



**UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION 10**

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OFFICE OF
WATER AND WATERSHEDS

August 10, 2016

Jason Pappani
Idaho Department of Environmental Quality
1410 N. Hilton
Boise, Idaho 83706

RE: EPA's Comments on Idaho's Update to Freshwater Aquatic Life Criteria for Copper,
Guidance Development, Docket No. 58-0102-1502,

Dear Jason:

The EPA appreciates the opportunity to provide comments to the Idaho Department of Environmental Quality (DEQ) on the materials presented at the July 26, 2014 negotiated rulemaking meeting. The information presented provided 1) DEQ's revised schedule for rulemaking to update Idaho's copper criteria, 2) a draft outline for an implementation guidance document, and 3) outlined a proposed monitoring approach to obtain input values for use with the copper biotic ligand model (BLM). The EPA is supportive of DEQ completing this work by fall of 2017 with the intent of Legislature review and approval by early 2018. The EPA acknowledges the importance of implementation guidance when adopting the copper BLM on a statewide basis and the EPA looks forward to providing input to DEQ as the guidance document develops.

As stated in a previous comment letter the EPA provided to DEQ, implementation methods are critical for model-derived criteria because models rely on input parameters that can vary in concentration or level over time and spatially throughout a site. The implementation methods should detail how DEQ intends to apply the copper BLM to a waterbody in order to provide clarity for the public and regulated community. These implementation methods should address key considerations for model inputs and outputs, such as site selection and characterization and how critical conditions will be determined (including analyzing model outputs, identifying the estimated default input parameters?) for Idaho waters. In addition, the methods should identify when default values are to be used in lieu of ambient data at a particular site, provide recommendations for sampling frequency and locations, and describe the methodology for data screening, data processing, and model output interpretation. The EPA sees implementation procedures as important for applying the copper BLM in a consistent, repeatable, and protective manner

Given DEQ presented simply a draft outline for the implementation guidance document, there is insufficient detail for the EPA to provide any meaningful comment at this time. However, the EPA supports the development of the guidance and looks forward to reviewing and providing DEQ with recommendations and suggestions as the document develops.

The EPA strongly supports DEQ's efforts to collect Idaho-specific data to derive copper criteria using the BLM and notes the importance of collecting enough samples over a long enough time period to capture the spatial and temporal variability and sensitive conditions at a site. The EPA's concern regarding the proposed monitoring plan is that it lacks a robust demonstration that summer-autumn is the critical period for the BLM. The proposed approach appears to be based on a limited dataset. According to the 7/26/2016 DEQ PowerPoint Presentation, slide #12, it appears that the BLM calculated criteria are lowest during the winter months (<10.0 µg/L during November – February). However, it is EPA's understanding that DEQ has determined to sample in the summer-autumn months based on data shown in slide #20 (DOC by month) of the same presentation in which DOC is shown to potentially decline from April to September of 2007 in multiple streams. Because winter to early spring is not included in that dataset, but BLM criteria appear to be lowest at that time (possibly due to low wintertime DOC, given low biological activity), EPA recommends that DEQ further justify their choice for summer-autumn sampling or provide a sampling plan to include samples during the more critical period of winter. Can DEQ reduce the fall monitoring and include collection of samples in the winter to at latest early spring (e.g., before and during the rising limb of the hydrograph of selected locations) of 2017 to provide a better validation to the assumption that summer-autumn is critical? The idea to have permitted facilities do the monitoring year round might be a way of capturing critical conditions; however, for ambient assessments, this may not be the best approach. In addition, the primacy of using concurrent data (input parameters and Cu) to calculate IWQCs for assessments might be problematic if the timing of the sampling leads to a situation where Cu is low and conditions are not critical. The combination of these above issues is why EPA recommends that the selection and use of real or default input parameters to calculate criteria when data are absent is rigorously justified with representative data.

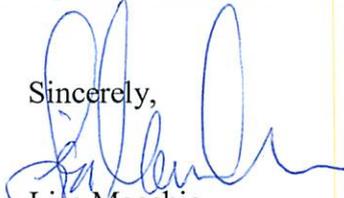
Lastly, EPA offers the following comments and suggestions again regarding the draft rule language for your consideration:

The EPA is supportive of DEQ referencing a guidance document in rule. However it is also important that DEQ provide the necessary clarity and requirements in rule so as to distinguish when certain elements are requirements and not optional approaches.

Additionally, as noted in a previous comment letter, DEQ's proposed draft rule language includes example calculated values for the acute and chronic freshwater copper criteria in Idaho's water quality standards table of toxic criteria, along with a footnote describing the model inputs that were used to derive the example values. The role of these example criteria is unclear in a plain reading of the table, and the example criteria could be falsely identified as default values to use in situations where model input data are unavailable. The EPA suggests that DEQ delete the comparative values in the table and, instead, provide in the rule the default input values for the model input parameters. Procedures identified in the EPA's *Draft Technical Support Document: Recommended Estimates for Missing Water Quality Parameters for Application in EPA's Biotic Ligand Model (the Missing Parameters Document)* should be followed in establishing estimated defaults.

The EPA appreciates DEQ's commitment to update Idaho's aquatic life copper criteria based on the most current science and is available to provide assistance to DEQ on further development of the criteria and recommended implementation procedures. If you have any questions or would like to discuss these comments further, please contact me at (206) 553-1834.

Sincerely,



Lisa Macchio

Water Quality Standards Coordinator