



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

June 7, 2018

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 5/23/18 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 a significant interest 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, chaired by Jerome City Council President Bob Culver.

The Idaho Department of Environmental Quality (IDEQ) is pursuing an update to Idaho's human health criteria for Arsenic, a carcinogen. Idaho Water Quality Standards (WQS; IDAPA 58.01.02) provide numeric toxics criteria for the protection of human health for two exposure scenarios – exposure through fish consumption only, and exposure through fish + drinking water consumption.

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

Sincerely,

A handwritten signature in black ink, appearing to read "Jess Harrison".

Jess Harrison, Executive Director

cc: Elaine Clegg, AIC Environment Committee Chair
Bob Culver, AIC Municipal Water Users Group Chair
Johanna Bell, AIC Policy Analyst
Tom Dupuis, AIC Environmental Consultant

Attachment

| Issue or DEQ Question | AIC Number | AIC Comment or Response | | AIC Discussion |
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| | | No Extension | With Extension | |
| <p>Toxicity/Cancer Slope Factor</p> | <p>1</p> | <p>If necessary, develop alternative Toxicity/Cancer Slope Factor independent of IRIS</p> | <p>Apply IRIS update if available</p> | <p>AIC supports natural background approach in general, rather than the usual HHC equation</p> |
| <p>Alternative Risk Factors</p> | <p>2</p> | <p>AIC supports an alternative risk factor, such as 10^{-4}, for As as in the approved Oregon criteria</p> | <p>Evaluate risk factor in the context of the overall consideration of the new dataset</p> | <p>AIC supports natural background approach in general, rather than the usual HHC equation</p> |
| <p>Elevated Background</p> | <p>3</p> | <p>Due to elevated background, AIC supports criteria based on natural background.</p> | <p>AIC believes the additional dataset will reinforce the need for the natural background approach to HHC for As.</p> | <p>AIC supports natural background approach in general, rather than the usual HHC equation</p> |
| | <p>4</p> | <p>Further evaluate Montana approach to natural background criteria using existing data</p> | <p>Develop a monitoring program, and review existing data, to provide the data necessary to implement Montana approach.</p> | <p>AIC believes that the other background conditions approaches identified by IDEQ in Slide 21 (e.g., percentile values or reference site approach) are not the only options and will not likely lead to attainable criteria.</p> |
| <p>Implementation</p> | <p>5</p> | <p>AIC recommends use of HDR report on treatment costs and feasibility to justify a variance approach</p> | <p>AIC recommends a similar approach to the HDR report tailored to Idaho conditions</p> | <p>IDEQ noted that variance approach has been done for other pollutants in other states, gives time for technology to make incremental improvements and intake credits are likely not appropriate for discharges of ground water to surface water. AIC agrees that the variance is the only possible viable option other than natural background criteria .</p> |
| <p>Monitoring</p> | <p>6</p> | <p>Not applicable</p> | <p>AIC supports IDEQ's stated goals for the monitoring, but also recommends additional data mining and collection to allow for application of the Montana approach to develop background concentrations. These concentrations may differ across Idaho, depending on the basin's geology and ground water influences. If the data indicates, apply site specific background analysis as appropriate.</p> | <p>IDEQ: Goals are to identify background conditions, refine Idaho-specific BAF, and refine understanding of $As_7:As_T$ in both water and fish IDEQ: Probabilistic monitoring, multiple water samples for As_7 and As_i (June/July and Oct/Nov IDEQ: time dependent monitoring, results will not be available unless there is an extension</p> |
| <p>Should Idaho limit consideration of arsenic BAF to only Freshwater?</p> | <p>IDEQ Question</p> | <p>AIC supports a freshwater only approach</p> | <p>Additional data will allow a more defensible Idaho BAF</p> | <p>IDEQ: BAFs are different between freshwater and marine systems, but not lentic and lotic systems. AIC supports natural background approach in general, rather than the usual HHC equation</p> |

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| <p>Should Idaho only consider (relatively) low ambient concentrations of arsenic when calculating BAFs?</p> | <p>IDEQ Question</p> | <p>Idaho's background levels are higher than national averages (according to EPA), considering low ambient concentrations when calculating BAFs would result in overestimation of BAF</p> | <p>Same comment</p> | <p>IDEQ: BAFs are higher at lower ambient As concentrations.</p> |
| <p>Should Idaho pursue alternative approach to calculate BAF?</p> | <p>IDEQ Question</p> | <p>AIC supports an alternative approach to the BAF</p> | <p>Additional data will allow a more defensible alternative approach for an Idaho BAF</p> | <p>Figure 4 in Slide 45 presentation makes it clear that using an average overestimates BAF fairly significantly. Again, AIC supports a natural background approach rather than the usual HHC equation.</p> |
| <p>Should Idaho limit derivation of BAF to Idaho-specific data, literature data, or use all available data? Does it matter? How much effort is it worth?</p> | <p>IDEQ Question</p> | <p>Literature data may not be appropriate for Idaho due to high background concentrations here, and it may overestimate the percentage of A_i to A_T</p> | <p>With adequate monitoring, Idaho-specific data should be used</p> | <p>AIC's previous comments noted that including the fish consumption aspect does not influence criteria substantially using the usual HHC equation approach. Again, AIC supports a natural background approach.</p> |