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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, Section 303 (c) of the federal Clean Water Act requires that states review their water quality standards and modify them, as appropriate, at least once every three years. This regulation is undertaken as part of the Department's ongoing review of Pennsylvania's 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. This regulation constitutes 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. There are no public health, safety, environmental or general welfare risks associated with changing this regulation.

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

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.

Page 2 of 8

(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.)

No persons will be adversely affected by this regulation, which is intended to update the water quality standards for the Commonwealth. Persons proposing new or expanded activities or projects which result in discharges to waters of the Commonwealth are required to provide effluent treatment according to the water quality criteria and designated and existing uses. This regulation will be implemented through the Department's permit and approval actions. For example, the National Pollutant Discharge Elimination System (NPDES) permitting program uses the stream use designation as a major basis 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 this 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 where involved, if applicable.

The Water Resources Advisory Committee (WRAC) reviewed the regulation at its July 14, 2004 meeting and suggested several clarification edits to the sections on dissolved oxygen and lake stratification. Those clarifications were made and accepted by the EQB in the final rulemaking.

(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.

The application of the dissolved oxygen criteria in lakes is expected to reduce compliance costs on the regulated community by not requiring costly technologies that may not be available or appropriate to the discharges. 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.

Page 3 of 8

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

Page 4 of 8

(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.

	Current FY	FY +1	FY +2	FY +3	FY +4	FY +5
	Year	Year	Year	Year	Year	Year
SAVINGS:	\$	\$	\$	\$	\$	\$
Regulated Community	Not Measurable					
Local Government	"					
State Governments	"					
Total Savings	"					
COSTS:						
Regulated Community	Not Measurable					
Local Government	.د					
State Governments	"					
Total Costs	"					
REVENUE LOSSES:						
Regulated Community	Not Measurable					
Local Government	"					
State Governments	"					
Total Revenue Losses	"					

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

Not Applicable.

(20b) Provide the past three year expenditure history for programs affected by the regulation.						
Program	FY-3	FY-2	FY-1	Current FY		
	(2001-2002)	(2002-2003)	(2003-2004)	(2004-2005)		
Env. Prot. Operations (160)	\$75,074,000	\$75,559,000	\$72,665,000	\$85,897,000		
Env. Program Mgmt. (161)	\$43,354,000	\$43,780,000	\$41,056,000	\$38,294,000		

(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 because the triennial review of water quality standards is required by the federal Clean Water Act

(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 to achieve the correct level of protection of Commonwealth waters.

(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 regulation is 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. This regulation 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 regulation.

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

Public meetings and hearings on the proposal were held during the public comment period on December 2, 2003, at the Four Points by Sheraton in Mars, PA and December 4, 2003, at the Courtyard by Marriott in Moosic, PA.

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 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 <u>Pennsylvania Bulletin</u> as final-form rulemaking. New or renewed NPDES permits reflecting the regulation 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.

CDL-1

FACE SHEET FOR FILING DOCUMENTS WITH THE LEGISLATIVE REFERENCE BUREAU

(Pursuant to Commonwealth Documents Law)

#2366

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

By:

(Deputy Attorney General)

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. 7-386

DATE OF ADOPTION August 17. 200 the ۵v TITLE KATHLEEN A MCGIN **CHAIRPERSON**

Copy below is hereby approved as to form and legality, Fx /e or independ ncies

DO NOT WRITE IN THIS SPACE

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BY 9.28.04 DATE OF APPROVAL

Chief Councel Independent Agency (Chief Councel Independent Agency) (Strike inapplicable title)

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

ORDER ADOPTING REGULATIONS

EXECUTIVE OFFICER CHAIRMAN OR SECRETARY

DEPARTMENT OF ENVIRONMENTAL PROTECTION ENVIRONMENTAL QUALITY BOARD

Water Quality Standards - Triennial Review

25 Pa. Code, Chapter 93

NOTICE OF FINAL RULEMAKING DEPARTMENT OF ENVIRONMENTAL PROTECTION ENVIRONMENTAL QUALITY BOARD [Title 25 PA. Code, Chapter 93] Triennial Review of Water Quality Standards

<u>Order</u>

The Environmental Quality Board (EQB) is amending Title 25 Pa. Code Chapter 93 (relating to water quality standards) as set forth in Annex A.

This order was adopted by the Board at its meeting of August 17, 2004.

A. Effective Date

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

B. Contact Persons

For further information contact Edward R. Brezina, Chief, Division of Water Quality Assessment and Standards, Bureau of Water Supply and Wastewater Management, 11th Floor, Rachel Carson State Office Building, P.O. Box 8467, (717) 787-9637 or Michelle Moses, Assistant Counsel, Bureau of Regulatory Counsel, 9th 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 final rulemaking is available electronically through the Department of Environmental Protection's (DEP's) website (http://www.dep.state.pa.us).

C. Statutory Authority

This final rulemaking is being 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 DEP. 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) sets forth certain requirements for portions of the Commonwealth's antidegradation program.

D. Background and Summary

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 regulation constitutes Pennsylvania's current triennial review of its water quality standards.

Pennsylvania's water quality standards, which are codified in Chapter 93 and portions of Chapter 92, are designed to implement the requirements of Section 5 and 402 of The Clean Streams Law and Section 303 of the Federal Clean Water Act (33 U.S.C.A. § 1313). The water quality standards consist of the 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 antidegradation regulations. Water quality standards are in-stream water quality goals that are implemented by imposing specific regulatory requirements, such as treatment requirements and effluent limitations, on individual sources of pollution.

This final rule will revise the Chapter 93 (Water Quality Standards) regulation. These regulatory revisions will clarify requirements, and update the regulation to be consistent with federal regulatory changes where indicated, and preserve Pennsylvania-specific requirements to serve the citizens of the Commonwealth. This regulation may affect persons who discharge wastewater into surface waters of the Commonwealth or otherwise conduct activities, which may impact such waters.

DEP's Water Resources Advisory Committee (WRAC), provided input on the proposed regulation at its November 13, 2002 and September 10, 2003 meetings. The proposed regulation was adopted by the EQB as proposed rulemaking at its July 15, 2003 meeting. The proposed rulemaking was published in the *Pennsylvania Bulletin* on October 18, 2003 (33 *Pa.B.* 5190) with provision for a 60-day public comment period that closed on December 17, 2003. The Board received 538 public comments. The comments received on the proposed regulation are summarized in Section E below.

The EQB has considered all of the public comments received on its proposed rulemaking in preparing for this final regulation. The draft final regulation was discussed with and approved by WRAC on July 14, 2004, with additional clarifications to the dissolved oxygen criteria. The valuable input from the public and the collective knowledge and experience drawn from advisory committees and others on this proposal has been utilized to develop a regulation which carefully balances the needs of citizens and the regulated community in assuring the protection of the Commonwealth's waters.

E. Summary of Comments and Responses on the Proposed Rulemaking

Comments were received from 538 commentators including the Independent Regulatory Review Commission (IRRC) as a result of the public comment period and the public hearing. Approximately 50% of the comments received involved section 93.2 (Scope). The proposed rulemaking recommended deletion of certain text in § 93.2(a) in order to correct any misinterpretation that the scope of Chapter 93 applies only to "discharges" or to "point sources." The majority of scope comments were in support of clarifying the language in § 93.2 to include point sources as well as non-point sources. There were a few commentators that expressed concerns with the removal of language from the scope section.

The other major issue was the proposed change to the application of dissolved oxygen criteria in § 93.7 to recognize the effects of natural stratification in lakes, ponds, and impoundments. Several commentators supported the proposed change to the dissolved oxygen criteria. A few commentators expressed concerns pertaining to the application of the criteria, the stratification process and definitions of epilimnion and hypolimnion.

A detailed description of the comments and revisions to the proposal follows:

General.

Many commentators requested that the Board not weaken the water quality standards. They expressed concern that Pennsylvania was going to reduce the protection of the waters of the Commonwealth. The Board responded to those comments by assuring commentators that the amendments to this regulation will not weaken the water quality standards but will clarify the protection of the waters of the Commonwealth. A comment was received concerning the application of water quality standards to wetlands. DEP has reviewed the water quality standards, and there was no new scientific information, policies, or directives found that would require changes to the water quality standards as they apply to wetlands.

§ 93.1. Definitions.

A few commentators expressed concerns that the application of the dissolved oxygen (DO) criteria and the stratification process was not clear. Therefore, a definition for hypolimnion has been added to the final form rulemaking to further clarify natural stratification.

§ 93.2. Scope.

The proposed change to the scope is one of the major issues that was raised by commentators. The proposed rulemaking recommended deletion of certain text in § 93.2(a) in order to correct any misinterpretation that the scope of Chapter 93 applies only to "discharges" or to "point sources." The majority of the comments on the scope were in support of the proposed change that clarified its application to both point and non-point sources of pollution. There were a few commentators that expressed concerns with the proposed change to remove language from the scope. They have requested that the existing language be retained or that new language be added to insert "point and non-point source" before "discharges." On final rulemaking, the EQB is inserting new

language that reads as follows: ... and will be considered by the Department in "implementing its authority under the Clean Streams Law and other statutes that authorize protection of surface water quality." This amendment will track current guidance and regulations for use of the standards in situations outside NPDES discharges. This change reaffirms DEP's longstanding position that the water quality standards in Chapter 93 are the standards that are used whenever the environmental statutes authorize the DEP to make decisions or approvals relating to stream quality protection. To clarify this point, a motion was made and approved at the Board's meeting on August 17, 2004 to amend this final rulemaking by adding the following language to the end of subsection 93.2(a): "Nothing in this chapter shall be construed to diminish or expand the authority of the Department to regulate surface water quality as authorized by statute."

Questions have been raised regarding the relationship between the recently enacted Water Resources Planning Act (Act 220 of 2002) and Chapter 93. The water withdrawal registration process required under Act 220 does not expand the Department's existing authority to protect surface waters. Water withdrawal information gathered under that statute is for water planning purposes and the State Water Plan will be used for the purposes articulated by section 3116 of that statute. (See 27 Pa.C.S. Section 3116.) Under multiple sections of Act 220 it is clear that the planning statute does not authorize, diminish or expand existing authority of the Department to regulate, control or require permits for the withdrawal or use of water. (See 27 Pa.C.S. Sections 3104 (4), 3111(c) and 3136(a).) By amending section 93.2 in this final rulemaking, the Department is not expanding its existing authority to protect surface waters.

§ 93.7. Specific water quality criteria.

The other major issue in the comments was the proposed change to the application of dissolved oxygen criteria in § 93.7 to recognize the effects of natural stratification in lakes, ponds, and impoundments. Several commentators supported the proposed change to the dissolved oxygen criteria. A few commentators expressed concerns pertaining to the application of the criteria, the stratification process, and definitions of epilimnion and hypolimnion. In response to the comments and to WRAC suggestions, the language in the final form rulemaking at § 93.7, Table 3 - Dissolved Oxygen is revised to further clarify natural stratification and how the process is applied and a new definition of "hypolimnion" is added to § 93.1.

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. DEP 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 and (2) several zones in the Delaware Estuary.

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 boat and shipping traffic pose a serious safety hazard in this area. This decision was based on a Use Attainability study in 1985. Because the same conditions exist today, no change to the designated use for Outer Erie Harbor/Presque Isle Bay is made.

DEP cooperated with the Delaware River Basin Commission (DRBC), Environmental Protection Agency (EPA) and other DRBC signatory states on a comprehensive Use Attainability 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. Criteria for enterococcus and changes in application to the fecal coliform criteria in this area reflect the use. The appropriate DRBC standards are referenced in Sections 93.9e and 93.9g (Drainage Lists E and G). 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.

F. Benefits, Costs and Compliance

Executive Order 1996-1 provides for a cost/benefit analysis of the final regulation.

1. *Benefits* – Overall, the citizens of this Commonwealth will benefit from these recommended changes because they provide the appropriate level of protection for the uses of surface waters in this Commonwealth.

2. Compliance Costs – This final regulation to Chapter 93 is not expected to impose any significant additional compliance costs on the regulated community. These regulatory changes are not expected to increase total pollution control expenditures over that which would otherwise be required under existing regulations.

3. Compliance Assistance Plan—This regulation has 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 regulation will be implemented in part through the National Pollutant Discharge Elimination System (NPDES) permitting program. No additional compliance materials are anticipated. Staff are available to assist regulated entities in complying with the regulatory requirements if any questions arise.

4. *Paperwork Requirements*—The regulatory revision 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. This regulation will be implemented through DEP's permit and approval actions. For example, the National Pollutant Discharge Elimination System (NPDES) bases effluent limitations on the uses of the stream and assures water quality criteria are achieved and designated and existing uses are protected.

H. Sunset Review

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

I. <u>Regulatory Review</u>

Under Section 5(a) of the Regulatory Review Act [71 P.S. § 745.5(a)], on ______, the DEP submitted a copy of the proposed rulemaking published at 33 <u>Pa.B.</u> 5190 on October 18, 2003, to the Independent Regulatory Review Commission (IRRC) and to the Chairpersons of the Senate and House Environmental Resources and Energy Committee for review and comment.

Under Section 5(c) of the Regulatory Review Act, the DEP provided IRRC and the Committees with copies of the comments received, as well as other documentation. The DEP has considered all public comments in preparing this final-form regulation.

Under Section 5.1(j.2) of the Regulatory Review Act, this final-form regulation was deemed approved by the House and Senate Committees on ______. Under Section 5.1 (e) of the Regulatory Review Act, IRRC met on ______ and approved the final-form regulation.

J. <u>Findings of the Board</u>

The Board finds that:

(1) Public notice of proposed rulemaking was given under sections 201 and 202 of the Act of July 31, 1968 (P.L. 769, No. 240) (45 P.S. §§ 1201 and 1202) and regulations promulgated thereunder at 1 Pa. Code §§ 7.1 and 7.2.

(2) A public comment period was provided as required by law. In addition, two Board hearings were held. All comments were considered.

(3) This regulation does not enlarge the purpose of the proposal published at 33 *Pennsylvania Bulletin* 5190, October 18, 2003.

(4) This final-form regulation is necessary and appropriate for administration and enforcement of the authorizing acts identified in Section C of this order.

K. Order of the Board

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

(a) The regulations of the Department, 25 PA Code Chapter 93, are amended by amending §§ 93.1, 93.2 (a), 93.6 (b), 93.7, 93.8 (b), 93.9, 93.9a, 93.9b, 93.9c, 93.9d, 93.9e, 93.9f, 93.9i, 93.9l, 93.9m, 93.9o, 93.9q and 93.9s to read as set forth in Annex A, with ellipses referring to the existing text of the regulation.

(b) The Chairperson of the Board shall submit this order and Annex A to the Office of General Counsel and the Office of Attorney General for approval and review as to legality and form, as required by law.

(c) The Chairperson shall submit this order and Annex A to the Independent Regulatory Review Commission and the Senate and House Environmental Resources and Energy Committees as required by the Regulatory Review Act.

(d) The Chairperson of the Board shall certify this order and Annex A and deposit them with the Legislative Reference Bureau, as required by law.

(e) This order shall take effect immediately upon publication in the *Pennsylvania* Bulletin.

7

BY:

Kathleen A. McGinty Chairperson Environmental Quality Board

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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

§ 93.1. Definitions.

* * * * *

High Quality Waters—Surface waters having quality which exceeds levels necessary to support propagation of fish, shellfish, and wildlife and recreation in and on the water by satisfying § 93.4b(a).

<u>HYPOLIMNION – THE COOLER, DENSER, LOWER LAYER IN A</u> <u>NATURALLY STRATIFIED LAKE, POND OR IMPOUNDMENT.</u>

* * * * *

§ 93.2. Scope.

(a) This chapter sets forth water quality standards for surface waters of this Commonwealth, including wetlands. These standards are based upon water uses which are to be protected and will be considered by the Department in [its regulation of discharges] <u>IMPLEMENTING ITS AUTHORITY UNDER THE</u> <u>CLEAN STREAMS LAW AND OTHER STATUTES THAT AUTHORIZE</u> <u>PROTECTION OF SURFACE WATER QUALITY. NOTHING IN THIS</u> <u>CHAPTER SHALL BE CONSTRUED TO DIMINISH OR EXPAND THE</u> <u>AUTHORITY OF THE DEPARTMENT TO REGULATE SURFACE WATER</u> QUALITY AS AUTHORIZED BY STATUTE.

* * * * *

§ 93.6. General water quality criteria

* * * * *

(b) In addition to other substances listed within or addressed by this chapter, specific substances to be controlled include, but are not limited to, floating materials, oil, grease, scum and substances **[which]** that produce color, tastes, **[orders]** odors, turbidity or settle to form deposits.

§ 93.7. Specific water quality criteria.

TABLE 3

Parameter	Symbol	Criteria	Critical Use*
		* * * *	
Color	Col	Maximum 75 units on the platinum-cobalt scale; no other colors perceptible to the human eye.	PWS
<u>Dissolved</u> <u>Oxygen</u>		The following specific dissolved oxygen criteria recognize the natural process of stratification in lakes, ponds and impoundments [and allow that the]. THESE CRITERIA APPLY TO FLOWING WATERS AND TO THE EPILIMNION OF A NATURALLY STRATIFIED LAKE, POND OR IMPOUNDMENT THE hypolimnion in a NATURALLY stratified lake, pond or impoundment is protected by the narrative water quality criteria in § 93.6 (relating to general water quality criteria). For non-stratified lakes, ponds or impoundments, the dissolved oxygen criteria [are th same as for the epilimnion] APPLY THROUGHOUT THE LAKE, POND OR IMPOUNDMENT to protect the critical useS [of the lake pond or impoundment].	See the following table.
	DOı	FOR FLOWING WATERS, Minimum daily average 6.0 mg/l; minimum 5.0 mg/l. For [the epilimnion of stratified] lakes, ponds and impoundments [only], minimum 5.0 mg/l [at any point].	CWF HQ-WWF HQ-TSF
	DO ₂	Minimum daily average 5.0 mg/l; minimum 4.0 mg/l. [For the cpilimnion off lakes, ponds and impoundments, minimum daily average of 5.0 mg/l, minimum, 4.0 mg/l].	WWF
	DO ₃	For the period February 1 to July 31 of any year, minimum daily average [off 6.0 mg/l; minimum 5.0 mg/l. For the remainder of the year, minimum daily average [off 5.0 mg/l; minimum 4.0 mg/l. [For lakes, ponds and impoundments, the criteria apply to the epilimnion.]	TSF
	DO ₄	Minimum 7.0 mg/l. [For stratified lakes, ponds and impoundments, the criterion applies to the epilimnion.]	HQ-CWF
		* * * *	

§ 93.8. Development of site-specific water quality criteria [for the protection of aquatic life].

