality standards are in-stream water quality goals that are implemented by imposing specific regulatory requirements, such as treatment requirements, best management practices, and effluent limitations, on individual sources of pollution.

Water quality standards are an important element of the Commonwealth's water quality management program. Some type of water quality standard has been in use for approximately 75 years in this Commonwealth. One of the early actions after the Sanitary Water Board (SWB) was created in 1923 was to classify streams by priority for water quality management actions. In 1947, the SWB classified all streams in this Commonwealth by the degree of treatment that had to be provided before discharge could occur. Article 301 – Water Quality Control, which specifically contained water uses, general and specific water quality criteria, and designated water uses, was added to the SWB's Rules and Regulations on June 28, 1967. The SWB was then abolished on January 19, 1971 following the formation of the new Pennsylvania Department of Environmental Resources (PA DER) in 1968. Responsibilities for developing and maintaining the water quality criteria and standards, and other related regulations were transferred to PA DER. New or revised specific water quality criteria and standards were developed by PA DER for all Pennsylvania surface waters, and formally adopted into 25 Pennsylvania Code, Chapter 93 – Water Quality Standards on September 10, 1971.

PA DER completed its first major review and complete overhaul of the water quality criteria and standards in 1979. After a series of public hearings and extensive public participation, revisions to the water quality criteria and uses were incorporated into Chapter 93. U.S. EPA Region III formally approved the revisions to Pennsylvania's water quality standards on January 26, 1981. Section 303(c)(1) of The Clean Water Act requires that states periodically, but at least once every three years, review and revise as necessary, their water quality standards. As such, additional reviews and revisions were made to Pennsylvania's water quality standards during 1985, 1989, and 1994. The then newly formed Department of Environmental Protection (DEP), which was created in June 1995 after splitting DER into two agencies by approval of The Conservation and Natural Resources Act (Act 18 of 1995), began to conduct its first comprehensive review of water quality standards regulations, policies, and implementation procedures which became the basis for the next Triennial Review. Additional reviews and revisions were made to Pennsylvania's water quality standards during 1998, 1999, 2000, 2002 and 2004 to address amendments for the Great Lakes Initiative (GLI), Antidegradation policies, the Water Quality Standard (WQS) Regulatory Basics Initiative (RBI) Triennial, and several other corrective amendments.

On May 9, 2007, the Department's Water Resources Advisory Committee voted to present this rulemaking package to the EQB. In addition, the Department presented this rulemaking package to the Agricultural Advisory Board on August 22, 2007. This proposal constitutes Pennsylvania's current triennial review of its water quality standards.

#### **E. Summary of Issues and Proposed Regulatory Revisions**

Issues being considered in this triennial review are: updating the water quality criteria; merging sections of Chapter 16 (Water Quality Toxics Management Strategy – Statement of Policy) into Chapter 93 (Water Quality Standards); adding a definition in § 93.1 to clarify the term “conventional treatment” for potable water supply (PWS) that is used in § 93.3, Table 1 and clarifying in the footnote to Table 3 in § 93.7 that other more sensitive “critical uses” may apply; verifying current exceptions to fishable/swimmable waters; making corrections and changes to drainage lists; and other typographic and grammatical corrections.

*Detailed Description of Proposed Revisions in Chapter 93 by Section.*

#### **Chapter 93. WATER QUALITY STANDARDS, Table of Contents**

The table of contents is being amended to show the incorporation of sections of Chapter 16 (relating to the Water Quality Toxics Management Strategy – Statement of Policy) into Chapter 93. The sections proposed to be merged include the criteria tables. The merging of these sections will consolidate the water quality standards by allowing all of Pennsylvania's water quality criteria to reside in one regulation. The remaining sections of Chapter 16 will be retained in the Statement of Policy, with some modifications, corrections and updates.

Also, the location and title for the current Section 93.8 in the table of contents will be corrected to match the relocation and title within the chapter. It is proposed that this section will become Section 93.8c and read, “Development of site-specific water quality criteria”. The title in the chapter was changed in the previous triennial review of water quality standards, but was inadvertently missed in the table of contents.

#### **Section 93.1 Definitions.**

The Board proposes to clarify that the substances referred to in the definition for *Toxic Substances* will be identified in Chapter 93, rather than Chapter 16.

A new definition is proposed to clarify and define the reference to “*conventional treatment*” in the description of the potable water supply use (PWS) in Table 1 at Section 93.3 (protected water uses). This definition incorporates the practices identified by the drinking water program that are commonly understood to provide “conventional” treatment.

A definition for Water Effect Ratio (WER) will be added to Chapter 93 using language from § 16.31(e) that currently describes a WER.

### **Section 93.3. Protected water uses.**

The Board proposes to clarify the definition of *Migratory Fishes* (MF) in Table 1. The proposed definition will explain that the fishes move to and from flowing waters to complete their life cycle in other waters.

The Board will also clarify that the definition of *Irrigation* (IRS) also includes golf courses, athletic fields and other commercial horticultural activities.

### **Section 93.7 Specific water quality criteria. Table 3:**

Changes to the use notation in the Critical Use column for the Ammonia-nitrogen (Am) criterion was inadvertently missed during the previous triennial review when the numerical system was replaced by the protected use symbols identified in § 93.3, Table 1. The proposed change replaces the "1" with the aquatic life use symbols that it had previously intended to represent (CWF, WWF, TSF, MF).

The Board proposes to change the footnote in § 93.7, Table 3, for "*Critical Use*" to clarify that other intervening uses may become the most sensitive use if it is determined that the specified *Critical Use* is not providing adequate protection for all statewide and protected uses, identified in sections 93.3 and 93.4, in or on the waterbody. Additional language will be added to the footnote as follows: "Other intervening more sensitive uses may apply at a given location on the waterbody."

### **Section 93.8 Development of site-specific water quality criteria.**

The Board proposes to relocate this section to a new section 93.8c following the proposed incorporation of sections and criteria tables from Chapter 16. The Board is also proposing to refine the procedure for informing the public of how site-specific water quality criteria will be incorporated into the water quality standards.

The Department has considered and approved NPDES permitted dischargers' requests for site-specific water quality criteria for facilities in Pennsylvania when it has been demonstrated that there exist site-specific biological or chemical conditions of the receiving waters, which differ from conditions upon which the water quality criteria were based. This was accomplished by performing site-specific chemical and toxicological studies through a water effects ratio (WER) study or through criteria recalculation methods following EPA's "Guidance on the Determination and Use of Water-Effect Ratios for Metals" (EPA-823-B-94-001, February 1994). A WER is a factor that expresses the difference between the measures of the toxicity of a substance in laboratory water and the toxicity in site water. The WER provides a mechanism to account for that portion of a metal or other applicable chemical, which is toxic under certain physical, chemical or biological conditions. A criterion recalculation considers the appropriateness of the toxicity data used to develop the national or state recommended criterion as compared to conditions at a specific site.

### **Section 93.8a Toxic substances.**

This section is being relocated and retitled as section 93.8. The new title will read, "Water quality criteria for toxic substances." The language in paragraph (b) of the current section relating to Chapter 16 and the toxics criteria will be replaced with references to Chapter 93. The new entry will read, "Water quality criteria for toxic substances shall be established as set forth in this Chapter. The analytical procedures will be listed in Chapter 16 (relating to water quality toxics management strategy—statement of policy)."

The Board proposes to delete, "At intervals not exceeding 1 year" in paragraph (h) of this section because the regulatory process will generally extend longer than one year, and this function will now become part of the triennial review process.

The Board proposes to clarify in subparagraph (j)(3) of this section the location of the antidegradation requirements. The antidegradation requirements are now in Chapters 93 and 96. The current reference to Chapter 95 (relating to water quality standards; and wastewater treatment requirements) is obsolete and will be replaced with Chapter 96 (relating to water quality standards implementation).

The Board proposes to create four new sections in Chapter 93 to accommodate sections and tables being moved from Chapter 16. These new sections are: § 93.8a (relating to metals criteria); § 93.8b (relating to human health and aquatic life criteria for toxic substances); § 93.8c (relating to development of site-specific water quality criteria); and § 93.8d (relating to special criteria for the Great Lakes system).

The water quality criteria for toxic substances that are national recommended water quality criteria currently contained in Chapter 16, Appendix A, Table 1 will be moved into § 93.8b, Table 5. New site-specific water quality criteria that are developed or approved by the Department will be placed and remain in Chapter 16 Appendix A Table 1, until such time that they can be moved into Chapter 93 during a triennial review or other review of water quality standards.

### **New Section 93.8b. Human health and aquatic life criteria for toxic substances.**

Many of the human health criteria in the "EPA National Recommended Water Quality Criteria: 2002 (EPA-822-R-02-047, November 2002)" compilation have been revised based on EPA's new methodology for deriving human health criteria (*Methodology for Deriving Ambient Water Quality Criteria for the Protection of Human Health (2000)*, EPA-822-B-00-004, October 2000) or based on new scientific data not previously available for calculating water quality criteria.

The national recommended water quality criteria revisions include a compilation of: previously published criteria that are unchanged, criteria that have been recalculated from earlier criteria and newly calculated criteria based on peer-reviewed assessments and data.

A summary of the Boards proposed toxics criteria revisions is listed below:

The following revised human health criteria incorporate EPA's new human health criteria methodology from October 2000. A new national default fish consumption rate of 17.5 grams/day replaces the previous 6.5 grams/day fish consumption rate, to adequately protect the general population of fish consumers. In addition, the cancer potency factor for PCB's has been updated according to the best available toxics data located in the Integrated Risk Information System (IRIS) database, which is the national preferred information source. Following are the present and proposed criteria changes to the human health water quality criteria for toxic substances:

Chemical name	Present Criteria ug/L	Proposed Criteria ug/L
2-CHLOROPHENOL	121	81
2,4-DICHLORO-PHENOL	93	77
2,4-DIMETHYL-PHENOL	540	380
4,6-DINITRO-o-CRESOL	13.4	13
2,4-DINITRO-PHENOL	70	69
PENTACHLORO-PHENOL	0.28	0.27
2,4,6-TRICHLORO-PHENOL	2.1	1.4
ACROLEIN	320	190
ACRYLONITRILE	.059	.051
CARBON TETRACHLORIDE	0.25	0.23
CHLORODIBROMO-METHANE	0.41	0.40
DICHLOROBROMO- METHANE	0.56	0.55
METHYL BROMIDE	48.0	47.0
METHYLENE CHLORIDE	4.7	4.6
TETRACHLORO ETHYLENE	0.8	0.69
TOLUENE	6800	1300
1,1,2-TRICHLOROETHANE	0.60	0.59
TRICHLOROETHYLENE	2.7	2.5
VINYL CHLORIDE	2.0	0.025
ACENAPHTHENE	1200	670
ANTHRACENE	9600	8300
BENZIDINE	.00012	.000086
BENZO(a)ANTHRACENE	.0044	.0038
BENZO(a)PYRENE	.0044	.0038
3,4-BENZOFLUORANTHENE	.0044	.0038
BENZO(k)FLUORANTHENE	.0044	.0038
BIS(2-CHLOROETHYL)ETHER	.031	.030
BIS(2-ETHYLHEXYL)PHTHALATE	1.8	1.2
2-CHLORONAPHTHALENE	1700	1000
CHRYSENE	.0044	.0038
DIBENZO(a,h)ANTHRACENE	.0044	.0038
3,3-DICHLOROBENZIDINE	.04	.021
DIETHYL PHTHALATE	23000	17000

DIMETHYL PHTHALATE	313000	270000
DI-N-BUTYL PHTHALATE	2700	2000
1,2-DIPHENYLHYDRAZINE	.04	.036
FLUORANTHENE	300	130
FLUORENE	1300	1100
HEXACHLOROENZENE	.00075	.00028
HEXACHLOROETHANE	1.9	1.4
INDENO(1,2,3cd)PYRENE	.0044	.0038
ISOPHORONE	36	35
N-NITROSODI-N-PHENYLAMINE	5	3.3
PYRENE	960	830
1,2,4-TRICHLOROENZENE	330	35
ALDRIN	.00013	.000049
alpha-BHC	.0039	.0026
beta-BHC	.014	.0091
CHLORDANE	0.0021	.00080
4,4-DDT	.00059	.00022
4,4-DDE	.00059	.00022
4,4-DDD	.00083	.00031
DIELDRIN	.00014	.000052
alpha-ENDOSULFAN	110	62
ENDRIN ALDEHYDE	0.76	0.29
HEPTACHLOR	.00021	.000079
HEPTACHLOREPOXIDE	.0001	.000039
PCBs	.000044	.000064
TOXAPHENE	.00073	.00028
2,3,7,8-TCDD	1.3 E-8	5.0 E-9

Similar to those above, the toxics criteria listed below are also calculated using EPA's 2000 methodology for deriving human health criteria, but because these toxics can also be found in other media (such as in food, air, etc.), the federally recommended criterion contains a relative source contribution (RSC) to account for non-water sources of exposure.

