



North American Metals Council  
Managed by B&C® Consortia Management, L.L.C.

September 27, 2016

Via Electronic Submission

Ms. Kathryn Gallagher  
Health and Ecological Criteria Division  
Office of Water (Mail Code 3404T)  
U.S. Environmental Protection Agency  
1200 Pennsylvania Ave, N.W.  
Washington, D.C. 20640

Re: Comments on Draft Aquatic Life Ambient Estuarine/Marine Water  
Quality Criteria for Copper - 2016, Docket No. EPA-HQ-OW-  
2016-0332

Dear Ms. Gallagher:

The North American Metals Council (NAMC) appreciates the opportunity to provide comments on the U.S. Environmental Protection Agency's (EPA) "Draft Aquatic Life Ambient Estuarine/Marine Water Quality Criteria for Copper - 2016," dated July 2016 (Notice of Availability, 81 Fed. Reg. 49982 (July 29, 2016), Docket No. EPA-HQ-OW-0332).

NAMC is an unincorporated, not-for-profit group formed to provide a collective voice for North American metals producers and users (*i.e.*, the North American "metals industry") on science- and policy-based issues that affect metals in a generic way. NAMC members include trade associations as well as individual companies. We have been a leading voice for the metals industry on science and policy-based issues affecting metals, and have worked closely with U.S. federal and international agencies to address risk assessment issues that are unique to metals at various stages of their lifecycle -- sourcing, production, engineering, use, recycling, and recovery. NAMC and its members advocate for policy based on good and technically defensible science, and are engaged in technical research on issues pertaining to several metals, including the development of water quality tissue-based standards for selenium, aluminum, and copper, the implementation of such standards, development of effects thresholds, and the identification of analytical methods pertinent to such standards.

{00609.002 / 111 / 00192043.DOCX 5}



North American Metals Council

Ms. Kathryn Gallagher  
September 27, 2016  
Page 2

This document comprises integrated comments provided by individual Members and Associates of NAMC. NAMC supports the positions and views expressed in the submission by the Copper Development Association and the International Copper Association.

NAMC applauds EPA for incorporating bioavailability concepts and the use of a saltwater Biotic Ligand Model (BLM) into the draft criteria document. Over the years, NAMC has supported the use of the BLM in the freshwater criterion for copper. This approach reflects the state-of-the-science for deriving protective criteria for both sensitive and insensitive environments. We are hopeful that the BLM or similar approaches that account for bioavailability will be used by EPA for all metals, not just copper, and we look forward to providing details on other metals that will be of assistance.

NAMC has several concerns, however, with some of the approaches, assumptions, and data used in the derivation of the draft estuarine/marine criteria for copper. These concerns are outlined below, along with our general recommendations for how to improve this important document.

### **EPA Should Rely on Copper Toxicity Studies in which DOC Concentrations Were Reported**

The BLM is highly sensitive to dissolved organic carbon (DOC). Therefore, EPA should only use copper toxicity data from studies in which DOC concentrations were reported to derive the criteria. NAMC recommends that EPA not use generic, estimated, or default DOC concentrations for toxicity tests in which this critical water quality parameter was not measured. This recommendation has significant implications for the derived final criteria, given the lack of reliable DOC data for several of the toxicity tests, especially for sensitive species.

### **EPA Should Not Derive Criteria Using Generalized Approaches**

The database on copper toxicity is quite large, so there is no need for EPA to derive the criteria using generalized approaches that are more appropriate for data-poor substances. There are sufficient data to derive a final chronic criterion without the use of acute to chronic ratios. NAMC believes EPA has relied on generic acute application factors, acute-chronic ratios, and acute-chronic ratio adjustments, all of which are unnecessary, introduce bias, and reduce precision in the final criteria derivation.



North American Metals Council

Ms. Kathryn Gallagher  
September 27, 2016  
Page 3

### **EPA Must Be Consistent in its Use of Default/Reference-Water Chemistries**

NAMC urges EPA to be consistent in its use of default/reference-water chemistries and base the values it selects on data that characterize the most likely environments in which the estuarine/marine criteria will be applied. This recommendation affects both BLM-normalization of toxicity data and the expression of the final criteria. Justifications for the chosen water-chemistry conditions appear to be lacking.

The large database of readily-available, published data that characterize water quality conditions in U.S. estuaries where these criteria are expected to be most-frequently applied should be utilized to improve the confidence in the use of the proposed criteria.

### **EPA Should Provide Additional Guidance on BLM Implementation**

NAMC urges EPA to provide additional guidance on the implementation of the BLM-based approach for estuaries to assist the states in adopting its recommendations. This suggestion was prompted by the lack of an EPA-derived definition of the freshwater/estuarine boundary, which is critical for implementation of this saltwater criteria, especially in light of EPA's already-existing recommendation for BLM-based freshwater copper criteria.

\* \* \* \*

NAMC appreciates the opportunity to provide comments. We believe accepting these recommendations will improve the quality of the EPA proposed estuarine/marine water quality criteria for copper. If you or your staff have any questions regarding this letter, please do not hesitate to contact me.

Sincerely,

Kathleen M. Roberts  
Executive Director