* * * * *

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

* * * * *

§ 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 is located. Abbreviations used in the Stream and the "Zone" [column] columns are as follows:

[T - Township Road

LR – Pennsylvania Legislative Route

SR – Pennsylvania State Route

FAS – Federal Aid Secondary Highway

US – United States Federal Route

I – Interstate Highway

RM – River Mile; river miles are used to indicate the distance from a point on the waterbody to its mouth and are based on the DEP's River Mile Index]

FAS – Federal Aid Secondary Highway

<u>I – Interstate Highway</u>

<u>LR – Pennsylvania Legislative Route</u>

<u>RM – River Mile; river miles are used to indicate the distance from a</u> <u>point on the waterbody to its mouth and are based on</u> <u>the DEP's River Mile Index</u> SR – Pennsylvania State Route

T – Township Road

UNT – Unnamed Tributaries

US – United States Federal Route

* * * * *

§93.9a. Drainage List A.

Delaware River Basin in Pennsylvania Delaware River

Exceptions To

Stream	Zone	County	Water Uses Protected	Specific Criteria
	* * * * *			
[3 – Sand Pond Creek	Basin (all sections in PA), Source to Sherman Creek	Wayne	CWF	None]
[4] <u>3</u> – Sherman Creek	Basin (all sections in PA) <u>, Source</u> to Starboard Creek	Wayne	HQ-CWF	None
[3 – Sand Pond Creek	Basin (all sections in PA),	Wayne	CWF	None]

	Sherman Creek to PA-NY State			
<u>4 – Starboard Creek</u> <u>3 – Sherman Creek</u>	Border Basin (all sections in PA) Basin (all sections in PA), Starboard Creek to PA-NY	<u>Wayne</u> Wayne	<u>CWF</u> <u>CWF</u>	<u>None</u> None
3 – [Sand Pond] <u>Sherman</u> Creek	State Border			
4 – [Unnamed Tributaries] <u>UNTs</u> to [Sand Pond] <u>Sherman</u> Creek	Basins (all sections in PA), PA- NY State Border to Mouth	Wayne	CWF	None
2—West Branch Delaware River	Main Stem, PA-NY State Border to Confluence with East Branch	Wayne	CWF, MF	See DRBC regulations— Water Quality Zone 1A

§93.9b. Drainage List B.

Delaware River Basin in Pennsylvania Lackawaxen River

			Water Uses	Exceptions To Specific
Stream	Zone * * * * *	County	Protected	Criteria
3 – West Branch Lackawaxen River	Main Stem, Prompton Reservoir to Confluence with Dyberry Creek * * * * *	Wayne	HQ-TSF, MF	None
[4 – Johnson Creek	Basin	Wayne	HQ-CWF, MF	None]
4—Van Auken Creek	Basin * * * * *	Wayne	HQ-TSF, MF	None

§ 93.9c. Drainage List C.

Delaware River Basin in Pennsylvania Delaware River

Stream	Zone * * * * *	County	Water Uses Protected	Exceptions To Specific Criteria	
3—Unnamed Tributaries to Bush Kill	Basins, Saw Creek to Mouth	Monroe	HQ-CWF	None	
[4]3—Sand Hill Creek	Basin	Monroe	HQ-CWF	None	
[4]3—Little Bush Kill	Basin, Source to Unnamed Tributary (UNT) 05067	Pike	EV	None	
[5] <u>4</u> —Unnamed Tributary 05067 to Little Bush Kill	Basin	Pike	EV	None	
[4] <u>3</u> —Little Bush Kill	Basin, UNT 05067 to UNT 05059	Pike	HQ-CWF	None	
[5] <u>4</u> —Unnamed Tributary 05059 to Little Bush Kill	Basin	Pike	EV	None	

[4]3Little Bush Kill	Basin, UNT 05059 to UNT 05057	Pike	EV	None
[5] <u>4</u> —Unnamed Tributary 05057 to Little Bush Kill	Basin	Pike	HQ-CWF	None
[4]3Little Bush Kill	Basin, UNT 05057 to Mouth	Pike	EV	None
1Delaware River	Main Stem, Tocks Island to Lehigh River	Northampton	WWF, MF	See DRBC regulations— Water Quality Zone

§93.9d. Drainage List D.

Delaware River Basin in Pennsylvania Lehigh River

Stream	Zone * * * * *	County	Water Uses Protected	Exceptions To Specific Criteria
3 - Nesquehoning Creek	Main Stem, Tibbetts Pond Dam to Mouth	Carbon	CWF	None
	* * * *			
4 – [First Hollow Run] <u>UNT 04106 (locally First</u> Hollow Run)	Basin	Carbon	EV	None
4—Jeans Run	Basin * * * * *	Carbon	HQ-CWF	None
3 - Mauch Chunk Creek	[Main Stem] <u>Basin, Source to</u> SR 902 Bridge	Carbon	[CWF] <u>EV</u>	None
[4 – Unnamed Tributaries to Mauch Chunk Creek	Basins	Carbon	CWF	None
4 – White Bear Creek	Basin, Source to PA 902 Bridge	Carbon	EV	None
4 – White Bear Creek	Basin, PA 902 Bridge to Mouth	Carbon	CWF	None]
3 - Mauch Chunk Creek	Basin, SR 902 Bridge to Mouth	<u>Carbon</u>	CWF	None
3-Beaverdam Run	Basin * * * * *	Carbon	CWF	None
§93.9e. Drainage List E.	Delaware River Basin in F Delaware Rive	'ennsylvania r		

Stream	Zone * * * * *	County	Water Uses Protected	Exceptions To Specific Criteria
2 – Neshaminy Creek	Main Stem, Confluence of West and North Branches [PA 614 Dam] <u>to RM 26.84</u>	Bucks	TSF, MF	Add Tur ₂
3—Unnamed Tributaries to Neshaminy Creek	Basins, Confluence of West and North Branches to [of PA 614	Bucks	TSF, MF	Add Tur ₂

WWF, MF	Add Tur ₂
TSF, MF	Add Tur ₂
WWF, MF	Add Tur ₂
WWF, MF	Add Tur ₁
WWF, MF	Add Tur ₁
WWF, MF	Add Tur ₁
	WWF, MF WWF, MF

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[Unnamed Tributaries] UNTs	Basins, Berks-Chester-	Chester <u>-</u>	HQ-TSF	None
to Schuylkill River	Montgomery County Border to Valley Creek (except those in Spring City and Phoenixville)	<u>Montgomery</u>		
3—[Unnamed Tributaries] <u>UNTs</u>	Basins, [Berks-Chester-	[Montgomery]	WWF	None
to Schuylkill River	Montgomery County Border to Valley Creek] <u>in Spring City</u> and Phoenixville	Chester		
3—Manatawny Creek	Main Stem * * * * *	Berks	CWF	None
3 - Perkiomen Creek	Basin, Source to SR 1010 Bridge at Hereford	Berks	HQ-CWF	None
3 – Perkiomen Creek	[Basin] <u>Main Stem</u> , SR 1010 Bridge to Green Lane Reservoir	Montgomery	TSF	None
4 – Unnamed Tributaries to Perkiomen Creek	Basins, [LR 06119] <u>SR 1010</u> Bridge to Green Lane Reservoir Dam	Montgomery	TSF	None
4-Hosensack Creek	Basin	Montgomery	CWF	None

* * * * *

§93.9i. Drainage List I.

Susquehanna River Basin in Pennsylvania Susquehanna River

			-		Exceptions To
Stream	Zone	* * * *	County	Water Uses Spe Protected Crit	Specific Criteria
2 – [Little Wysox] Laning Creek	Basin		Bradford	WWF	None

2-Wysox Creek	Basin		Bradford	CWF	None
		* * * *			

§93.91. Drainage List L.

Susquehanna River Basin in Pennsylvania West Branch Susquehanna River

	West Dianch Susqueimin	Water Uses	Exceptions To Specific Criteria		
Stream	Zone * * * * *	County	Protected	-	
4—Bennett Branch Sinnemahoning Creek	Main Stem, Mill Run to Confluence with Driftwood Branch	Cameron	WWF	None	
	* * * * *				
5 – Trout Run	Basin, Source to Spring Run	Elk	CWF	None	
6 – Spring Run	Basin, <u>Source to UNT 24721</u>	Elk	[HQ-CWF] <u>CWF</u>	None	
7 - UNT 24721 to Spring Run	Basin	<u>Elk</u>	CWF	None	
<u>6 – Spring Run</u>	<u>Basin, UNT 24721 to Stony</u> Brook	<u>Elk</u>	<u>HQ-CWF</u>	<u>None</u>	
7 – Stony Brook	<u>Basin</u>	Elk	<u>CWF</u>	None	
6 – Spring Run	Basin, Stony Run to Mouth	Elk	<u>CWF</u>	None	
5 – Trout Run	Basin, Spring Run to Mouth	Elk	CWF	None	
	* * * *				

§93.9m. Drainage List M.

Susquehanna River Basin in Pennsylvania Susquehanna River

Exceptions To

Stream	Zone	County	Water Uses Protected	Specific Criteria	
2 – Penns Creek	* * * * * Basin, Source to [Pine] <u>Muddy</u>	Centre	CWF	None	
<u>3 – Muddy Creek</u> 2 – Penns Creek	<u>Creek</u> <u>Basin</u> Basin, Muddy Creek to Pine	<u>Centre</u> <u>Centre</u>	HQ-CWF CWF	<u>None</u> None	
3—Pine Creek	<u>Creek</u> Basin, Source to Downstream Boundary of Hook Natural Area	Centre	EV	None	

§93.90. Drainage List O.

Susquehanna River Basin in Pennsylvania Susquehanna River

Stream	 · · · · · · · · · · · · · · · · · · ·	Zone	· · · · · · · · · · · · · · · · · · ·		County	Water Uses Protected	Exceptions To Specific Criteria
	 		* * * * *			 	
				-7-		-	
		· · · · · · · · · · · · · · · · · · ·				 	

3 – Laurel Run	3 – Laurel Run <u>Basin, Source to South Branch</u> Laurel Run		<u>EV</u>	None
[4 – North Branch Laurel Run	Basin, Source to Confluence with South Branch	Perry	EV	None]
4—South Branch Laurel Run	Basin[, Source to Confluence with North Branch]	Perry	HQ-CWF	None
3—Laurel Run	Basin, [Confluence of North and] South [Branches] Branch to T 339	Perry	HQ-CWF	None
3—Laurel Run	Basin, T 339 to Mouth	Perry	CWF	None
	* * * *			
3—Mill Creek	Main Stem, Source to [PA A-352] <u>SR 1011</u>	Lancaster	CWF	None
4Unnamed Tributary to Mill Creek From New Holland Reservoir	Basin, Source to Tailwaters of New Holland Reservoir	Lancaster	HQ-CWF	None
4—Unnamed Tributary to Mill Creek From New Holland Reservoir	Basin, New Holland Reservoir	Lancaster	CWF	None
4—Unnamed Tributary to Mill Creek From New Holland Reservoir	Basin, New Holland Reservoir Dam to Mouth	Lancaster	CWF	None
3 – Mill Creek	Basin, [PA A-352] <u>SR 1011</u> to Mouth	Lancaster	WWF	None
3-Stehman Run	Basin	Lancaster	WWF	None
	* * * *			
2 – Deer Creek	Basin (all sections in PA)	York	CWF, MF	None
1Chesapeake Bay				
	* * * *			
§93.9q. Drainage List Q.				
	Ohio River Basin in Per Allegheny Rive	nnsylvania Pr		ET _
-			Water Uses	Specific
Stream	Zone ****	County	Protected	Criteria
4—South Branch Tionesta Creek	Main Stem, Source to Confluence with West Branch	Warren	HQ-CWF	None

5—[Unnamed Tributaries] <u>UNTs</u> to South Branch Tionesta Creek 5—Martin Run

Basins

Basin

<u>Basin</u>

Basin

<u>Basin</u>

Basin

<u>5 – Wolf Run</u>

5—Coon Run

5 - Chaffee Run

5—Crane Run

-8-

Elk-Forest- Warren

Elk

<u>Elk</u>

Elk

<u>Elk</u>

Elk

- -- ---

HQ-CWF

HQ-CWF

HQ-CWF

HQ-CWF

HQ-CWF

EV

None

None

<u>None</u>

None

None

None

	5—Iron Run	Basin	Forest	HQ-CWF	None
	5—Fork Run	Basin	Forest	HQ-CWF	None
	5—Bogus Run	Basin	Forest	HQ-CWF	None
	5Rock Run	Basin	Forest	HQ-CWF	None
	<u>5 – Tuttle Run</u>	Basin	Forest	HQ-CWF	<u>None</u>
	5-Cherry Run	Basin	[Forest] Warren	HQ-CWF	None
	<u>5 – Martin Run</u>	Basin	Warren	HQ-CWF	<u>None</u>
	5-East Branch Tionesta Creek	Basin	[Forest] Warren	HQ-CWF	None
3-	-Tionesta Creek	Main Stem, Confluence of West and South Branches to Mouth	Forest	CWF	None

§93.9s. Drainage List S.

Ohio River Basin in Pennsylvania Allegheny River

		Exceptions To		
Stream	Zone ****	County	Water Uses Protected	Specific Criteria
4 – North Fork <u>Redbank Creek</u>	Main Stem, Source to Confluence with Sandy Lick Creek	Jefferson	HQ-CWF	None
5—Unnamed Tributaries to North Fork	Basins, Source to Confluence with Sandy Lick Creek	Jefferson	HQ-CWF	None
	* * * * *			
5 – South Branch of North	Basin	Jefferson	EV	None
Fork Redbank Creek				
5—Acy Run	Basin	Jefferson	HQ-CWF	None

* * * * *

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FINAL STATEMENT OF POLICY WATER QUALITY TOXICS MANAGEMENT STRATEGY

(Provided to EQB for information only, no Board action required)

ENVIRONMENTAL QUALITY BOARD MEETING

August 17, 2004

.

EXECUTIVE SUMMARY

Amendments to Title 25 PA. Code, Chapter 16 Water Quality Toxics Management Strategy – Statement of Policy

The Department of Environmental Protection (DEP) is amending Chapter 16 (relating to Water Quality Toxics Management – Statement of Policy). This amendment complements the review and revision of the regulations at Chapter 93 (relating to Water Quality Standards) and is part of the Triennial Review of Water Quality Standards.

SUMMARY OF THE POLICY – In Section 16.24, the final policy will update the chronic conversion factor for mercury. The US Environmental Protection Agency recently stated that this factor, which previously applied only to the Great Lakes, also applies to national waters. DEP also deleted the footnote that applied to the previous mercury conversion factor because it is no longer applicable. The language in Section 16.61 is amended to match recent changes to Chapter 93, pertaining to the Great Lakes Initiative. Non-substantive changes were made to the Great Lakes Aquatic Life and Human Health Criteria table to add clarity and to make grammatical corrections. There were also several non-substantive changes made to Sections 16.101 and 16.102. In Section 16.101, the tables have been reorganized to allow simplicity and clarity to criteria searching. In Section 16.102 the abbreviations were reorganized; Tables 1 and 2 were updated as a result of recent updates to approved methods in 40 CFR Part 136; and grammatical corrections were made.

Comments were received from six commentators as a result of the public comment period and the public hearings. Two comments were supportive of changes being made to Section 16.24, Appendix A, Table 1 and Section 16.61. One comment questioned if Pennsylvania's criteria continuous concentration (CCC) for mercury is equivalent to EPA's. The Department believes that Pennsylvania criteria are protective based on EPA's scientific rationale. EPA has not provided scientific support to its reinterpretation of the mercury specifications in the recent publication of the *National Recommended Water Quality Criteria-Correction (EPA 822-Z-99-001, April 1999)*. The other comments received address issues not part of the proposal including: toxics criteria relationship to the MCLs in the Safe Drinking Water Act (SDWA), the new MCL for arsenic as the criterion for human health, new fish consumption rates, the water quality criterion for methylmercury, design flow for acute aquatic life protection, and CCC for aluminum. The changes made to this policy can be viewed in the attached annex.

PURPOSE OF THE POLICY - Pennsylvania's water quality standards, which are set forth in part in 25 <u>Pa. Code</u> Chapter 93, implement the provisions of Section 5 and 402 of the Clean Streams Law and Section 303 of the Federal Clean Water Act, 33 U.S.C.A. § 1313. Water quality standards consist of the uses of the surface waters of the Commonwealth, the specific numeric and narrative criteria necessary to achieve and maintain those uses and antidegradation regulations. Chapter 16 is a water quality policy for managing toxic pollutants. It sets forth the guidelines for development of criteria for toxic substances, and lists the water quality criteria and analytical methods and detection limits for toxic substances. Chapter 16 is directly referenced as a support policy document in the DEP's toxic substances regulation at Section 93.8a.

ADVISORY GROUPS - The Water Resources Advisory Committee (WRAC) was briefed on the comments and on this final policy at its July 14, 2004 meeting.

PUBLIC COMMENT – Notice of the proposed amendments to Chapter 16 was published in the *Pennsylvania Bulletin* on October 18, 2003 (33 *Pa.B.* 5202) with provision for a 60-day public comment period that closed on December 17, 2003. In order to acquaint the public with the proposed amendments to Chapter 16, DEP conducted two public meetings prior to the start of the public hearings. Meetings/hearings were held on December 2, 2003, at the Four Points by Sheraton Mars, PA and on December 4, 2003, at the Courtyard by Marriott in Moosic.

COMMENT/ RESPONSE DOCUMENT

CHAPTER 16. - WATER QUALITY TOXICS MANAGEMENT STRATEGY – STATEMENT OF POLICY Final Rulemaking

Comment: § 16.24

1. We support the Departments change of the conversion factor for mercury. (6)

Response:

Thank you for your comment.

Comment: § 16.32

2. DEP should utilize EPA's new fish consumption estimates in calculating its toxics criteria. We are concerned that DEP has not yet used recent revised EPA guidance for calculating human health effect levels in its toxics criteria. The increase in EPA's estimate for average fish consumption could substantially strengthen the criteria for certain toxic substances that are known to have health effects. While the EPA fish consumption number is a national, not state specific number, DEP has previously used national numbers. If in the future DEP has developed state specific numbers, this could be used, however, until that time it would make sense to use the current EPA guidance. (1)

Response:

In the (2000) Methodology for Deriving Ambient Water Quality Criteria for the Protection of Human Health, EPA suggests a four-preference hierarchy for States to follow when deriving fish consumption rates. The four preference hierarchy is: (1) use of local data; (2) use of data reflecting similar geography/population groups; (3) use of data from national surveys; and (4) use of EPA's default intake rates. EPA's first preference is that States use results from fish intake surveys of local watersheds within the State to establish fish intake rates that are representative of the defined population. The Department has not yet developed site-specific data and is considering how to determine the most appropriate fish consumption rate for use in updating the criteria.

