

May 6, 2024

Brock Tabor
Water Quality Program
Alaska Department of Environmental Conservation
P.O. Box 111800
Juneau, Alaska 99811

Dear Mr. Tabor:

The EPA has reviewed the issue summary that the Alaska Department of Environmental Conservation developed for the 2024-2026 triennial review and posted on its website for public comment. The EPA commends the DEC for undertaking a timely triennial review of Alaska's water quality standards consistent with the federal WQS regulations at 40 CFR § 131.20.

In 2015, the EPA revised the federal WQS regulations at 40 CFR Part 131.² Given the revisions to several WQS regulatory requirements, the EPA strongly encourages the DEC to use the triennial review process to update any of Alaska's WQS that are inconsistent with the EPA's revised WQS regulations.

Similarly, the EPA recommends that the DEC conduct a comprehensive crosswalk comparing Alaska's water quality criteria with the EPA's Clean Water Act section 304(a) criteria recommendations to ensure that WQS include up-to-date water quality criteria that are protective of Alaska's designated uses. If the DEC chooses not to update the state's criteria to reflect the current CWA section 304(a) criteria recommendations, consistent with the revised federal WQS regulations, the EPA requests an explanation of the decision rationale when reporting the results of the triennial review to the EPA.

For reference, below is a list of parameters with finalized CWA section 304(a) criteria recommendations that have not been previously adopted or revised by Alaska.

- Human health criteria for 94 chemical pollutants, published in 2015³
- Human health criterion for methylmercury, published in 2001⁴
- Freshwater aquatic life criteria for acrolein, published in 2009⁵

¹ https://dec.alaska.gov/water/water-quality/triennial-review/ and https://water.alaskadec.commentinput.com?id=mtPEFZ8Mp

² https://www.federalregister.gov/documents/2015/08/21/2015-19821/water-quality-standardsregulatory-revisions

³ https://www.epa.gov/wqc/human-health-water-quality-criteria-and-methods-toxics

⁴ https://www.epa.gov/wqc/human-health-criteria-methylmercury

⁵ https://www.epa.gov/sites/default/files/2018-12/documents/ambient-wqc-acrolein.pdf

- Freshwater aquatic life criteria for aluminum, published in 2018⁶
- Freshwater aquatic life criteria for ammonia, published in 2013⁷
- Freshwater aquatic life acute criterion for cadmium, published in 20168
- Freshwater aquatic life criteria for carbaryl, published in 2012⁹
- Freshwater aquatic life criterion for copper, published in 2007¹⁰
- Freshwater aquatic life chronic criteria for selenium, published in 2016¹¹
- Recreational water quality criteria and swimming advisories for cyanotoxins, published in 2019¹²
- Nutrient criteria in Lakes and Reservoirs, published in 2021¹³

Human Health Criteria

Similar to the state's previous four triennial reviews, the DEC has identified human health criteria (HHC) as a priority for rulemaking in the 2024-26 review cycle. The EPA remains very supportive of the prioritization of this issue and recommends that the DEC adopt new and revised HHC derived using the updated scientific information in the EPA's 2015 national HHC recommendations and best available data on fish consumption by Alaskans. ¹⁴ In response to a September 2022 letter from the EPA, ¹⁵ the DEC committed to a 24-month rulemaking timeline, with a proposed rule in "Winter 2023-2024" and a final rule in "Fall-Winter 2024-2025." ¹⁶ The EPA urges the DEC to continue prioritizing this important issue and anticipates receiving the DEC's draft HHC package for review and public comment soon.

The EPA encourages the DEC to use local data, including the 2019 EPA-contracted report, *Alaska Statewide and Regional Estimates of Consumption Rates in Rural Communities for Salmon, Halibut, Herring, Non-Marine fish, and Marine Invertebrates*, ¹⁷ as a resource for developing a fish consumption rate for the state. As stated in the EPA's July 3, 2023 letter to the DEC – since community harvest data indicates that subsistence fishing is an existing and widespread practice in the state – the EPA

⁶ https://www.epa.gov/wqc/aquatic-life-criteria-aluminum

⁷ https://www.epa.gov/wqc/aquatic-life-criteria-ammonia

⁸ https://www.epa.gov/wqc/aquatic-life-criteria-cadmium

⁹ https://www.epa.gov/wqc/aquatic-life-criteria-carbaryl

¹⁰ https://www.epa.gov/wqc/aquatic-life-criteria-copper

¹¹ https://www.epa.gov/wqc/aquatic-life-criterion-selenium

¹² https://www.epa.gov/sites/default/files/2019-05/documents/hh-rec-criteria-habs-document-2019.pdf

https://www.epa.gov/nutrientpollution/ambient-water-quality-criteria-address-nutrient-pollution-lakes-and-reservoirs