Chemical Name	RSC	Present Criteria ug/L	Proposed Criteria ug/L
ANTIMONY	.40	14	5.6
THALLIUM	.20	1.7	.24
CYANIDE, FREE	.20	700	140
CHLOROENZENE	.20	680	130
ETHYLBENZENE	.20	3100	530
TOLUENE	.20	6800	1300
1,2-trans-DICHLOROETHYLENE	.20	700	140
1,2-DICHLOROENZENE	.20	2700	420
HEXACHLOROCYCLOPENTADIENE	.20	240	40
ENDRIN	.20	0.76	.059

The criteria for the following toxics were developed based on EPA's 2000 methodology for deriving human health criteria and other toxicity data as follow:

Chemical name	RSC	Present Criteria ug/L	Proposed Criteria ug/L
ARSENIC		50	10
1,1-DICHLOROETHYLENE	0.2	0.057	33
BUTYLBENZYL PHTHALATE		300	150
gamma-BHC (LINDANE)	0.2	.019	0.098

Arsenic – EPA is in the process of an extensive evaluation of the ambient water criterion for Arsenic. The Department's present criterion for arsenic is 50 ug/L, which was the maximum contaminate level (MCL) allowed in drinking water. On January 22, 2001 EPA adopted the MCL for arsenic in drinking water at 10 ug/L, replacing the old MCL of 50 ug/L. The rule became effective on February 22, 2002. The date by which systems had to comply with the new 10 ug/L standard was January 23, 2006.

At this time the Board is proposing to adopt 10 ug/L for the arsenic ambient water quality criterion. Upon EPA's completion of the arsenic evaluation, and in the event of incorporation of a new recommended ambient water quality human health criterion, the Department will re-evaluate the criterion for arsenic and make a recommendation to the Board on whether to incorporate it into the Commonwealth's water quality standards.

1,1-Dichloroethylene (1,1-DCE) – EPA has determined after comprehensive review that the toxicity data for 1,1-DCE exhibits suggestive evidence of carcinogenicity but not sufficient evidence to assess human carcinogenic potential. Therefore 1,1-DCE has been labeled a possible human carcinogen. The cancer potency factor has been removed from the Integrated Risk Information System (IRIS) database, which is the national preferred information source. The Board is proposing this re-calculated human health criterion as a threshold level toxic, as recommended by EPA. The criterion is calculated using a reference dose, which accounts for non-cancer effects and a RSC that accounts for non-water sources of exposure. In addition, because this toxic substance exhibits suggestive evidence of carcinogenicity the criterion was developed using an addition margin of safety (divided by a factor of 10) to protect human health from carcinogenic effects. The guidelines for development of human-based criteria with threshold level toxic effects are presently found in Chapter 16 (relating to water quality toxics management strategy – statement of policy).

Butylbenzyl Phthalate – This compound is also calculated as a human health threshold level toxic substance. The proposed criterion retains an additional margin of safety (divided by a factor of 10) to account for it being a possible human carcinogen, according to established protocols presently found in Chapter 16 (relating to water quality toxics management strategy – statement of policy).

Gamma-BHC (LINDANE) – The cancer potency factor for lindane has been removed from IRIS. The Board is proposing the calculated human health criterion as a threshold level toxic as

recommended by EPA. The criterion was calculated using a reference dose, which accounts for non-cancer effects and a RSC that accounts for non-water sources of exposure. In addition, because this toxic substance exhibits suggestive evidence of carcinogenicity the criterion includes a margin of safety (divided by a factor of 10) to protect human health from carcinogenic effects.

#### **New criteria being added to Table 5.**

New criteria that have been developed or approved by the Department are being proposed for adoption by the Board and added to Table 5. The Board is proposing to add ambient water quality human health criteria for molybdenum (210 ug/L) and metolachlor (69 ug/L) to the water quality standards since these compounds are expected to be present in discharges.

The Board proposes to adopt the freshwater aquatic life criterion that was recently developed by EPA for diazinon where both the criteria continuous concentration (CCC) and criteria maximum concentration (CMC) are not to exceed 0.17 ug/L (EPA-822-R-05-006, Dec. 2005). This criterion replaces a similar guidance value that was previously developed by the Department based on limited available toxicological data. Formally adopting this new diazinon criterion is needed to support TMDLs and for use in other NPDES permits where needed.

#### **New Section 93.8c. Development of site-specific water quality criteria.**

This new section 93.8c is proposed to contain the provisions for developing site-specific water quality criteria, which were previously contained in Section 93.8 prior to merging the criteria tables from Chapter 16.

#### **New Section 93.8d. Special criteria for the Great Lakes System.**

The Board is proposing to incorporate portions of the Special Provisions for the Great Lakes System from Chapter 16 into a new Section 93.8d, including the Great Lakes Aquatic Life and Human Health Criteria Table (as a new Table 6) and the Great Lakes Wildlife Criteria Table (as a new Table 7) from § 16.61 (relating to special provisions for the Great Lakes System).

#### **Section 93.9. Designated water uses and water quality criteria.**

Clarification is being added to describe that the County being referenced in the stream drainage lists in §§ 93.9a. - 93.9z is the county in which the mouth "or the downstream limit of the zone being described for that entry" is located. It currently only refers to it being the location of the mouth of the waterbody. In addition, an amendment to § 93.9(b) clarifies that the most stringent water quality standard applies between the Department's standards and interstate or international agencies' standards under an interstate compact or international agreement.

#### **Corrections to Drainage Lists**

**Sections 93.9a. – 93.9o and 93.9z. Add MF to Drainage Lists A – O and Z.**

The three major eastern drainage basins within Pennsylvania; the Delaware, Susquehanna, and Potomac River basins, which make up the Commonwealth's contribution to the greater Mid-Atlantic slope, have historically supported the passage, maintenance and propagation of migratory fish. Migratory fish are characterized as anadromous and catadromous fishes and other fishes, which travel to or from flowing waters to complete their life cycle. Anadromous fishes spend most of their lives in saltwater, but migrate to flowing freshwaters to spawn, while catadromous fishes spend most of their lives in freshwater, and spawn in saltwater. The construction of large hydroelectric dams, smaller milldams, other lowhead dams or obstructions, and overfishing, which started in the 1800's, has led to the decline of Pennsylvania's migratory fish populations. Since that time, restoration efforts have been and continue to be successfully implemented in an effort to restore migratory fish populations into their historical ranges. The presence and/or potential for passage, maintenance and propagation of native migratory fishes can be substantiated through fish passage restoration projects that currently facilitate the recovery of species to a significant portion of their historical range and proposed projects with the potential to restore populations to the entire historical range. This proposal would apply a migratory fishes (MF) designation to the Mid-Atlantic slope drainages, and has taken into consideration the presence and/or potential for passage, maintenance and propagation of American eel, American shad, hickory shad, blueback herring, alewife, Atlantic striped bass, shortnose sturgeon, Atlantic sturgeon and other fish species that migrate locally within the watershed to complete their life cycles. Therefore, a basin-wide migratory fishes (MF) designation is proposed for drainage lists A through O and Z, unless there are specific exceptions noted for certain waterbodies or stream segments within one of these drainage lists. Drainage lists A through G are located within the Delaware River Basin. Drainage lists H through O are located within the Susquehanna River Basin. Drainage list Z is located within the Potomac River Basin. It should be noted, however, that this particular revision will not be shown in the proposed Annex that accompanies this rulemaking, but will be incorporated into the Code at final rulemaking.

The following additional changes to the drainage lists are proposed by the Board to clarify stream names and segment boundaries and designations. These corrections do not change the current stream use designations, and only serve as clarifications:

#### **Section 93.9d. Drainage List D.**

The zone description for the headwaters of the Black Creek basin is currently written in section 93.9d as 'Basin, Source to Beaver Creek'. This zone description, however, actually defines the Hazle Creek basin since the confluence of Hazle Creek and Beaver Creek form Black Creek. Hazle Creek is currently missing from this drainage list. To correct this, an entry for Hazle Creek basin will be inserted before the Beaver Creek entry. The 'Main Stem' entry for Black Creek will be corrected to reference the confluence of Hazle Creek and Beaver Creek, which forms Black Creek. The Unnamed Tributaries entry for Beaver Creek to the Mouth will also be corrected to reference the confluence of Hazle Creek and Beaver Creek. This action will not affect the current stream use designations for these waters.

Additionally, Koons Creek and Brushy Hollow Run are listed as tributaries to Black Creek in the Department's stream directory. To clarify their proper location within Drainage List D, the

Board proposes to add Koons Creek before the Quakake Creek entries and add Brushy Hollow Run after Quakake since these two streams are named tributaries within this section. This action will not affect the current stream use designations.

### **Section 93.9f. Drainage List F.**

The Board proposes to correct an error that was made during the most recent Triennial Review of Water Quality Standards (TR04) concerning Drainage List F. Before TR04, which was published as Proposed Rulemaking at 33 PaB 5192 on October 18, 2003 and Final Rulemaking at 35 PaB 1197 on February 12, 2005, there were two entries for the unnamed tributaries (UNTs) to the Schuylkill River from the Berks-Chester-Montgomery County border to Valley Creek. One entry designated all of the UNTs to the Schuylkill River on the Chester County shore as HQ-TSF (except those in Spring City and Phoenixville). The other entry designated all of the UNTs to the Schuylkill River on the Montgomery County shore as WWF. The UNTs to the Schuylkill River in Spring City and Phoenixville were not listed in Chapter 93. The result of the last triennial review was to incorrectly list all of the UNTs to the Schuylkill River (on both the Chester and Montgomery County shores) from the Berks-Chester-Montgomery County border to Valley Creek (except those in Spring City and Phoenixville) as HQ-TSF in § 93.9F. The UNTs to the Schuylkill River in Spring City and Phoenixville were designated WWF. Further corrective action is necessary because all of the UNTs to the Schuylkill River on the Montgomery County shore should not be HQ-TSF, but rather should be WWF. Also, the entry for reference to UNTs from 'Valley Creek to Tide' should be changed so that it reads from 'Valley Creek to Head of Tide'. The county listed for this entry should not be Chester-Montgomery since the 'Head of Tide' for the Schuylkill River is actually located in Philadelphia County (Fairmont Dam).

It was brought to the Department's attention that Mellshamic Creek is listed in the Department's stream directory as an unnamed tributary (UNT) to the Schuylkill River. After extensive review the Department has determined that Mellshamic Creek is a local name given to one of two unnamed tributaries (UNTs) in this reach of the Schuylkill River. To clarify this, the Board proposes to remove the stream entry containing the local name Mellshamic Creek from this drainage list. This action will not affect the current stream use designations since this stream will be covered by the unnamed tributaries entry.

Additionally, the Department recently received information that suggests Trout Creek and Monocacy Creek may be improperly designated in Section 93.9f. Both streams are currently designated warm water fishes (WWF) and they will both undergo separate reviews for redesignation to cold water fishes (CWF). The Department will conduct its review of available information pertaining to these two streams during the proposed phase of this rulemaking. The public is encouraged to make available to the Department any technical data concerning the water quality, instream habitat or biological condition of either of these two streams. After the Department's review has been completed, the appropriate designated use for Monocacy Creek and Trout Creek will be included in the final rulemaking. The Department will protect any more stringent existing use, as indicated on the Department's Existing Use List which is posted on the Department's website and maintained by the Bureau of Water Standards and Facility Regulation.

**Section 93.9i. Drainage List I.**

It was determined that the name of North Fork Mehoopany Creek is incorrect in the drainage list. After thorough review of the PA Gazetteer of Streams and the PA Stream Directory it was determined that North Branch Mehoopany Creek is the correct name. The Board proposes to correct the name of North Fork Mehoopany Creek, to North Branch Mehoopany Creek.

Nine Partners Creek is a tributary to the Tunkhannock Creek. Nine Partners Creek was historically known as Leslie Creek and was referenced in the *Water Resources Bulletin*, Gazetteer of Streams (June 1984) as being the same stream as Leslie Creek. To clarify the stream name, the Board proposes to change the name of Leslie Creek to Nine Partners Creek.