Comment: § 16.61

3. We support the proposed change to the aquatic life equations for cadmium. (6)

Response:

Thank you for your comment.

Comment: § 16.102, General

4. Request that DEP reexamine the Chapter 16 Toxics Criteria in order to ensure that the Toxics Criteria are at least as stringent as the MCLs set forth in the Safe Drinking Water Act. Many standards set in the federal Safe Drinking Water Act (SDWA) are not embodied in the Toxics Criteria. The SDWA sets Maximum Contaminant Levels (MCLs) for 54 different organic chemicals that water utilities are required to maintain in the water they provide to consumers. However, the Chapter 16 Toxics Criteria do not provide protection to source waters for many of these chemicals, potentially resulting in a situation where the state could allow toxic substances to be discharged into a source water in an amount that could result in an MCL violation at a drinking water intake. Of the 54 organics with MCLs, 28 did not have any toxics criteria. An additional 11 had toxics criteria that were weaker than the MCL. Altogether, 72% of the organics that are regulated through the SDWA have weaker standards, or no standards in Chapter 16. (1)

Response:

Pennsylvania's ambient water quality criteria for the protection of human health are developed in part by the National Recommended Water Quality Standards (NRWQS), under the federal Clean Water Act. There are some drinking water contaminants that are regulated under the Safe Drinking Water Act (SDWA) that do not have ambient water quality criteria. Many of the primary drinking water contaminants are included in Chapter 16, Water Quality Toxics Management Strategy. For all carcinogens, which include most of the organic toxics, a cancer risk level of 10⁻⁶ is applied. Cancer criteria are always more stringent than the drinking water criteria which takes other factors into consideration. For example, benzene: The drinking water criterion is 5 ug/L and the ambient water human health criterion is 1.2 ug/L. Pennsylvania regulates 75% of the 51 organic primary drinking water contaminants, at a protective level equal to or more stringent than the MCL.

Comment: § 16.102, Appendix A, Table 1

5. EPA, Region III is asking Pennsylvania to reevaluate the possibility of adopting the current National Primary Water Standard for Arsenic as the criterion for the protection of human health from the ingestion of both fish and water. As of January 23, 2006, drinking water treatment facilities will be required to meet the recommended Maximum Contaminant Level, or MCL, of 10 ug/L. As it is unlikely that PA will complete another triennial review of its water quality standards regulation by that time, the Commonwealth will be putting an undo burden upon these facilities by maintaining the current surface water criterion of 50 ug/L. (2,3)

Response:

PA will consider adopting the MCL or another criterion for Arsenic, after the MCL requirements are put into place.

Comment: § 16.102, Appendix A, Table 1

6. The Department should adopt EPA's standard for methylmercury. In 2001, EPA adopted a human health criterion of 0.3 mg/kg for this substance based on concentrations in fish and shellfish tissue. (4, 5)

Response:

This is the first time EPA has issued a water quality criterion expressed as a fish and shellfish tissue value rather than as a water column value. EPA stated this approach was a direct consequence of the scientific consensus that consumption of contaminated fish and shellfish is the primary human route of exposure to methylmercury. EPA, however, recognizes that this approach differs from traditional water column criteria, and that it will likely pose implementation challenges. In the January 8, 2001 notice EPA attempted to provide suggested approaches for relating the fish and shellfish tissue criterion to concentrations of methylmercury in the water column. The Department and most other states have requested specific guidance from EPA on how the states' are to adopt and implement this unique water quality criterion. To date, however, EPA has not yet developed this implementation guidance for a water quality criterion that is based on concentrations in fish and shellfish tissue, which EPA acknowledged (in their own factsheets and criteria documentation) was needed before states can effectively implement this new criterion.

Comment: § 16.102, Appendix A, Table 1

7. Pennsylvania's CCC and CMC for mercury are identical to EPA's recommended numbers (USEPA 2002), but they are annotated " (Hg^{2+}) ," which would mean that the criterion applies only to inorganic mercury. The current proposed change to apply a conversion factor to the CCC for mercury takes into account the difference between total and dissolved mercury. By applying the criterion to inorganic (Hg²⁺) rather than total mercury, Pennsylvania's criterion is not equivalent to EPA's and is under protective of the fish and wildlife. (6)

Response:

Pennsylvania adopted EPA's 304(a) recommended aquatic life criterion for mercury based on the 1995 Updates: Water Quality Criteria Documents for the Protection of Aquatic Life in Ambient Water (EPA-820-B-96-001, September 1996), which is derived from, and scientifically supported by, data for inorganic mercury (HgII). Other previous EPA documents such as Quality Criteria for Water 1986 (EPA 440-5-86-001), or the "Gold Book" and the Ambient Water Quality Criteria for Mercury (EPA 440/5-80-058, October 1980) and Mercury - 1984 (440/5-84-026, January 1985) criteria documents also make specific freshwater mercury criteria recommendations as total recoverable mercury (HgII). EPA's most recent compilation of recommended criteria, as published in the National Recommended Water Quality Criteria-Correction (EPA 822-Z-99-001, April 1999), however, recommends this mercury (HgII) criterion be applied to total mercury. We do not, however, believe the April 1999 compilation provides the necessary scientific support or

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documentation to justify EPA's recommended change in the application of the mercury criterion to total.

Comment: § 16.102, Appendix A, Table 1

8. The Department has not yet adopted EPA's criteria continuous concentration (CCC) for aluminum. The Department has continued to maintain that the EPA's CCC is flawed, and said it will "continue to monitor the scientific literature and EPA's evaluations of aluminum toxicity and amend the criterion or add a chronic criterion, if indicated". The Department should make public its evaluation in this review. (6)

Response:

The Department has no new information to support the CCC for aluminum and continues to apply the acute criteria to protect fish and aquatic life.

General Comments

Comment:

9. The Department should use Q1-10 as the design flow, as that is recommended by EPA in both guidance (USEPA 1991), and regulation (40CFR 131.36). The Department's use of Q7-10 to establish acute effects will result in less protection of aquatic life than envisioned by EPA when it publishes or promulgates criteria. EPA made a similar comment in the 2000 triennial review. The Department's argument demonstrated that in "the vast majority of circumstances," there will be "no substantial difference" in effluent limitations developed as a result of using the Q1-10 vs. Q7-10 flow; therefore, the impact of this change on the regulated community would be minimal. The Department has not justified its use of Q7-10. We continue to recommend that Q1-10 be used as the design flow for acute criteria. (6)

Response:

For protection of aquatic life due to acute effects from toxics, the Department uses Q7-10 as the design flow. The degree of protection depends on two main factors: the design stream flow and the amount of dilution that is allowed to occur before enforcing acute criteria. The Department does not allow mixing zones, but uses a time-based criteria compliance method that employs the EPA ambient mixing equation to determine the amount of mixing that occurs in 15 minutes. For large rivers, for example, only a few percent of the Q7-10 flow may be allocated for dilution, and the resulting wasteload allocation reflects this restriction. It is difficult to exactly compare how protective Pennsylvania's method is compared to methods using Q1-10 as the design flow with a mixing zone based on the discharge length scale or some multiple of the local depths. It appears that both methods provide similar levels of protection against acute effects from toxics.
Chapter 16 – Statement of Policy List of Commentators

ID	Name/Address	Zip	Submitted 1 pg Summary	Provided Testimony	Req Final Rulemaking
1	Myron Arnowitt, Western PA Director, Clean Water Action			Τ	
2	Denise Hakowski USEPA Region III			Τ	
3	Evelyn S. MacKnight, Chief USEPA Region III				
4	William J. Gerlach Pennsylvania Attorney Chesapeake Bay Foundation				
5	Robert Wendelgass PA Campaign for Clean Water				
6	David Densmore United States Department of the Interior Fish and Wildlife Service				

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STATEMENTS OF POLICY TITLE 25 – ENVIRONMENTAL PROTECTION DEPARTMENT OF ENVIRONMENTAL PROTECTION [Title 25 PA. CODE CH. 16] Water Quality Toxics Management Strategy

The Department of Environmental Protection (DEP) is amending Chapter 16 (relating to Water Quality Toxics Management – Statement of Policy). These proposed amendments complement the review and revision of Chapter 93 (relating to Water Quality Standards).

A. Effective Date

These amendments will be effective upon publication in the Pennsylvania Bulletin.

B. Contact Persons

For further information contact Edward R. Brezina, Chief, Division of Water Quality Assessment and Standards, Bureau of Water Supply and Wastewater Management, 11th Floor, Rachel Carson State Office Building, P.O. Box 8467, 717-787-9637 or Michelle Moses, Assistant Counsel, Bureau of Regulatory Counsel, 9th 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 final rulemaking is available electronically through DEP's website (<u>http://www.dep.state.pa.us</u>).

C. Statutory Authority

These 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 DEP. 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) sets forth certain requirements for portions of the Commonwealth's antidegradation program. 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.

D. Background and Summary

Pennsylvania's water quality standards, which are set forth in part in 25 <u>Pa. Code</u> Chapter 93 and Chapter 16, implement the provisions of Section 5 and 402 of the Clean Streams Law and Section 303 of the Federal Clean Water Act, 33 U.S.C.A. § 1313. Water quality standards consist of the uses of the surface waters of the Commonwealth, the specific numeric and narrative criteria necessary to achieve and maintain those uses and antidegradation regulations. Chapter 16 is a water quality policy for managing toxic pollutants. It sets forth the guidelines for development of criteria for toxic substances, and lists the water quality criteria and analytical methods and detection limits for toxic substances. Chapter 16 is directly referenced as a support policy document in DEP's toxic substances regulation at Section 93.8a.

The revisions to the statement of policy will streamline and clarify requirements, update the policy to be consistent with Federal requirements, and preserve Pennsylvania-specific requirements to serve the citizens. These amendments may affect persons who discharge wastewater into surface waters of the Commonwealth, or otherwise conduct activities, which may impact the waters.

The Department's Water Resources Advisory Committee (WRAC), provided input on the proposed amendments at its November 13, 2002 and September 10, 2003 meetings. The proposal was published in the *Pennsylvania Bulletin* on October 18, 2003 (33 *Pa.B.* 5190) with provision for a 60-day public comment period that closed on December 17, 2003. Comments were received from six commentators as a result of the public comment period and the public hearings. The Department considered all of the public comments received on its proposal in preparing for this final statement of policy. The draft final regulation was discussed with WRAC on July 14, 2004. The valuable input from the public and the collective knowledge and experience drawn from advisory committees and others on this proposal has been utilized to develop a policy which carefully balance the needs of citizens and the regulated community in assuring the protection of the Commonwealth's waters. The comments received on the proposed regulation are summarized in Section E below.

E. Summary of Comments and Responses on the Proposed Rulemaking

No changes were made to the proposal based on the comments received.

§ 16.32. Threshold level toxic effects.

A comment stated that DEP should adopt EPA's new fish consumption estimates in calculating its toxics criteria. The DEP has not yet developed site-specific data and is considering the most appropriate fish consumption rate for use in updating the criteria at a future time.

§ 16.102 General, Appendix A. Table 1.

A comment requested that DEP reexamine the Chapter 16 toxics criteria for comparison to Safe Drinking Water Act maximum contaminant levels (MCLs). Pennsylvania's ambient water quality criteria are developed under the federal Clean Water Act. Safe Drinking Water Act requirements are different. Nevertheless, many water quality criteria are more stringent than MCLs.

EPA requested that Pennsylvania consider a new human health criterion for arsenic. DEP will consider adopting the MCL or water quality criterion for arsenic, after the MCL requirements are put into place and the ambient water quality criterion is recommended.

Although requested, DEP is not adopting EPA's human health criterion for methylmercury because EPA has not yet developed sufficient implementation guidance for a water quality criterion that is based on concentration in fish and shellfish tissue.

The request to adopt the criteria continuous concentration (CCC) for aluminum did not result in any changes to this section. DEP has no new information to support the CCC for aluminum.

The comment on the application of the CCC for mercury did not result in any changes. Pennsylvania adopted EPA's 304 (a) recommended aquatic life criterion for mercury based on the 1995 update of the Water Quality Criteria Documents for the Protection of Aquatic Life in Ambient Water (EPA-820-B-96-001, September 1996) and EPA has not provided scientific rationale for a change.

DEP has prepared a Comment and Response document for the proposed amendments. Copies are available from the Division of Water Quality Assessment and Standards at the address in Section B.

BY

Kathleen A. McGinty Secretary

ANNEX A

TITLE 25. ENVIRONMENTAL PROTECTION PART I. DEPARTMENT OF ENVIRONMENTAL PROTECTION Subpart A. PRELIMINARY PROVISIONS ARTICLE II. STATEMENTS OF POLICY

CHAPTER 16. WATER QUALITY TOXICS MANAGEMENT STRATEGY STATEMENT OF POLICY

Subchapter A. GUIDELINES FOR DEVELOPMENT OF CRITERIA FOR TOXIC SUBSTANCES AND WATER QUALITY CRITERIA FOR TOXIC SUBSTANCES

* * * * *

GUIDELINES FOR DEVELOPMENT OF AQUATIC LIFE CRITERIA

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§ 16.24. Metals criteria.

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Conversion Factors Table

Chronic Acute

Source

[NA**] 0.85 0.85

1,2

Mercury

* * * * *

*Conversion factor is for both acute and chronic criteria.

[**The Great Lakes Guidance includes a conversion factor for the Great Lakes-specific chronic mercury criterion which is based on chronic effects to fish and aquatic life. The factor is not applicable to the PA (and NTR) criterion, which was developed by the EPA as a Nationally applicable criterion, because it is residue based.]

* * * * *

GREAT LAKES SYSTEM

§16.61. Special provisions for the Great Lakes System.

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

* * * * *

BCC—Bioaccumulative Chemical of Concern—A chemical that has the potential to cause adverse effects which, upon entering the surface waters, by itself or its toxic transformation product, accumulates in aquatic organisms by a human health BAF greater than 1000, after considering metabolism and other physiochemical properties that might enhance or inhibit bioaccumulation, under the methodology in 40 CFR Part 132 Appendix B (relating to Great Lakes Water Quality Initiative). Current BCCs are listed in 40 CFR 132.6, Table 6 [Subpart A] (relating to pollutants of initial focus in the Great Lakes Water Quality Initiative).

* * * * *

(b) Water quality criteria for the Great Lakes System.

* * * * *

(2) Human health criteria. Human health criteria for the Great Lakes System will be developed using the methods in §§ 16.32 and 16.33 (relating to threshold level toxic effects; and nonthreshold effects (cancer)), except that fish consumption is 15 grams per day. If there are insufficient data to develop human health threshold criteria for a toxic substance identified in a discharge into these waters, the Department will develop, or require the discharger to develop, subject to Department approval, protective human health values using the methodologies in 40 CFR Part 132, Appendix C, [Part] Section III, as it relates to Tier II values, and guidance issued by the Department.

* * * *

GREAT LAKES AQUATIC LIFE AND HUMAN HEALTH CRITERIA

PP NO	Chemical Name	CAS Number	Criteria Concenti	Continuous rations (ug/L)	Criteria Maximum Concentration (ug/L)	Human Health Criteria (ug/L)		
				* * * * *				
4M	Camdium] <u>Cadmium</u>	07440439	*{1.1016 (ln[H]x0 Exp(0.78 (ex: @H=	72- .041838)}x 52xIn[H]-2.715) =100, CCC=2.24)	*{1.136672- (ln[H]x0.041838)}x Exp(1.128xln[H]-3.6867) (ex: @H=100,CMC=4.26)	N/A		
				* * * * *				
4P	gamma- BHC (Lindane)	00058899	N/A	* * * *	0.95	0.47	CR	L] <u>H</u>
[18P]	PCBs	[53469219]	N/A		N/A	0.00000	039	CRL

Fish and Aquatic Life Criteria

* * * * *

(6) Additional requirements. Additivity of toxic effects for [cholorinated] chlorinated dibenzo-p-dioxins and chlorinated dibenzofurans will be accounted for under 40 CFR Part 132, Appendix F, Procedure 4 (relating to Great Lakes Water Quality Initiative implementation procedures).

Subchapter B. ANALYTICAL METHODS AND DETECTION LIMITS FOR TOXIC SUBSTANCES

GENERAL PROVISIONS

§ 16.101. Introduction.

(a) This subchapter contains information on the final EPA Guidelines establishing test procedures for the analysis of priority pollutants under the Federal Water Pollution Control Act, known as the Clean Water Act (33 U.S.C.A. § § 1251—1376). The procedures of analysis for the organic compounds are contained in 40 CFR 136 (relating to guidelines establishing test procedures). Procedures for inorganic substances are cited in this source, but details are found elsewhere. Analytical procedures for free cyanide are approved by the Department and are contained in Appendix A, Tables 2A and 2B.

* * * * *

§16.102. Approved EPA Analytical Methods and Detection Limits.

(a) Appendix A, Tables 2<u>A and 2B</u> contain[s] the following data elements and is to be used as follows:

* * * * *

(2) Method number + (description) includes the approved EPA procedures by identifying number and an abbreviated description of each. The methods are detailed in one or more of the following sources:

(i) Methods for Chemical Analysis of Water and Wastes, EPA 600/4-79-020, Revised March 1984.

(ii) 40 CFR Part 136 (relating to guidelines establishing test procedures). The EPA provides a list of still other sources for these methods in 40 CFR Part 136. Methods that were not developed by the EPA, that is, have no EPA identifying method number, but are approved by the EPA for use in NPDES related analyses are marked with an asterisk (*) in Appendix A, Tables 2A and 2B.

(iii) Standard Methods for the Examination of Water and Wastewater, 20th Edition, APHA-AWWA-[JWPCF] WEF, 1998.

(iv) Hach Handbook of Wastewater Analysis, Hach Chemical Company, 1979.

(v) Direct Current Plasma (DCP) Optical Emission Spectrometric Method for Trace Elemental Analysis of Water and Wastes, Method AES0029. Applied Research Laboratories, Inc., 1986—Revised 1991, Fison Instruments, Inc.

(vi) ASTM Annual Book of Standards, Section 11, Water. American Society for Testing and Materials, [1991] 1999.

(3) MDL is the method detection limit for each chemical for each method. The MDL is defined as the minimum concentration that can be measured and reported with 99% confidence that the value is above zero—that is, something is really there. The MDL concentrations listed were obtained using reagent water. Similar results were achieved using representative wastewaters. The MDL achieved in a given analysis will vary depending on instrument sensitivity and matrix effects.

