

Water Resources Commission Meeting
August 11, 2016

Proposed Updates to the Massachusetts
Surface Water Quality Standards
(314 CMR 4.00)

Division of Watershed Management, Bureau of
Water Resources, MassDEP

314 CMR 4.00: Background

- **314 CMR 4.00 Massachusetts Surface Water Quality Standards (SWQS)**
 - Purpose: restore, enhance and protect the chemical, physical, and biological integrity of surface waters
 - Covers all waters in the Commonwealth except groundwaters
 - Massachusetts SWQS were first promulgated in 1967 and have been periodically revised
 - The Clean Water Act requires the EPA to approve all revisions following promulgation for the changes to become enforceable

Proposed Changes to 314 CMR 4.0

- **Updating Bacteria Standards**
 - 2012 EPA guidance for recreational waters
- **Clarifying Aluminum Criteria**
 - Acid-Soluble instead of Total Recoverable aluminum criteria
- **Reformatting & Housekeeping Updates**
 - Tables and Figures: 1-27
 - Table 28
 - Site-specific copper criteria

Updating Bacteria Standards

- EPA released new recommended recreational bacteria criteria for the protection of human health in 2012
- Continued federal grant funding for state Beaches Environmental Assessment and Coastal Health (BEACH) programs requires adoption of EPA's new criteria
- The Department of Public Health implements the BEACH program while MassDEP implements the SWQS program

Updating Bacteria Standards

The proposed changes to 314CMR 4 clarify the following:

- Bacteria indicators remain unchanged
- Enterococci threshold of 33 cfu/100mL → 35, not significant
- Statistical Threshold Value (STV) of 130 Enterococci/410 *E. Coli* replaces single sample maximum (SSM) of Enterococci 61/*E. Coli* 235
- ***Note the proposed changes are not expected to cause significant impact to permit holders or beach operators***

Clarifying Aluminum Criteria

- **Revised SWQS**
 - Chronic (87 $\mu\text{g/L}$) and acute (750 $\mu\text{g/L}$) aluminum criteria thresholds will not change
 - Consistent with EPA guidance, aluminum criteria will be expressed as the acid-soluble aluminum (ASA) present in surface waters
 - ASA criteria will remain ecologically-protective of aquatic life and will better reflect natural conditions in Massachusetts

Translating Aluminum Criteria into NPDES Limits

- **Technical Assistance Toolkit**
 - Permittees interested in assessing permit compliance based on the ASA criteria will need to collect additional aluminum data to support the development of revised aluminum permit limits
 - MassDEP has created fact sheets and data collection guidelines to inform NPDES facilities on the steps required to develop alternative criteria

Reformatting & Housekeeping Updates: Tables and Figures (1-27)

No substantive changes

Tables

- Reformatted and alphabetized tables
- Clarified boundaries of waters/segments
- Added missing Classes (A, B, SA, SB) to many waterbodies
- Clarified “Qualifiers” for many waters/segments
- Surface waters previously listed as a group are now each listed separately

Figures

- Changed figures that had errors in basin boundaries or surface water locations
- Added or updated Class SB waterbody markers for certain figures

Reformatting & Housekeeping Updates

Site-specific copper criteria added in 2013 (not approved by EPA) *will be removed*

BASIN/ DRAINAGE AREA	SURFACE WATER	BOUNDARY, TOWN OR RIVER MILE*
BLACKSTONE	Unnamed Tributary to West River	Upton, 0.2 - 0.0
CHARLES RIVER	Unnamed Tributary to Stop River	1.5 - 0.0
	Unnamed Tributary to Charles River	Weston, 0.3-0.0
CHICOPEE	Dunn Brook	3.7 - 0
MILLERS RIVER	Millers River	38.5 - 0.0
	Otter River	9.5-0.0
PARKER RIVER	Mill River	2.54 - 0.0
	Unnamed Tributary to Mill River	Byfield
SHAWSHEEN	Unnamed Tributary to Elm Brook	Lincoln, 0.5-0.0
SUASCO	Unnamed Tributary to Hop Brook	Sudbury
	Hop Brook	13.1 - 0.0
	Spencer Brook	1.8 - 0.0
	Sudbury River	10.6 - 0.0
TAUNTON	Sawmill Brook	Bridgewater, 1.6 - 0.0

Stakeholder Engagement

- **MassDEP has worked with stakeholders:**
 - EPA
 - Department of Public Health
 - Water Works Association
 - Coalition for Water Resources Stewardship
 - Watershed groups
 - Mass Rivers Alliance
 - Charles River Watershed Association
 - Connecticut River Watershed Council

Public Process

- **Estimated Timeline:**
 - Public hearing: early/mid October 2016
 - Public comment period: October 2016
 - Promulgation target: Early 2017
- **Subscribe to MassDEP's Regulations List-Serve:**
 - <http://www.mass.gov/eea/agencies/massdep/news/subscribe-to-regulations-updates-and-related-notification.html>

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