These actions will not affect the current stream use designations for these waters.

**Section 93.9l. Drainage List L.**

The Board proposes to clarify that the origin of Rauchtown Creek is the confluence of Rocky Run and Gottshall Run. This action will not affect the current stream use designations.

**Section 93.9m. Drainage List M.**

Currently, Buddys Run is an incorrect name for a tributary to Shamokin Creek. This stream name should be Bennys Run. This action will not affect the current stream use designation for this tributary.

**Section 93.9q. Drainage List Q.**

Shirley Run is a tributary to Thompson Creek in the Ohio River basin (Drainage List Q). The entry, which designates Shirley Run basin as HQ-CWF, is missing from Chapter 93.9 Drainage List Q. Shirley Run basin was redesignated from CWF to HQ-CWF in the Tincum Creek et. al, final rulemaking (published in the Pennsylvania Bulletin on October 11, 1997). As a result of the RBI (Regulatory Basics Initiative) Triennial Review final rulemaking, which was published in the Pennsylvania Bulletin on November 18, 2000, the designation for Shirley Run was inadvertently and erroneously reverted back to CWF as it was prior to the Tincum Creek, et. al rulemaking. This proposed amendment to Chapter 93 is intended to restore the HQ-CWF designation for Shirley Run, which was originally established by the Tincum Creek, et. al., rulemaking package of 1997.

To clarify that the mouth of West Branch Caldwell Creek lies in Warren County, the Board will change the county entry in section 93.9q from Crawford County to Warren County. This action will not affect the current stream use designations.

**Section 93.9v. Drainage List V.**

The Board proposes to clarify the county listings for two of the entries that comprise the Tenmile Creek basin. The downstream boundary for the zone that describes the headwaters of Tenmile

Creek (Basin, Source to South Fork Tenmile Creek) lies along the boundary between Greene and Washington Counties and therefore both Greene and Washington Counties should be listed with this entry in section 93.9v. Similarly, Greene, Washington and Fayette Counties should be listed with the entry for the downstream portion of Tenmile Creek (Basin, South Fork Tenmile Creek to Mouth) since the mouth of Tenmile Creek lies at the border of these three counties. These corrections will not affect the current stream use designations.

### **Section 93.9x. Drainage List X.**

The Board proposes to add reference to both the PA Department of Health's regulations and the Federal regulation at 40 CFR 131.41, which sets forth new bacteria criteria within the Commonwealth for coastal recreation waters on Lake Erie.

### **Exceptions for Fishable/Swimmable Waters**

Part of the triennial review requires that states reexamine water body segments that do not meet the fishable or swimmable uses specified in Section 101(a)(2) of the Federal Clean Water Act. The Department evaluated the two Pennsylvania water bodies where the uses are not currently met: (1) the Harbor Basin and entrance channel to Outer Erie Harbor/Presque Isle Bay (Drainage List X, § 93.9x) and (2) several zones in the Delaware Estuary (Drainage Lists E and G, §§ 93.9e and 93.9g).

The swimmable use designation was deleted from the Harbor Basin and entrance channel demarcated by U.S. Coast Guard buoys and channel markers on Outer Erie Harbor/ Presque Isle Bay because pleasure boating and commercial shipping traffic pose a serious safety hazard in this area. This decision was further supported by a Use Attainability (UAA) study conducted by the Department in 1985. Because the same conditions and hazards exist today, no change to the designated use for Outer Erie Harbor/Presque Isle Bay is proposed.

In April 1989 the Department cooperated with the Delaware River Basin Commission (DRBC), EPA and other DRBC signatory states on a comprehensive UAA study in the lower Delaware River and Delaware Estuary. This study resulted in appropriate recommendations relating to the swimmable use, which DRBC included in water use classifications and water quality criteria for portions of the tidal Delaware River in May 1991. The appropriate DRBC standards were referenced in Sections 93.9e and 93.9g (Drainage Lists E and G) in 1994. The primary water contact use remains excluded from the designated uses for river miles 108.4 to 81.8 because of continuing significant impacts from combined sewer overflows, and hazards associated with commercial shipping and navigation.

### **F. Benefits, Costs and Compliance**

1. Benefits - Overall, the Commonwealth, its citizens and natural resources will benefit from these recommended changes because they provide the appropriate level of protection in order to preserve the integrity of existing and designated uses of surface waters in this Commonwealth. Protecting water quality has economic values provided to present and future generations in the form of clean water, recreational opportunities, and aquatic life protection. It is important to

realize all benefits and to ensure that activities that depend on surface water or that may affect its chemical, biological and physical integrity may continue in a manner that is environmentally, socially and economically sound. Maintenance of water quality ensures its future availability for all uses.

2. Compliance Costs - The proposed amendments to Chapter 93 may impose additional compliance costs on the regulated community. These regulatory changes are necessary to improve total pollution control. The expenditures necessary to meet new compliance requirements may exceed that which is required under existing regulations.

Persons conducting or proposing activities or projects must comply with the regulatory requirements relating to designated and existing uses. Persons expanding a discharge or adding a new discharge point to a stream could be adversely affected if they need to provide a higher level of treatment to meet the more stringent criteria for selected parameters or there are changes in designated and existing uses of the stream. These increased costs may take the form of higher engineering, construction or operating cost for wastewater treatment facilities. Treatment costs are site-specific and depend upon the size of the discharge in relation to the size of the stream and many other factors. Therefore, it is not possible to precisely predict the actual change in costs. Economic impacts would primarily involve the potential for higher treatment costs for new or expanded discharges to streams that are redesignated. The initial costs from technologically improved treatments may be offset over time by potential savings from and increased value of improved water quality through these improved and possibly more effective or efficient treatments.

3. *Compliance Assistance Plan*—The proposed revisions have been developed as part of an established program that has been implemented by the Department since the early 1980s. The revisions are consistent with and based on existing Department regulations.

The proposed amendments will be implemented, in part, through the National Pollutant Discharge Elimination System (NPDES) permitting program. No additional compliance actions are anticipated. Staff is available to assist regulated entities in complying with the regulatory requirements if questions arise.

4. *Paperwork Requirements*—The proposed revisions should have no significant paperwork impact on the Commonwealth, its political subdivisions, or the private sector.

## **G. Pollution Prevention**

Water quality standards are a major pollution prevention tool because they protect water quality and designated and existing uses. The proposed amendments will be implemented through the Department's permit and approval actions. For example, the National Pollutant Discharge Elimination System (NPDES) bases effluent limitations on the designated use of the stream and the water quality criteria necessary to achieve designated and existing uses.

## **H. Sunset Review**

The regulations 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 December 21, 2007, the Department submitted a copy of the proposed rulemaking and a copy of a Regulatory Analysis Form to the Independent Regulatory Review Commission (IRRC) and to the Chairpersons of the Senate and House Environmental Resources and Energy Committees. 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 rulemaking 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 Regulatory Review Act specifies detailed procedures for review, prior to final publication of the rulemaking, by the Department, the General Assembly and the Governor of comments, recommendations or objections raised.

## **J. Public Comments**

***Written Comments*** - Interested persons are invited to submit comments, suggestions or objections regarding the proposed rulemaking to the Environmental Quality Board, P.O. Box 8477, Harrisburg, PA 17105-8477 (express mail: Rachel Carson State Office Building, 16<sup>th</sup> Floor, 400 Market Street, Harrisburg, PA 17105-8477). Comments submitted by facsimile will not be accepted. The Board must receive comments by February 26, 2008. 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 February 26, 2008. 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 proposed amendments will be considered.

***Electronic Comments*** - Comments may be submitted electronically to the Board at [RegComments@state.pa.us](mailto:RegComments@state.pa.us) and must be received by the Board by February 26, 2008. A subject heading of the proposal and a return name and address must be included in each transmission. If an acknowledgement of electronic comments is not received by the sender within two working days, the comments should be retransmitted to the e-mail address provided above to ensure receipt.

## **K. Public Meeting and Public Hearing**

The Department will hold two public meetings to explain the proposed rulemaking and to respond to questions from meeting participants. The meetings will be held at 2:00 p.m. and at 6:00 p.m. as follows:

February 14, 2008

Department of Environmental Protection  
Southcentral Regional Office  
Susquehanna Room A  
909 Elmerton Avenue  
Harrisburg, PA 17110

The Board will hold two public hearings for the purpose of accepting comments on this proposed rulemaking. The hearings will be held at 4:00 p.m. and at 8:00 p.m. as follows:

February 14, 2008

Department of Environmental Protection  
Southcentral Regional Office  
Susquehanna Room A  
909 Elmerton Avenue  
Harrisburg, PA 17110

Persons wishing to present testimony at the hearing are requested to contact the Environmental Quality Board, P.O. Box 8477, Harrisburg, PA 17105-8477, (717) 787-4526, at least one week in advance of the hearing to reserve a time to present testimony. Oral testimony is limited to ten minutes for each witness. Witnesses are requested to submit three written copies of oral testimony to the testimony on their behalf at each hearing. Organizations are limited to designating one witness to present testimony on their behalf at the hearing.

Persons in need of accommodations as provided for in the Americans With Disabilities Act of 1990 should contact the Board at (717) 787-4526 or through the Pennsylvania AT&T Relay Services at 1-800-654-5984 (TDD) to discuss how the Department may accommodate their needs.

KATHLEEN A. MCGINTY  
Chairperson  
Environmental Quality Board

ANNEX A

**TITLE 25. ENVIRONMENTAL PROTECTION  
PART I. DEPARTMENT OF ENVIRONMENTAL PROTECTION  
Subpart C. PROTECTION OF NATURAL RESOURCES  
ARTICLE II. WATER RESOURCES**

**CHAPTER 93. WATER QUALITY STANDARDS**

**GENERAL PROVISIONS**

- Sec.  
93.1. Definitions.  
93.2. Scope.  
93.3. Protected water uses.  
93.4. Statewide water uses.

**ANTIDegradation REQUIREMENTS**

- 93.4a. Antidegradation.  
93.4b. Qualifying as High Quality or Exceptional Value Waters.  
93.4c. Implementation of antidegradation requirements.  
93.4d. Processing of petitions, evaluations and assessments to change a designated use.  
93.5. [Reserved].

**WATER QUALITY CRITERIA**

- 93.6. General water quality criteria.  
93.7. Specific water quality criteria.  
[93.8. **Development of site-specific water quality criteria for the protection of aquatic life.**]  
93.8[a]. Water Quality Criteria for Toxic substances.  
93.8a. Metals criteria.  
93.8b. Human health and aquatic life criteria for toxic substances  
93.8c. Development of site-specific water quality criteria.  
93.8d. Special provisions for the Great Lakes System

\* \* \* \* \*

**§ 93.1. Definitions.**

The following words and terms, when used in this chapter, have the following meanings, unless the context clearly indicates otherwise:

\* \* \* \* \*

*Clean Water Act*—The Federal Water Pollution Control Act (33 U.S.C.A. §§ 1251-1376).

**Conventional treatment**—conventional filtration in a treatment process that uses separate, sequential units for coagulation/flocculation, clarification, and granular media filtration to produce finished water for drinking.

\* \* \* \* \*

*Thirty-day average*—The arithmetic average of the samples collected during a consecutive 30-day period.

*Toxic substance*—A chemical or compound in sufficient quantity or concentration which is, or may become, harmful to human, animal or plant life. The term includes, but is not limited to, priority pollutants and those substances, which are identified in **Tables 5 and 6 of this Chapter. Additional toxic substances are also described in** Chapter 16 **Appendix A, Table 1** (relating to **site-specific** water quality **criteria for toxic substances** [ management strategy—statement of policy ] ).

**Water Effect Ratio (WER)** — a factor that expresses the difference between the measures of the toxicity of a substance in laboratory water and the toxicity in site water. The WER provides a mechanism to account for that portion of a metal that is toxic under certain physical, chemical or biological conditions.

*Water quality criteria*—Numeric concentrations, levels or surface water conditions that need to be maintained or attained to protect existing and designated uses.

\* \* \* \* \*

### § 93.3. Protected water uses.

Water uses which shall be protected, and upon which the development of water quality criteria shall be based, are set forth, accompanied by their identifying symbols, in Table 1:

TABLE 1

*Symbol*    *Protected Use*

**Aquatic Life**

\* \* \* \* \*

MF            *Migratory Fishes*—Passage, maintenance and propagation of anadromous and catadromous fishes and other fishes which [**ascend**] **move to or from** flowing waters to complete their life cycle **in other waters**.