* * * * *

(iv) The primary source for detection limits in Appendix A, Tables $2\underline{A}$ and $\underline{2B}$ is EPA MDL studies. However, when the EPA has not performed an MDL study or reported the detection limit, other sources—particularly, Standard Methods—are consulted. When there is no literature on detection limit, the Department's Bureau of Laboratories may be asked to determine the detection limit based on an MDL study.

(4) Permittees will be required to meet the detection limits listed in Appendix A, Tables $2\underline{A}$ and $2\underline{B}$. If the detection limit is not listed, a permittee shall develop a detection limit using an MDL study.

* * * * *

APPENDIX A TABLE 1 WATER QUALITY CRITERIA FOR TOXIC SUBSTANCES

			Fish and Aqua	atic Life Criteria	Human	
PP NO	Chemical Name	CAS Number	Criteria Continuous Concentration (ug/L)	Criteria Maximum Concentration (ug/L)	Health Criteria (ug/L)	
			* * * * *			
4M	Cadmium	.07440439	[*{1.101672-(In[H]x0.041838)}x Exp(0.7852xIn[H]-2.715) (ex:@H=100, CCC=2.2)] *{1.101672-(In[H]x0.041838)}x Exp(0.7409 x In[H]-4.719) (ex:@H=100, CCC=0.25)	[*{1.136672 (In[H]x0.041838)}x Exp(1.128xIn[H]3.6867) (ex: @H=100, CMC=4.3)] *{1.136672-(In[H]x0.041838)}x Exp(1.0166 x In[H]-3.924) (ex: @H=100, CMC=2.01)	N/A	
			* * * *			
7P	4,4-DDT	00050293	[0.0001] <u>0.001</u>	1.1	0.00059	CRL

* * * * *

APPENDIX A TABLE 1 WATER QUALITY CRITERIA FOR TOXIC SUBSTANCES Acronyms and Footnotes to Table 1

* * * * *

H- Threshold effect human health criterion; incorporates additional uncertainly factor for some Group C carcinogens. CRL- Cancer risk level at 1×10^{-6} lnH- Natural Logarithm of the Hardness of stream as mg/l CaCO₃ N/A- Insufficient data to develop criterion.

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Parameter (CAS)		Method Number (Description) *Source	Detection Limit (µg/l)
	ALUMINUM	202.1 (AA, flame)	100
	(07429905)	202.2 (AA, furnace)	3
		200.7 (ICP)	45
		[3500-Al D* ¹] 3500 Al B* ¹ (Colorimetric)	6
		[D4190-82(88)* ⁴] <u>D4190-94*⁴</u> (DCP)	NA
1 M	ANTIMONY	204.1 (AA, flame)	200
	(07440360)	204.2 (AA, furnace)	3
		200.7 (ICP)	[45] <u>32</u>
		* * * * *	
3M	BERYLLIUM	210.1 (AA, flame)	5
	(07440417)	210.2 (AA, furnace)	0.2
		200.7 (ICP)	0.3
		3500-Be D*1 (Colorimetric)	5
		[D4190-82(88)*⁴] <u>D4190-94*⁴</u> (DCP)	NA
_	BORON	212.3 (Colorimetric)	0.2
	(07440428)	200.7 (ICP)	5
		[D4190-82(88)* ⁴] <u>D4190-94*⁴</u> (DCP)	NA
4M	CADMIUM	213.1 (AA, flame)	5
	(07440439)	213.2 (AA, furnace)	0.1
		200.7 (ICP)	4
		3500-Cd D*1 (Colorimetric)	0.5
		[D3557-90(C)*⁴] <u>D3557-95(C)*⁴</u> (Voltametry)	NA
		[D4190-82(88)] D4190-94*⁴ (DCP)	NA

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TABLE 2<u>A</u>APPROVED EPA ANALYTICAL METHODS AND DETECTIONLIMITS: INORGANICS

5M	CHROMIUM	218.1 (AA, flame)	50
	TOTAL	218.2 (AA, furnace)	1
	(07440473)	218.3 (AA, extraction)	1
		200.7 (ICP)	7
		[D4190-82(88)* ⁴] <u>D4190-94*⁴</u> (DCP)	NA
		<u>3500-Cr B*¹ (Colorimetric)</u>	<u>NA</u>
5M	CHROMIUM VI	218.4 (AA extraction)	10
	(07440473)	[3500-Cr D* ¹] 3500-Cr B* ¹ (Colorimetric)	NA
	COBALT	· 219.1 (AA, flame)	50
	(07440484)	219.2 (AA, furnace)	1
		200.7 (ICP)	7
		 D4190-82(88)*⁴ <u>D4190-94*⁴</u> (DCP)	NA
6M	COPPER	220.1 (AA, flame)	20
	(07440508)	220.2 (AA, furnace)	1
		200.7 (ICP)	6
		[3500-Cu D* ¹] <u>3500-Cu B*¹</u> (Colorimetric)	3
		[3500-Cu E ^{*1}] <u>3500-Cu C^{*1} (</u> Colorimetric)	[10] <u>20</u>
		[D4190-82(88)**] <u>D4190-94*⁴ (DCP)</u>	NA
	IRON	236.1 (AA, flame)	30
	(07439921)	236.2 (AA, furnace)	1
•		200.7 (ICP)	7
		[3500-Fe D* ¹] <u>3500-Fe B*¹ (Colorimetric)</u>	[20] <u>10</u>
		D4190-82(88)*⁴ D4190-94*⁴ (DCP)	NA

	7M	LEAD	239.1 (AA, flame)	100	
		(07439921)	239.2 (AA, furnace)	1	
			200.7 (ICP)	42	
			[3500-Pb D* ¹)] <u>3500-Pb B*¹ (</u> Colorimetric)	NA	
			[D3559-90(C)* ⁴] <u>D3559-96(C)*⁴</u> (Voltametry)	NA	
			[D490-82(88)* ⁴] <u>D4190-94*⁴</u> (DCP)	NA	
		MAGNESIUM	242.1 (AA, flame)	1	
		(07439954)	200.7 (ICP)	[45] <u>30</u>	
			3500—Mg D* ¹ (Gravimetric)	NA	
			—* ³ (DCP)	NA	
	н н. 	MANGANESE	243.1 (AA, flame)	10	
		(07439965)	243.2 (AA, furnace)	0.2	
•			200.7 (ICP)	2	
			[3500-Mn D* ¹] <u>3500-Mn B*¹ (</u> Colorimetric)	6	
			8034—* ² (Colorimetric)	NA	
			[D4190-82(88)*⁴] <u>D4190-94*⁴</u> (DCP)	NA	
	8M	MERCURY	245.1 (Cold vapor, Man)	0.2	
		(07439976)	245.2 (Cold vapor, Auto)	0.2	
			<u>1631 (Cold vapor, Atomic Fluor.)</u> * * * * *	0.0005	
	9M	NICKEL	249.1 (AA, flame)	40	
		(07440020)	249.2 (AA, furnace)	1	
			200.7 (ICP)	15	
			3500-Ni D*1 (Colorimetric)	NA	
			[D4190-82(88)^{*4}] <u>D4190-94^{*4}</u> (DCP)	NA	
	10M	SELENIUM	270.2 (AA, furnace)	2	
		(07782492)	[270.3 (AA, hydride)]	[2]	
			200.7 (ICP)	75	
· · · · · · · · · · · · · · · · · · ·			<u>3114 B*¹ (AA, gaseous hydride)</u> * * * * *	2	
· · · · · · · · · · · · · · · · · · ·					
· · · · · · · · · · ·			· · · · · · · · · · · · · · · · · · ·		······································
					and the second

13M	ZINC	200.7 (ICP)	2
	(07440666)	3500-Zn E* ¹ (Colorimetric)	1
		[3500-Zn F ^{*2}] <u>3500-Zn B^{*1}</u> (Colorimetric) [D4190-82(88)* ⁴] <u>D4190-94*⁴</u> (DCP)	[NA] <u>20</u> Na
14M	CYANIDE, TOTAL (00057125)	4500-CN D*[1] ¹ (Titrimetric) [335.3] 335.2 (Spectrophometric)	1000 20
	`	335.3 (Color., Auto)	5
**14M	CYANIDE FREE	(DEP Free CN method, Auto)	1
1-11-1	CTANDE, TREE	Not EPA approved	1
	(00057125)	4500-CN I* ¹ Not EPA approved	NA
		335.1 (Amenable to Chlor.) * * * * *	NA

* Not an EPA developed method, but approved by EPA

APHA-AWWA-[WPCF, 1992] WEF, 1998. The approved methods may also be found in Standard Methods for the Examination of Water and Wastewater, 18th or 19th Editions, but with different identifying numbers.

For Selenium, the method number quoted is from the 19th Edition.

²—Hach Handbook of Wastewater Analysis. 1979.

³—Direct Current Plasma (DCP) Optical Emission Spectrometric Method for Trace Elemental Analysis of Water and Wastes, Method AES0029. Applied Research Laboratories, Inc., 1986-Revised 1991.

⁴—ASTM Annual Book of Standards, Section 11, Water. American Society for Testing and Materials, [1991] 1999.

** EPA currently measures "total cyanide" to satisfy cyanide limits and has not yet approved analytical methods for "free cyanide." Free cyanide is a DEP required analysis, and either of the three listed methods are acceptable for its determination.

NOTE: Metal samples are to be unfiltered and predigested for measurement of the total recoverable (not dissolved) fraction. Samples for dissolved measurement are to be field filtered.

TABLE 2 <u>B</u>
APPROVED EPA ANALYTICAL METHODS AND DETECTION
LIMITS: ORGANICS

Parame (CAS)	ter	Method Number (Description) *Source	Detection Limit (MDL) (µg/l)
1 A	2-CHLOROPHENOL	604 - GC/FID	0.31
	(00095578)	604 - GC/ECD	0.58
		625 - GC/MS	3.3
		1625 B - GC/MS(isotope)	10
2A	2,4-DICHLOROPHENOL	604 - GC/FID	0.39
	(00120832)	604 - GC/ECD	0.68
		625 - GC/MS	2.7
		1625 B - GC/MS(isotope)	10
~ ~			0.22
3A	2,4-DIMETHYLPHENOL	604 - GC/FID	0.32
	(00105679)	604 - GC/ECD	0.63
		625 - GC/MS	2.7
		1625 <u>B</u> - GC/MS(1sotope)	10
4A	4,6-DINITRO-0-CRESOL	604 -GC/FID	16.0
	(00534521)	604 - GC/ECD	NA
		625 - GC/MS	24
		1625 <u>B</u> - GC/MS(isotope)	20
5A	2,4-DINITROPHENOL	604 -GC/FID	13.0
	(00051285)	604 - GC/ECD	NA
		625 - GC/MS	42
		1625 <u>B</u> - GC/MS(isotope)	50
6A	2-NITROPHENOL	604 -GC/FID	0.45
	(00088755)	604 - GC/ECD	0.77
	(/	625 - GC/MS	3.6
		1625B - GC/MS(isotope)	20
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7 A	4-NITROPHENOL	604 -GC/FID	2.8		
	(00100027)	604 - GC/ECD	0.70		
		625 - GC/MS	2.4		
		1625 <u>B</u> - GC/MS(isotope)	50		
8A	p-CHLORO-m-CRESOL	604 - GC/FID	0.36		
	(00059507)	604 - GC/ECD	1.8		
		625 - GC/MS	3.0		
		1625 B - GC/MS(isotope)	10		
9A	PENTACHLOROPHENOL	604 - GC/FID	7.4		
	(00087865)	604 - GC/ECD	0.59		
		625 - GC/MS	3.6		
		1625 <u>B</u> - GC/MS(isotope)	50		
10A	PHENOL	604 - GC/FID	0.14	•	
	(00108952)	604 - GC/ECD	2.2		
		625 - GC/MS	1.5		
		1625 B - GC/MS(isotope)	10		
11 A	2,4,6-TRICHLORO-	604 - GC/FID	0.64		
	PHENOL	604 - GC/ECD	0.58		
	(00088062)	625 - GC/MS	2.7		
		1625 <u>B</u> - GC/MS(isotope)	10		
IV	ACROLEIN (1)	603 - GC/FID	0.7		
	(00107028)	624 - GC/MS	NA		
		1624 <u>B</u> - GC/MS(isotope)	50		
2V	ACRYLONITRILE ⁽¹⁾	603 - GC/FID	0.5	-	
	(00107131)	624 - GC/MS	NA		
		1624 <u>B</u> - GC/MS(isotope)	50		
3V	BENZENE	602 - GC/PID	0.20		•.
	(00071432)	624 - GC/MS	4.4		
		1624 B - GC/MS(isotope)	10		
 5V	BROMOFORM	601 - GC/Hal.	0.20		-
 · · · · · · ·	(00075252)	624 - GC/MS	4.7		1961 - 196 Mar
 	· · · · · · · · · · · · · · · · · · ·	1624 <u>B</u> - GC/MS(isotope)	10		

6V	CARBON TETRA-	601 - GC/Hal.	0.12
	CHLORIDE	624 - GC/MS	2.8
	(00056235)	1624 <u>B</u> - GC/MS(isotope)	10
7V	CHLOROBENZENE	601 - GC/Hai.	0.25
	(00108907)	602 - GC/PID	0.20
	•	624 - GC/MS	6.0
		1624 B - GC/MS(isotope)	10
8V	CHLORODIBROMO-	601 - GC/Hal.	0.09
	METHANE	624 - GC/MS	3.1
	(00124481)	1624 <u>B</u> - GC/MS(isotope)	10
9V	CHLOROETHANE	601 - GC/Hal.	0.52
	(00075003)	624 - GC/MS	NA
		1624 <u>B</u> - GC/MS(isotope)	[10] <u>50</u>
10V	2-CHLOROETHYL	601 - GC/Hal.	0.13
	VINYL ETHER	624 - GC/MS	NA
	(00110758)	1624 B - GC/MS(isotope)	10
11V	CHLOROFORM	601 - GC/Hal.	0.05
	(00067663)	624 - GC/MS	1.6
		1624 <u>B</u> - GC/MS(isotope)	10
12V	DICHLOROBROMO-	601 - GC/Hal.	0.10
	ETHANE	624 - GC/MS	2.2
	(00075274)	1624 <u>B</u> - GC/MS(isotope)	10
14V	1,1-DICHLOROETHANE	601 - GC/Hal.	0.07
	(00075343)	624 - GC/MS	4.7
		1624 <u>B</u> - GC/MS(isotope)	10
15V	1,2-DICHLOROETHANE	601 - GC/Hal.	0.03
	(00107062)	624 - GC/MS	2.8
		1624 <u>B</u> - GC/MS(isotope)	10

16V	1,1-DICHLORO-	601 - GC/Hal.	0.13
	ETHYLENE	624 - GC/MS	2.8
	(00075354)	1624 B - GC/MS(isotope)	10
17V	1,2-DICHLORO-	601 - GC/Hal.	0.04
	PROPANE	624 - GC/MS	6.0
	(00078875)	1624 B - GC/MS(isotope)	10
18V	1,3-DICHLORO-	601 - GC/Hal.	0.34-cis 0.20-trans
	PROPYLENE	624 - GC/MS	5.0-cis
	(00542756)	1624 <u>B</u> - GC/MS(isotope)	10 trans
19V	ETHYLBENZENE	602 - GC/PID	0.20
	(00100414)	624 - GC/MS	7.2
		1624 <u>B</u> - GC/MS(isotope)	10
20V	METHYL BROMIDE	601 - GC/Hal.	1 18
	(00074839)	624 - GC/MS	NA
		1624 <u>B</u> - GC/MS(isotope)	[10] <u>50</u>
21V	METHYL CHLORIDE	601 - GC/Hal.	0.08
	00074873)	624 - GC/MS	NA
		1624 B -GC/MS(isotope)	[10] <u>50</u>
22V	METHYLENE	601 - GC/Hal.	0.25
	CHLORIDE	624 - GC/MS	2.8
	(00075092)	1624 B - GC/MS(isotope)	10
23V	1,1,2,2-TETRA-	601 - GC/Hal.	0.03
	CHLOROETHANE	624 - GC/MS	6.9
	(00079345)	1624 <u>B</u> - GC/MS(isotope)	10
24V	TETRACHLORO-	601 - GC/Hal.	0.03
	ETHYLENE	624 - GC/MS	4.1
	(00127184)	1624 B - GC/MS(isotope)	10

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25V	TOLUENE	602 - GC/PID	0.20	
	(00108883)	624 - GC/MS	6.0	
		1624 <u>B</u> - GC/MS(isotope)	10	
26V	1,2-trans-	601 - GC/Hal.	0.10	
	DICHLOROETHYLENE	624 - GC/MS	1.6	
	(00156605)	1624 <u>B</u> - GC/MS(isotope)	10	
27V	1,1,1-TRICHLORO-	601 - GC/Hal.	0.03	
	ETHANE	624 - GC/MS	3.8	
	(00071556)	1624 B - GC/MS(isotope)	10	
28V	1,1,2-TRICHLORO-	601 - GC/Hal.	0.02	
	ETHANE	624 - GC/MS	5.0	
	(00079005)	1624 B - GC/MS(isotope)	10	
29V	TRICHLOROETHYLENE	601 - GC/Hal.	0.12	
	(00079016)	624 - GC/MS	1.9	
		1624 <u>B</u> - GC/MS(isotope)	10	
31V	VINYL CHLORIDE	601- GC/Hal	0.18	
	(00075014)	624 - GC/MS	NA	
		1624 <u>B</u> - GC/MS(isotope)	10	
1B	ACENAPHTHENE	610 - GC/FID	NA	
	(00083329)	610 - HPLC	1.8	
		625 - GC/MS	1.9	
		1625 <u>B</u> - GC/MS(isotope)	10	
2B	ACENAPHTHYLENE	610 - GC/FID	NA	
	(00208968)	610 - HPLC	2.3	
		625 - GC/MS	3.5	
		1625 <u>B</u> - GC/MS(isotope)	10	
3B	ANTHRACENE	610 - GC/FID	NA	
	(00120127)	610 - HPLC	0.66	
		625 - GC/MS	1.9	
		1625 B - GC/MS(isotope)	10	

