EXECUTIVE SUMMARY

Amendment to Title 25 Pa. Code, Chapter 93 (Water Quality Standards)

Triennial Review of Water Quality Standards

The Department of Environmental Protection (Department) recommends the Environmental Quality Board (EQB) adopt amendments to Title 25 Pa. Code Chapter 93, as included in the Triennial Review of Water Quality Standards final rulemaking.

PURPOSE OF THE 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. 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 92a, are designed to implement the requirements of Sections 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 instream water quality goals that are implemented by imposing specific regulatory requirements, such as treatment requirements, best management practices, and effluent limitations on individual sources of pollution.

SUMMARY OF THE REGULATION - The final rulemaking includes amendments to 25 Pa Code Chapter 93 in order to: improve the public notification process associated with stream redesignation rulemaking activities, as included § 93.4c; update the water quality criteria in § 93.7, Table 3 and §93.8, Table 5; update the language in § 93.8d in order to make it consistent with the language in Chapter 92a; and change and correct drainage lists and typographic and grammatical errors.

As part of its triennial review, states are required to reexamine water body segments that do not meet the fishable or swimmable uses specified in Section 101(a)(2) of the Federal Clean Water Act. The Department evaluated the two Pennsylvania water bodies where the uses are not currently met including: (1) the Harbor Basin and entrance channel to Outer Erie Harbor/Presque Isle Bay (Drainage List X, § 93.9x) and (2) several zones in the Delaware Estuary (Drainage Lists E and G, §§ 93.9e and 93.9g). Because conditions have not changed, the Department does not recommend changes to the designated use for either waterbody.

PUBLIC COMMENT - The regulation was adopted by the EQB as proposed rulemaking at its April 17, 2012 meeting. The proposed rulemaking was published in the *Pennsylvania Bulletin* on July 7, 2012 (42 Pa.B. 4367) with provision for a 45-day public comment period that ended August 21, 2012. The Board held a public hearing for the purpose of accepting comments on the proposed rulemaking on August 8, 2012, in Conference Room 105, Rachel Carson State Office Building, 400 Market Street, Harrisburg, PA.

As a result of the public hearing and public comment period, the Board received comments from 197 commentators including the Independent Regulatory Review Commission (IRRC) and the U.S. Environmental Protection Agency (EPA Region 3). The majority of commentators expressed opposition to the proposed water quality criteria for molybdenum, sulfates and chlorides. Specifically, commentators questioned whether the statewide criteria for these contaminants would impact the economy and regulated community and also questioned the scientific studies the Department relied upon in the development of the criteria. Commentators also requested that the Department perform additional instream monitoring and provide further justification on the need for the proposed statewide criteria for molybdenum, sulfates and chlorides.

Several commentators expressed opposition to the chloride aquatic life equation-based criterion included in the proposed rulemaking. The Department is recommending the Board withdraw the proposed equation-based aquatic life criterion for chloride, including both the acute and chronic equations. There is now more recent and on-going research, much of it funded by EPA, examining the relationship between various ion matrices and toxicity.

Based on comments received, the Department is also recommending that the Board remove the proposed statewide criterion for 1,4-dioxane, but retain a site-specific criterion (3 μ g/L) in Chapter 16. While the Department is not currently recommending a statewide criterion of 0.35 μ g/L, the proposed criterion, which is based on more recent science, will continue to be used in the issuance of NPDES permits where the use of a site specific criterion is warranted.

The Department is also recommending that the Board remove the rate of temperature change language from §93.7. The rate of temperature change provision is retained in Chapter 96, §96.6 to prevent adverse impacts from rapid changes in temperature.

ADVISORY GROUPS – The Department discussed the proposed triennial rulemaking with the Water Resources Advisory Committee (WRAC) five times in 2011, at the April, June, July, October and December 2011 meetings. On January 11 2012, WRAC voted to present the proposed rulemaking package to the Board. The Agricultural Advisory Board declined the need for their consideration on the proposed triennial review of water quality standards that was scheduled for its regular October 19, 2011 meeting.

Following closure of the public comment period, WRAC, in coordination with the Department, initiated an Ad hoc workgroup to discuss two aspects of the triennial review proposed rulemaking for revisions to Chapter 93, Water Quality Standards. An Ad hoc workgroup met on August 27, 2012 to discuss the proposed sulfate aquatic life criterion, and again on August 29, 2012, to allow for scientific information to be presented on the aquatic life and human health criterion for molybdenum. These publicly noticed Ad hoc workgroup meetings were held in Room 105, Rachel Carson State Office Building, 400 Market Street, Harrisburg, PA, and offered presenters the opportunity to participate by conference call, as well.

A discussion concentrating on the science used in the calculation of the sulfate criterion occurred during the special Ad hoc workgroup meeting held Monday, August 27, 2012. The Department is recommending to the Board that it withdraw the proposed equation-based aquatic life criterion for sulfate from the final rulemaking based upon conversations and comments submitted by Dr. Soucek and other leading researchers. Dr. Soucek is the primary investigator in the research that

ultimately yielded the proposed equation-based sulfate criterion. The Department believes the science/toxicity testing supporting the criterion is valid, but there is concern that the test conditions, the ionic matrices, used in the original research do not match all conditions typically found in Pennsylvania streams.

On August 29, 2012, an additional Ad hoc workgroup met to allow for scientific information to be presented on the aquatic life and human health criterion for molybdenum. The Department is recommending the Board remove the proposed criterion for molybdenum based on comments received that a statewide criterion for molybdenum is not warranted. The Department has full confidence that the science used in the development of the human health and aquatic life criteria is appropriate and is the best science currently available. While the Department is not currently recommending a statewide criterion for molybdenum, the proposed criterion will continue to be used in the issuance of NPDES permits where the use of a site-specific criterion is warranted.

The draft final regulation was discussed with WRAC at its November 28, 2012. WRAC approved moving forward with development of final rulemaking for consideration by the Environmental Quality Board.