

**Recommendation to Revise Triennial Review of Water Quality Standards Rulemaking in
Response to November 20, 2008 IRRC Disapproval**

**Revised Amendment to Title 25 Pa. Code, Chapter 93
(Triennial Review of Water Quality Standards)**

The Department of Environmental Protection (DEP) recommends that the Environmental Quality Board (EQB) reconsider its earlier decision and adopt the amendment to the rulemaking the Board previously approved on September 16, 2008 (Title 25 Pa. Code Chapter 93 regarding Triennial Review of Water Quality Standards), as included in this revised final-form rulemaking.

PURPOSE OF THE RECOMMENDATION: The regulation the Board previously approved on September 16, 2008 constitutes Pennsylvania's current triennial review of its water quality standards, which is required under Section 303(c)(1) of the Clean Water Act. The Independent Regulatory Review Commission (IRRC) disapproved the final rulemaking package on November 20, 2008. IRRC's sole objection is the adoption of a statewide water quality criterion for molybdenum (Mo). In its Disapproval Order, IRRC asserts three reasons for the disapproval: 1) IRRC questions whether DEP has offered sufficient justification regarding the specific interest of the Commonwealth to exceed federal water quality standards; 2) IRRC states that the EQB has not sufficiently addressed the economic and fiscal impact of imposing this new water quality criterion on the regulated community; and 3) IRRC states that the EQB has not fully demonstrated the impact of the consumption of Mo on the public health.

The Department disagrees with IRRC and its basis for disapproval of the statewide water quality criterion for Mo as set forth in greater detail below. The Mo criterion was developed using sound science and the use of appropriate methodologies, and it is based on convincing scientific evidence and studies.

Notwithstanding the strong scientific and technical basis for the Mo criterion, the Department recommends that the Board reconsider its earlier approval of the Triennial Review rulemaking package and remove Mo criterion in light of the IRRC disapproval and the potential for significant delay in final publication of rulemaking package. The Triennial Review rulemaking package contains many other needed revisions to the Commonwealth's water quality standards. Any further delay in final publication of these other needed changes is a problem because the Department is required by EPA to complete its Triennial Review rulemaking in a timely manner, and submission of a final Triennial Review rulemaking package to EPA is already late. It is anticipated that removal of the Mo criterion from the package will allow the rest of the package to be approved as a final rulemaking under the Regulatory Review Act because this was the only issue identified by IRRC in its disapproving order.

Because of the strong scientific and technical basis for the Mo criterion, the Department plans to ask the Board to begin the rulemaking procedures to develop a Mo criterion standard in a future proposed rulemaking. Additional time and effort may be useful in developing a broader consensus that a statewide Mo criterion is needed. As part of a future proposed rulemaking there will be an opportunity to seek additional scientific support from the public for the development of a statewide Mo criterion. Until a statewide Mo criterion is developed by the Board, the

Department will develop site-specific Mo criteria on a case-by-case basis for use in individual permits as the current regulations allow.

The Department continues to believe that there is strong scientific and technical support for the promulgation of a statewide Mo criterion for the following reasons:

First, the Department's Statement of Policy on Water Quality Toxics Management Strategy establishes a methodology for developing water quality standards, independent of federal standards, and the Department followed its policy in the development of a molybdenum standard. State-specific standards are often developed based on the types of industry and pollutants specific to those industries that are located in Pennsylvania. Mo is shown to cause gout-like symptoms, which is characterized by pain, swelling, inflammation and deformities of the joints, and in all cases an increase in the uric acid content of the blood. This condition was also accompanied by disorders of the gastrointestinal tract, liver and kidneys. Mo is considered to be a toxic metal and has also been labeled a teratogen because it can cause developmental deformities, as described in the Toxicity Profile - Toxicity Summary for Molybdenum prepared by the Oak Ridge National Laboratory and available at the on-line *Risk Assessment Information System (RAIS)*. In Chapter 93 a "toxic substance", is defined as, "a chemical or compound in sufficient quantity or concentration which is, or may become, harmful to human, animal or plant life." Based on the scientific evidence and the fact that industries in Pennsylvania discharge molybdenum, it is appropriate for Pennsylvania to "exceed" federal water quality standards by adopting a standard for Mo.

Mr. Jon Capacasa, Director of U.S. EPA Region III's Water Protection Division, provided a November 18, 2008 letter of support to Chairman Coccodrilli of IRRC, in which he states that *"PADEP developed [a] numeric criterion for molybdenum to protect human health in accordance with its own state regulations (Chapter 16, Guidelines for Development of Human Health-Based Criteria), using the guidelines in PA Code §16.32 for threshold level toxic effects and EPA's Methodology for Deriving Ambient Water Quality Criteria for the Protection of Human Health (EPA-822-B-00-004, October 2000)."* Mr. Capacasa went on to say that EPA Region III supports *"both the methodologies and the variables that PADEP used to develop a human health criterion for molybdenum. EPA also supports PADEP's determination that a molybdenum criteri[on] is necessary to protect Pennsylvania's statewide potable water supply use."*

Second, as U.S. EPA properly indicated in its comments to IRRC, economic and technological factors are not part of an evaluation of water quality criteria under the federal Clean Water Act. Water quality criteria are strictly based on science and are developed to protect water uses. Economic and technological factors are considered at the NPDES permitting stage, when the conditions are established under which a permittee may discharge.

Finally, although IRRC asserts that there is a lack of data demonstrating adverse health impacts on Pennsylvanians, U.S. EPA and states regularly rely on national health data to support the development of water quality standards. The Department is concerned that the IRRC has misapprehended or ignored the strong scientific and supportive evidence during its review of this regulation. The Department has the expertise in developing water quality criteria and IRRC should defer to the Department's expertise on technical or scientific issues.

Pennsylvania's water quality standards, which are codified in Chapter 93 and portions of Chapter 92, and 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), must be reviewed and amended as necessary, at least once every three years. 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. Final amendments to the Triennial Review rulemaking, once approved by the Commonwealth, will be submitted to the U.S. EPA for approval.

Although the Department disagrees with the objections and disapproval put forth by the IRRC, it is believed the recommended revisions and updates to the water quality standards are necessary. Therefore, to prevent further delay of the Commonwealth's adoption of the triennial review, the Department is resubmitting the originally recommended final-form rulemaking, with the exception of the statewide water quality criterion for molybdenum (Mo). The revised rulemaking otherwise remains unchanged as it was considered and approved by the Board on September 16, 2008. The revised amendments being considered will: update the water quality criteria; remove the statewide criterion for molybdenum; merge sections of Chapter 16 (Water Quality Toxics Management Strategy – Statement of Policy) into Chapter 93 (Water Quality Standards); add a definition in § 93.1 to clarify the term “conventional treatment” for potable water supply (PWS) that is used in § 93.3, Table 1; clarify in the footnote to Table 3 in § 93.7 that other sensitive “critical uses” may apply; verify current exceptions to fishable/swimmable waters; and correct and change drainage lists and other typographic and grammatical errors.

The Department had considered all public comments, and suggestions from WRAC in the development of the original final-form rulemaking.

DEADLINE FOR ACTION – To meet the deadlines for action in the Regulatory Review Act final amendments to the revised regulations must be adopted by the Board at its January 2009 meeting. The Board is required to submit a Report to the Standing Committees and IRRC at the end of January or when the Standing Committees are designated in response to the IRRC disapproval. In addition, the Commonwealth is required to meet the federal requirements on the triennial review of water quality standards.