4B	BENZIDINE ⁽²⁾	605 - HPLC	0.08
	(00092875)	625 - GC/MS	44
		1625 <u>B</u> - GC/MS(isotope)	50
5B	BENZO(a)ANTHRACENE	610 - GC/FID	NA
	(00056553)	610 - HPLC	0.013
		625 - GC/MS	7.8
		1625 <u>B</u> - GC/MS(isotope)	[50] <u>10</u>
6B	BENZO(a)PYRENE	610 - GC/FID	NA
	(00050328)	610 - HPLC	0.023
		625 - GC/MS	2.5
		1625 B - GC/MS(isotope)	10
7B	3,4-BENZO-	610 - GC/FID	NA
	FLUORANTHENE	610 - HPLC	0.018
	(00205992)	625 - GC/MS	4.8
		1625 B - GC/MS(isotope)	10
8B	BENZO(ghi)PERYLENE	610 - GC/FID	NA
	(00191242)	610 - HPLC	0.076
		625 - GC/MS	4.1
		1625 B - GC/MS(isotope)	[10] <u>20</u>
9B	BENZO(k)FLUOR-	610 - GC/FID	NA
	ANTHENE	610 - HPLC	0.017
	(00207089)	625 - GC/MS	2.5
		1625 <u>B</u> - GC/MS(isotope)	10
10B	BIS(2-CHLORO-	611 - GC/Hal.	0.5
	ETHOXY) METHANE	625 - GC/MS	5.3
	(00111911)	1625 <u>B</u> - GC/MS(isotope)	10
11B	BIS(2-CHLORO-	611 - GC/Hal.	0.3
	ETHYL) ETHER	625 - GC/MS	5.7
	(00111444)	1625 B - GC/MS(isotope)	10
12B	BIS(2-CHLORO-	611 - GC/Hal.	0.8
	ISOPROPYL) ETHER	625 - GC/MS	5.7
	(39638329)	1625 B - GC/MS(isotope)	10

13B	BIS(2-ETHYL-	606 - GC/ECD	2.0
	HEXYL) PHTHALATE	625 - GC/MS	2.5
	(00117817)	1625 <u>B</u> - GC/MS(isotope)	10
14B	4-BROMOPHENYL	611 - GC/Hal.	2.3
	PHENYL ETHER	625 - GC/MS	1.9
	(00101553)	1625 <u>B</u> - GC/MS(isotope)	10
15B	BUTYLBENZYL	606 - GC/ECD	0.34
102	PHTHALATE	625 - GC/MS	2.5
	(00085687)	1625 B - GC/MS(isotope)	10
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16B	2-CHLORONAPH-	612 - GC/ECD	0.94
	THALENE	625 - GC/MS	1.9
	(00091587)	1625 <u>B</u> - GC/MS(isotope)	10
178	4-CHI OROPHENVI	611 - GC/Hal	3.9
170	PHENVI FTHER	625 - GC/MS	42
	(07005723)	1625B - GC/MS(isotone)	19
	(07005725)		
18B	CHRYSENE	610 - GC/FID	NA
	(00218019)	610 - HPLC	0.15
		625 - GC/MS	5.3
		1625 <u>B</u> - GC/MS(isotope)	10
100	DIPENIZO(a h)	610 - GC/FID	NA
190	ANTURA CENE	610 - HPLC	0.030
	(00053703)	625 - GC/MS	25
	(00033703)	1625B - GC/MS(isotope)	20
		-	
20B	1,2-DICHLORO-	601 - GC/Hal.	0.15
	BENZENE	602 - GC/PID	0.40
	(00095501)	612 - GC/ECD	1.14
		624 - GC/MS	NA
		625 - GC/MS	1.9
		1625 B - GC/MS(isotope)	10

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	21B	1,3-DICHLORO-	601 - GC/Hal.	0.32		
		BENZENE	602 - GC/PID	0.40		
		(00541731)	612 - GC/ECD	1.19		
			624 - GC/MS	NA		
			625 - GC/MS	1.9		
			1625 <u>B</u> - GC/MS(isotope)	10		
	22B	1,4-DICHLORO-	601- GC/Hal.	0.24		
		BENZENE	602 - GC/PID	0.30		
		(00106467)	612 - GC/ECD	1.34		
			624 - GC/MS	NA		
			625 - GC/MS	4.4		
			1625 <u>B</u> - GC/MS(isotope)	10		
	23B	3,3'-DICHLORO-	605 - HPLC	0.13		
		BENZIDINE ⁽²⁾	625 - GC/MS	16.5		
		(00091941)	1625 <u>B</u> - GC/MS(isotope)	50		
	24B	DIETHYL PHTHALATE	606 - GC/ECD	0.49		
		(00084662)	625 - GC/MS	1.9		
			1625 <u>B</u> - GC/MS(isotope)	10		
	25B	DIMETHYL	606 - GC/ECD	0.29		
		PHTHALATE	625 - GC/MS	1.6		
		(00131113)	1625 B - GC/MS(isotope)	10		
	263	DI-N-BUTYL	606 - GC/ECD	0.36		
		PHTHALATE	625 - GC/MS	2.5		
		(00084742)	1625 <u>B</u> - GC/MS(isotope)	10		
	27B	2.4-DINITROTOLUENE	609 - GC/ECD	0.02	·	
		(00121142)	625 - GC/MS	5.7		
		() · -/	1625 <u>B</u> - GC/MS(isotope)	10		
	28B	2,6-DINITROTOLUENE	609 - GC/ECD	0.01		
	–	(00606202)	625 - GC/MS	1.9		
			1625 <u>B</u> - GC/MS(isotope)	10	<u> </u>	
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29B	DI-N-OCTYL	606 - GC/ECD	3.0	
	PHTHALATE	625 - GC/MS	2.5	
	(00117840)	1625 B - GC/MS(isotope)	10	
30B	1,2-DIPHENYL-	625 - GC/MS	10	
	HYDRAZINE (00122667)	1625 <u>B</u> - GC/MS(isotope)	20	
31B	FLUORANTHENE	610 - GC/FID	NA	
	(00206440)	610 - HPLC	0.21	
		625 - GC/MS	2.2	
		1625 <u>B</u> - GC/MS(isotope)	10	
32B	FLUORENE	610- GC/FID	NA	
	(00086737)	610 - HPLC	0.21	
		625 - GC/MS	1.9	
		1625 <u>B</u> - GC/MS(isotope)	10	
33B	HEXACHLORO-	612 - GC/ECD	0.05	
	BENZENE	625 - GC/MS	1.9	
	(00118741)	1625 <u>B</u> - GC/MS(isotope)	10	
34B	HEXACHLORO-	612 - GC/ECD	0.34	
	BUTADIENE	625 - GC/MS	0.9	
	(00087683)	1625 <u>B</u> - GC/MS(isotope)	10	
35B	HEXACHLORO-	612 - GC/ECD	0.40	
	CYCLOPENTADIENE (3)	625 - GC/MS	NA	
	(00077474)	1625 <u>B</u> - GC/MS(isotope)	10	
36B	HEXACHLOROETHANE	612 - GC/ECD	0.03	
	(00067721)	625 - GC/MS	1.6	
		1625 B - GC/MS(isotope)	10	
37B	INDEN0(1,2,3-	610 - GC/FID	NA	· ·
	cd)PYRENE	610 - HPLC	0.043	
	(00193395)	625 - GC/MS	3.7	
	•• • • • • • • • • •	1625 B - GC/MS(isotope)	20	

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38B	ISOPHORONE	609 - GC/FID	5.7
	(00078591)	609 - GC/ECD	15.7
		625 - GC/MS	2.2
		1625 B - GC/MS(isotope)	[20] <u>10</u>
39B	NAPHTHALENE	610 - GC/FID	NA
	(00091203)	610 - HPLC	1.8
		625 - GC/MS	1.6
		1625 B - GC/MS(isotope)	10
40B	NITROBENZENE	609 - GC/FID	3.6
	(00098953)	609 - GC/ECD	13.7
		625 - GC/MS	1.9
		1625 <u>B</u> - GC/MS(isotope)	10
41B	N-NITROSODI-	607 - GC/N-PD	0.15
	METHYLAMINE ⁽⁴⁾	625 - GC/MS	NA
	(00062759)	1625 <u>B</u> - GC/MS(isotope)	50
42B	N-NITROSODI-N-	607 - GC/ECD	0.46
	PROPYLAMINE	625 - GC/MS	NA
	(00621647)	1625 B - GC/MS(isotope)	20
43B	N-NITROSODI-	607 - GC/N-PD	0.81
	PHENYLAMINE (4)	625 - GC/MS	1.9
	(00086306)	1625 B - GC/MS(isotope)	20
44E	PHENANTHRENE	610 - GC/FID	NA
	(00085018)	610 - HPLC	0.64
		625 - GC/MS	5.4
		1625 <u>B</u> - GC/MS(isotope)	10
45E	B PYRENE	610 - GC/FID	NA
	(00129000)	610 - HPLC	0.27
		625 - GC/MS	1.9
		1625 B - GC/MS(isotope)	10
46E	3 1,2,4-TRICHLORO-	612 - GC/ECD	0.05
	BENZENE	625 - GC/MS	
	(00120821)	1625 <u>B</u> - GC/MS(isotope)	10

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(2) – EPA says "When [Benzidene] <u>Benzidine</u> is known to be present, screen with EPA 605." However, because HPLC is a generally unavailable procedure at this time, GC-MS enhanced to achieve a detection level more sensitive than the EPA's MDL can be used. Permit monitoring requirements for these two chemicals can also be set using EPA 625 as an acceptable analytical procedure.

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COMMENT/REPONSE DOCUMENT Chapter 93 – Triennial Review of Water Quality Standards

General Comments

1. Comment:

Please do not weaken our water quality standards, leave them alone. It only benefits polluters financially and passes the clean up cost onto the taxpayers. (146, 350, 462)

I was shocked that the water quality standards may be compromised by pressure from influential businesses. By reducing water quality standards we will poison many healthy rivers and streams, thus poisoning all life, which feeds off of those waters sources. I will not continue to vote for people who ignore environmental issues such as these and allow for lax standards.

(410)

I am concerned over the financial cost of clean air and water but I fear the human cost of unchecked quality control. I urge anyone in power not to relax current standards. (415)

Response: Thank you for your comments. DEP will continue protecting the waters of the Commonwealth. The change in the Chapter 93 regulation does not weaken but rather clarifies how DEP protects the waters of the Commonwealth.

2. Comment:

The free and deregulated use of Pa's streams will destroy the habitat and seriously devalue the land. I urge you to uphold and enforce the current Water Quality Standards and hope that in the future, you will pass further regulations that reduce the pollution industry releases into the aquatic environment.

(116)

Response: Thank you for your comments. DEP will continue protecting the waters of the Commonwealth, through the water quality standards.

3. Comment:

The callous handling and destruction of our environment due to lax environmental laws and ineffective regulation by corrupted or inept officials will eventually lead to the destruction of our selves. Please protect our streams, rivers aquifers and other sources of water by not permitting the water quality standards to be lowered, ignored or forgotten. (474)

I am very concerned with the quality of the water in this nation. It is not fair to the environment to allow businesses to eliminate runoff standards. The polluted water running from factories, mining, farming and logging must be controlled by the business itself.

(511)

Response: Thank you for your comments. DEP will continue protecting the waters of the Commonwealth.

4. Comment:

Control of chemical pesticides and fertilizers, both commercially and privately is critical, if we want to keep our streams clear and pure. (119, 250)

Response: Thank you for your comment. The Department will continue protecting the waters of the Commonwealth.

5. Comment:

You have my support to increase the quality of our rivers and streams, not diminish them. (115, 121, 298)

Response: Thank you for your comment.

6. Comment:

It would be great if Pa. had a group of people who watched out for the waters and environmental issues.

(80)

Response: There are many groups and individuals that take an active part in assisting the Department in watching out for our waters and other environmental issues. The Department believes one of the most effective means of engaging these groups and individuals is through the process of public participation in the rulemaking and decision-making process, which you have used in supplying your comments. Thank you for your participation and comments.

7. Comment:

I am opposed to surrounding states hauling garbage to Pa. What will happen to the ground water?

(36, 219)

Response: Thanks for your comment. The regulations currently under review do not specifically control the referenced activities associated with surrounding states hauling garbage into Pennsylvania. These activities are regulated through the Solid Waste Management regulations contained in *The Pennsylvania Code*, Title 25, Articles VIII & IX. The waste management program is outside the scope of these regulations. We have forwarded your comment to the Bureau of Land Recycling and Waste Management.

8. Comment:

Thank you for working for cleaner streams and air. (8, 349)

Response: Thank you for your comment.

9. Comment:

Everyone needs clean water. Please keep our water clean and safe. All efforts must be made to protect our water and air quality. (146, 209, 224, 231, 257, 264, 338, 354, 481, 494, 500)

Response: Thank you for your comment. DEP will continue protecting the waters of the Commonwealth.

10. Comment:

Pennsylvania has several EV streams in my area and it was difficult to get that classification. (499)

Response: Thank you for your comment.

11. Comment:

Runoff is bad for the environment. All people should be more careful. The world isn't an endless resource.

(504)

Response: Thank you for your comment.

12. Comment:

If we don't stop pollution we will lose the privilege of drinking clean tap water, which we take for granted.

(15, 508)

Response: Thank you for your comment.

13. Comment:

Stop spilling all your toxic waste in our water. You're making our children sick and killing the fish. (509)

Response: Thank you for your comment. DEP will continue protecting the waters of the Commonwealth.

14. Comment:

You should ban MTBE in gasoline. (137)

Response: Thank you for your comment. The EPA recommended long-term health advisory level of 20 ug/L MTBE is used as a guideline to limit the level of MTBE in waters of the Commonwealth.

Comments on Revisions to Scope of Water Quality Standards (§ 93.2.)

1. Comment:

We support the proposed language change to Chapter 93.2. (1, 2, 22, 58, 61, 63, 89, 194, 195, 200, 201, 202, 236, 237, 238, 313, 496, 497)

Response: Thank you for your comments.

2. Comment:

Commentators expressed concerns with the breadth of this change, its potential impact on permit review and compliance actions, and lack of clarity. To increase clarity, the EQB should include the phrase "point and non-point source" before "discharges" rather than deleting language from Section 93.2(a). (537)

Response: The proposed change to Chapter 93 was intended to capture the breadth of the body of the regulations that currently apply to both point source and nonpoint sources of pollution. On final rulemaking, the regulation is further clarified by adding "and will be considered by the Department in implementing its authority under the Clean Streams Law and other statutes that authorize protection of surface water quality." The change in the final rulemaking supports the Department's longstanding position that the water quality standards in Chapter 93 are the standards that are used whenever the environmental statutes authorize the Department to make decisions relating to surface water quality protection. The Department's review of permits and compliance actions will continue to be consistent with the body of regulations contained in Chapter 93, as it has historically been implemented. The change in the scope section should not provide an impact on these reviews because the change only reflects what is already expressed in the body of the regulations.

3. Comment:

I support the changes to 93.2 (Scope). Antidegradation protection applies to all regulated activities, not just to discharges. I also ask you to change 25 PA Code 93.4c (b) to ensure that the water quality of the HQ and EV surface waters will be as protected from the effects of all regulated activities.

(527)

Response: The requirement for nonpoint source controls for HQ and EV waters is already provided in Sections 93.4a and 93.4c(b)(2).

4. Comment:

Please support DEP's proposed regulation that will continue to control runoff and other non-discharge activities that affect water goals.

(193)

Response: Thank you for your supportive comment.

5. Comment:

As a concerned citizen I urge you to ensure that our state's Water Quality Standards apply to all activities that affect water quality, not just discharges. I urge you to support proposed DEP regulations that would ensure continued control of runoff in Pennsylvania. Removing runoff from our Water Quality Standards could lead to contaminated drinking water supplies and destroy many of our streams. We cannot afford to allow our waters to get more polluted.

(5, 9, 19, 20, 21, 40, 48, 53, 55, 59, 60, 62, 78, 90, 91, 92, 94-102, 104, 108, 117, 120, 122, 124, 140-145, 147-164, 166, 170-179, 181-183, 203-208, 212-217, 232-234, 273-278, 281, 301, 311, 312, 314-316, 319, 389, 391, 394, 395, 398, 400, 408, 409, 414, 417, 424, 440, 453, 461,478, 490, 503, 527, 530, 531)

Response: The Department believes the proposed change to the scope section of the regulation (at § 93.2) would have avoided future misunderstandings about the scope of Chapter 93. Chapter 93 is not limited to "discharges" or to "point sources" as defined in § 92.1 (relating to definitions). Upon further deliberation of the comments received, however, the final regulation is further clarified by adding "and will be considered by the Department in implementing its authority under the Clean Streams Law and other statutes that authorize protection of surface water quality." The change in the final rulemaking supports the Department's longstanding position that the water quality standards in Chapter 93 are the standards that are used whenever the environmental statutes authorize the Department to make decisions relating to surface water quality protection and clarifies that Chapter 93 applies to both point source discharges and nonpoint sources of pollution. Thank you for these supportive comments.

6. Comment:

Runoff is the leading cause of pollution to our rivers and streams. Runoff is also the leading cause of stream impairment in our state. During the past few year's, progress had been made in cleaning our waterways. Relaxing water quality standards will erase this progress. Removing runoff from water quality standards will ruin waterways. Please continue protecting our streams and the environment. Good streams are necessary to protect life forms. It is not replaceable.

(3-7, 9-14, 16-18, 23-49, 52, 54, 56, 64-66, 68-77, 79, 81-88, 93, 103, 105-107, 109, 110, 113-114, 118-119, 121, 124, 127, 128, 130-140, 165, 167, 168, 184, 186-192, 210, 211, 218, 220-223, 225-227, 229, 230, 240-244, 247-249, 251-255, 258-260, 262, 263, 265-269, 271, 272, 279-297, 299-310, 317, 318, 320-322, 328, 230-337, 339-349, 351-353, 355-377, 379-390, 392, 393, 396, 397, 399, 401-406, 413, 414, 416-423, 425-435, 437-439, 442-452, 454-460, 463-473, 475, 477, 480, 482-489, 491-493, 495, 500-502, 504-507, 510, 512, 513, 515, 517-522, 525, 526, 529, 532-536)

I would like to see the water quality standards applied to all activities that affect water quality, not just discharges. Please do not allow mining, industry or others to negatively

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impact our watershed. We must do all we can to keep manufacturers responsible for how they treat our environment. Runoff is a major concern that needs to be addressed. (5, 9, 17, 23, 25, 37, 38, 40, 41, 48, 50, 64, 67, 74, 83, 111, 112, 120, 122, 125-127, 129, 130-132, 134-136, 140, 165, 167, 169, 185, 189, 190, 221-223, 227, 242, 252, 256, 259, 261, 263, 266, 270, 282, 297, 319, 334, 337, 344, 348, 352, 353, 356, 357, 378, 383, 385, 387, 391, 396, 398, 400,408, 409, 413, 421-424, 430, 43 5, 441, 442, 453, 461, 463, 477, 479, 485, 490-492, 495, 500, 503, 512, 516, 522, 523, 524, 530, 531, 534, 536)

Clean streams are vital to our existence. We cannot exempt polluters from our state's Water Quality Standards. Allowing the polluters to succeed in exempting runoff from the standards is a violation of the federal Clean Water Act and the Clean Stream Law. Keep the laws protecting me from runoff, the leading cause of stream impairment in our state. Please do not allow our standards to be weakened.