\* \* \* \* \*

**Water Supply**

\* \* \* \* \*

IRS            *Irrigation*—Used to supplement precipitation for [**growing crops**] **crop**

**production, maintenance of golf courses and athletic fields, and other commercial horticultural activities.**

\*\*\*\*\*

**§ 93.7. Specific water quality criteria.**

(a) Table 3 displays specific water quality criteria and associated critical uses. The criteria associated with the Statewide water uses listed in § 93.4, Table 2 apply to all surface waters, unless a specific exception is indicated in §§ 93.9a—93.9z. Other specific water quality criteria apply to surface waters as specified in §§ 93.9a—93.9z. All applicable criteria shall be applied in accordance with this chapter, Chapter 96 (relating to water quality standards implementation) and other applicable State and Federal laws and regulations.

**TABLE 3**

<i>Parameter</i>	<i>Symbol</i>	<i>Criteria</i>	<i>Critical Use*</i>
		*****	
Ammonia Nitrogen	Am	The maximum total ammonia nitrogen concentration ( <b>in mg/L</b> ) at all times shall be the numerical value given by: un-ionized ammonia nitrogen (NH <sub>3</sub> -N) x (log <sup>-1</sup> [pK <sub>T</sub> -pH] + 1), where:	[1] <b>CWF,</b> <b>WWF,</b> <b>TSE,</b> <b>MF</b>
		*****	

\*Critical [u]Use: The most sensitive designated or existing use the criteria are designed to protect. **Other intervening, more sensitive uses may apply at a given location on the waterbody.**

(b) Table 4 contains specific water quality criteria that apply to the water uses to be protected. When the symbols listed in Table 4 appear in the Water Uses Protected column in §§ 93.9a—93.9z, they have the meaning listed in the second column of Table 4. Exceptions to these standardized groupings will be indicated on a stream-by-stream or segment-by-segment basis by the words “Add” or “Delete” followed by the appropriate symbols described elsewhere in this chapter.

\*\*\*\*\*

(d) If the Department determines that natural quality of a surface water segment is of lower quality than the applicable aquatic life criteria in Table 3, **5 or Chapter 16, Appendix A Table 1**, the natural quality shall constitute the aquatic life criteria for that segment. All draft natural quality determinations shall be published in the *Pennsylvania Bulletin* and be subject to a minimum 30-day comment period. The Department will maintain a publicly available list of surface waters and parameters where this subsection applies, and shall, from time to time, submit appropriate amendments to §§ 93.9a—93.9z.

\* \* \* \* \*

**[§ 93.8. Development of site-specific water quality criteria.**

**(a) The Department will consider a request for site-specific criteria for protection of aquatic life, human health or wildlife when a person demonstrates that there exist site-specific biological or chemical conditions of receiving waters which differ from conditions upon which the water quality criteria were based. Site-specific criteria may be developed for use only in place of current Statewide or regional (such as the Great Lakes systems) criteria. The request for site-specific criteria shall include the results of scientific studies for the purpose of:**

**(1) Defining the areal boundaries for application of the site-specific criteria which will include the potentially affected wastewater dischargers identified by the Department, through various means, including, but not limited to, the total maximum daily load (TMDL) process described in Chapter 96 (relating to water quality standards implementation) or biological assessments.**

**(2) Developing site-specific criteria which protect its existing use and designated use.**

**(b) Scientific studies shall be performed in accordance with the procedures and guidance in the Water Quality Standards Handbook (EPA 1994), as amended and updated, guidance provided by the Department or other scientifically defensible methodologies approved by the Department.**

**(c) Prior to conducting studies specified in subsections (a) and (b), a proposed plan of study shall be submitted to and approved by the Department.**

**(d) Signed copies of all reports including toxicity test data shall be submitted to the Department within 30 days of completion of the tests.**

**(e) If as a result of its review of the report submitted, the Department determines that a site-specific criterion is appropriate, the Department will, for site-specific changes to criteria in § 93.7 (relating to specific water quality criteria), prepare a recommendation to the EQB in the form of proposed rulemaking, incorporating that criterion for the water body segment. The site-specific changes to the criteria will become effective for the water body segment following adoption by the EQB as final rulemaking and publication in the *Pennsylvania Bulletin*.**

**(f) A person challenging a Department action under this section shall have the burden of proof to demonstrate that the Department's action does not meet the requirements of this section.]**

**§ 93.8[a]. Water Quality Criteria for Toxic substances.**

(a) The waters of this Commonwealth may not contain toxic substances attributable to point or nonpoint source waste discharges in concentrations or amounts that are inimical to the water uses to be protected.

(b) Water quality criteria for toxic substances shall be established **as described** under Chapter 16 (relating to water quality toxics management strategy—statement of policy) [wherein]. **The Department will develop water quality criteria for toxics not listed in Chapter 93, Table 5 in accordance with § 93.8c and Chapter 16. Appendix A, Table 1 in Chapter 16 lists site-specific human health and aquatic life criteria that have been recently developed or adopted by the Department based on approved methodologies and the best scientific information currently available.** [t]The [criteria and] approved EPA analytical procedures and detection limits for these substances will also be listed **in Chapter 16 (relating to water quality toxics management strategy—statement of policy)**. Chapter 16, along with changes made to it, is hereby specifically incorporated by reference.

(c) Water quality criteria for toxic substances which exhibit threshold effects will be established by application of margins of safety to the results of toxicity testing to prevent the occurrence of a threshold effect.

\* \* \* \* \*

(h) **[At intervals not exceeding 1 year, the]The Department will periodically, but at least once every 3 years, review, revise as necessary, and publish [a] new or revised water quality criteria for toxic substances, and revised procedures for criteria development in the Pennsylvania Bulletin.**

\* \* \* \* \*

(j) The requirements for discharges to and antidegradation requirements for the Great Lakes System are as follows:

\* \* \* \* \*

(3) Statewide antidegradation requirements in this [c]Chapter and Chapter [ **95 (relating to water quality standards; and wastewater treatment requirements)** ] **96 (relating to water quality standards implementation)** and in the Federal regulation in 40 CFR 131.32(a) (relating to Pennsylvania) as applicable, apply to all surface waters of the Great Lakes System.

\* \* \* \* \*

**§ 93.8a. Metals criteria.**

**Dissolved criteria are footnoted in Table 5, and have been developed by applying the most current EPA conversion factors to the total recoverable criteria. The EPA factors are listed in the following Conversion Factors Table.**

**Conversion Factors Table**

	<u>Chronic</u>	<u>Acute</u>	<u>Source</u>
<u>Arsenic</u>	<u>1.000 (As3+)</u>	<u>1.000 (As3+)</u>	<u>1,2</u>
<u>Cadmium</u>	<u>1.101672- (ln[H]x0.041838)</u>	<u>1.136672- (ln[H]x0.041838)</u>	<u>2</u>
<u>Chromium VI</u>	<u>0.962</u>	<u>0.982</u>	<u>1,2</u>
<u>Copper</u>	<u>0.960</u>	<u>0.960</u>	<u>1,2</u>
<u>Lead*</u>		<u>1.46203-(ln[H]x0.145712)</u>	
<u>Mercury</u>	<u>0.85</u>	<u>0.85</u>	<u>1,2</u>
<u>Nickel</u>	<u>0.997</u>	<u>0.998</u>	<u>1,2</u>
<u>Selenium</u>	<u>0.922</u>	<u>0.922</u>	<u>1</u>
<u>Silver</u>	<u>NA</u>	<u>0.85</u>	<u>2</u>
<u>Zinc</u>	<u>0.986</u>	<u>0.978</u>	<u>1,2</u>

\*Conversion factor applies to both acute and chronic criteria.

Source 1—Final Water Quality Guidance for the Great Lakes System (60 FR 15366, March 23, 1995)

Source 2—Establishment of Numeric Criteria for Priority Pollutants; Revision of Metals Criteria-Interim Final Rule (60 FR 22229, May 4, 1995)

**§ 93.8b. Human health and aquatic life criteria for toxic substances.**

**(a) Table 5 and Chapter 16, Appendix A Table 1 list the aquatic life and human health criteria for toxic substances which the Department uses in development of effluent limitations in NPDES Permits and for other purposes. The human health criteria, which include probable modes of exposure (such as, but not limited to ingestion from drinking water and fish consumption, inhalation, and dermal absorption), are further defined as to the specific effect (that is, cancer or threshold health effects). For those aquatic life criteria which are hardness related and specified as a formula, such as several of the heavy metals, the Department will use the specific hardness of the receiving stream after mixing with the waste discharge in calculating criteria on a case-by-case basis. The priority pollutant numbers (PP NO) used by the EPA to identify priority pollutants are included in Table 5 for reference purposes. The toxics without a PP NO are non-priority pollutants and state derived criteria.**

**(b) Some of these criteria may be superseded for the Delaware Estuary, Ohio River Basin, Lake Erie Basin, and Genesee River Basin under interstate and international compact agreements with the Delaware River Basin Commission, Ohio River Valley Sanitation Commission and International Joint Commission, respectively. The criteria in Table 5 do not apply to the Great Lakes System. Water quality criteria for the Great Lakes System are contained in § 93.8d and Table 6 (relating to special provisions for the Great Lakes System). Criteria may be developed for the Great Lakes System for substances other than those listed in § 93.8d under the methodologies in §16.61 (relating to water quality criteria for the Great Lakes system).**

**TABLE 5**

**WATER QUALITY CRITERIA FOR TOXIC SUBSTANCES**

<u>PP</u> <u>NO</u>	<u>Chemical Name</u>	<u>CAS</u> <u>Number</u>	<u>Fish and Aquatic Life Criteria</u>		<u>Human</u> <u>Health</u> <u>Criteria</u> <u>(ug/L)</u>	
			<u>Criteria Continuous</u> <u>Concentrations (ug/L)</u>	<u>Criteria Maximum</u> <u>Concentration (ug/L)</u>		
1M	ANTIMONY	07440360	220	1100	5.6	H
2M	ARSENIC	07440382	150 (As3+)	340 (As3+)	10	H
3M	BERYLLIUM	07440417	N/A	N/A	N/A	-
4M	CADMIUM	07440439	*{1.101672-(ln[H]x0.041838)}x Exp(0.7409xln[H]-4.719) (ex: @H=100, CCC=0.25)	*{1.136672-(ln[H]x0.041838)}x Exp(1.0166xln[H]-3.924) (ex: @H=100, CMC=2.0)	N/A	-
5M	CHROMIUM III	16065831	*0.860xExp(0.819xln[H]+0.6848) (ex: @H=100, CCC=74)	*0.316Exp(0.819xln[H]+3.7256) (ex: @H=100, CMC=570)	N/A	-
5M	CHROMIUM VI	18540299	*10	*16	N/A	-
6M	COPPER	07440508	*0.960xExp(0.8545xln[H]-1.702) (ex: @H=100, CCC=9.0)	*0.960xExp(0.9422xln[H]-1.700) (ex: @H=100, CMC=13)	N/A	-
7M	LEAD	07439921	*{1.46203-(ln[H]x0.145712)}x Exp(1.273xln[H]-4.705) (ex: @H=100, CCC=2.5)	*{1.46203-(ln[H]x0.145712)}x Exp(1.273xln[H]-1.460) (ex: @H=100, CMC=65)	N/A	-
8M	MERCURY	07439976	*0.77 (Hg2+)	*1.4 (Hg2+)	0.05	H
9M	NICKEL	07440020	*0.997xExp(0.846xln[H]+0.0584) (ex: @H=100, CCC=52)	*0.998xExp(0.846xln[H]+2.255) (ex: @H=100, CMC=470)	610	H
10M	SELENIUM	07782492	*4.6	N/A	N/A	-
11M	SILVER	07440224	N/A	*0.850xExp(1.72xln[H]-6.590) (ex: @H=100, CMC=3.2)	N/A	-
12M	THALLIUM	07440280	13	65	.24	H
13M	ZINC	07440666	*0.986xExp(0.8473xln[H]+0.884) (ex: @H=100, CCC=120)	*0.978xExp(0.8473xln[H]+0.884) (ex: @H=100, CMC=120)	N/A	-
14M	CYANIDE, FREE	00057125	5.2	22	140	H
1A	2-CHLOROPHENOL	00095578	110	560	81	H
2A	2,4-DICHLORO- PHENOL	00120832	340	1700	77	H
3A	2,4-DIMETHYL- PHENOL	00105679	130	660	380	H
4A	4,6-DINITRO-o- CRESOL	00534521	16	80	13	H
5A	2,4-DINITRO- PHENOL	00051285	130	660	69	H
6A	2-NITROPHENOL	00088755	1600	8000	N/A	-

