



Association of Idaho Cities
3100 South Vista, Suite 201, Boise, Idaho 83705
Telephone (208) 344-8594
Fax (208) 344-8677
www.idahocities.org

April 30, 2020

Ms. Paula Wilson, Administrative Rules Coordinator
Idaho Department of Environmental Quality
1410 N Hilton
Boise, ID 83706

Re: Docket No. 58-0102-1801 Update to Human Health Criteria for Arsenic – 4/15/2020
Stakeholder Meeting

Dear Ms. Wilson/Paula,

The Association of Idaho Cities (AIC) serves to advance the interests of the cities of Idaho through legislative advocacy, technical assistance, training, and research. Idaho cities and municipal drinking water utilities play important roles as primary providers of drinking water and implementers of the Clean Water Act. Idaho cities represent over 70% of all Idaho residents. These stakeholders have significant interests in the development of water quality standards, rules, and guidance related to the protection of human and aquatic life. AIC is actively engaged in water quality issues through the work of our Environment Committee, chaired by Boise City Council President Pro Tem Elaine Clegg and our Municipal Water Users Group.

AIC appreciates the opportunity to comment on the development of the update to Idaho's human health criteria for arsenic and looks forward to working with our state and other partners in the development of this important water quality standards.

Should you have questions concerning our attached comments, please feel free to contact me.

Sincerely,

Johanna Bell, Policy Analyst

cc: Susan Hawkins, AIC President
Kelley Packer, AIC Executive Director
Elaine Clegg, AIC Environment Committee Chair
AIC Municipal Water Users & IPDES Task Force



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General Comments

AIC appreciates the data presented, and information and potential future steps and actions by IDEQ at the April 15th negotiated rule-making meeting. IDEQ is to be commended for its tremendous effort and success to date to develop comprehensive statewide data for total and inorganic arsenic (As) in water and fish.

Bio-Accumulation Factor Data Results – Implications and Possible Next Steps

Based on the data presented at the April meeting, it is apparent that the As data will not support development of a scientifically defensible relationship between total or inorganic arsenic in water and concentrations in fish tissue, and hence will not support establishment of a defensible bioaccumulation factor (BAF). Without a defensible BAF, the fish consumption aspect of a human health criterion (HHC) will also not be defensible.

An alternative approach to protection of human health from As in fish might be considering a fish consumption advisory, or warning, process rather than a formal HHC based partly (drinking water supplies) or wholly (recreation only waters) on fish tissue concentrations and a BAF. AIC does not have the specific expertise to recommend what a defensible advisory/warning level would be, but suggests this concept be considered by IDEQ and other agencies responsible for human health protection in Idaho.

Issues to Consider Regarding a “Drinking Water Only” Arsenic Criteria

However, even if the fish consumption aspect of a HHC criterion is not included, the drinking water only aspect of a HHC that would apply to designated public water supplies throughout Idaho would also likely be problematic based on the As data that IDEQ presented at the April meeting.

This will ultimately depend on EPA’s determination regarding the cancer slope factor (CSF) pertaining to HHC, but assuming that it remains similar to the current CSF, the resulting HHC for drinking water alone would be at least an order of magnitude lower than the As concentrations measured in water at most locations in Idaho.

Idaho’s High Natural Background Sources of Arsenic

As IDEQ has indicated, this is likely due to natural background sources of As in Idaho waters related to geologic conditions and sources of As to groundwater and surface waters. Consequently, consistent with previous comments AIC has submitted during this As rule-

making, IDEQ should be seriously evaluating the potential for developing natural background HHC in Idaho.

AIC has suggested IDEQ evaluate a similar approach currently being pursued by the Montana DEQ (MDEQ), using a mass-balance process to determine defensible natural (non-anthropogenic) As concentrations in Idaho surface waters. The Montana approach was presented by MDEQ staff to the Idaho rule-making participants in an earlier meeting.

Development of a Mass-Balance for Inorganic Arsenic - Background and Anthropogenic Sources

The ambient monitoring network and data collected by IDEQ provides useful information regarding the potential for a natural background approach in Idaho. What is currently lacking to further evaluate the viability of mass-balance approach is inorganic As data from major point and nonpoint sources of anthropogenic inorganic As. However, many of the major point sources in Idaho will have total As data for their effluent, some more than others, but at least an initial cursory evaluation of the mass-balance approach could be undertaken using total As as a surrogate, and if promising, warranting further collection of inorganic As from these sources.

Next Steps for Continued Monitoring – AIC’s Recommendations

At the April meeting, IDEQ requested participants consider comments on next steps for continued monitoring, especially the fish tissue monitoring aspect of the program. AIC recommends that IDEQ consider discontinuing the fish tissue sampling, given that the comprehensive data collected so far demonstrate that determining a defensible BAF appears to be very unlikely. The funds that would otherwise be used for the fish monitoring could be used to further explore the viability of a natural background, mass-balance concept for Idaho surface waters.

From a field sampling perspective, some or all of these funds could be re-allocated to collecting As data from anthropogenic sources during the upcoming field season. Funds could also potentially be allocated to IDEQ staff to further develop the concepts and processes needed to pursue natural background criteria for Idaho.