(49, 51, 123, 226, 219, 228, 245, 246, 256, 261, 323, 329, 356, 378, 407, 411, 412, 528, 532, 533)

I am opposed to DEP eliminating runoff from our Water Quality Standards. (180, 476, 514)

Please ensure that our streams are well protected by not altering the Water Quality Standards. Non-point source pollution is a serious threat to the health of our streams. The issue of runoff from mining, farming and logging needs to be addressed by our standards.

(245, 386, 436, 441, 523, 524)

Response: Thank you for your comments. DEP is charged with protecting the waters of the Commonwealth, and DEP will continue protecting these waters as provided in the federal Clean Water Act, Pennsylvania's Clean Streams Law and other statutes that authorize protection of surface water quality. Runoff will continue to be managed in accordance with the Department's water quality programs. The final regulations maintain the Department's longstanding position that the water quality standards in Chapter 93 are the standards that are used whenever the environmental statutes authorize the Department to make decisions relating to surface water quality protection.

7. Comment:

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We are concerned that the lack of mention of Chapter 105 in the preamble indicates that in this triennial review, the Department did not sufficiently review and assess the water quality standards program as it applies to wetlands. (237)

Response: The EQB will clarify in the order of the final form rulemaking that it has reviewed the water quality standards, and that there were no new scientific information, policies, or directives found that would require changes to the water quality standards as they apply to wetlands.

8. Comment:

Changing § 93.2 is not sufficient to protect the water quality of the Commonwealth's High Quality (HQ) and Exceptional Value (EV) waters. I request that you also change 25 Pa. Code § 93.4c (b) to ensure that the water quality of the Commonwealth's HQ and EV waters will be as protected from the effects of all regulated activities as it is currently protected from the effects of discharges. (57)

Response: The requirement for nonpoint source controls for HQ and EV waters is already provided in Sections 93.4a and 93.4c(b)(2).

9. Comment:

The proposed amendment to § 93.2 exceeds the scope of regulatory authority made available to the Department by the Clean Streams Law, and the EQB should remove it from the final regulation.

(197, 198, 235, 239)

Response: The proposed change to Chapter 93 was intended to capture the breadth of the body of the regulations that currently apply to both point source discharges and nonpoint sources of pollution. On final rulemaking, the language tracks the Department's authority, granted by statutes, to protect surface water quality. This change in the final rulemaking supports the Department's longstanding position that the water quality standards in Chapter 93 are the standards that are used whenever the environmental statutes authorize the Department to make decisions relating to stream quality protection.

10. Comment:

We oppose the proposed revision to Section 93.2. It is unclear if the Clean Streams Law provides for the Department to have such broad enforcement authority. Basic principles of fairness, both practical and legal, require that the regulated community have a more certain understanding of their responsibilities. The proposed language would allow the Department to expand its enforcement authority without having to proceed with further rulemaking. If the Department wishes to expand its authority to an activity beyond what is commonly understood to be a discharge, it must do so with specificity and public input. It should also do so only when there is clear authority from legislation. (235, 239)

Response: The Department's review of permits and compliance actions will continue to be consistent with the body of regulations contained in Chapter 93. The change in the scope section should not provide an impact on these reviews because the change only reflects what is already expressed in the body of the regulations. The authority to regulate nonpoint sources of pollution is already established in Chapter 93. Clarifications to the scope section provide the regulated community and the public with greater certainty about what is actually contained in Chapter 93.

11. Comment:

The Senate Environmental Resources & Energy Committee (Committee) is concerned that the Environmental Quality Board's proposed modification of the scope section within the existing water quality standards rule (25 Pa Code §93.2) not only significantly alters the Department of Environmental Protection's (DEP) existing regulatory authority, but further does so without appropriate statutory authority. As an alternative, the Committee would be agreeable to the EQB's adoption of the Independent Regulatory Review Commission's (IRRC) suggestion to instead insert the phrase "point and nonpoint source" before "discharges".

(537)(538)

Response: The proposed change to Chapter 93 was intended to capture the breadth of the body of the regulations that currently apply to both point source discharges and nonpoint sources of pollution. The final regulation is further clarified by adding "and will be considered by the Department in implementing its authority under the Clean Streams Law and other statutes that authorize protection of surface water quality." The change in the final rulemaking supports the Department's longstanding position that the water quality standards in Chapter 93 are the standards that are used whenever the environmental statutes authorize the Department to make decisions relating to surface water quality protection and clarifies that Chapter 93 applies to both point source discharges and nonpoint sources of pollution.

12. Comment:

Beyond including "nonpoint sources" as defined in 93.1, what is the need for the deletion of the phrase "and will be considered by the Department in its regulation of discharges?" (537)

Response: There is no additional need. The scope provision, as it is currently written, does not highlight the breadth of the Chapter and, therefore, may be misinterpreted.

13. Comment:

How does Chapter 93 pertain to the regulation of stream withdrawals or mine subsidence? (537)

Response: The water quality standards in Chapter 93 are the standards that are used whenever the environmental statutes authorize the Department to make decisions relating to protecting surface water quality from pollution. To the extent that water withdrawals from a stream would cause pollution, the same water quality standards apply.

Comments on Dissolved Oxygen Criteria revisions

1. Comment:

Oppose the change to the dissolved oxygen criterion. DEP has not adequately stated how it will protect the hypolimnion of lakes. DEP should adopt the higher EPA values for dissolved oxygen. The proposed amendment does not take into account conditions that
cause variability of stratification of lakes and does not establish sound criteria for determining whether a lake is stratified. (2, 22, 58, 61, 63, 89, 194, 195, 201, 202, 236, 313, 497)

Response: The purpose for the revisions to the dissolved oxygen criteria is to recognize the natural process of lake stratification. One result of stratification is that dissolved oxygen concentrations in the hypolimnion are very low because this layer is cut off from contact with the atmosphere and from mixing by the wind. Because of the low dissolved oxygen concentrations, fish will avoid this layer and other components of the aquatic community have adapted to these conditions. Changing the criteria to recognize a natural phenomenon will not change the conditions or the aquatic life that has adapted to them. The fishery present in the lake should determine the use support status, not an unreasonable expectation for dissolved oxygen in the hypolimnion.

The proposed revisions do not specifically address variability in stratification because stratification is unique to each lake, so all variability cannot be addressed. The Department believes that it is unnecessary to include specific criteria for determining stratification in regulation. Because stratification is a well-known phenomenon, there are sufficient literature and textbook descriptions of conditions relating to temperature and dissolved oxygen and ways to measure them. The Department will use these wellknown, scientifically approved measures to determine when and if a particular lake is stratified and the specific variations surrounding the lake's stratification.

The Departments dissolved oxygen criteria are protecting aquatic life. In addition, EPA has approved these criteria as protective.

2. Comment:

EPA supports Pennsylvania's proposed modification to the dissolved oxygen criteria for the protection of the Cold Water Fishes use, but we do have several issues related to this modification that we would like addressed. First, PADEP needs to provide details as to how these criteria will be applied in its 303(d) listing methodology for lakes. Second, PADEP needs to specify how they will implement the narrative water quality criteria to protect the hypolimnion in a stratified lake. Third, PADEP needs to define hypolimnion and expand the definition of epilimnion to address temporal and spatial concerns. Finally, EPA would like to reiterate our position that for those lakes that are Warm Water Fishes that have been classified as Cold Water Fishes, we would support a redesignation to Warm Water Fishes use if accompanied by a use attainability analysis (UAA) as required by 40 CFR 131.10(j)(2). (200, 237)

Response: Implementation of the proposed revisions to the dissolved oxygen criteria for lakes will allow the Department to conduct a more realistic assessment of the aquatic life use support status of lakes. Instead of reacting to a numeric criterion that represents an unreasonable expectation for the hypolimnion, we will shift our focus and to evaluate the quality and use attainment status of the lake by directly measuring its biological conditions. This will prevent erroneous resource decisions and especially inappropriate

303 (d) listings of lakes as being impaired, when in fact the subject lake is merely undergoing a natural process of stratification of the water column.

As noted above, the aquatic community has adapted to the conditions in the hypolimnion. During the period that the lake is stratified, the natural quality will constitute the water quality criteria, and the existing community must be maintained as provided in Section 93.6. A definition of epilimnion is provided in Section 93.1. In terms of temporal concerns, we believe that it is widely understood that stratification occurs primarily during the summer and fall. The spatial properties of stratification are lake-specific and cannot be easily defined. The Department will, however, use well-known, scientifically approved measures to determine when and if a particular lake is stratified. In doing these studies, the Department will also be able to determine the specific details such as the temporal and spatial conditions associated with the lake's stratification.

The Department is adding a new definition for hypolimnion in the final form rulemaking as follows:

HYPOLIMNION – THE COOLER, DENSER, LOWER LAYER IN A NATURALLY STRATIFIED LAKE, POND OR IMPOUNDMENT.

Proposals to redesignate lakes will be based on use attainability analyses that include field data.

3. Comment:

Commentators expressed serious concerns with the proposed changes in the dissolved oxygen (DO) criteria under Table 3 in Section 93.7. The U.S. Environmental Protection Agency, Region 3 (EPA) and the U.S. Fish and Wildlife Service (USFWS) both expressed support for the proposed changes in the DO criteria. However, they raised several issues related to clarifying the application of the criteria and the stratification process. The EQB should clarify the new language in Table 3 or define the new phrase "process of stratification" in the final-form regulation. Another approach would be creating an exception that states, "The DO criteria will apply to the epilimnion of a lake, pond or impoundment if stratification is documented". (537)

Response: The Department has revised the final form rule so that it states "The DO criteria will apply to the epilimnion of a lake, pond or impoundment when it is naturally stratified."

4. Comment:

The proposed change eliminates D.O. protection for certain waters and species found in lakes, ponds and impoundments. It gives the Department boundless discretion to categorize a lake or impoundment as "stratified", without requirement for any study, or without any definition of "stratification". (238)

Response: As indicated above, the Department will use scientifically valid studies to determine if a lake is stratified.

Comments on Existing Uses

1. Comment:

DEP should protect "existing uses," all the biological species that are in a given stream. It is not enough to simply evaluate activities for their potential to change water chemistry or temperature. DEP should use the EPA guidance to do so. (22, 58, 61, 63, 89, 194, 195, 201, 202, 313, 497)

Response: Both the state and federal water quality standards regulations require protection of existing and designated uses. While the initial step in the permitting process is to evaluate the potential for degradation, compliance activities can include field data collection to determine actual impacts to the aquatic community in order to protect the existing use. In addition, the Department has a methodology in place to protect existing uses that are more protective than the designated use in any water body, . Biological surveys to determine aquatic life use support include EPA methodologies as well as other recognized techniques.

2. Comment:

DEP should include language in the standards that will adequately protect in-stream flow and habitat. Existing uses need to be protected from all activities that may impact them and their habitats.

(194, 202)

Response: The Department is developing some tools for use in addressing water quality inputs resulting from activities other than discharges. Activities involving surface and groundwater withdrawals that require permits under the Pennsylvania Safe Drinking Water Act are being addressed on a case-by-case basis in accordance with DEP's guidance – Screening Criteria for Water Quality/ Quality Impacts of Drinking Water Permits (DEP ID: 383-2131-001). Another tool for assessing inputs from a proposed withdrawal on a stream supporting a cold water fishery is DEP's guidance on use of the Instream Flow Incremental Methodology (IFIM), which is currently under development.

Both of these guidance documents include applications of technologies that are continuing to evolve. To place implementation procedures using these methods within a regulatory format, would severely limit the Department's ability to revise them and keep pace with the changing science.

3. Comment:

Does listing a stream as impaired mean that existing uses have been eliminated? If so, we are not aware of an instance where the DEP has taken a regulatory action to rectify, or penalize, an activity that has caused the impairment. (199)

Response: Describing a stream or segment as impaired does not necessarily mean that the existing use has been eliminated. It may only indicate that the water body is not meeting its potential. In some cases, such as streams severely impacted by acid mine drainage, the use may be nonexistent. Approaches for dealing with stream impairments include revised effluent limits, enforcement actions or development of a Total Daily Maximum Load (TMDL), which the Department actively pursues as part of its regulatory obligations.

4. Comment:

Does an activity that significantly reduces the number or biomass of fish violate DEP's antidegradation policy? What percentage constitutes "significantly"? Does an activity that replaces a pollution intolerant community with one that tolerates pollution violate DEP's antidegradation policy? Does an activity that eliminates mussels, or certain pollution intolerant species of aquatic insects, violate DEP's antidegradation policy? Does an activity that eliminates of a stream violate DEP's antidegradation policy? How long must the affected reach be? What percentage of stream is it permissible to degrade? (199)

Response: Any discharge or activity that affects an existing or designated use is in violation of the water quality standards and the antidegradation policy. There are no specific criteria for evaluating percentage of loss or length of a stream reach. Each instance is evaluated on a site-specific basis and is dealt with in an appropriate manner. Approaches for dealing with stream impairments include revised effluent limits, enforcement actions or development of a Total Daily Maximum Load (TMDL).

5. Comment:

The antidegradation regulations should be revised to clearly define existing uses as the actual fish, mussels and aquatic insects in the stream. (498)

Response: Evaluation of existing uses, that include aquatic life uses, is done by assessing the actual aquatic community. The evaluation is done on a stream or stream segment basis. The aquatic community may be compared to that in an un-impacted upstream reach or a "reference station" with similar instream conditions in order to determine existing use or use support status. The Department believes and EPA has approved that the current aquatic life uses in the water quality standards are adequate to protect the aquatic species present in Pennsylvania waters.

Comments on Biological Criteria Development

1. Comment:

The Department should propose the addition of biological criteria to the specific water quality criteria set forth in chapter 93.

I urge DEP to implement (a) biological criteria, (b) a "cool-water fishes" designated use, and (c) language protecting in-stream flow and habitat. The agency has not reported to the public on these issues.

(22, 58, 61, 63, 89, 195, 201, 202, 236, 238, 313, 496, 497, 498)

Response: The Department is developing the methods and metrics that may form the basis of numerical biological criteria in the water quality standards. This effort is being done in consultation with the Pennsylvania Fish and Boat Commission and the U.S. Environmental Protection Agency. Development of these biological indexes is a lengthy process for a number of reasons. This development requires a large amount of field data collection for both fish and benthic macroinvertebrates, and laboratory identification for benthic macroinvertebrates. In addition, a large array of biological metrics must be evaluated to identify those that provide meaningful information about the community. These metrics must then be formed into an index for use in particular stream types.

The Department has been evaluating the need for developing "coolwater" temperature criteria, but at this time, does not anticipate further refining the aquatic life uses categories. DEP is currently working with EPA and the Pa Fish and Boat Commission (PFBC) on potential development of a new fish Index of Biological Integrity (IBI) for Pennsylvania's different waterbodies and aquatic life uses. The Pennsylvania Instream Incremental Flow Methodology is used to address stream flow and habitat concerns.

2. Comment:

DEP lacks a specified level of protection for procedures in its water quality standards to ascertain when uses are impaired. To determine if existing uses have been eliminated, the DEP needs a scientifically defensible procedure that uses the aquatic life in the stream. If DEP has a procedure, it needs to be included as part of the Antidegradation guidance so that the public is aware of the standards that DEP uses. (199, 236, 237)

Response: The Department has been using the results of biological stream studies to evaluate aquatic life use support status since the late 1960s. Methods used to detect impairment have evolved over the years as the science of aquatic biology has developed. Most evaluations have focused on the benthic macroinvertebrate community, but fish have also been used. The methods are contained in various quality assurance project plans for different survey types. As noted above, surveys include EPA and other recognized methodologies. Because survey methods are continually evolving, the Department believes they should continue to be articulated in quality assurance plans and guidance rather than regulation. The modified EPA Rapid Bioassessment Procedure, used by the Department in evaluating stream quality, is available in "Pennsylvania's Surface Water Quality Monitoring Network," available on the DEP website at: http://www.dep.state.pa.us/dep/deputate/watermgt/wqp/wqstandards/wqstandards.htm.

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3. Comment:

We recommend that the DEP complete the development of an Index of Biological Integrity for fish and/or the benthic community that will allow a scientifically defensible method of determining when Existing Uses have been eliminated. (199, 496)

Response: The Department has been working on development of a fish Index of Biological Integrity for quite some time. This effort is being done in consultation with the Pennsylvania Fish and Boat Commission and the U.S. Environmental Protection Agency. Development of a biological index is a lengthy process for a number of reasons. Those reasons include the need for a great amount of field data from various types of streams, the evaluation of a large number of potential metrics and calibration of the index to various situations or stream types. A metrics type approach to evaluation of the benthic macroinvertebrate community in streams characterized by a series of riffles and pools is in place. Data are being collected and metrics evaluated that may be useful for assessing other stream types like limestone streams, limestone influenced streams or low gradient streams where riffles are not prevalent.

4. Comment:

It has been pointed out that for many of the common resident fish in transitional or "cool water" systems the WWF temperature criterion is not protective. In the 1992 comment/response document on the Stoney Run redesignation, the Department stated that it was working on developing a new designated use for these transitional waterbodies. We believe that the Department should report on the progress of this effort in this triennial review. A "cool water fishes" or "transitional fishes" use with a thermal requirement should be developed.

(236, 237, 238)

Response: DEP has generally taken the approach of protecting streams dominated by these "cool water species" as cold-water streams. If warmer water fishes dominate the stream then they are considered for possible redesignation, following the publicly participated regulatory process.

The Department has been evaluating the need for developing "coolwater" temperature criteria, but at this time, does not anticipate further refining the aquatic life uses categories. DEP is currently working with EPA and the PFBC on potential development of new fish IBI for Pennsylvania's different waterbodies and aquatic life uses.

Comments on Mixing Zones / Variances

1. Comment:

Pa. should come up with both a "mixing zone policy" and a "variance" procedure in its standards if it is going to allow them. There is nothing articulated in Pa water quality standards about areas where water quality criteria do not apply, even though the Department uses "criteria compliance times" when establishing NPDES permit limits. Currently, DEP does not provide information in public notices on the size of and extent

of mixing zones. EPA would like the EQB to consider for inclusion, during this triennial review, the adoption of regulations that would allow the Commonwealth to grant variances.

