



**UNITED STATES ENVIRONMENTAL PROTECTION
AGENCY
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WATER
DIVISION

January 11, 2021

Jason Pappani
Surface Water Bureau Chief
Idaho Department of Environmental Quality
1410 North Hilton
Boise, Idaho 83706-1255

Re: EPA Comments on Idaho’s Negotiated Rulemaking – Preliminary Draft Negotiated Rule, Draft No. 1, Docket No. 58-0102-1801

Dear Jason:

Thank you for the opportunity to provide comments to the Idaho Department of Environmental Quality (DEQ) regarding the preliminary draft rule language DEQ is considering in revising Idaho’s arsenic human health criteria.

EPA is still evaluating the draft language and the approaches DEQ presented during the December 8, 2020 negotiated rulemaking meeting. However, at this time EPA would like to offer the following preliminary comments and suggestions for your review and consideration.

Below is a portion of the preliminary draft negotiated rule No.1 as presented by DEQ (strikeout text indicates existing text that would be removed and red and underlined text indicates the preliminary new and/or revised language):

Table 2. Criteria for Protection of Human Health (based on consumption of:)						
Compound	^a CAS Number	Carcinogen ?	Water & Fish (µg/L)		Fish Only (µg/L)	
Inorganic Compounds/Metals						
Arsenic ¹	7440382	Y	10	c d j	10	c d j
Arsenic ²	7440382	Y	10	c d j <u>k</u>	10 <u>8µg/kg</u>	c d j <u>!</u>

¹Effective for CWA purposes. Water & Fish value, Water & Fish footnote j, Fish Only value and Fish Only footnotes d and j continue to be effective for CWA purposes until the date EPA issues written notification that the revisions in Docket No. 58-0102-1801 have been approved. See Arsenic² immediately below.

² Not yet effective for CWA purposes. Water & Fish footnote k, Fish Only value and Fish Only footnote l are not effective for CWA purposes until the date EPA issues written notification that the revisions in Docket No. 58-0102-1801 have been approved.

c. Inorganic forms only.

d. Criterion expressed as total recoverable (unfiltered) concentrations.

j. This criterion is based on the drinking water Maximum Containment Contaminant Level (MCL).

k. Human health criteria for Water & Fish exposure to inorganic arsenic are attained if fish tissue concentrations comply with the Fish Only criterion and water column concentrations meet the maximum contaminant level for inorganic arsenic provided in IDAPA 58.01.08, "Idaho Rules for Public Drinking Water Systems."

l. For Fish Only exposure to inorganic arsenic, the human health criterion is: Fish muscle (fillet) tissue: 8 µg/kg on a wet-weight basis, based on an average or composite of a minimum of five (5) individual fish of the same species, where the smallest individual is no less than seventy-five percent (75%) of the total length (size) of the largest individual.

Footnotes k and l are not effective for CWA purposes until the date EPA issues written notification that the revisions in Docket No. 58-0102-1801 have been approved.

Water & Fish Criterion for Protection of Idaho's Domestic (Drinking) Water Supply Use

Even though most public water supplies that use surface waters as source water for drinking water do so after treatment, in consideration of the goal of pollution prevention, ambient waters should not be contaminated to a level where the burden of achieving health objectives is shifted away from those responsible for pollutant discharges and placed on downstream uses to bear the costs of upgraded or supplemental water treatment. Programs under the Clean Water Act (CWA) are some of our most important tools in protecting sources of drinking water from contamination. EPA is committed to promoting full utilization of those programs to help protect drinking water sources wherever possible and EPA's continued CWA/SDWA integration actions. The operating principle of EPA's policy efforts is that, while public water systems are legally accountable for the delivery of safe drinking water to their consumers, no water system should have to provide more treatment than that which is necessary to address naturally occurring pollutant concentrations e.g., minerals leaching from rock formations, or wildlife contamination unrelated to anthropogenic activities.

At the previous rulemaking meeting on November 5, 2020, DEQ proposed two options for the fish plus water arsenic criterion to protect Idaho's domestic water supply (DWS) use:

- calculate criteria based on Idaho exposure factors and Idaho specific BAF, or
- narrative criteria

Idaho should evaluate whether the proposed narrative approach referencing the Safe Drinking Water Act (SDWA) Maximum Contaminant Level (MCL) adequately considers aggregate risk from exposure to both fish and water. EPA recommends that if Idaho decides to pursue this approach for the water + org criterion, which deviates from how Idaho typically derives criteria to protect the DWS use, the state should provide a justification for doing so.

