



SQUAXIN ISLAND TRIBE

SENT BY ELECTRONIC MAIL to swqs@ecy.wa.gov.

May 7, 2024

Marla Koberstein
Department of Ecology
Water Quality Program
PO Box 47696
Olympia, WA 98504-7696

RE Comments on Proposed Aquatic Life Toxics Criteria

Dear Ms. Koberstein:

Thank you for the opportunity to provide comments on the Washington Department of Ecology's proposed Aquatic Life Toxics Criteria for freshwater and marine environments. Contamination of fish, invertebrates and aquatic plants from toxic chemicals is of the utmost concern to the Squaxin Island Tribe. Updating criteria for toxic pollutants is long overdue; the last major update occurring in 1992. As such, we strongly support this rulemaking effort. Our general comments on the rulemaking are described below. Additional detail is contained in the attached memorandum.

The Squaxin Island Tribe is a federally recognized Indian tribe located in Southern Puget Sound in Mason County, Washington with treaty rights to harvest fish and shellfish. Healthy watersheds and marine areas are critical to the survival of the Squaxin Island Tribe culturally, economically, and as an important food source. As a natural resource co-manager, the Squaxin Island Tribe has a vested interest in all policies that affect their treaty-reserved resources and the protection and restoration of habitat critical to their recovery and long-term sustainability.

I. Updating Toxics Criteria is Urgent

Freshwater and marine environments are under assault from toxic stormwater runoff. Both finfish and shellfish are affected by chemical contamination, including reduced survival from acute exposure and impacts to growth and reduction from chronic exposure. In turn, tribal communities are impacted through reduced ceremonial, subsistence, and commercial use of treaty resources. In some cases, finfish and shellfish are unfit for consumption due to high levels of heavy metals and other toxins. 6PPD-q, the impact of which was only recently discovered, is the latest example of a long list of chemicals that impact treaty resources.

Washington's aquatic life toxics criteria are outdated. Most of Washington's aquatic life toxics criteria have not been updated since 1992 or prior. Since the National Toxics Rule of 1992, the Environmental Protection Agency (EPA) has added additional toxic substances to their list of recommended criteria and provided several updates to previously established criteria. Ecology determined that waiting until

consultation under the Endangered Species Act (ESA) consultations and subsequent EPA approvals were completed for Idaho and Oregon before moving forward with updates to ensure compliance with the ESA and would be approved by EPA. Further, Ecology determined that updating human health criteria was a higher priority than updating aquatic life toxics criteria given the ongoing ESA consultation on aquatic life toxics criteria.

II. Clean Water Act Requirements

Section 303 of the Clean Water Act (CWA) mandates that states adopt water quality standards (WQS) to restore and maintain the chemical, physical, and biological integrity of the nation's waters. The WQS consist of beneficial uses to protect both aquatic life communities and recreational and subsistence-based uses (i.e. salmonid spawning, cold water biota, primary or secondary contact recreation) designated for specific water bodies and water quality criteria to protect uses. Under the CWA, states, federally recognized tribes, and territories have primary responsibility for developing appropriate beneficial uses for water bodies within their jurisdiction. These governing entities review and, if appropriate, revise their WQS on a triennial basis in accordance with CWA section 303(c). Section 303(c)(2)(E) of the CWA requires states to adopt chemical-specific, numeric criteria for priority toxic pollutants. The criteria must protect state-designated beneficial uses of water bodies. Under CWA section 303(c), EPA must review and approve or disapprove any revised or new standards. EPA is required to set criteria that establish benchmarks for states, territories and tribal nations to follow when they develop their water-quality standards. EPA must also assess whether any endangered species will be harmed when it approves state-based standards, including to wide-ranging species that cross multiple jurisdictions and fall under different standards.

Since 1980, the EPA has published numerous criteria development guidelines for states and tribes and recommended national criteria for numerous pollutants. The national criteria include recommended acute and chronic criteria for the protection of aquatic life resources. States, tribes, and territories may choose to adopt EPA's recommended criteria or modify these criteria to account for site-specific or other scientifically defensible factors. However, the process for updating the criteria and going through the necessary Endangered Species Act (ESA) consultation with NOAA Fisheries and U.S. Fish and Wildlife Service has taken years, which makes these updates especially necessary.