7A	4-NITROPHENOL	00100027	470	2300	N/A	-
8A	P-CHLORO-m-CRESOL	00059507	30	160	N/A	-
9A	PENTACHLORO-PHENOL	00087865	Exp(1.005x[pH]-5.134) @pH= 6.5 7.8 9.0 Crit= 4.1 15 50	Exp(1.005x[pH]-4.869) @pH= 6.5 7.8 9.0 Crit= 5.3 19 65	0.27	CRL
10A	PHENOL	00108952	N/A	N/A	21000	H
11A	2,4,6-TRICHLORO-PHENOL	00088062	91	460	1.4	CRL
1V	ACROLEIN	00107028	1	5	190	H
2V	ACRYLONITRILE	00107131	130	650	0.051	CRL
3V	BENZENE	00071432	130	640	1.2	CRL
5V	BROMOFORM	00075252	370	1800	4.3	CRL
6V	CARBON TETRACHLORIDE	00056235	560	2800	0.23	CRL
7V	CHLORO-BENZENE	00108907	240	1200	130	H
8V	CHLORODIBROMO-METHANE	00124481	N/A	N/A	0.40	CRL
9V	CHLOROETHANE	00075003	N/A	N/A	N/A	-
10V	2-CHLOROETHYL VINYL ETHER	00110758	3500	18,000	N/A	-
11V	CHLOROFORM	00067663	390	1900	5.7	CRL
12V	DICHLOROBROMO-METHANE	00075274	N/A	N/A	0.55	CRL
14V	1,1-DICHLOROETHANE	00075343	N/A	N/A	N/A	-
15V	1,2-DICHLOROETHANE	00107062	3100	15,000	0.38	CRL
16V	1,1-DICHLOROETHYLENE	00075354	1500	7500	33.0	H
17V	1,2-DICHLOROPROPANE	00078875	2200	11,000	N/A	-
18V	1,3-DICHLOROPROPYLENE	00542756	61	310	.034	CRL
19V	ETHYLBENZENE	00100414	580	2900	530	H
20V	METHYL BROMIDE	00074839	110	550	47	H
21V	METHYL CHLORIDE	0074873	5500	28,000	N/A	-
22V	METHYLENE CHLORIDE	00075092	2400	12,000	4.6	CRL
23V	1,1,2,2-TETRACHLOROETHANE	00079345	210	1000	0.17	CRL
24V	TETRACHLOROETHYLENE	00127184	140	700	0.69	CRL
25V	TOLUENE	00108883	330	1700	1300	H
26V	1,2-trans-DICHLORO-	00156605	1400	6800	140	H

<u>ETHYLENE</u>							
27V	<u>1,1,1-TRICHLORO-ETHANE</u>	<u>00071556</u>	<u>610</u>		<u>3000</u>	<u>N/A</u>	
28V	<u>1,1,2-TRICHLORO-ETHANE</u>	<u>00079005</u>	<u>680</u>		<u>3400</u>	<u>0.59</u>	<u>CRL</u>
29V	<u>TRICHLORO-ETHYLENE</u>	<u>00079016</u>	<u>450</u>		<u>2300</u>	<u>2.5</u>	<u>CRL</u>
31V	<u>VINYL CHLORIDE</u>	<u>00075014</u>	<u>N/A</u>		<u>N/A</u>	<u>.025</u>	<u>CRL</u>
1B	<u>ACENAPHTHENE</u>	<u>00083329</u>	<u>17</u>		<u>83</u>	<u>670</u>	<u>H</u>
2B	<u>ACENAPHTHYLENE</u>	<u>00208968</u>	<u>N/A</u>		<u>N/A</u>	<u>N/A</u>	<u>-</u>
3B	<u>ANTHRACENE</u>	<u>00120127</u>	<u>N/A</u>		<u>N/A</u>	<u>8300</u>	<u>H</u>
4B	<u>BENZIDINE</u>	<u>00092875</u>	<u>59</u>		<u>300</u>	<u>0.000086</u>	<u>CRL</u>
5B	<u>BENZO(a)-ANTHRACENE</u>	<u>00056553</u>	<u>0.1</u>		<u>0.5</u>	<u>0.0038</u>	<u>CRL</u>
6B	<u>BENZO(a)PYRENE</u>	<u>00050328</u>	<u>N/A</u>		<u>N/A</u>	<u>0.0038</u>	<u>CRL</u>
7B	<u>3,4-BENZO-FLUORANTHENE</u>	<u>00205992</u>	<u>N/A</u>		<u>N/A</u>	<u>0.0038</u>	<u>CRL</u>
8B	<u>BENZO(ghi)-PERYLENE</u>	<u>00191242</u>	<u>N/A</u>		<u>N/A</u>	<u>N/A</u>	<u>-</u>
9B	<u>BENZO(k)-FLUORANTHENE</u>	<u>00207089</u>	<u>N/A</u>		<u>N/A</u>	<u>0.0038</u>	<u>CRL</u>
10B	<u>BIS(2-CHLORO-ETHOXY)METHANE</u>	<u>00111911</u>	<u>N/A</u>		<u>N/A</u>	<u>N/A</u>	<u>-</u>
11B	<u>BIS(2-CHLORO-ETHYL)ETHER</u>	<u>00111444</u>	<u>6000</u>		<u>30,000</u>	<u>0.030</u>	<u>CRL</u>
12B	<u>BIS(2-CHLORO-ISOPROPYL)ETHER</u>	<u>[39638329]</u> <u>108-60-1</u>	<u>N/A</u>		<u>N/A</u>	<u>1400</u>	<u>H</u>
13B	<u>BIS(2-ETHYL-HEXYL)PHTHALATE</u>	<u>00117817</u>	<u>910</u>		<u>4500</u>	<u>1.2</u>	<u>CRL</u>
14B	<u>4-BROMOPHENYL PHENYL ETHER</u>	<u>00101553</u>	<u>54</u>		<u>270</u>	<u>N/A</u>	<u>-</u>
15B	<u>BUTYLBENZYL PHTHALATE</u>	<u>00085687</u>	<u>35</u>		<u>140</u>	<u>150</u>	<u>H</u>
16B	<u>2-CHLORO-NAPHTHALENE</u>	<u>00091587</u>	<u>N/A</u>		<u>N/A</u>	<u>1000</u>	<u>H</u>
17B	<u>4-CHLORO-PHENYL PHENYL ETHER</u>	<u>07005723</u>	<u>N/A</u>		<u>N/A</u>	<u>N/A</u>	<u>-</u>
18B	<u>CHRYSENE</u>	<u>00218019</u>	<u>N/A</u>		<u>N/A</u>	<u>0.0038</u>	<u>CRL</u>
19B	<u>DIBENZO(a,h)-ANTHRACENE</u>	<u>00053703</u>	<u>N/A</u>		<u>N/A</u>	<u>0.0038</u>	<u>CRL</u>
20B	<u>1,2-DICHLORO-BENZENE</u>	<u>00095501</u>	<u>160</u>		<u>820</u>	<u>420 for dichloro-benzene</u>	<u>H</u>
21B	<u>1,3-DICHLORO-BENZENE</u>	<u>00541731</u>	<u>69</u>		<u>350</u>	<u>See 20B</u>	<u>H</u>
22B	<u>1,4-DICHLORO-BENZENE</u>	<u>00106467</u>	<u>150</u>		<u>730</u>	<u>See 20B</u>	<u>H</u>
23B	<u>3,3-DICHLORO-</u>	<u>00091941</u>	<u>N/A</u>		<u>N/A</u>	<u>.021</u>	<u>CRL</u>

<u>BENZIDINE</u>						
24B	<u>DIETHYL PHTHALATE</u>	<u>00084662</u>	<u>800</u>	<u>4000</u>	<u>17000</u>	<u>H</u>
25B	<u>DIMETHYL PHTHALATE</u>	<u>00131113</u>	<u>500</u>	<u>2500</u>	<u>270000</u>	<u>H</u>
26B	<u>DI-N-BUTYL PHTHALATE</u>	<u>00084742</u>	<u>21</u>	<u>110</u>	<u>2000</u>	<u>H</u>
27B	<u>2,4-DINITRO-TOLUENE</u>	<u>00121142</u>	<u>320</u>	<u>1600</u>	<u>0.05 for dinitro-toluene</u>	<u>CRL</u>
28B	<u>2,6-DINITRO-TOLUENE</u>	<u>00606202</u>	<u>200</u>	<u>990</u>	<u>See 27B</u>	<u>CRL</u>
29B	<u>DI-N-OCTYL PHTHALATE</u>	<u>00117840</u>	<u>N/A</u>	<u>N/A</u>	<u>N/A</u>	<u>-</u>
30B	<u>1,2-DIPHENYL-HYDRAZINE</u>	<u>00122667</u>	<u>3</u>	<u>15</u>	<u>.036</u>	<u>CRL</u>
31B	<u>FLUORANTHENE</u>	<u>00206440</u>	<u>40</u>	<u>200</u>	<u>130</u>	<u>H</u>
32B	<u>FLUORENE</u>	<u>00086737</u>	<u>N/A</u>	<u>N/A</u>	<u>1100</u>	<u>H</u>
33B	<u>HEXACHLORO-BENZENE</u>	<u>00118741</u>	<u>N/A</u>	<u>N/A</u>	<u>0.00028</u>	<u>CRL</u>
34B	<u>HEXACHLORO-BUTADIENE</u>	<u>00087683</u>	<u>2</u>	<u>10</u>	<u>0.44</u>	<u>CRL</u>
35B	<u>HEXACHLORO-CYCLOPENTADIENE</u>	<u>00077474</u>	<u>1</u>	<u>5</u>	<u>40</u>	<u>H</u>
36B	<u>HEXACHLORO-ETHANE</u>	<u>00067721</u>	<u>12</u>	<u>60</u>	<u>1.4</u>	<u>CRL</u>
37B	<u>INDENO(1,2,3-cd)PYRENE</u>	<u>00193395</u>	<u>N/A</u>	<u>N/A</u>	<u>.0038</u>	<u>CRL</u>
38B	<u>ISOPHORONE</u>	<u>00078591</u>	<u>2100</u>	<u>10,000</u>	<u>35</u>	<u>H</u>
39B	<u>NAPHTHALENE</u>	<u>00091203</u>	<u>43</u>	<u>140</u>	<u>N/A</u>	<u>-</u>
40B	<u>NITROBENZENE</u>	<u>00098953</u>	<u>810</u>	<u>4000</u>	<u>17</u>	<u>H</u>
41B	<u>N-NITROSO-DIMETHYLAMINE</u>	<u>00062759</u>	<u>3400</u>	<u>17,000</u>	<u>0.00069</u>	<u>CRL</u>
42B	<u>N-NITROSODI-N-PROPYLAMINE</u>	<u>00621647</u>	<u>N/A</u>	<u>N/A</u>	<u>0.005</u>	<u>CRL</u>
43B	<u>N-NITROSO-DIPHENYLAMINE</u>	<u>00086306</u>	<u>59</u>	<u>300</u>	<u>3.3</u>	<u>CRL</u>
44B	<u>PHENANTHRENE</u>	<u>00085018</u>	<u>1</u>	<u>5</u>	<u>N/A</u>	<u>-</u>
45B	<u>PYRENE</u>	<u>00129000</u>	<u>N/A</u>	<u>N/A</u>	<u>830</u>	<u>H</u>
46B	<u>1,2,4-TRICHLORO-BENZENE</u>	<u>00120821</u>	<u>26</u>	<u>130</u>	<u>35</u>	<u>H</u>
1P	<u>ALDRIN</u>	<u>00309002</u>	<u>0.1</u>	<u>3</u>	<u>0.000049</u>	<u>CRL</u>
2P	<u>alpha-BHC</u>	<u>00319846</u>	<u>N/A</u>	<u>N/A</u>	<u>0.0026</u>	<u>CRL</u>
3P	<u>beta-BHC</u>	<u>00319857</u>	<u>N/A</u>	<u>N/A</u>	<u>.0091</u>	<u>CRL</u>
4P	<u>gamma-BHC (LINDANE)</u>	<u>00058899</u>	<u>N/A</u>	<u>0.95</u>	<u>0.098</u>	<u>H</u>
5P	<u>delta-BHC</u>	<u>00319868</u>	<u>N/A</u>	<u>N/A</u>	<u>N/A</u>	<u>-</u>
6P	<u>CHLORDANE</u>	<u>00057749</u>	<u>0.0043</u>	<u>2.4</u>	<u>0.00080</u>	<u>CRL</u>