(22, 58, 61, 89, 194, 195, 200, 201, 202, 237, 313, 497)

Response: Pennsylvania does not have either a mixing zone policy or a water quality standards variance. The time extension in § 95.4 of the regulation, although seldom used, allows a cost-effective and practical means to meet water quality based effluent limitations.

Comments on Bacteria Criteria Indicators

1. Comment:

EPA is requesting that Pennsylvania reconsider during this triennial review the adoption of EPA's recommendation of using E. coli or enterococci as an indicator of bacterial contamination in surface water.

(1, 2, 89, 195, 200, 236, 238, 496)

Response: The Department is currently evaluating the E. coli based criteria for bacteria indicators in recreational waters, but is awaiting finalization of EPA's draft Implementation Guidance, and the development of approved analytical methodologies for bacteria (E. coli) in effluent samples. The Department is working closely with EPA and other states on developing this final guidance. Pennsylvania will consider adoption of criteria for a new bacteria indicator organism when EPA completes the Implementation Guidance and publishes approved analytical methods for effluents.

Comments on Nutrients

1. Comment:

Adopt water quality standards for total nitrogen and phosphorus loads to protect Pa water downstream waters, such as the Chesapeake Bay and the Gulf of Mexico hypoxia zone. EPA has recently issued recommendations encouraging states to adopt water quality standards for nutrients, particularly total nitrogen and total phosphorus. We understand that Pa is moving forward on a standard for total phosphorus, and urge the Department to publish a schedule for completion and adoption of this standard. We also encourage the adoption of a standard for total nitrogen prior to the next triennial review. (2, 199, 236, 237, 238, 496)

Response: The Department is currently working with EPA and other states on developing water quality standards for nutrients. Pennsylvania is refining its plan for nutrient criteria development. The plan will be posted on the DEP website when complete. At this time and depending on studies currently underway, it is projected that some nutrient criteria may be available in 2008.

Comments on Public Participation

1. Comment:

We request that the EQB review the provisions for public notice for new and expanded NPDES permits to discharge treated wastewater to streams. We request the Board use its authority to see that revised public notice provisions are included in Department regulations and Guidance.

(196)

Response: Public notice provisions for NPDES permits were considered recently as part of the Regulatory Basics Initiative review. The current procedures provide adequate opportunity for public participation.

Comments on Methyl Mercury Criteria

1. Comment:

The Department should adopt EPA's standard for methyl mercury. (236, 238, 496)

Response: EPA has not yet developed implementation guidance for this unusual human health criterion that is based on concentrations in fish and shellfish tissue. PA DEP and most other states have requested such guidance from EPA. EPA acknowledges in their own fact sheets and criteria documentation that additional guidance is needed before states can effectively implement this new criterion.

Comments on Endangered Species

1. Comment:

We are concerned that certain guidance documents or long-standing Department procedures may undermine protection of threatened and endangered species, even when the regulations afford protection. (237)

Response: The comment does not identify specific concerns to which the Department can respond. In the surface water programs the Department regulation at Chapter 93 clearly protects threatened and endangered species as existing uses whenever they occur.

This is a list of corporations, organizations and interested individuals from whom the Environmental Quality Board has received comments regarding the above referenced regulation.

ID	Name/Address	Zip	Submitted 1 pg	Provided	Req Final
			Summary	Testimony	Rulemaking
1	Ms. Denise Hakowski			Т	
	Environmental Protection Agency				
	Region III				
2	Mr. Rick Loomis			Т	
	Clean Water Action		Ì		
3	David & Sharon Hippensteal				
_					
4	Ms. Dorothy L. Roantree	-			
5	Mr. Gregory A. Kuritz				
	Ms Mary Ann Ardoline				
6	Mr. Greg Costa				
U U	Mil. Gleg Costa				
7	Ma Elizabeth Vezavez				
	wis. Enzabeth vazquez				
0	Ma Estalla Comobal				
0	Ms. Estena Cemodyi				
	Ma Charles D. Common			<u></u>	
9	Mr. Charles D. Gorman				
	Ms. Snaron Gorman				
10					
10	Ms. Rosemary Hill				
	Ms. Dons Moyer				
10					·····
12	Mr. George W. Tessaro				
	MS. Anna Tessaro				
10					
15	Ms. Irene Borowiak				
14	Ms. Cindy M. Presto				
15	P. M. Deily				
16	Ms. Mary Kay Brown				
			1		

ID	Name/Address	Zip	Submitted 1 pg Summary	Provided Testimony	Req Final Rulemaking
17	Ms. Gwendolyn Walker				
18	Nick & Rachel Zoubroulis				
19	Mr. Robert Jamieson				
20	Mr. Stan Cherim				
21	Mr. Eric Wilden				
22	William & Sue Keane				
23	Mr. Neil Borowsky Ms. Sue Borowsky				
24	Mr. Kermit Angst				
25	Ms. Mary Koch				
26	Ms. Barbara Lawrence				
27	Mr. John Collins				
28	Ms. Elizabeth Rizzo				
29	Ms. Michele Nicol				
30	Mr. Josh Hertzog				
31	Mr. Matthew P. J. Wiley				
32	Ms. Susan N. Ruhe				
33	Ms. Norma J. Montgomery				
34	Mr. Richard P. Weierbach, Jr.				
35	Mr. Daniel Perez				
36	Mr. Brian G. Wynn				

ID	Name/Address	Zip	Submitted 1 pg Summary	Provided Testimony	Req Final Rulemaking
37	Mr. Eugene A. Kestenbaum	1	,		
	Ms. Susan Kestenbaum				
38	Ms. Kimberly Black				
39	R. Ackerman				
40	Herbert & Joanne Brentari				
41	Mr. Charles B. Greco				
	Mr. Charles E. Greco				
	Ms. Sue B. Greco				
42	Mitsothea Kheng				
43	Mr. Carl D. Freedman				
	Ms. Helen C. Poulos				
44	Mr. Nick Adcock				
	Ms. Kathryn Adcock				
Í .	Chris Adcock	1			
	Ms. Maureen Adcock				
45	Mr. Sheldon Berman				
	Ms. Susan Berman				
46	Ms. Angie Sarsfield				
47	Mr. Albert Berdugo				
	Peninah Berdugo				
48	Mr. William H. Drummond				
	Lue Willie Stinson Drummond				
49	Mr. Michael Shaboe	1			
	241 Lismore Avenue				
50	Mr. Mark Garvin				
51	Mr. William J. Colquitt				
	Ms. Tara M. Colquitt				
	Mr. Christopher J. Colquitt				
		1	· · · ·		

ID	Name/Address	Zip	Submitted 1 pg Summary	Provided Testimony	Req Final Rulemaking
52	Mr. Zachary E. Weierbach				
	Ms. Ashlee Weierbach				
53	Ms. Jennifer L. Abel				
54	Ms. Edwina Hoover				
55	Mr. David Heitler-Klevans				
56	Ms. Sass				
57	Jonathan L. Clark, Esq.				
58	Mr. Jonathan Nadle				
59	Mr. Thomas Toland				
60	Ms. Ann Weller				
61	Ms. Monica Gregory				
	Director of Academic Affairs Penn State Hazleton				
62	Ms. Kristin Perugino				
63	Ms. Dorothy Tecklenburg				
64	Eric & Selina Mumbauer				
65	Mr. Michael P. Matlock Ms. Renee S. Matlock				
66	Ms. Sara Elizabeth Bechtel				
67	Mr. Barry Pratt	-			
68	Ms. Gwen Pilgert	-		· · ·	
69	Ms. Reina Garcia				
70	Mr. Jon Koch Ms. Crystal Koch				

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D	Name/Address	Zip	Submitted 1 pg Summary	Provided Testimony	Req Final Rulemaking
71	Mr. James W. Parmer				
72	Sung Min Hong				
73	Keely Schultz				
74	Mr. Owen R. Jones				
75	Chris P. Yando				
76	Jean Eisenhart				
77	Mr. Anthony V. Radogna Ms. Rochel M. Radogna	_			
78	Ms. Nancy L. Boyens				
79	Erin Brinot				
80	C. Brassington				
81	Ms. Tiara Jeffries No Address				
82	Ms. Jillian Ambrozy				
83	Ms. Nancy Varas				
84	Ms. Patricia G. Gray			-	
85	Ms. Alexandra Dilli				
86	Mr. Leonard R. Vermuelen Ms. Melissa Vermuelen				
87	Ms. Tara Gray				
88	Scott & Karen Matuczinski				
89	Ms. Ann Jacobs				
90	Ms. Linda A. Stremple				· · · · · · · · · · · · · · · · · · ·

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ID	Name/Address	Zip	Submitted 1 pg Summary	Provided Testimony	Req Final Rulemaking
91	Ms. Jodi Lubar		_		
92	Ms. Gay Crawford				
93	Ms. Ellis Louden			· · · · · · · · · · · · · · · · · · ·	
. 94	Ms. Eva Lexie				
95	Ms. Marsha Low			<u> </u>	
96	Ms. Judy Bernardini				
97	Ms. Laurie Fish				
98	Mr. Christopher M. McCann	· · · · · · · · · · · · · · · · · · ·			
99	Ms. Shonna Heggenstaller				
100	Erin McGinley				
101	Ms. Tricia Avey			- -	
102	Ms. Susan DeWyngaert				
103	Mr. Jorge L. Troncoso				
104	Mr. Brad Elliott				
105	K. J. Kamau				
106	Mr. Stephen Banks				
107	Ms. Ellen Watson			-	
108	Mr. Horace A. Stern			·	
109	Ms. Ileen Henderson				
110	Mr. Michael Farnsworth Ms. Barbara Farnsworth				
111	Ms. Alicia Sinka-Thomas	· · · · · · · · · · · · · · · · · · ·		· · · · · · · · · · · · · · · · · · ·	
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ID	Name/Address	Zip	Submitted 1 pg Summary	Provided Testimony	Req Final Rulemaking
112	Mr. Joseph Colangelo				
113	Mrs. Maxine Temkin				
114	Ms. Meagan Boonie				
115	Miss S. Maida				
116	Mr. Howard Schatz				
117	Ms. Margaret Haokenson				
118	Ms. Julie Rivers				
119	Mr. Michael J. Cicalese, Jr.				
120	Ms. Elizabeth S. McKinsty				
121	Mr. Mark Cohen				
122	The Freifelder Family				
123	Miss Jayne M. Essmann		· · ·		
124	Ms. Michelle N. Healy				
125	Ms. Bonnie Beers				
126	Mis. Hilary Love				
127	The Lindsey Family				
128	Ms. Eileen Fields				
129	Ms. Carol Hannon				
130	Mr. Michael Lipschutz				
131	Ms. Theresa McKlveen				
132	Ms. Jasmine Duhammer		· ·		

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ID	Name/Address	Zip	Submitted 1 pg	Provided	Req Final
			Summary	Testimony	Rulemaking
133	Mr. Daniel Gutierrez				
	Ms. Melisa Gutierrez				
134	John & Diane Kolessar-Beil				
135	Ms. Jackie Bruenengsen				
136	Mr. Mike Pieson Ms. Jen Pieson				
137	Mrs. Donna Custer				
138	Miss Julianna McHugh				-
	Ms. Elsa Shast McHugh				
139	Mr. Eric Allvin				
140	Jan Walter Crocker				
	Ms. Phyllis Crocker				
	Ms. Rachel Crocker				
141	Erin Muzzy				
142	Mr. Jeremy Miles				
143	Ms. Nancy Aronson				
144	Mr. Keith M. Taylor				
	President, EC				
	Sami Rose Culinary Productions, Inc.				
145	Mr. Greg Rempel				
146	Mr. Steven Swarter				
147	Mr. Peter A. Pirollo				
148	Ms. Adrienne Lindstrom				
149	Mr. Sean Barker			· · · · · · · ·	
150	Mr. Scott Figler				

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ID	Name/Address	Zip	Submitted 1 pg Summary	Provided Testimony	Req Final Rulemaking
151	Ms. Heather Rajotte				
152	Mr. Harold Love				
153	Ms. Ellen McMaster				
154	Ms. Victoria Little				
155	Ms. Mary L. Dumont				
156	Ms. Beatrice Carter				
157	Mr. Mark Peruso				
158	Mr. Todd Powers				
159	Lawren S. Bale, Ph.D.				
160	Mr. Mark L. Price				
161	Mr. Glenn Graeber				
162	Mr. Scott Figler				
163	Ms. Stacey Crognale				
164	Ms. Joan G. Anderson				
165	Jami Weinstock				
166	Ms. Kathy Axelrod				
167	Mr. Thomas P. Duncan Ms. Tondolayo T. Duncan				
168	Ms. Doris Johnson				
169	Mrs. Nicole A. Herstick				
170	Ms. Sherry Bruner				
171	Mr. Timothy J. Gobreski				

ID	Name/Address	Zip	Submitted 1 pg	Provided	Req Final Bulamaking
172	Greg & Karen Stump		Summary	1 esumony	Nutemaking
173	Pat Chanaitis				
115					
174	Ms. Miranda Spencer				
175	Mr. Stephen Gastright				
176	Randi Harris				
177	Mr. Jeff Ham				
178	Mr. Anthony J. Ciafardoni				
179	Resident				
180	Ms. Lynnette Saunders				
181	Ms. Regina Szczesniak				
182	Ms. Maryjane Smyrl				
183	Mr. Mark L. Pepper				
184	Mr. Gordon Macklem, Jr.				
185	Ms. M. Stephanie Reynolds				
186	L. Becker				
187	Mr. Clif Kirstein				
188	Mrs. Nancy V. Walker				
189	Alfred A. & Joanne L. Reszka				
190	Ms. Carol Cosgrove				
191	Mr. Ed Trinkle				
192	Miss Sarah Trinkle				

ID	Name/Address	Zip	Submitted 1 pg Summary	Provided Testimony	Req Final Rulemaking
193	D. Patrick Ford, MD, MPH, CIH				
194	Marion M. Kyde, Ph.D. Neil G. Kyde				
195	Mr. C. Mark Hersh Raymond Proffitt Foundation				
196	Ms. Elizabeth Milner President Pennsylvania League of Women Voters				
197	Mr. Stephen W. Rhoads President Pennsylvania Oil & Gas Assoc.				
198	Mr. George Ellis President Pennsylvania Coal Association				
199	Mr. Ed Zygmunt Ms. Melody Zullinger Pennsylvania Federation of Sportsmen's Clubs				
200	Evelyn S. MacKnight, Chief PA/DE/WV Branch (3WP11) Office of Watersheds U.S. Environmental Protection Agency Region III				
201	Mr. John R. Lake		· · · · · · · · · · · · · · · · · · ·		
202	Lehigh County Conservation District				
203	Mr. James Lee				
204	Mr. Malcolm Johnson				
205	Mr. Richard Fritzson				
206	Ms. Anne Frese				
207	Bice Perussia				
208	Mr. Russell Mehalick				

ID	Name/Address	Zip	Submitted 1 pg Summary	Provided Testimony	Req Final Rulemaking
209	Eric & Harriet Lieberman				8
210	Mr. Robert S. Gaugler				
211	Mr. Thomas Lenko				· · · · · · · · · · · · · · · · · · ·
212	Mr. Bob Cunatola				
213	Mr. Carter Craigie				
214	Mr. Brian Choi				
215	S. Caruba				
216	Ms. Jackie Baxter				49.
217	Ms. Wendy Blake				
218	Mr. Michael Robertson Mr. Shawn Robertson				
219	Mrs. Lee Berkley				
220	Mr. Joel E. Hyman				
221	Miss Rachel Lewin				
222	Ms. Amy Hanson				
223	Mr. Joel Grubman Mr. Toby Grubman				
224	Michael & Radell Taylor				
225	Mr. Henry Szczepanski				
226	Ms. Maruguerite S. Hasson				
227	Ms. Susan M. Gobreski				
228	Mr. & Mrs. George W. Danner				······

D	Name/Address	Zip	Submitted 1 pg Summary	Provided Testimony	Req Final Rulemaking
229	Ms. Colleen Malpezzi				
230	Ms. Gail Chiles				
231	Miss Regina Lukievic				
232	Ms. Vicki Gershon				
233	Ms. Debora Weber				
234	Arcana Albright				
235	Marel A. Raub, Director Natural Resources Programs Pennsylvania Farm Bureau				
236	PA Campaign for Clean Water				
237	Mr. David Densmore United States Department of the Interior Fish and Wildlife Service				
238	William J. Gerlach Pennsylvania Attorney Chesapeake Bay Foundation				
239	Ms. Melanie Cook Asst. Director Governmatnal Affairs PA Builders Association				
240	Mr. Michael A. Kelly				
241	LCPL Rodriguez M. A U.S.M.C.R.				
242	Mr. Wayne Evans				
243	Ms. Jill Katz				
244	Residents				
245	Mr. Dennis Gleason Ms. Kathleen Gleason				
246	Ms. Sharon R. Tompkins	· · · · · · · · · · · · · · · · · · ·			· · · ·

Re: Proposed Rulemaking	: Triennial Review of Water Quality Standards (#7-386)
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ID	Name/Address	Zip	Submitted 1 pg Summary	Provided Testimony	Req Final Rulemaking
247	Mr. Richard Altopiedi			-	
248	Ms. Carole Jeanne Nicholson				
249	Daniel & Joanie Olsen		· · · · · · · · · · · · · · · · · · ·		
250	Mr. Robert H. Holmes		· · · · · · · · · · · · · · · · · · ·		
251	Mr. Leonard Gift				
252	Ms. Frances Fiche				
253	Ms. Eileen Heron			·	
254	Mr. Brian Lehotsky Ms. Maureen Lehotsky				
255	Mr. Matthew Gibboni				
256	Ms. Helen Egbert				
257	Mr. Kevin Winter Deely				· · · · · ·
258	Mr. Michael A. Berry				
259	C. M. Brosious				
260	Ms. Barbara S. Kelly				
261	Ms. Beth O'Reilly				
262	Ms. Ruth Desideria				
263	Bridget McVan, Ph.D.				
264	Mr. Sean O'Reilly	·····			
265	Frederick G. & BettyJane H. Heller				
266	Ms. Irene Alberta	······································			ан ал
267	Ms. Angela Malpedo			- 	

