



October 5, 2017

Diana Eignor
Health and Ecological Criteria Division
Office of Water (Mail Code 4304T)
Environmental Protection Agency
1200 Pennsylvania Avenue NW.
Washington, DC 20460

RE: Comments on Docket ID No. EPA-HQ-OW-2017-0260

Dear Ms. Eignor:

Massachusetts Water Works Association (MWWA), the New England Water Works Association (NEWWA) and the New England Water Environment Association (NEWEA) are submitting the following comments on the United States Environmental Protection Agency's (EPA) Draft Updated Aquatic Life Ambient Water Quality Criteria for Aluminum in Freshwater published in the Federal Register on July 28, 2017 (Docket ID No. EPA-HQ-OW-2017-0260). MWWA represents the Public Water Systems in Massachusetts. NEWWA represents Public Water Systems in Massachusetts, New Hampshire, Maine, Rhode Island and Vermont. NEWEA represents wastewater systems in Massachusetts, New Hampshire, Maine, Connecticut, Rhode Island and Vermont. Our organizations have been monitoring the inclusion of Aluminum discharge limits in permits issued by EPA Region 1 under the National Pollutant Discharge Elimination System (NPDES) program.

We are pleased to see that EPA is updating the national freshwater aquatic life ambient water quality criteria to take into account water quality parameters that affect Aluminum toxicity and bioavailability. The current Aluminum criteria, adopted by EPA in 1988, does not appear to be appropriate for receiving waters in the New England region. The Massachusetts Department of Environmental Protection (MassDEP) has been in the process of reviewing their surface water quality standard for Aluminum and were expected to move forward with proposing changes to their regulations this fall, as they felt the current criteria to be overly conservative for many of Massachusetts' waters. This proposed criteria could impact the state's adoption of new surface water quality standards.

On March 6, 2017, EPA Region 1 issued a Potable Water Treatment Facility General Permit (PWTF GP) for Massachusetts & New Hampshire. This permit stated that discharge limits for Aluminum would be included in this permit. Many Public Water Systems use alum (aluminum sulfate) as a coagulant in their drinking water treatment process and we feel it will be difficult for them to achieve the current numeric limit while maintaining their current treatment processes. Many of the receiving waters in New England, including many high quality, pristine waterways, already have natural background levels of Aluminum that exceed the current national water quality standard that is used as the basis for numeric permit limits. The high levels of background Aluminum in waters generally considered to be very clean suggest that the current standard is grossly inaccurate and unnecessarily overprotective.

For Public Water Systems, coagulant changes (such as to iron-based coagulants) could be both a costly and lengthy process which may have significant operational impacts. Public Water Systems that change coagulants to meet Aluminum limits may have problems with other Safe Drinking Water Act requirements; they may have to reassess their lead and copper corrosion control program as one example. In some instances, change in coagulants have resulted in sudden highly elevated lead levels. It simply does not make sense to have Public Water Systems potentially compromising public health, or having to make costly investments to change coagulants or treatment processes, so that they do not exceed an arbitrary water quality standard, which even if exceeded, does not appear to be causing environmental harm in our area. Nor does it make sense for wastewater treatment plants serving communities across the state to spend their limited funds trying to reduce Aluminum in treated discharges with no environmental benefit to be gained.

We have reviewed EPA's proposal and believe that the changes proposed are beneficial and should move forward, however, we do offer the following comments for EPA's consideration before the new criteria is finalized:

- 1. Maximum DOC in Multiple Linear Regression Models:** The maximum dissolved organic carbon (DOC) limit for the new calculator is 5 mg/L. Some water bodies have significantly higher DOC and therefore potentially significantly higher toxicity limits. It would be an undue hardship for a permittee discharging to a water body with high DOC to be required to meet an unreasonably low Aluminum limit just because the scale of the model maxes out at 5 mg/L for DOC. The model should be expanded to account for higher DOC concentrations observed in New England waters.
- 2. Implementation:** We understand that EPA does not have any implementation guidance available at this point, but we strongly suggest that the guidance be developed and ready upon finalization of the criteria.

EPA should provide updated guidance for performing calculations and/or studies to determine higher regulatory Aluminum toxicity limits when water bodies are not within the calculator's limits for pH, hardness, and DOC.

As we reviewed the proposed criteria, the following question was raised and should be addressed in Guidance: How are the criteria translated into a discharge limit for a permit? Water quality can change seasonally and therefore permittees wonder which samples will be used for establishing the discharge limits.

We think it is important for EPA to define the “site” for sampling the water quality parameters that are input into the model. We understand that the samples for the water quality parameters (hardness, TOC, DOC, pH) should be done in the receiving waters and not from the discharge, but EPA should make that explicit in the final document.

- 3. Anti-backsliding:** Since the Clean Water Act contains anti-backsliding provisions, we wonder how EPA will handle cases where the new criteria results in a higher applicable criteria? It is our position that if new methodologies are available for calculating criteria, then permittees should be given the opportunity to apply the new methodology and their permit should be modified to adopt the new criteria, even if it results in criteria that may be considered more “favorable” than the old criteria. Permits must rely on the best available science and should not be bound by anti-backsliding provisions if new information is available.

MWWA, NEWWA and NEWEA appreciate the opportunity to provide these comments and we hope that EPA will modify the final criteria to incorporate the points we have raised. Should you have any questions regarding our comments, please contact Jennifer Pederson at 978-263-1388 or jpедerson@masswaterworks.org.

Sincerely,

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Stephen Ryan
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