7P	<u>4,4-DDT</u>	<u>00050293</u>	<u>0.001</u>	<u>1.1</u>	<u>.00022</u>	<u>CRL</u>
8P	<u>4,4-DDE</u>	<u>00072559</u>	<u>0.001</u>	<u>1.1</u>	<u>.00022</u>	<u>CRL</u>
9P	<u>4,4-DDD</u>	<u>00072548</u>	<u>0.001</u>	<u>1.1</u>	<u>.00031</u>	<u>CRL</u>
10P	<u>DIELDRIN</u>	<u>00060571</u>	<u>0.056</u>	<u>0.24</u>	<u>.000052</u>	<u>CRL</u>
11P	<u>alpha-ENDOSULFAN</u>	<u>00959988</u>	<u>0.056</u>	<u>0.22</u>	<u>62 for endosulfan</u>	<u>H</u>
12P	<u>beta-ENDOSULFAN</u>	<u>33213659</u>	<u>0.056</u>	<u>0.22</u>	<u>See 11P</u>	<u>H</u>
13P	<u>ENDOSULFAN SULFATE</u>	<u>01031078</u>	<u>N/A</u>	<u>N/A</u>	<u>N/A</u>	<u>-</u>
14P	<u>ENDRIN</u>	<u>00072208</u>	<u>0.036</u>	<u>0.086</u>	<u>.059</u>	<u>H</u>
15P	<u>ENDRIN ALDEHYDE</u>	<u>07421934</u>	<u>N/A</u>	<u>N/A</u>	<u>0.29</u>	<u>-</u>
16P	<u>HEPTACHLOR</u>	<u>00076448</u>	<u>0.0038</u>	<u>0.52</u>	<u>.000079</u>	<u>CRL</u>
17P	<u>HEPTACHLOR EPOXIDE</u>	<u>01024573</u>	<u>0.0038</u>	<u>0.5</u>	<u>.000039</u>	<u>CRL</u>
18P	<u>PCB</u>		<u>0.014</u>	<u>N/A</u>	<u>0.000064 for PCBs</u>	<u>CRL</u>
25P	<u>TOXAPHENE</u>	<u>08001352</u>	<u>0.0002</u>	<u>0.73</u>	<u>0.00028</u>	<u>CRL</u>
PP	<u>2,3,7,8-TCDD</u>	<u>01746016</u>	<u>N/A</u>	<u>N/A</u>	<u>5.0 E-9</u>	<u>CRL</u>
==	<u>ACETONE</u>	<u>00067641</u>	<u>86,000</u>	<u>450,000</u>	<u>3500</u>	<u>H</u>
==	<u>ALUMINUM</u>	<u>07429905</u>	<u>N/A</u>	<u>750</u>	<u>N/A</u>	<u>-</u>
==	<u>BARIUM</u>	<u>07440393</u>	<u>4100</u>	<u>21,000</u>	<u>2400</u>	<u>H</u>
==	<u>BORON</u>	<u>07440428</u>	<u>1600</u>	<u>8100</u>	<u>3100</u>	<u>H</u>
==	<u>COBALT</u>	<u>07440484</u>	<u>19</u>	<u>95</u>	<u>N/A</u>	<u>-</u>
==	<u>p-CRESOL</u>	<u>00106445</u>	<u>160</u>	<u>800</u>	<u>N/A</u>	<u>-</u>
==	<u>DIAZINON</u>	<u>333415</u>	<u>0.17</u>	<u>0.17</u>	<u>N/A</u>	<u>-</u>
==	<u>FORMALDEHYDE</u>	<u>00050000</u>	<u>440</u>	<u>2200</u>	<u>700</u>	<u>H</u>
==	<u>2-HEXANONE</u>	<u>00591786</u>	<u>4300</u>	<u>21,000</u>	<u>N/A</u>	<u>-</u>
==	<u>LITHIUM</u>	<u>07439932</u>	<u>N/A</u>	<u>N/A</u>	<u>N/A</u>	<u>-</u>
==	<u>METHYLETHYL KETONE</u>	<u>00078933</u>	<u>32,000</u>	<u>230,000</u>	<u>21,000</u>	<u>H</u>
==	<u>METHYLISO-BUTYL KETONE</u>	<u>00108101</u>	<u>5000</u>	<u>26,000</u>	<u>N/A</u>	<u>-</u>
==	<u>METOLACHLOR</u>	<u>51218452</u>	<u>NA</u>	<u>NA</u>	<u>69</u>	<u>H</u>
==	<u>MOLYBDENUM</u>	<u>07439987</u>	<u>NA</u>	<u>NA</u>	<u>210</u>	<u>H</u>
==	<u>I-PROPANOL</u>	<u>00071238</u>	<u>46,000</u>	<u>230,000</u>	<u>N/A</u>	<u>-</u>
==	<u>2-PROPANOL</u>	<u>00067630</u>	<u>89,000</u>	<u>440,000</u>	<u>N/A</u>	<u>-</u>
==	<u>1,2,3-TRICHLORO-PROPANE</u>	<u>00096184</u>	<u>N/A</u>	<u>N/A</u>	<u>210</u>	<u>H</u>
==	<u>VANADIUM</u>	<u>07440622</u>	<u>100</u>	<u>510</u>	<u>N/A</u>	<u>-</u>
==	<u>XYLENE</u>	<u>01330207</u>	<u>210</u>	<u>1100</u>	<u>70,000</u>	<u>H</u>

#### Acronyms and Footnotes to Table 5

\* Indicates dissolved metal criterion; others are total recoverable metals. Each listed dissolved criterion in Table 5 is equal to the corresponding total recoverable criterion

before rounding (from the EPA National Ambient Water Quality Criteria Documents) multiplied by the conversion factor (from the Conversions Factors Table); a criterion that is expressed as a hardness (H)-based equation is shown in Table 5 as the conversion factor (listed) multiplied by the hardness criterion equation; an example criterion at hardness=100mg/L is included.

CAS—Chemical Abstract Service number

CRL—Cancer risk level at  $1 \times 10^{-6}$

H—Threshold effect human health criterion; incorporates additional uncertainty factor for some Group C carcinogens.

ln[H]—Natural Logarithm of the Hardness of stream as mg/l  $\text{CaCO}_3$

$\mu\text{g/L}$ —Micrograms per liter

N/A—Criterion not developed

PP NO—Priority Pollutant Number

§ 93.8c. Development of site-specific water quality criteria.

(a) The Department will consider a request for site-specific criteria for protection of aquatic life, human health or wildlife when a person demonstrates that there exist site-specific biological or chemical conditions of receiving waters which differ from conditions upon which the water quality criteria were based. Site-specific criteria may be developed for use only in place of current Statewide or regional (such as the Great Lakes systems) criteria. The request for site-specific criteria shall include the results of scientific studies for the purpose of:

(1) Defining the areal boundaries for application of the site-specific criteria which will include the potentially affected wastewater dischargers identified by the Department, through various means, including, but not limited to, the total maximum daily load (TMDL) process described in Chapter 96 (relating to water quality standards implementation) or biological assessments.

(2) Developing site-specific criteria which protect its existing use and designated use.

(b) Scientific studies shall be performed in accordance with the procedures and guidance in the Water Quality Standards Handbook (EPA 1994), including “Guidance on the Determination and Use of Water-Effect Ratios for Metals” (February 1994) and with the Methodology for Deriving Ambient Water Quality Criteria for the Protection of Human Health (2000), as amended and updated. Other guidance approved by the Department, which is based on other EPA approved or scientifically defensible methodologies, may be used. The water effect ratio (WER) study may be conducted, based on either total recoverable or dissolved criteria, depending on the form of the criterion.

(c) Prior to conducting studies specified in subsections (a) and (b), a proposed plan of study shall be submitted to the Department for review, consideration and approval.

(d) Signed copies of all reports including toxicity test data shall be submitted to the Department within 60 days of completion of the tests.

(e) If, as a result of its review of the report submitted to satisfy a request, the Department determines that a site-specific criterion for a toxic substance is appropriate, the Department will publish the site-specific criterion in the *Pennsylvania Bulletin*, along with other special conditions under § 92.61(a)(5) (relating to public notice of permit application and public hearing), and in Chapter 16 Appendix A, Table 1. Changes listed in Appendix A, Table 1 will be promulgated through a formal rulemaking process as part of a triennial review or other rulemaking. If, as a result of its review of the report submitted to satisfy a request, the Department determines that a site-specific criterion for a parameter listed in § 93.7 (relating to specific water quality criteria) is appropriate, the Department will prepare a recommendation to the EQB in the form of proposed rulemaking, incorporating that criterion for the water body segment. A change to the criterion for a parameter listed in § 93.7 will become effective following adoption by the EQB as final rulemaking and publication in the *Pennsylvania Bulletin*.

(f) A person challenging a Department action under this section shall have the burden of proof to demonstrate that the Department's action does not meet the requirements of this section.

§ 93.8d. Special criteria for the Great Lakes System.

(a) The following special provisions shall apply for the Great Lakes System, which includes the streams, rivers, lakes and other bodies of surface water within the drainage basin of the Great Lakes in this Commonwealth:

(b) *Water quality criteria for the Great Lakes System.* Human health and aquatic life criteria for the Great Lakes System are contained in Table 6. For any pollutant not listed in the table, criteria to protect existing and designated uses will be developed by the Department, as needed in accordance with this Chapter and Chapter 16.

**TABLE 6  
GREAT LAKES AQUATIC LIFE AND HUMAN HEALTH CRITERIA**

		<i>Fish and Aquatic Life Criteria</i>			<i>Human Health Criteria</i>
<i>PP</i>	<i>NO</i> Chemical Name	<i>CAS</i> Number	<i>Criteria Continuous Concentrations (ug/L)</i>	<i>Criteria Maximum Concentration (ug/L)</i>	<i>Criteria (ug/L)</i>
<i>2M</i>	Arsenic	07440382	*148 (As3+)	*340[lowbar](As3+)	N/A
<i>4M</i>	Cadmium	07440439	*{1.101672-(ln[H]x0.041838)}x	*{1.136672-(ln[H]x0.041838)}x	N/A

Exp(0.7852xln[H]-2.715)  
(ex: @H=100, CCC=2.24)

Exp(1.128xln[H]-3.6867)  
(ex: @H=100, CMC=4.26)

