

Idaho Department of Environmental Quality

Update on Revision of Idaho's Human Health
Criteria for Arsenic

Docket No. 58-0102-1801

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Yellowjacket Lake

Outline

- History of Arsenic Human Health Criteria in Idaho
- Rulemaking Schedule
- Issues related to setting Arsenic criteria
 - Tools available



History of Arsenic HHC in Idaho

Arsenic Human Health Criteria				
Date	Action	Fish Only (µg/L)	Fish + Water (µg/L)	Notes
December 22, 1992	EPA promulgation of the National Toxics Rule (NTR), includes As criteria for human health	0.14	0.018	Based on fish consumption rate of 6.5 g/day, drinking water intake of 2 L/day, BW of 70 kg, and BCF of 44. These federally promulgated criteria become effective for Clean Water Act Purposes in Idaho
August 24, 1994	Idaho adopts NTR into state WQS by reference Docket No. 16-0102-9402	0.14	0.018	



History of Arsenic HHC in Idaho

		Arsenic Human Health Criteria		
Date	Action	Fish Only (µg/L)	Fish + Water (µg/L)	Notes
March 8, 1995	Idaho As criteria revised by State Legislature (concurrent resolution HCR 11a) Docket No. 16-0102-9501	6.2	0.02	Revised Fish Only criterion using BCF of 1, rounded Fish + Water criterion up from 0.018 Idaho still covered under NTR
June 25, 1996	EPA approves Idaho adoption of NTR and revised As criteria			NTR values for As still effective under federal rule
November 10, 1997	EPA final Federal rule removing Idaho from the NTR for As becomes effective	6.2	0.02	Idaho criteria adopted in 1995 become effective for Clean Water Act purposes



History of Arsenic HHC in Idaho

		Arsenic Human Health Criteria		
Date	Action	Fish Only (µg/L)	Fish + Water (µg/L)	Notes
March 19, 1999	Idaho adoption of revised As criteria based on current (1999) SDWA MCL approved by state legislature Docket No. 16-0102-9801	50	50	Submitted for EPA approval April 23, 1999. Criteria were effective for Clean Water Act purposes upon effective date of final rule; EPA did not act on this submittal until 2016 disapproval.
January 22, 2006	SDWA MCL for drinking water reduced from 50 µg/L to 10 µg/L becomes effective			



History of Arsenic HHC in Idaho

Arsenic Human Health Criteria				
Date	Action	Fish Only (µg/L)	Fish + Water (µg/L)	Notes
March 29, 2010	Idaho adoption of revised As criteria based on SDWA MCL approved by state legislature Docket No. 58-0102-0801	10	10	Submitted for EPA approval June 21, 2010. Approved by EPA July 7, 2010; effective for Clean Water Act purposes



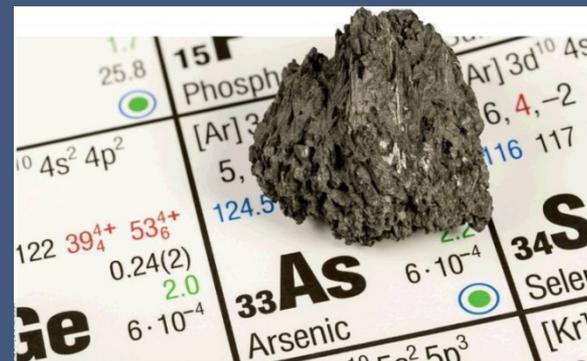
History of Arsenic HHC in Idaho

- May 2016: EPA entered consent decree with Northwest Environmental Advocates to reconsider approval of Idaho's 2010 As Criteria (10 µg/L)
- September 2016: EPA reconsidered, and disapproved, Idaho's 2010 As criteria



Settlement schedule

- EPA required to propose new HHC for As by November 15, 2018; and either approve new Idaho criteria or promulgate federal criteria by July 15, 2019



Settlement schedule

- DEQ initiated rulemaking to update HHC for As, with goal of Board approval by November 2018
- June 2018: EPA requested modifications to consent decree:
 - November 2022 for EPA to propose
 - November 2023 for EPA to approve or promulgate



Revised Rulemaking Schedule

Action	Date
Notice of Negotiated Rulemaking published in Idaho Administrative Bulletin	4/4/18
1 st negotiated rulemaking meeting	4/19/18
Continue negotiated rulemaking meetings until summer 2022	
Deadline for submitting Proposed Rule to Office of Administrative Rules for publication in the Bulletin	Summer 2022
Proposed Rule published in Bulletin; comment period begins	Fall 2022
End of comment period.	Fall 2022
Mail final proposal to Board members	October 2022
Board meeting – consideration of final proposal for adoption of pending rule	November 2022
Notice of Adoption of Pending Rule published in Idaho Administrative Bulletin	January 2023
Pending rule reviewed by Legislature	January 2023
Pending rule becomes final and effective if approved by Legislature	2023 sine die



Issues to Consider

- Arsenic is naturally elevated in surface waters of the Western US
- Uncertainty in toxicity
- Uncertainty in rates of bioaccumulation
- Uncertainty in relationship of inorganic vs. organic forms of Arsenic



Yellowjacket Lake

Issues to Consider

- CWA does not allow for consideration of feasibility when setting criteria values
 - Arsenic is naturally elevated in the West
 - Removal to criteria levels can be prohibitively expensive
 - WQS could be much lower than what is allowed under the SDWA





How to Resolve?

- EPA to update Integrated Risk Information System (IRIS) database with new toxicity factors
- Proposed DEQ monitoring (pending funding) to:
 1. Determine background Arsenic in Idaho waters
 2. Determine ratio of inorganic to organic Arsenic in Idaho waters
 3. Determine appropriate bioaccumulation rates based on Idaho data



How to Resolve?

- Identify tools to develop to deal with feasibility
 - Variances
 - Natural Background Conditions as Criteria
 - Use Attainability Analysis



Questions



Salmon River



Abandon Creek



Selway River