



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

REGION 10

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OFFICE OF
WATER AND WATERSHEDS

JUL 07 2010

Mr. Barry Burnell
Administrator
Water Quality Programs
Idaho Department of Environmental Quality
1410 North Hilton
Boise, Idaho 83706-1255

Re: Approval of Revisions to Idaho's Water Quality Standards; Arsenic Human Health Criteria, Docket 58-0102-0801

Dear Mr. Burnell:

The Environmental Protection Agency has completed its review of Idaho's revised water quality criteria for arsenic contained in Docket 58-0102-0801 and adopted into Idaho's Water Quality Standards (WQS) regulations at 58.0102.210.01. This review is conducted pursuant to our authority under Section 303(c) of the Clean Water Act (CWA) and implementing regulations at 40 CFR Part 131. In accordance with these authorities, EPA approves Idaho's revised arsenic human health criteria. This revision resolves a longstanding issue regarding Idaho's arsenic criteria and we commend the Idaho Department Environmental Quality (IDEQ) for its efforts to update this provision of Idaho's water quality standards.

Background

In 1997, IDEQ put forth a temporary rule request to the Idaho Board of Health and Welfare (the Board) to adopt temporary revised numeric arsenic human health criterion of 25 μL , for both consumption of water and organisms and consumption of organisms only. The Board chose to modify the temporary rule to 50 $\mu\text{g/L}$ based on the rationale that this value was consistent with the maximum contaminant level (MCL) established under the Safe Drinking Water Act (SDWA) at that time. On January 7, 1998, IDEQ published a notice of temporary and proposed rule in the Idaho Administrative Bulletin (Docket No. 16-0102-9801). The proposed temporary rule revised both arsenic human health criteria to 50 μL from the previously EPA approved values of 0.02 μL for consumption of water and organisms and 6.2 μL for consumption of organisms only. A 30-day public comment period was initiated.

By letter dated February 5, 1998, EPA Region 10 submitted formal public comments to IDEQ regarding the proposed rule. In the letter, EPA recommended that Idaho retain the previously approved criteria (0.02 μL and 6.2 μL) as a prudent public health policy. At that time, EPA was proceeding with a national research strategy to improve the agency's scientific understanding of arsenic. EPA was also in the process of reassessing the national criteria recommendations for surface waters (0.018 μL for consumption of water and organisms and 0.14 μL for consumption of organisms only) and the drinking water MCL (50 μL).

IDEQ chose not to revise the proposed rule in accordance with EPA's recommendations and moved forward to adopt a rule revising both arsenic human health criteria to 50 µ/L. The rule became a pending rule in November 1998 and was sent to the Idaho Legislature for their review in January 1999. At the end of the 1999 legislative session, the Idaho Legislature adopted the rule as final. By letter dated April 23, 1999, IDEQ submitted the newly adopted arsenic human health criteria (50 µ/L) in Docket 16-0102-9801 to EPA for review and action. EPA did not act to approve or disapprove these revisions to Idaho's arsenic human health criteria. Instead, EPA expressed its concerns with adoption of an MCL value that was likely to be revised in the next year and urged IDEQ to revisit revising the arsenic human health criteria. On January 22, 2001, EPA promulgated a new MCL for arsenic of 10 ug/L (see 66 Fed. Reg. 6976).

On May 6, 2009, IDEQ proposed revising the arsenic human health criteria from 50 µg/l to 10 µg/l and initiated a 30-day public comment period. EPA provided comments supporting the revision. On September 2, 2009, the Idaho Board of Environmental Quality adopted the revisions to the arsenic human health criteria as a proposed rule which was subsequently submitted to the Idaho legislature as a pending rule in January 2010. The pending rule was adopted as a final rule at the end of the 2010 Idaho legislature, effective March 29, 2010. By letter dated June 21, 2010, IDEQ sent the revised arsenic human health criteria to EPA for review and action.

EPA Review and Determination

Section 303(c)(2) of the CWA requires and authorized Tribes to submit new or revised water quality standards (WQS) to EPA for review. Under Section 303(c) of the CWA and its implementing regulations found at 40 CFR 131.5, EPA is to review these WQS to ensure the adopted designated water uses are consistent with the CWA, the adopted criteria protect the designated water uses and the state has followed its own procedures for adopting such standards

The federal water quality standards regulations at 40 CFR 131.11(a) (1) state in part that states must adopt water quality criteria that protect designated uses. Criteria must be based on sound scientific rationale and must contain sufficient parameters or constituents to protect the designated use. Regarding toxic pollutants, 40 CFR 131.11(a)(2) requires states to review water quality data and information on discharges to identify specific water bodies where toxic pollutants may be adversely affecting water quality or the attainment of the designated water use, or where the level of toxic pollutants warrant concern and to adopt criteria for such toxic pollutants applicable to the water body sufficient to protect the designated use. Lastly, 40 CFR 131.11(b) states that in establishing criteria, states should set numerical values based on EPA's 304(a) Guidance, 304(a) Guidance modified to reflect site-specific conditions, or other scientifically defensible methods.

The current EPA Section 304(a) guidance values for human health criteria for arsenic under the Clean Water Act are 0.018 µg/l (organisms and water) and 0.14 µg/l (organisms only). However, the water quality criteria for arsenic have been, and continue to be, the subject of much deliberation. In 1995 EPA determined that additional research was needed to quantify and evaluate the human health risks for arsenic. Similarly, under the Safe Drinking Water Act (SDWA), EPA began to reevaluate data to determine whether the Maximum Contaminate Level

(MCL) of 50 µg/l should be lowered. On January 22, 2001, EPA published a new MCL for arsenic in drinking water of 10 µg/l (66 FR 6976).

EPA has reviewed Idaho's WQS revisions to the numeric criteria for arsenic for the protection of human health, found in the Idaho Water Quality Standards at IDAPA 58.0102.210.01. Idaho's previous criterion was 50 µg/l. Idaho revised its criterion to 10 µg/l, consistent with EPA's current MCL for arsenic. Therefore, EPA is approving Idaho's arsenic criterion for the protection of human health.

Please feel free to contact me at (206) 553-4198 if you have questions concerning this letter or Lisa Macchio, Idaho Water Quality Standards Coordinator at (206) 553-1834.

Sincerely,



Michael A. Bussell
Director
Office of Water and Watersheds

cc: Mr. Michael McIntyre, IDEQ
Mr. Don Essig, IDEQ