

### **Summary of Responses to Comments and Changes to the Proposed Rulemaking**

Comments were received from 10 commentators including the Independent Regulatory Review Commission (IRRC) and EPA Region 3 as a result of the public hearings and extended public comment period. The comments received covered four major topics: 1) the proposed statewide molybdenum criterion; 2) clarification of language being added to §93.7(a) concerning intervening critical uses; 3) moving the toxics criteria from Chapter 16 to Chapter 93; and 4) clarification on how the site-specific criteria in Chapter 16, Appendix A Table 1 will be used.

Most of the comments received involved requests for the Board to justify the proposed statewide criterion for molybdenum (Mo). At the request of representatives from Langeloth Metallurgical Company (LMC), the Board extended the public comment period an additional 30 days to allow LMC time to review documents supporting the molybdenum criterion development. As a result, the comment period was open for a total of 75 days.

The Board's decision to proceed with a statewide water quality criterion for Mo was based on the Department's need for instream criteria to develop NPDES effluent discharge limits by regional and central office staff. Pennsylvania has at least four active major NPDES permits that require Mo monitoring, and at least 2 additional facilities that discharge molybdenum.

An excessive amount of 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 according to 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.

US EPA Headquarters staff reviewed and concurred that the Department used the appropriate data and methodologies to develop the recommended statewide criterion for molybdenum.

Department staff provided comments and suggestions regarding the proposed definition for "Conventional Treatment". Conventional treatment, for the purpose of surface water protection of the Potable Water Supply (PWS) use, should reflect the treatment processes required to filter and disinfect water. This treatment scheme should not have to bear the burden of removing non-conventional pollutants that would otherwise be controlled by those discharging the pollutants. The Board has revised the proposed definition for "conventional treatment" in § 93.1.

The Department reviewed the comment concerning that there may be confusion if the entire section 40 CFR 131.41 is adopted by reference at § 93.9x (relating to Lake Erie). The recommendation to only adopt paragraph (c) of that section will add to confusion regarding implementation of the new standard and will not incorporate the definitions for the categories of use (high, moderate, light and infrequent). The regulation in paragraph (d) clearly articulates when state-adopted criteria apply, and its incorporation does not appear to contradict any future

state effort to develop criteria. The Board will revise this proposed incorporation by reference to include section 40 CFR 131.41, except for paragraph (f) since requirements for schedules of compliance are addressed in 25 Pa Code Chapter 92.

Based on comments received, the Board has clarified the revised “Critical Use” footnote in §93.7(a) regarding “other intervening, more sensitive uses”. Protected and statewide water uses, identified in §§ 93.3 and 93.4, will be protected using criteria in §§ 93.6, 93.7 and 93.8. Based on the activities in the watershed, these decisions will be made on a case-by-case basis. Where needed, site-specific criteria may be developed to protect the uses, and it will be these criteria that will determine the “sensitive use.” The Board has added language to this footnote to clarify when other “critical uses” will be applied.

Other commenters requested clarification on why the Board was moving criteria back into Chapter 93. Moving the criteria for toxic substances into Chapter 93 will give these criteria the full effect and advantage of regulation. This is appropriate since these criteria are not being changed or supplemented as frequently as originally anticipated. The original incentive for listing criteria in the Statement of Policy was to allow for flexibility in the timing of criteria development and revision.

EPA supports the criteria move but requested clarification in § 93.8d(e) on how the site specific criteria in Chapter 16, Appendix A Table 1 will be used. Background or natural conditions are site-specific by nature, so EPA is unsure how such criteria will be incorporated into Table 5, which appears to include only statewide criteria. A criterion placed in Chapter 16, Appendix A Table 1 will remain a site-specific criterion as originally developed and be incorporated into the appropriate portion of §§ 93.9a – 93.3z that relates to “Exceptions to Specific Criteria” unless, during rulemaking, it is determined that the same criterion has general statewide applicability.

A detailed description of the recommended revisions to the Chapter 93 proposal follows:

### **§ 93.1. Definitions.**

Based on Department staff comments, the Board has revised the proposed definition for “Conventional Treatment”. The definition will reflect the treatment processes required to filter and disinfect water. It will alleviate the burden of removing non-conventional pollutants that would otherwise be controlled by the discharger of these pollutants.

*Conventional Treatment* – Filtration for the removal of solids, followed by disinfection for the control of pathogenic organisms, to produce water for drinking and other human consumption.

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

In § 93.7(a), Table 3, the Board is clarifying the “Critical Use” footnote. Protected and statewide water uses, identified in §§ 93.3 and 93.4, will be protected using criteria in §§ 93.6, 93.7 and 93.8. Based on the activities in the watershed, these decisions will be made on a case-

by-case basis. Where needed, site-specific criteria may be developed to protect water uses, and it will be these criteria that will determine the sensitive use.

\* Critical Use: The sensitive designated or existing use the criteria are designed to protect. Other intervening, sensitive uses may become applicable at a given location on the waterbody. Where needed, site-specific criteria may be developed to protect water uses, and it will be these criteria that will determine the sensitive use.

The reference to Chapter 16, Appendix A Table 1 will not be added to § 93.7(d), as proposed because it is not applicable to a natural quality determination.

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

The Board has restructured §93.8d(e) into the following two paragraphs to clarify the use of site-specific criteria.

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

If, as a result of its review of the report submitted to satisfy a request, the Department determines that a site-specific criterion for a toxic substance is appropriate, the Department will publish the site-specific criterion in the *Pennsylvania Bulletin*, along with other special conditions under § 92.61(a)(5) (relating to public notice of permit application and public hearing), and in Chapter 16 Appendix A, Table 1 (relating to site-specific water quality criteria for toxic substances). Changes listed in Appendix A, Table 1 will be promulgated through a formal rulemaking process to incorporate the site-specific criteria as “Exceptions to Specific Criteria” during a triennial review or other rulemaking.

#### **Changes to proposal for Chapter 16**

A detailed description of the comments and revisions to the Chapter 16 proposal follows:

In §16.11 Toxic substances, § 16.32 Threshold level toxic effects and §16.33 Nonthreshold effects (cancer), the Department will modify the sentences pertaining to the referenced documents as suggested by EPA, and will read as follows:

The EPA has updated the criteria of issued new criteria since 1980 based on new data, and more recently, new methodologies for developing human health criteria summarized in the *Methodology for Deriving Ambient Water Quality Criteria for the Protection of Human Health* (EPA-822-B-00-004, October 2000). EPA’s current criteria recommendations can be found in the National Recommended Water Quality Criteria (EPA-822-H-04-001, 2004), as amended and updated.

**Appendix A, Table 1**

A criterion placed in Chapter 16, Appendix A Table 1 will remain a site-specific criterion as originally developed and be incorporated into the appropriate portion of §§ 93.9a – 93.3z that relates to “Exceptions to Specific Criteria” unless, during rulemaking, it is determined that the same standard has general statewide applicability.

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