In DEQ's preliminary draft rule language, the narrative criterion for arsenic contained in footnote k references a numeric criterion in the form of the SDWA MCL. EPA notes that footnote k refers to IDAPA 58.01.08., which is a citation to the entirety of Idaho's Rules for Public Drinking Water Systems. The exact subsection of Idaho's drinking water rules containing information on Idaho's drinking water MCLs is provided in subsection 58.01.08.050.01.b. However, this subsection does not include the actual MCL value for arsenic nor any other contaminants. Instead, subsection 58.01.08.050.01.b provides a statement that incorporates by reference 40 CFR 141.62. Thus, nowhere in the Idaho rules can one find the value for the SDWA MCL for arsenic. EPA suggests DEQ consider revising footnote k so that it is less cumbersome for the public to understand the proposed value for arsenic. In addition, EPA suggests DEQ use more specific wording in footnote k, such as "incorporates by reference," to make clear that the criterion is the SDWA MCL for arsenic.

Furthermore, footnote k to arsenic in Idaho's table of toxic criteria appears to be a narrative criterion that incorporates a numeric by reference. Given this, EPA suggests that the more transparent and direct approach is for DEQ to provide the numeric value in the table of criteria. If DEQ believes there is a compelling reason not to include the value in the table, we request the rationale be articulated in writing so that EPA could more fully evaluate this approach. In the event DEQ would like to retain footnote k as a narrative, EPA provides the following suggested language for your consideration:

k. Human health criteria for Water & Fish exposure to inorganic arsenic are adopted by reference and provided at 40 CFR 141.62

Additionally, EPA suggests DEQ evaluate the duration and frequency associated with the SDWA MCL requirements as compared to the duration and frequency associated with surface water ambient water quality criteria for arsenic. EPA recommends consulting with DEQ's drinking water program to ensure the frequency of exceedance allowed for MCLs is aligned with the frequency and duration components associated with surface water magnitudes to protect Idaho's post-treatment DWS use.

Fish Only Criterion for Protection of Idaho's Primary and Secondary Recreation Uses

The preliminary draft rule for the fish only criterion includes only a tissue criterion and not a water column criterion as well. We appreciate DEQ's efforts to gather Idaho data to derive a statewide Idaho-specific bioaccumulation factor (BAF) and have discussed with DEQ that the current data reveal uncertainty in the relationship between water and fish arsenic concentrations; however, we believe there is value in having a water column criterion for ease in implementation. We would like to work with DEQ in the coming months to collectively consider options for the BAF. EPA would like to talk further with DEQ about potential options to account for the uncertainty, including evaluating the existing data in different ways. Given the current rulemaking schedule, it appears there is sufficient time for DEQ to give further consideration to additional options regarding a BAF for arsenic.

As you know there are a number of challenges associated with implementation of a tissue-only criterion, such as difficulty in deriving a water-based limit for permitted dischargers and resources involved in collecting fish tissue data, and EPA believes it will be important for these to be fully discussed and addressed during this rulemaking and prior to DEQ putting forth a proposed rule. Furthermore, if DEQ intends to move forward with a tissue-only criterion for arsenic, it is critically important for DEQ to develop a draft framework for implementation during this rulemaking to ensure clarity and a solid understanding of how a tissue criterion, without a corresponding water column criterion for arsenic, would be implemented. EPA believes both the public and regulated community would be interested in knowing the circumstances/situations where DEQ foresees tissue data would be collected, by whom, and for what purposes. The implementation framework should include details regarding how DEQ envisions implementation, specifically in CWA programs such as IPDES permits, TMDLs and listing and assessment. Having this additional detail during the rulemaking process would be helpful to EPA, stakeholders, and the public in further evaluating DEQ's proposed approaches for arsenic human health criteria.

EPA greatly appreciates DEQ's continued efforts to evaluate and propose potential approaches to revising Idaho's human health arsenic criteria. EPA looks forward to continuing to provide technical support to DEQ on this work. Please do not hesitate to contact me at (206) 553-1834 or at macchio.lisa@epa.gov if you have any questions.

Sincerely,

Lisa Macchio
Water Quality Standards Coordinator

cc: Michelle Dale, DEQ