¹⁴ https://www.epa.gov/wqc/human-health-water-quality-criteria-and-methods-toxics#2015

¹⁵ Letter from Casey Sixkiller, Regional Administrator, EPA Region 10, to Jason W. Brune, Commissioner, Alaska Department of Environmental Conservation. (September 6, 2022). https://www.epa.gov/ak/alaska-human-health-water-quality-criteria
¹⁶ Letter from Jason W. Brune, Commissioner, Alaska Department of Environmental Conservation, to Casey Sixkiller, Regional Administrator, EPA Region 10. (September 30, 2022). https://www.epa.gov/ak/alaska-human-health-water-quality-criteria

¹⁷ Polissar, N., Neradilek, M., Tech, T. (2019). Alaska Statewide and Regional Estimates of Consumption Rates in Rural Communities for Salmon, Halibut, Herring, Non-Marine fish, and Marine Invertebrates. Final Report. Tetra Tech, US Environmental Protection Agency, Alaska Department of Environmental Conservation. https://www.epa.gov/system/files/documents/2022-10/AK-HHC-Consumption-Rates-Report-3-20-2019.pdf

recommends that the DEC select inputs to derive new and revised HHC for Alaska with protection of subsistence fishing/rural consumers as the focus. 18

Aquatic Life Criteria

The DEC has identified the development of a site-specific method for establishing copper aquatic life criteria as a high priority in this triennial review cycle. The EPA remains available to assist as the DEC works through these WQS revisions. Additionally, the EPA encourages the DEC to consider updating Alaska's statewide freshwater copper aquatic life criteria consistent with the EPA's CWA section 304(a) recommendations for copper, which are calculated using the biotic ligand model.¹⁹

The DEC has identified revised aquatic life criteria for aluminum, ammonia, PFAS, and selenium as issues for "information gathering and analysis" (Phase II) in the 2024-26 review cycle. In a letter dated May 16, 2014, to the DEC, the EPA highlighted its 2013 publication of the 304(a) criteria recommendations for ammonia reflecting the latest science. The EPA continues to recommend that the DEC adopt the EPA's current CWA 304(a) criteria recommendations for ammonia during the 2024-26 review cycle. Similarly, the EPA encourages the DEC to consider updating the state's numeric aquatic life criteria consistent with the EPA's CWA section 304(a) criteria recommendations for aluminum, selenium, and PFAS (when available). ^{20,21}

Bacteria Criteria and Recreational Criteria

The DEC identified the state's bacteria criteria as a high priority in the 2024-26 review cycle. The EPA is available to assist in the DEC's efforts to clarify language in Alaska's regulations allowing multiple methods for detecting and reporting freshwater or marine bacteria.

The DEC has also identified cyanotoxin criteria as a Phase II issue in the state's Triennial Review Issue Summary. In 2019, the EPA published recreational criteria recommendations and swimming advisories for microcystins and cylindrospermopsin. ²² Given the ubiquitous nature of cyanobacteria, the EPA urges the DEC to consider updating the state's recreational criteria during the 2024-26 review cycle.

Additional Topics

As always, the EPA is available to support the DEC's efforts on additional topics related to updating Alaska's WQS identified in the 2024-2026 Triennial Review Issue Summary.

¹⁸ Letter from Michael Szerlog, Acting Water Division Director, EPA Region 10, to Randy Bates, Division of Water Director, Alaska Department of Environmental Conservation. (July 3, 2023). https://www.epa.gov/ak/alaska-human-health-water-quality-criteria

¹⁹ https://www.epa.gov/wqc/aquatic-life-criteria-copper

²⁰ https://www.epa.gov/wqc/aquatic-life-criteria-aluminum and https://www.epa.gov/wqc/aquatic-life-criterion-selenium

²¹ The EPA proposed draft national aquatic life criteria for Perfluorooctanoic Acid (PFOA) and Perfluorooctane Sulfonate (PFOS) in 2022. https://www.epa.gov/wqc/aquatic-life-criteria-perfluorooctano-sulfonate-pfoa and https://www.epa.gov/wqc/aquatic-life-criteria-perfluorooctane-sulfonate-pfos

²² https://www.epa.gov/sites/default/files/2019-05/documents/hh-rec-criteria-habs-document-2019.pdf

The EPA looks forward to working with the DEC to identify any revisions necessary to ensure that Alaska's WQS are consistent with the federal rule requirements and include criteria that protect the state's designated uses. We remain available to support the state's efforts to review and revise the WQS applicable to the state of Alaska.

Thank you for the opportunity to comment on Alaska's 2024-2026 Triennial Review. Please contact me if you have questions at (206) 553-1580 or Renkens.Rachael@epa.gov.

Best regards,

Rachael Renkens Water Quality Standards Coordinator Water Division, EPA Region 10

cc: Terri Lomax, Manager, Water Quality Program, DEC