



pennsylvania
DEPARTMENT OF ENVIRONMENTAL PROTECTION



Office of Water Programs

Proposed Rulemaking - Triennial Review of Water Quality Standards (25 Pa. Code, Chapter 93)

Environmental Quality Board Meeting

April 18, 2017

Tom Wolf, Governor

Patrick McDonnell, Acting Secretary

Triennial Review of Water Quality Standards

- Periodic Review & Revision of Water Quality Standards (WQS) required, at least once every 3 years, by Section 303(c) of Federal Clean Water Act
- Previous Triennial Review of WQS – 2013 (TR13):
 - Environmental Quality Board (EQB) Approved Final Rulemaking on April 16, 2013
 - Final Rule Published (43 Pa.B. 4080) on July 20, 2013
 - U.S. Environmental Protection Agency (EPA) Approved PA's Triennial on May 22, 2014

Pennsylvania Water Quality Standards

- WQS are codified in Title 25 Pa. Code:
 - Chapter 93 – Water Quality Standards
- Designed to implement Requirements of Sections 5 and 402 of The Clean Streams Law and Section 303 of the Federal Clean Water Act
 - Consist of designated uses and specific numerical and narrative criteria needed to protect those uses, and an antidegradation policy.
 - In-stream water quality goals implemented by pollution control measures and specific regulatory requirements

Pennsylvania Water Quality Standards

- Additional WQS Provisions and implementation requirements are described in 25 Pa. Code:
- Chapter 16 – Water Quality Toxics Management
 - Strategy - Statement of Policy
- Chapter 96 – Water Quality Standards
 - Implementation

Triennial Review Proposed Rulemaking

General Updates and Corrections:

- Updates, revisions, and corrections for typos, translation errors and missed references or entries associated with prior rulemaking and/or publication activities.
 - Delete reference at § 93.8a(j)(3) to Federal regulation in 40 CFR 131.32(a) since that promulgation had been removed by EPA.
 - Corrections to use designations and stream entries in Drainage Lists at Sections 93.9a – 93.9z.
 - Add missing designations or waters
 - Reformat for National Hydrography Dataset (NHD) Flowline & Geographic Information System (GIS) layers
 - Replace river mile indexes (RMI) with coordinates for lat./long.

▶ Proposed Clarification to Existing Regulation

- Clarification added to definition of *Outstanding National, State, regional or local resource water* in § 93.1 regarding conservation easements
- Clarify in §§ 93.8c(a) & (b) and 93.8e that criteria in Table 5 may apply to the Great Lakes System for those substances not listed in Table 6
- Clarify in § 93.8c(a) the source of information to be used for hardness and pH values used in equation-based criteria
- Clarification is added to Table 5 indicating which criteria, currently without a Priority Pollutant No., were developed by DEP (D) or by EPA (E)

▶ Proposed Updates to Existing Regulation

- Reference in § 93.8d(c) added to the Biotic Ligand Model (BLM) for use in developing site-specific criteria for copper in freshwater systems
- Reference to Appendix A, Table 1A in § 93.8a(b) deleted since Table 1A is being deleted in 25 Pa. Code Chapter 16
- Reference added in § 93.8d(f)(2) to a new on-line table for site-specific criteria that have been developed and are being used by DEP
- Bac₂ bacteria criterion moved from Table 3 to a new table inserted at § 93.9x to reflect only location where this criterion applies, in Lake Erie waters

▶ Proposed Revisions to Water Quality Criteria

- Rulemaking proposes to revise and update WQ criteria found in Chapter 93, Tables 3 and 5 to reflect the latest scientific information and Federal guidelines for criteria development
- Revisions based on the most recent science and compilation of nationally recommended WQ criteria, as updated since PA's previous triennial review – TR13, and as requested by DEP Regional staff
 - Updates to Criteria in Table 3 at § 93.7 for:
 - Aquatic Life Criterion for Ammonia
 - Recreation Use - Bacteria criterion for *E. coli*
 - Updates to Human Health Criteria in Table 5 at § 93.8c
 - Based on EPA's 94 updated HH criteria, and recalculation of DEP-derived criteria, where possible, using similar risk factors

▶ Proposed Revisions to Water Quality Criteria

Aquatic life criteria:

- Ammonia criteria based on EPA's April 2013 recommendations for freshwater aquatic life criteria
 - (EPA 822-R-13-001)
 - Recommendations are based on assumption that salmonids and mussels are present
- *E. coli* Bacteria criteria based on EPA's November 2012 Recreational Water Quality Criteria, for freshwater
 - (EPA 820-F-12-058)
 - Does not change existing, non-swimming season fecal coliform-based numerical criteria in Bac₁
 - Bac₂ criterion moved to § 93.9x (Lake Erie)

▶ Proposed Revisions to Water Quality Criteria

Human Health criteria:

- Based on final updates for 94 criteria for the protection of human health, announced by EPA on June 29, 2015.
 - 80 FR 36986 (EPA-HQ-OW-2014-0135)
 - Updates to reflect latest scientific information and to implement existing EPA guidelines found in EPA's 2000 Human Health Criteria Methodologies
- Updated Exposure Factors:
 - Drinking Water Intake – 2.4 liters/day
 - Body Weight – 80 kg
 - Fish Consumption Rate – 22.0 g/day
- Updated pollutant-specific Bioaccumulation Factors in EPA's IRIS database
- Criteria for 73 priority pollutants are updated, 11 are new, 10 required no change from existing based on EPA's recommendations; and 12 DEP-derived criteria were recalculated using similar factors

Notes for Proposed Rulemaking

- Department not recommending change to the specific chloride criterion in Table 3, at this time
 - Continuing to review all available science, including the new Draft Field-Based Methods for Developing Aquatic Life Criteria for Specific Conductivity, (EPA December 20, 2016)
- EPA took no action, to approve or disapprove the Nonylphenol criterion adopted during the previous triennial review – TR13
 - Retaining this criterion; resubmitting for EPA approval

Removal of Water Contact

- CWA Section 101(a)(2) Fishable / Swimmable Uses
- Required to reconfirm, during each triennial review, the removal of water contact (WC) protected use on selected waters within Pennsylvania's WQS, for portions of:
 - Delaware Estuary (§§ 93.9e & g)
 - Outer Erie Harbor and Presque Isle Bay (§ 93.9x)
- DEP confirms that same conditions and hazards exist, so continue to remove WC for these waters

Less Restrictive Uses

- Also required to re-evaluate, during each triennial review, the less restrictive protected uses on selected waters within Pennsylvania's WQS, for portions of the Delaware Estuary (§§ 93.9e & g), Delaware River Basin Commission (DRBC) Zones 3, 4 & part of 5
 - Warm Water Fishes (Maintenance Only)
 - Migratory Fishes (Passage Only)
- DEP continues to work with DRBC & other DRBC states and EPA to determine the appropriate uses and water quality criteria for these waters

Recommendation

DEP is requesting the adoption of this proposed rulemaking with a 60-day public comment period to include three public hearings to be held in Harrisburg, Pittsburgh, and Wilkes-Barre.



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