

May 4, 2024

To: Marla Koberstein
Department of Ecology
Water Quality Program
PO Box 47696
Olympia, WA 98504-7696

Subject: Proposed updates to aquatic life toxics criteria, WAC 173-201A-240 Technical Support Document

Dear Ms. Koberstein,

This letter is being submitted to raise awareness about concerns identified within the WAC 173-201A-240 Technical Support Document, particularly surrounding the proposed criteria related to metals.

Since 2007, the US Environmental Protection Agency (USEPA) has recognized the importance of several water quality parameters (e.g., pH, dissolved organic carbon, and hardness) as factors that can affect the toxicity of metals by altering their bioavailability within the environment.¹ In 2017, the USEPA initiated a Cooperative Research and Development Agreement (CRADA) with eight metals associations as signatories. The associations involved in this agreement include the Aluminum Association, Aluminum REACH Consortium, Cobalt Institute, International Copper Association, Copper Development Association, International Lead Association, International Zinc Association, and NiPERA Inc. The objective of this ongoing agreement is to support the development of bioavailability-based aquatic life criteria.² Since 2018, the CRADA signatories have developed expanded empirical data, updated ecotoxicity databases and bioavailability models, established simplified modeling frameworks, generated model comparison documents, and produced several peer-reviewed publications supporting the continued use of bioavailability concepts in regulatory settings.

Although the Department of Ecology's current proposal supports the application of Multiple Linear Regression models for copper and aluminum, the approach proposed for other metals (i.e., hardness-based criteria) is not consistent with best-available science nor the updated criteria and methodologies under development by USEPA Office of Water. On behalf of the CRADA industry partners, we recommend that the methods applied in developing the aquatic life criteria for metals be reconsidered. In particular, we encourage the Department of Ecology to strive for alignment, consistency, and to more broadly apply bioavailability concepts in the criteria development for metals in the state of Washington. Since the state-of-the-science bioavailability considerations vary slightly between different metals, the industry associations comprising the signatories intend to individually submit specific comments and recommendations pertaining to each metal.

The signatories to this letter are not only involved in the USEPA's CRADA workplan, but are also active in the development and implementation of bioavailability-based criteria throughout different domestic (e.g., state of California) and international (e.g., Canada, Europe, Australia) jurisdictions. We would welcome the opportunity to work alongside the Washington Department of Ecology in a collaborative manner to assist in developing protective and scientifically robust criteria for metals in surface waters that fulfill the environmental objectives set forth by the Washington Department of Ecology and USEPA.

¹ <https://www.epa.gov/wqs-tech/copper-biotic-ligand-model>

² <https://www.epa.gov/wqc/metals-crada-phase-1-report>

Thank you for your attention and consideration.

Sincerely,

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