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ID	Name/Address	Zip	Submitted 1 pg Summary	Provided Testimony	Req Final Rulemaking
268	C. C. Hsiung				
269	Mr. John A. Matthews Ms. Virginia Quinn Matthews				
270	Ms. Margaret K. Smedley				
271	L. Gabriel Tuttle				
272	Tel Toulomelis				
273	Abdullah Pezeshkian				
274	Mr. Thomas Buell				
275	Jeffrey Dvorin, Ph.D.				
276	Mr. Kip Leitner				
277	Ms. Lynn Cashell				
278	Ms. Penny Benson				
279	Ms. Martha Dreest				
280	Mr. Mike Levinson				
281	Ms. Patricia Smith				
282	L. Lasics				
283	Mr. Mathew Wolfson				
284	Mr. Joseph Grinenko				
285	Mr. Ross Zimmerman				
286	Mr. Robert G. Flammer Ms. Esther Flammer				
287	Ms. Helen Davis				

ID	Name/Address	Zip	Submitted 1 pg Summary	Provided Testimony	Req Final Rulemaking
288	Mrs. Arlene Rehrig			y	
289	Ms. Joan Green				
290	Jean L. Kalam				
291	Mr. John A. Augustyre				
292	Ms. Stephanie Gorman				
293	Melissa & Baka Malhz			· <u></u> _ · · · · ·	
294	The Calise Family				
295	Mr. Steven Kapsalis Mrs. Asimina Kapsalis				
296	Mr. Michale Mann				
297	Ms. Megan Marts				
298	Ms. Susan L. Munzer				
299	Ms. Abby Muth Miss Cassie Muth Mr. William E. Muth				
300	Mr. Daniel N. Smist Erin R. Smist Ms. Deirdre C. Smist				
301	Sharon & Brian Wiles-Young				
302	Mr. Jeffrey M. Pitts				
303	Mr. Daniel Augustus				
304	Mr. David W. Jones Sue Jones				
305	Ms. Angela Symons	-			

D	Name/Address	Zip	Submitted 1 pg Summary	Provided Testimony	Req Final Rulemaking
306	Resident				
307	Resident				
308	Mr. Francis Jacob				
309	Ms. Jody Snyder				
310	Mr. Joe Phillips Ms. Yolanda M. Phillips				
311	Mr. Andrew Heydt				
312	Mr. Dan Tocci				
313	Mr. James H. Smith		S		
314	Mr. Steve M. Clark	······································			
315	Ms. Joan Hazbun				
316	Ms. Kim Empson				
317	Mr. & Mrs. Mark Menges				
318	Ms. Amanda Spangenberg Ms. Joann Spangenberg				
319	Mr. Jeffrey Mendsen Ms. Amie Mendsen				
320	Adele Postie				

321 M. Simone Attieh

322 Mr. Brian Martin

323 Mr. Willard H. Bilheimer

Ms. Margaret I. Bilheimer

324 Ms. Nancy Mitchell-Kvacky

ID	Name/Address	Zip	Submitted 1 pg	Provided Testimony	Req Final Rulemaking
325	Ms. Shelly Smith		<u>Summury</u>	resentony	Automaning
326	Mr. Scott Krause Ms. Betty K. Krause				
327	Mr. Ronald Epstein				
328	Ms. Connie Clarke				
329	Mr. Christopher Behler Ms. Paula Behler Miss Rachel Behler				
330	Ms. Sarah Strunk				
331	Ms. Angela Cleffi				
332	Ms. Marquerite Cohn				
333	S. Beck				
334	Mr. Jeffrey Plum Ms. DeAnn L. Plum Mr. Nick Plum				
335	D. M. Czipoth				
336	Mr. Joshua Brown Lise Brown Ms. Samantha Brown				
337	Mr. Steve Barnett				
338	Mr. Jordan Peters				
339	Ms. Patricia Brobst				
340	Ms. Sylvia Peters				
341	Ms. Mary DiLuzio Miss Amanda DiLuzio Miss Rebecca DiLuzio				

ID	Name/Address	Zip	Submitted 1 pg Summary	Provided Testimony	Req Final Rulemaking
342	Mr. Jose Cid				
343	Mr. Rick Soliday				
344	Ms. Nancy Gorny Donahue	-			
345	Ms. Dawn Tarant				
346	Ms. Patricia Swindells	-			
347	Mr. Scott S. Levis				
348	Mr. David Yantz				
349	The Towey Family				
350	Mr. Richard A. Noll				
351	Ms. Margi Waery				
352	Ms. Elizabeth Jones				
353	Ms. Patricia Rooney				
354	Ms. Rochelle Webster				
355	J. Muller				
356	Mis. Deborah Bageas				
357	Ms. Kristi Payne				
358	Dennis & Deborah Kaminski				
359	Mr. Donald W. Muchlberger, Sr.				
360	Edward & Donna Rokus				
361	Resident				
362	Mr. William Kuder				

ID	Name/Address	Zip	Submitted 1 pg Summary	Provided Testimony	Req Final Rulemaking
363	Resident				
364	Ms. Rosemarie E. Morano				-
365	Mr. Robert S. Gaugh				
366	Mr. David P. Stech				
367	Mr. Reuben H. Hartzell, Jr. Ms. Mary Ann Hartzell				
368	Ms. Lizbeth Santiago				
369	Ms. Mary Isaac				
370	Mr. John Gregoris Ms. Madeline Gregoris				
371	Mr. Eric A. Baltz Ms. Wendy J. Kilian				
372	The Henry Family				
373	Margaret & Steven Krauric				
374	Mr. Raymond Maldemuder				
375	Mr. Isaac Dessources				
376	Powell				
377	Ms. Valerie Powell				
378	Susha Golomb				
379	Resident				
380	Resident				
381	Resident				
382	Ms. Jill E. Snyder				

ID	Name/Address	Zip	Submitted 1 pg Summary	Provided Testimony	Req Final Rulemaking
383	Leigh Finner				Y
384	Mr. Jim Rothbauer Ms. Janine Krempa				
385	Cherie R. & Jadon N. Barnett				
386	Mr. Art Hochhauser Ms. Susan Hochhauser				
387	Mr. Scott Balliet Ms. Marybeth Johnson				
388	Resident				
389	Mr. Reginald E. Romain				
390	Mr. Robert Winkelspecht				
391	Ms. Patricia Peoples				
392	Ms. Dolores Nash				
393	Mr. Joseph H. Gurst				
394	Mr. Tom Christman Ms. Christine Bauer				· · · · · · · · · · · · · · · · · · ·
395	Mr. Jack Golden				
396	Mr. Weston Oberman Ms. Natalie Oberman Mr. John Wargo Ms. Robin Wargo				
397	The Donnelly Family				
398	Ms. Melissa Langbein				
399	Ms. Anna Calhern				
400	Ms. Debby Appel				

ID	Name/Address	Zip	Submitted 1 pg Summary	Provided Testimony	Req Final Rulemaking
401	Mr. Skip Higgins				y
402	The Alvarez Family				
403	Thomas & Bianca Hegedus			······································	
404	Mr. Thomas Rice			• ·	
405	Mr. Marc Sternberg Miss Sue Sternberg				
406	Ms. Lisa Pellino				
407	J. Colosimo			· · ·	
408	Mr. Gene S. Schneyer				
409	Joan M. Smith, Esquire				
410	Mr. Laurence Liss		· · · · · · · · · · · · · · · · · · ·		
411	Mrs. Kasia Frawley				
412	Mr. Jason Frawley				
413	Ms. Virginia Jonas				
414	Mr. Adam Thompson				
415	Mr. George Lutz				
416	Ms. Marcia Webber				
417	Mr. John R. Jones Miss Brenda L. Jones				
418	The Harmatz Family				
419	Ms. Julie Anderson				
420	Mr. Paul McGee				

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D	Name/Address	Zip	Submitted 1 pg	Provided Testimony	Req Final Rulemaking
421	Ms. Kristina L. Graham		Summary	resumony	Kuithaking
422	Mr. Robert M. Muller				
	Ms. Judy A. Muller				
423	Ms. Gail V. Jensen				
424	The Fanning Family				
425	Resident				
426	Ms. Cynthia Olira				
427	Resident				
428	Ms. Tracey Lewis				
429	Ms. Patti Dougherty		and a second and the		
430	M. Shatzkin				
431	Ms. Eileen Smyth				
432	Ms. Sue Paridy				
433	Ms. Jeanin Partridge				
434	Ms. Kathleen J. Zoback No Address				
435	Ms. Millicent Murden		·		
436	Ms. Suzanne L. Zlotnick				
437	Residents				
438	Mr. Daniel Direso Ms. Marianne Direso				
	Mr. Stephen Direso				
439	Mrs. Ruth Suher			······································	
440	Ms. Pamela Komm				

ID	Name/Address	Zip	Submitted 1 pg Summary	Provided Testimony	Req Final Rulemaking
441	Inge Connelly				
442	Mrs. Mary Alice Grebner				
443	Mr. Justin Ryan				
444	Malen Barger				
445	Ms. Carol Halpern				
446	Mr. Kevin McManus Ms. Diane McManus				
447	Mr. Ned Carroll Ms. Deb Carroll				
448	The Siegel Family				
449	Mr. Hugh Grass Ms. Eileen Grass				
450	Residents				
451	Ms. Kim Hershey				
452	Ms. Gina Weir Ms. Patricia C. Weir				
453	M3. Julie Agresta				
454	Mr. Glen Shenkman				
455	David & Cynthia Conaron				
456	Mr. Jon Clark				
457	Ms. Mary E. Gallagher				
458	David & Denise Kuritz				
459	Chris Kelly			-	

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D	Name/Address	Zip	Submitted 1 pg Summary	Provided Testimony	Req Final Rulemaking
460	Mr. Christopher P. Meissner				
	Ms. Kelly Meissner				
	Ms. Susan E. Meissner				
461	Residents				
462	Mr. Scott Sherman				
463	Mr. Robert J. Guarini				
464	Ronald Zeisler & Company LLC			. <u></u>	
465	Ms. Natasha Taylor-Smith				
	Mr. Christopher Troy Zellars				
466	Mr. Jerry Toombs	· · · · · ·			
	Ms. Loren Toombs				
467	Mr. Alan Greenberg			~	
	Ms. D'vorah Horn-Greenberg				
468	Mr. Mervyn Tuckman				
	Ms. Lyn Tuckman				
469	Al & Phyllis Hoffman				
470	M. Scrace				
471	Mr. Michael C. Ecker				
	Ms. Jennifer Ecker				
	Mr. Thomas Ecker				
472	Ms. Gianna Fenimore				
473	Julius Ellison, M.D.				
474	Garth & Caira Bongers				
475	Ms. Mary Anne Bradley				
476	Ms. Tracey Smith				

ID	Name/Address	Zip	Submitted 1 pg Summary	Provided Testimony	Req Final Rulemaking
477	Mr. Dave Hinsch				
478	Mr. Frank Acosta				
479	The Green Family				
480	Mr. Jim Dimond				
481	Mr. Scott Komarinski				
482	Mr. Steven R. Buckley				
483	Mr. Robert A. Faust				
484	Mr. Gregory T. Larson Ms. Lynn M. Larson				
485	The Peters Family				
486	Ms. Kelly Ihne			- ///- 	
487	Mr. Christopher D. Porter				
488	Resident				
489	Mr. Michael Troupman				
490	Mr. Ed Kobus				
491	Mr. Philip Brochu				
492	Residents				
493	Mr. Gregory A. Snyder				
494	Terry S. Horn				
495	Mr. Dennis Pinzini Ms. Susan Hall				
496	Mr. Larry J. Schweiger President Western Pennsylvania Conservancy		S		

D	Name/Address	Zip	Submitted 1 pg Summary	Provided Testimony	Req Final Rulemaking
497	Erin Ballard		S	<u>v</u>	B_
	Clean Water Associate		_		
	PennEnvironment				
498	Mr. Theodore C. Trostle				
	President				
	Spring Creek Trout Unlimited				
499	Mr. Brice Lee Horwath				
	Ms. Heather Dudek				
500	Mr. Gary H. Dudek				
	Ms. Stacey Lynn Dudek				
	Ms. Linda L. Dudek				
501	Chris Senegeto				
502	Resident				
503	Dianne & Gary Gray				
504	The Jaffe Family				
505	Mr. Matt Johnson				
506	The Stockely Family		-, -		
507	Ms. Sally Godfry				
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508	E. Turner				
509	Ms. Marie Bade				
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510	The Migliore Family				,
511	Mr. Andrew Schumelir				
	Miss Jenny Levinthal	1			
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512	neamer & Mike Zadroga	1			
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515	MI. & MIS. E. JAITEII				
514	Regident				
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515	Ma Thing other WI WI all		Summary	Testimony	Rulemaking
515	Mr. 11momy w. wall Ms. Marilyn Wall				
516	Mr. Jacob Sibley				
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517	Mr. James Collins, Jr.				
	Mis. Loine A. Cooper				
518	The Leeser Family				
510	Ma Carrie Walting				
519	Ms. Carrie Hipkiss				
520	Resident				
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521	Ms. Janet Biri				
522	Mr. Robert Kelly		· · · · · · · · · · · · · · · · · · ·		
	Mrs. Jamie M. Kelly				
523	Mr. Kevin Thomas				
	Ms. Barbara Thomas				
524	Mr. Robert N. Todd				
525	Mr. William Otto Teichman				
506					
526	The Leister Family				
527	Ms. Jessica Beth Moon				
528	Mr. Brian Zeck				
529	Ms Kristina Koutsouros	1			
022					
530	Ms. Alice L. Osborne				
521	Mr. David Dournou				
551	Mr. David Downey Ms. Maureen Downey				
532	Ms. Mary Martha Johnson				
533	Ms. Kathryn Reid				
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Re: Proposed Rulemaking: Triennial Review of Water Quality Standards (#7-386)

ID	Name/Address	Zip	Submitted 1 pg Summary	Provided Testimony	Req Final Rulemaking
534	Ms. Antonia Oberthaler				
535	Ms. Cindy Hunn				
536	The Bratspis Family				
537	Robert E. Nyce IRRC				
538	Senator Mary Jo White Senator Raphael J. Musto Senate Environmental Resources and Energy Committee				



Pennsylvania Department of Environmental Protection

Rachel Carson State Office Building P.O. Box 2063 Harrisburg, PA 17105-2063 October 1, 2004

Policy Office

717-783-8727

Robert E. Nyce, Executive Director Independent Regulatory Review Commission 14th Floor, Harristown #2 333 Market Street Harrisburg, PA 17120

RE: Final Rulemaking – Triennial Review of Water Quality Standards (#7-386)

Dear Mr. Nyce:

Pursuant to Section 5.1(a) of the Regulatory Review Act, enclosed is a copy of a final-form regulation for review by the Commission. The Environmental Quality Board (EQB) approved this final-form rulemaking on June 15, 2004.

Pennsylvania's water quality standards, which are codified in Chapter 93 and portions of Chapter 92, 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). The water quality standards consist of the 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 and effluent limitations, on individual sources of pollution. 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. This final-form regulation constitutes Pennsylvania's current triennial review of its water quality standards.

The final-form regulation includes amendments to the Scope section in §93.2. With the assistance of the Senate Environmental Resources and Energy Committee, language was developed and added to the final rulemaking to clarify the Department's legal role in protecting surface water quality.

This regulation also updates the dissolved oxygen criteria in §93.7. In order to recognize the effects of natural stratification in lakes, and to provide consistency among the dissolved oxygen criteria, the DO_1 and DO_4 criteria were amended to apply only to the epilimnion (upper layer) of stratified lakes. In response to comments received concerning the DO criteria and with input from the Water Resources Advisory Committee, a definition for hypolimnion was added to

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§93.1 and an introductory statement added to the regulation at §93.7 to clarify the criteria. In §93.9, several changes to the drainage lists were adopted to clarify stream names and segment boundaries. In §§93.2, 93.6, 93.8 and 93.9, there are language or typographic corrections to add clarity. In addition to Chapter 93, DEP is adopting amendments to Chapter 16 (pertaining to Water Quality Toxics Management Strategy – Statement of Policy) as part of the triennial review; however, no EQB, Commission or Committee action is needed on the Policy Statement. The proposed revisions to Chapter 16 are enclosed with this correspondence for your information.

The EQB approved the Triennial Review rulemaking package at its July 15, 2003, meeting. The proposed rulemaking was published in the *Pennsylvania Bulletin* on October 18, 2003 (33 *Pa.B.* 5190) with provision for a 60-day public comment period (that closed on December 17, 2003) and two public hearings. In order to acquaint the public with the proposed amendments to Chapter 93, the Department conducted two public meetings prior to the start of the public hearings on December 2, 2003 in Mars and December 4, 2003 in Moosic.

Comments were received from 538 commentators including the Independent Regulatory Review Commission (IRRC) as a result of the public comment period and the public hearing. Approximately 50% of the comments received involved Section 93.2 (Scope). The proposed rulemaking recommended deletion of certain text in §93.2(a) in order to correct any misinterpretation that the scope of Chapter 93 applies only to "discharges" or to "point sources." The majority of Scope comments were in support of clarifying the language in §93.2 to include point sources as well as non-point sources. There were a few commentators that expressed concerns with the removal of language from the Scope section.

The other major issue was the proposed change to the application of dissolved oxygen criteria in §93.7 to recognize the effects of natural stratification in lakes, ponds, and impoundments. Several commentators supported the proposed change to the dissolved oxygen criteria. A few commentators expressed concerns pertaining to the application of the criteria, the stratification process and definitions of epilimnion and hypolimnion.

The Department will provide assistance as necessary to facilitate the Commission's review of this final-form regulation under Section 5.1(e) of the Regulatory Review Act. This review is tentatively scheduled for November 4, 2004. Please contact me if you would like additional information.

Sincerely, Marjorie/L. Hughes Regulatory Coordinator

Enclosures

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TRANSMITTAL SHEET FOR REGULATIONS SUBJECT TO THE REGULATORY REVIEW ACT

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I.D. NUMBE	ER: 7-386				
SUBJECT:	Water Quality Standards - Triennial Review				
AGENCY:	DEPARTMENT OF ENVIRONMENTAL PROTECTION # 234				
TYPE OF REGULATION Proposed Regulation					
x	Final Regulation				
А	Final Regulation with Notice of Droposed Pulamelring Omitted				
	120 day Emergency Contification of the Atterney Concrel				
	120-day Emergency Certification of the Governor				
	120-day Emergency Certification of the Governor				
	a. With Revisions b. Without Revisions				
FILING OF REGULATION					
DATE	SIGNATURE DESIGNATION				
Mil- DNeufr House committee on environmental Resources & energy Nichard Jox 10/1 10-1-04 Vicki Hoffman					
Au	SENATE COMMITTEE ON ENVIRONMENTAL RESOURCES & ENERGY				
10/1/04 &	INDEPENDENT REGULATORY REVIEW COMMISSION				
	ATTORNEY GENERAL (for Final Omitted only)				
	LEGISLATIVE REFERENCE BUREAU (for Proposed only				
September 28, 2004					