

Proposed Federal Aquatic Life Criteria for Aluminum in Oregon Freshwaters

Summary

The EPA is proposing a rule to establish federal Clean Water Act (CWA) water quality criteria for freshwaters under the state of Oregon's jurisdiction to protect aquatic life from the effects of exposure to harmful levels of aluminum. Aluminum naturally occurs at low levels in surface waters, such as rivers and lakes. However, at higher concentrations, it can be toxic to aquatic life. The EPA's proposal uses the latest scientific knowledge on aluminum toxicity in water. The public may provide written and/or oral comments on the proposed rule.

Background

To protect aquatic communities from the harmful effects of pollutants in surface waters, states must establish water quality criteria for their water bodies that are protective of designated aquatic life uses. The EPA periodically publishes national criteria recommendations under CWA section 304(a) for states to consider.

In 2013, the EPA disapproved Oregon's freshwater acute (short-term) and chronic (long-term) aluminum criteria as not meeting CWA requirements to protect aquatic life in the State. The EPA is under a consent decree deadline to propose a rule to protect freshwater aquatic life in Oregon from the adverse effects of aluminum consistent with CWA requirements by April 19, 2019, and to finalize a rule by March 27, 2020, unless Oregon adopts and submits protective criteria for aluminum that the EPA approves as meeting CWA requirements before that time.

The EPA's proposed aluminum aquatic life criteria for Oregon

The EPA proposes to promulgate aluminum criteria for Oregon freshwaters based on the EPA's revised national criteria recommendation to protect freshwater aquatic life. The proposal, if finalized, would apply to all freshwaters under Oregon's jurisdiction that have a designated aquatic life use. In 2018, the EPA published final, updated national CWA section 304(a) recommended freshwater aquatic life criteria for aluminum (see relevant documents online at www.epa.gov/wqc/2018-final-aquatic-life-criteria-aluminum-freshwater). The criteria recommendation includes a calculator for deriving criteria output values based on site-specific ambient water chemistry. The EPA proposes that Oregon shall use the calculation approach in the 2018 CWA section 304(a) recommendation.

Details on the derivation of criteria values

The CWA section 304(a) recommendation calculation approach uses three ambient water body characteristics that affect the toxicity of aluminum as input parameters: pH, dissolved organic carbon (DOC), and total hardness. The State would use the calculated outputs to identify acute and chronic aluminum criteria values to protect aquatic life throughout the site under the full range of ambient conditions, including when aluminum is most toxic given the spatial and temporal variability of the water chemistry at the site.

How the EPA's proposal relates to the State of Oregon's efforts to develop criteria

The EPA is under a consent decree to finalize this proposed rule by March 27, 2020. The EPA will not proceed with final rulemaking (or will withdraw its final rule, as applicable) for freshwater acute and chronic aluminum if Oregon adopts and submits protective criteria for aluminum that the EPA approves as meeting CWA requirements. Oregon has not yet adopted and submitted revised freshwater acute and chronic aluminum criteria to the EPA.

Soliciting comments on the proposed rule

The EPA welcomes comments concerning the proposed rule and requests any additional information for consideration by the Agency. The EPA is also seeking comment on providing protective default DOC input values to use when sufficient representative data for pH and total hardness (parameters that are commonly collected) are available but corresponding DOC data are not available. The EPA is also seeking comment on providing protective default aluminum criteria values for use when sufficiently representative ambient data to derive protective criteria output values relying on the CWA section 304(a) recommendation calculation approach are not available.

Public hearings on the EPA's proposed rule

In addition to accepting written comments from the public, the EPA is offering two online public hearings on the proposed rule so that interested parties may provide oral comments. The first hearing will be on Tuesday, June 11, 2019 from 4:00pm to 6:00pm Pacific Time. The second hearing will be on Wednesday, June 12, 2019 from 9:00am to 11:00am Pacific Time.

Where can I find more information?

Contact Heather Goss by phone at (202) 566-1198 or by email at goss.heather@epa.gov, or Rochelle Labiosa by phone at (206) 553-1172 or by email at labiosa.rochelle@epa.gov. To view the proposed rule, supporting documents, and more details on

how to make written comments and/or how to register to make oral comments at the online public hearings, visit the EPA's Water Quality Standards website at:

www.epa.gov/wqs-tech/aluminum-aquatic-life-criteria-applicable-oregon-fresh-waters-proposed-rule.