III. Ecology's Proposal to Update Aquatics Life Toxics Criteria

The Department of Ecology proposes to amend WAC 173-201A-240 to provide greater protection to aquatic organisms based on increased understanding of the toxicity of certain chemicals and to comply with the ESA. EPA recommends criteria for 45 toxic substances that should be considered under this rule. Twenty-eight of the 45 are included in Washington's WQS. Of Washington's 28 toxic substances with WQS, 16 existing criteria are being revised and updated, including freshwater acute and chronic, and saltwater acute and chronic criteria.¹ Ecology is proposing 15 new criteria.² Ecology will not adopt EPA recommended criteria for 3 toxins.³ Ecology is proposing state-specific criteria for 6PPD-quinone.

IV. General Comments

The NWIFC support Ecology's decision to update all aquatic life criteria in a single rulemaking rather than a piecemeal approach in multiple rulemakings. This approach will maximize protections more

¹Aldrin, Arsenic, Cadmium, Chromium III, Chromium VI, Copper, Cyanide, Dieldrin, Endrin, gamma-BHC, Mercury, Nickel, Pentachlorophenol, Selenium, Silver, and Zinc,

² 6PPD-quinone, Aluminum, Acrolein, Carbaryl, Demton, Diazinon, Guthion, Malathion, Methoxychlor, Mirex, Nonylphenol, PFOS, PFOA, Silver, and Tributyltin

³ Iron, Heptachlor epoxide, and Hydrogen sulfide.

quickly than individual rulemakings. Further, by incorporating the findings from the ESA consultations in Idaho and Oregon, Ecology increases the likelihood of EPA approval and compliance with the ESA.

Contaminated stormwater runoff and chronic inputs of dangerous chemicals into the freshwater and marine environments is a pervasive threat to treaty resources and the tribal communities that rely on them for cultural, subsistence, and commercial purposes. As such, we are highly supportive of the updates Ecology is proposing to existing criteria. We also highly support the proposed new toxics criteria, including the criteria for 6PPD-quinone, which EPA has not recommended. 6PPD-quinone is lethal to juvenile and adult Coho salmon in small doses. Studies have shown that steelhead and trout are also susceptible to this chemical. Ecology's criteria are based on a species sensitivity distribution for Coho salmon (rather than EPA's genus sensitivity distribution) in order capture the high degree of sensitivity Coho have to low levels of exposure. We support the species sensitivity distribution basis for developing the 6PPd-quinone criteria.

We oppose Ecology's decision to not adopt EPA's recommended criteria for iron, heptachlor epoxide, and hydrogen sulfide. These chemicals pose significant threats to aquatic organisms. The presence of iron particles can irritate gill tissue in salmonids, leading to gill damage and bacterial infection. Exposure to iron has been shown to reduce the immune response of salmonids. Hydrogen sulfide can have lethal effects on fish. Sublethal effects include reduced appetite and erratic swim behavior. Heptachlor epoxide is highly toxic to finfish, shellfish, waterfowl, and aquatic plants.

Washington does not currently have criteria for perfluorooctane sulfonic acid (PFOS) or perfluorooctane acid (PFOA). EPA has draft criteria for both. However, Ecology states that it won't adopt EPA's criteria unless EPA finalizes their recommendations for PFOS and PFOA before Ecology's rulemaking concludes. We urge Ecology to reconsider this position or consider alternative ways to adopt EPA's recommendations should EPA finalize after the rulemaking. PFOA and PFOS are highly problematic chemical compounds that are ubiquitous in the aquatic environment and do not easily break down. Studies have determined that most freshwater fish have high levels of these compounds in their tissue. Human health effects include suppression of the immune system, reduced vaccine efficacy, increased risk of certain cancers, and reproductive and developmental problems. As such, it is imperative that Ecology adopt EPA criteria for these toxic compounds as soon as possible.

V. Specific Comments (see attached memorandum provided by the Ridolfi through the Northwest Indian Fisheries Commission)

In closing, we appreciate Ecology's effort to update its aquatic life toxics criteria. This effort, while long overdue, will provide enhanced protections for treaty resources and tribal communities.

Sincerely,



Erica Marbet
Water Resources Biologist
Squaxin Island Tribe