<b>5M</b>	<b>Chromium, III</b>	<b>16065831</b>	<b>*0.860xExp(0.819xln[H]+0.6848)</b> (ex: @H=100, CCC=74)	<b>*0.316xExp(0.819xln[H]+3.7256)</b> (ex: @H=100, CMC=570)	<b>N/A</b>	
<b>5M</b>	<b>Chromium, VI</b>	<b>18540299</b>	<b>*10.56</b>	<b>*15.73</b>	<b>N/A</b>	<b>-</b>
<b>6M</b>	<b>Copper</b>	<b>07440508</b>	<b>*0.960xExp(0.8545xln[H]-1.702)</b> (ex: @H=100, CCC=8.96)	<b>*(0.960xExp(0.9422xln[H]-1.700))</b> (ex: @H=100, CMC=13.44)	<b>N/A</b>	
<b>8M</b>	<b>Mercury</b>	<b>07439976</b>	<b>*0.77</b>	<b>*1.44</b>	<b>0.0031</b>	<b>H</b>
<b>9M</b>	<b>Nickel</b>	<b>07440020</b>	<b>*0.997xExp(0.846xln[H]+0.0584)</b> (ex: @H=100, CCC=52.01)	<b>*[0.998xExp(0.846xln[H]+2.255)]</b> (ex: @H=100, CMC=468.24)	<b>N/A</b>	<b>H</b>
<b>10M</b>	<b>Selenium</b>	<b>07782492</b>	<b>*4.61</b>	<b>N/A</b>	<b>N/A</b>	<b>-</b>
<b>13M</b>	<b>Zinc</b>	<b>07440666</b>	<b>*0.986xExp(0.8473xln[H]+0.884)</b> (ex: @H=100, CCC=118.14)	<b>*0.978xExp(0.8473xln[H]+0.884)</b> (ex: @H=100, CMC=117.18)	<b>N/A</b>	
<b>14M</b>	<b>Cyanide, Free</b>	<b>00057125</b>	<b>5.2</b>	<b>22</b>	<b>600</b>	<b>H</b>
<b>3A</b>	<b>2,4-Dimethyl-phenol</b>	<b>00105679</b>	<b>N/A</b>	<b>N/A</b>	<b>450</b>	<b>H</b>
<b>5A</b>	<b>2,4-Dinitro-phenol</b>	<b>00051285</b>	<b>N/A</b>	<b>N/A</b>	<b>55</b>	<b>H</b>
<b>9A</b>	<b>Pentachlorophenol</b>	<b>00087865</b>	<b>Exp(1.005[pH]-5.134)</b> <u>@pH= 6.5 7.8 9.0</u> <b>Crit = 4.05 14.95 49.95</b>	<b>Exp (1.005[pH]-4.869)</b> <u>@pH = 6.5 7.8 9.0</u> <b>Crit = 5.28 19.49 65.10</b>	<b>N/A</b>	
<b>3V</b>	<b>Benzene</b>	<b>00071432</b>	<b>N/A</b>	<b>N/A</b>	<b>1.2</b>	<b>CRL</b>
<b>7V</b>	<b>Chloro-benzene</b>	<b>00108907</b>	<b>N/A</b>	<b>N/A</b>	<b>470</b>	<b>H</b>
<b>22V</b>	<b>Methylene Chloride</b>	<b>00075092</b>	<b>N/A</b>	<b>N/A</b>	<b>4.7</b>	<b>CRL</b>
<b>25V</b>	<b>Toluene</b>	<b>00108883</b>	<b>N/A</b>	<b>N/A</b>	<b>5600</b>	<b>H</b>
<b>29V</b>	<b>Trichloro-ethylene</b>	<b>00079016</b>	<b>N/A</b>	<b>N/A</b>	<b>2.9</b>	<b>CRL</b>
<b>33B</b>	<b>Hexachloro-benzene</b>	<b>00118741</b>	<b>N/A</b>	<b>N/A</b>	<b>0.000045</b>	<b>CRL</b>
<b>36B</b>	<b>Hexachloro-ethane</b>	<b>00067721</b>	<b>N/A</b>	<b>N/A</b>	<b>0.53</b>	<b>CRL</b>
<b>4P</b>	<b>gamma-BHC (Lindane)</b>	<b>00058899</b>	<b>N/A</b>	<b>0.95</b>	<b>0.47</b>	<b>H</b>
<b>6P</b>	<b>Chlordane</b>	<b>00057749</b>	<b>N/A</b>	<b>N/A</b>	<b>0.000025</b>	<b>CRL</b>
<b>7P</b>	<b>4,4-DDT</b>	<b>00050293</b>	<b>N/A</b>	<b>N/A</b>	<b>0.000015</b>	<b>CRL</b>
<b>10P</b>	<b>Dieldrin</b>	<b>00060571</b>	<b>0.056</b>	<b>0.24</b>	<b>0.00000065</b>	<b>CRL</b>
<b>14P</b>	<b>Endrin</b>	<b>00072208</b>	<b>0.036</b>	<b>0.086</b>	<b>N/A</b>	
<b>18P</b>	<b>PCBs</b>		<b>N/A</b>	<b>N/A</b>	<b>0.00000039</b>	<b>CRL</b>

25P	Toxaphene	08001352	N/A	N/A	0.0000068	CRL
PP	2,3,7,8-TCDD	01746016	N/A	N/A	8.6 E-10	CRL
—	Parathion	00056382	0.013	0.065	N/A	

Acronyms and Footnotes to Table 6

\* Indicates dissolved metal criterion; others are total recoverable metals. Each listed dissolved criterion in Table 6 is equal to the corresponding total recoverable criterion before rounding (from the EPA National Ambient Water Quality Criteria Documents) multiplied by the conversion factor (from the Conversions Factors); a criterion that is expressed as a hardness (H)-based equation is shown in Table 6 as the conversion factor (listed) multiplied by the hardness criterion equation; an example criterion at hardness=100mg/L is included.

CAS—Chemical Abstract Service number

CRL—Cancer risk level at  $1 \times 10^{-6}$

H—Threshold effect human health criterion; incorporates additional uncertainty factor for some Group C carcinogens.

ln[H]—Natural Logarithm of the Hardness of stream as mg/l CaCO<sub>3</sub>

ug/L –Micrograms per liter

N/A—Criterion not developed.

PPNO—Priority Pollutant Number

(c) Wildlife criteria. Wildlife criteria will be developed for the bioaccumulative chemicals of concern (BCCs) in the Great Lakes System using methodologies contained in the Great Lakes guidance in 40 CFR Part 132, Appendix D (relating to Great Lakes Water Quality Initiative methodology for the development of wildlife criteria). The wildlife criteria are contained in the following table:

GREAT LAKES WILDLIFE CRITERIA

TABLE 7

<u>PP</u>	<u>CHEMICAL</u>	<u>CRITERION</u>
<u>NO.</u>	<u>NAME</u>	<u>(ug/L)</u>

<b>7-9P</b>	<b>DDT &amp; METABOLITES</b>	<b>0.000011</b>
<b>8M</b>	<b>MERCURY</b>	<b>0.0013</b>
<b>18-24P</b>	<b>PCBs (TOTAL)</b>	<b>0.00012</b>
<b>PP</b>	<b>2,3,7,8-TCDD</b>	<b>3.1 E-9</b>

**DESIGNATED WATER USES AND WATER QUALITY CRITERIA**

**§ 93.9. Designated water uses and water quality criteria.**

(a) The tables in § § 93.9a—93.9z display designated water uses and water quality criteria in addition to the water uses and criteria specified in Tables 2 and 3. Designated uses shall be protected in accordance with Chapters 95 and 96 (relating to wastewater treatment requirements; and water quality standards implementation) and any other applicable State and Federal laws and regulations. The tables also indicate specific exceptions to Tables 2 and 3 on a stream-by-stream or segment-by-segment basis by the words “add” or “delete” followed by the appropriate symbols described elsewhere in this chapter. The county column in § § 93.9a—93.9z indicates the county in which the mouth of the stream **or the downstream limit of the zone described for that entry** is located. Abbreviations used in the Stream and the “Zone” columns are as follows:

(b) When appropriate, “Exceptions to Specific Criteria” provide reference to the Delaware River Basin Commission (DRBC) water quality regulations, Orsanco (Ohio River Valley Water Sanitation Commission) pollution control standards and the Great Lakes Water Quality Agreement (GLWQA) which specify the criteria that apply **if a water quality standard is more stringent than those in this title.**

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*Editor’s note: A basin-wide migratory fishes (MF) designation is being applied to drainage lists A through O and Z, unless there are specific exceptions already noted for certain waterbodies or stream segments within one of these drainage lists. These specific changes to the drainage lists, however, are not reflected in this Annex, but will be added to the code at final rulemaking. Drainage lists A through G are located within the Delaware River Basin. Drainage lists H through O are located within the Susquehanna River Basin. Drainage list Z is located within the Potomac River Basin.*

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**§93.9d. Drainage List D**

**Delaware River Basin in Pennsylvania  
Lehigh River**

Stream	Zone	County	Water Uses Protected	Exceptions To Specific
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Criteria

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3—Penn Springs	Basin	Carbon	HQ-CWF	None
3—Black Creek	<b>[Basin, Source to Beaver Creek</b>	<b>Carbon</b>	<b>HQ-CWF</b>	<b>None]</b>
<b>4—Hazle Creek</b>	<b>Basin</b>	<b>Carbon</b>	<b>HQ-CWF</b>	<b>None</b>
4—Beaver Creek	Basin	Carbon	CWF	None
3—Black Creek	Main Stem, <b>Confluence of Hazle Creek</b>	Carbon	CWF	None
	<b>and</b> Beaver Creek to Mouth			
4—Unnamed Tributaries to	Basins, <b>Confluence of Hazle Creek and</b>	Carbon	HQ-CWF	None
Black Creek	Beaver Creek to Mouth			
<b>4—Koons Creek</b>	<b>Basin</b>	<b>Carbon</b>	<b>HQ-CWF</b>	<b>None</b>
4—Quakake Creek	Basin, Source to Wetzel Creek	Carbon	HQ-CWF	None
5—Wetzel Creek	Basin	Carbon	CWF	None
4—Quakake Creek	Basin, Wetzel Creek to Mouth	Carbon	CWF	None
<b>4—Brushy Hollow Run</b>	<b>Basin</b>	<b>Carbon</b>	<b>HQ-CWF</b>	<b>None</b>
3—Maple Hollow	Basin	Carbon	HQ-CWF	None

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§93.9f. Drainage List F

Delaware River Basin in Pennsylvania  
*Schuylkill River*

Stream	Zone	County	Water Uses Protected	Exceptions To Specific Criteria
*****				
3—Monocacy Creek	Basin	Berks	WWF	None
3—UNTs to Schuylkill River	Basins, <b>(all UNT's along Montgomery County shore)</b> , Berks-Chester- Montgomery County Border to Valley Creek [(except those in Spring City and Phoenixville)]	<b>[Chester—]</b> Montgomery	<b>[HQ-TSF]</b> WWF	None
<u>3—UNTs to Schuylkill River</u>	<b>Basins (all UNTs along Chester County shore except those in Spring City and Phoenixville), Berks-Chester-Montgomery County Border to Valley Creek</b>	<b>Chester</b>	<b>HQ-TSF</b>	<b>None</b>
3—UNTs to Schuylkill River	Basins, in Spring City and Phoenixville	Chester	WWF	None

\*\*\*\*\*

3—Valley Creek	Basin	Montgomery-Chester	EV	None
3—Unnamed Tributaries to Schuylkill River	Basins, Valley Creek to <u>Head of Tide</u>	[Chester-Montgomery] <u>Philadelphia</u>	WWF	None
[3—Mellshamic Creek	Basin	Montgomery	WWF	None]
3—Trout Creek	Basin	Montgomery	WWF	None

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§93.9i. Drainage List I

Susquehanna River Basin in Pennsylvania  
*Susquehanna River*

Stream	Zone	County	Water Uses Protected	Exceptions To Specific Criteria
*****				
2—Mehoopany Creek	Basin, Source to North [ <u>Fork] Branch Mehoopany Creek</u>	Wyoming	HQ-CWF	None
3—North [ <u>Fork] Branch</u> Mehoopany Creek	Basin	Wyoming	CWF	None
2—Mehoopany Creek	Basin, North [ <u>Fork] Branch Mehoopany Creek</u> to Mouth	Wyoming	CWF	None
2—Taques Creek	Basin	Wyoming	CWF	None
2—Tunkhannock Creek	Main Stem, Source to Susquehanna-Wyoming County Border	Susquehanna-Wyoming	CWF	None
3—Unnamed Tributaries to Tunkhannock Creek	Basins, Source to Susquehanna-Wyoming County Border	Susquehanna	CWF	None
3—Bear Swamp Creek	Basin	Susquehanna	CWF	None
3—Bell Creek	Basin	Susquehanna	CWF	None
3— <u>Nine Partners [Leslie]</u> Creek	Basin	Susquehanna	CWF	None
3—Partners Creek	Basin	Susquehanna	CWF	None

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§93.9l. Drainage List L

Susquehanna River Basin in Pennsylvania  
*West Branch Susquehanna River*

Stream	Zone	County	Water Uses	Exceptions To Specific
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		Protected	Criteria
*****			
4—Unnamed Tributary 21134	Basin, Source to Rauchtown Creek	Lycoming CWF	None
5—Rauchtown Creek	<b>[Basin, Source to Confluence of Rockey Run and Gottshall Run</b>	<b>Clinton HQ-CWF</b>	<b>None]</b>
<u>6—Rockey Run</u>	<u>Basin</u>	<u>Clinton HQ-CWF</u>	<u>None</u>
<u>6—Gottshall Run</u>	<u>Basin</u>	<u>Clinton HQ-CWF</u>	<u>None</u>
5—Rauchtown Creek	Basin, Confluence of Rockey Run and Gottshall Run to Mouth	Lycoming CWF	None
*****			

§93.9m. Drainage List M

Susquehanna River Basin in Pennsylvania  
*Susquehanna River*

Stream	Zone	County	Water Uses Protected	Exceptions To Specific Criteria
*****				
3—Trout Run	Basin	Northumberland	CWF	None
3— <b>[Buddys] Bennys</b> Run	Basin	Northumberland	CWF	None
3—Millers Run	Basin	Northumberland	CWF	None
*****				

§93.9q. Drainage List Q

Ohio River Basin in Pennsylvania  
*Allegheny River*

Stream	Zone	County	Water Uses Protected	Exceptions To Specific Criteria
*****				
4—Marsh Run	Basin	Crawford	CWF	None
4—Thompson Creek	Basin, <b>Source to Shirley Run</b>	Crawford	CWF	None
<u>5—Shirley Run</u>	<u>Basin</u>	<u>Crawford</u>	<u>HQ-CWF</u>	<u>None</u>
<u>4—Thompson Creek</u>	<u>Basin, Shirley Run to Mouth</u>	<u>Crawford</u>	<u>CWF</u>	<u>None</u>
*****				
5—Caldwell Creek	Basin, Source to West Branch Caldwell Creek	Warren	HQ-CWF	None



area and central channel dredged  
and maintained by United States  
Army Corps of Engineers.

7 and 9  
Add E. coli per  
40 CFR 131.41  
and See 28 Pa.  
Code §  
18.28(b)(2) and  
(3)

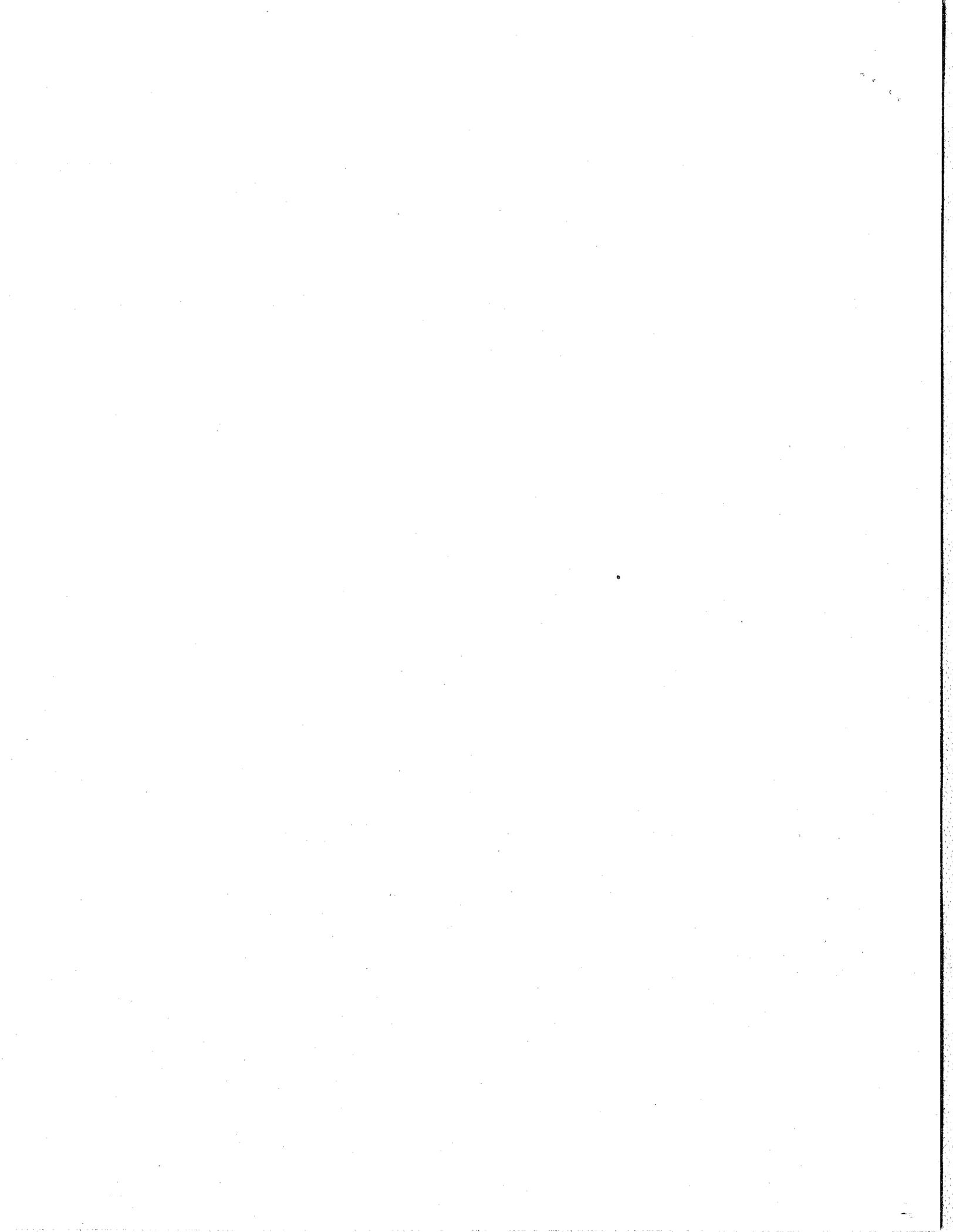
1—Lake Erie (Outer Erie Harbor area and central channel  
Harbor and Presque Isle dredged and maintained by United  
Bay) States Army Corps of Engineers

Erie

WF,  
lete WC

Delete pH and  
Bac1, Add pH  
between 7 and 9,  
Bac2

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Pennsylvania Department of Environmental Protection

Rachel Carson State Office Building  
P.O. Box 2063  
Harrisburg, PA 17105-2063  
December 21, 2007

Policy Office

717-783-8727

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

Re: Proposed Rulemaking: Triennial Review of Water Quality Standards  
(25 Pa. Code, Chapter 93) (#7-421)

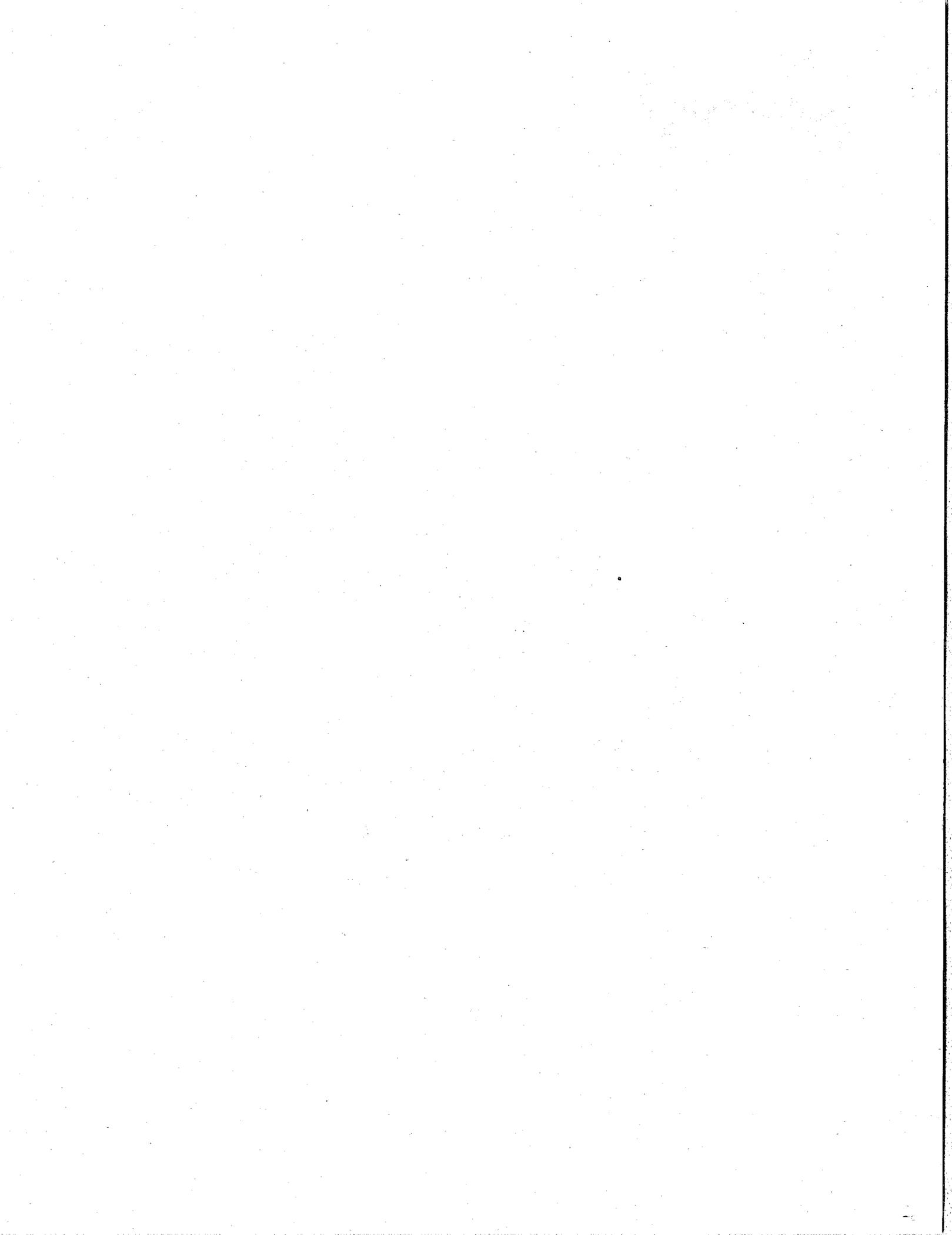
Dear Mr. Kaufman:

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. This proposal is scheduled for publication as a proposed rulemaking in the *Pennsylvania Bulletin* on January 12, 2008, with a 45-day public comment period, that will conclude on February 26, 2008. Two public meetings and two public hearings have been scheduled for this proposal as indicated in the enclosed Preamble of this rulemaking. The Environmental Quality Board (EQB) adopted this proposal on October 16, 2007.

Section 303(c)(1) of The Clean Water Act requires that states periodically, but at least once every 3 years, review and revise as necessary, their water quality standards. This proposal constitutes Pennsylvania's current triennial review of its water quality standards. Notable changes in the proposed rulemaking include the update of water quality criteria for toxic substances to reflect the latest scientific information and new Federal guidelines for criteria development; adding clarification to the definition of *conventional treatment* for the protection of potable water supply use (PWS) in §§ 93.1 and 93.3; clarifying that other intervening uses may become the most sensitive use as related to the *Critical Use* in § 93.7, Table 3; and changing several drainage lists to clarify stream names, segment boundaries and to recognize the presence of migratory fish in the three major tributaries to the mid-Atlantic slope drainage. A number of minor changes are also included in the proposed rulemaking to correct typographical errors and to clarify content.

The Department's Water Resources Advisory Committee (WRAC) discussed the rulemaking at various meetings, and most recently reviewed the draft proposed rulemaking at its May 9, 2007, meeting. WRAC voted unanimously for the Department to proceed with the proposed rulemaking to the EQB.

The Department will provide the Commission with the assistance required to facilitate a thorough review of this proposal. Section 5(g) of the Regulatory Review Act provides that the



Commission may, within 30 days of the close of the comment period, convey to the agency its comments, recommendations and objections to the proposed regulation. The Department will consider any comments, recommendations or suggestions submitted by the Commission, as well as the Committees and public commentators, prior to final adoption of the regulation.

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

Sincerely,

A handwritten signature in black ink that reads "Michele L. Tate". The signature is written in a cursive style with a small dot above the letter 'e' in "Tate".

Michele L. Tate  
Regulatory Coordinator

Enclosures

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

I.D. NUMBER: 7- 421  
 SUBJECT: Triennial Review of Water Quality Standards  
 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

RECEIVED

DEC 21 REC'D

INDEPENDENT REGULATORY  
REVIEW COMMISSION

3:30pm

**FILING OF REGULATION**

DATE	SIGNATURE	DESIGNATION
12/24/07	<i>D. Neuf</i>	Majority Chair, HOUSE COMMITTEE ON ENVIRONMENTAL RESOURCES & ENERGY
12/21/07	<i>Jessica R. Pardo</i>	Minority Chair, HOUSE COMMITTEE ON ENVIRONMENTAL RESOURCES & ENERGY
12/21/07	<i>Pat He</i>	Majority Chair, SENATE COMMITTEE ON ENVIRONMENTAL RESOURCES & ENERGY
12/21/07	<i>Pat He</i>	Minority Chair, SENATE COMMITTEE ON ENVIRONMENTAL RESOURCES & ENERGY
12-21-07	<i>Jonia E. Wilmond</i>	INDEPENDENT REGULATORY REVIEW COMMISSION
		ATTORNEY GENERAL (for Final Omitted only)
12/21/07	<i>Mayera Garces</i>	LEGISLATIVE REFERENCE BUREAU (for Proposed only)

