



STATE OF WASHINGTON  
DEPARTMENT OF ECOLOGY

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January 11, 2019

Nina Bell, Director  
Northwest Environmental Advocates  
PO Box 12187  
Portland, OR 97212

**Re: Petition for Rulemaking to Adopt a Presumptive Definition of “All Known, Available, and Reasonable Treatment” as Tertiary Treatment for Municipal Sewage Dischargers to Puget Sound and its Tributaries**

Dear Nina Bell:

Pursuant to RCW 34.05.330(1), this letter formally responds to your Petition for Rulemaking (Petition) to adopt technology-based effluent limits for the discharge of nutrients from municipal wastewater treatment facilities that discharge to Puget Sound and its tributaries. In particular, your Petition requests a presumptive definition of all known, available, and reasonable treatment (AKART) as tertiary treatment for municipal sewage dischargers to Puget Sound and its tributaries. The Washington State Department of Ecology (Ecology) received your Petition via email on November 14, 2018.

Your Petition asks Ecology to revise Chapter 173-221 WAC, Discharge Standards and Effluent Limitations for Domestic Wastewater Facilities, to establish year-round total technology-based effluent limits for total nitrogen and total phosphorus of 3 mg/L and 0.1 mg/L or lower, respectively. The Petition asserts that Ecology has the information necessary to establish and implement these technology-based effluent limits within Puget Sound without further analysis of the dissolved oxygen impairments through use of the Salish Sea Model.

Ecology has thoroughly evaluated and considered the issues raised in your Petition. After careful consideration and review, Ecology is denying your request to engage in rulemaking to adopt a rule to define AKART as tertiary treatment for municipal sewage dischargers into Puget Sound and its tributaries. Although Ecology has decided to deny your petition, we share your concerns regarding existing nutrient impacts and dissolved oxygen impairments within Puget Sound. However, Ecology does not agree that revising Chapter 173-221 WAC to define AKART as tertiary treatment for municipal discharges into Puget Sound and its tributaries is a reasonable approach to address Puget Sound water quality impairments. As discussed below, Ecology believes a water quality-based approach is necessary to address dissolved oxygen impairments caused by excess nutrient loading to Puget Sound and its tributaries.



AKART is a technology-based determination that requires dischargers to use all known, available, and reasonable methods to control and prevent pollution. Treatment technology must be both economically and technically feasible in order to be AKART. Currently, the Environmental Protection Agency is conducting a nationwide Publically Owned Treatment Works (POTW) nutrient survey, in part because enhanced treatment for nutrient removal is neither affordable nor necessary for all wastewater treatment plants. In contrast to technology-based effluent limits, water quality-based effluent limits are not limited to technology that is known, available, and reasonable. Rather, water quality-based effluent limits are set at the levels necessary to ensure that a discharger does not cause or contribute to a violation of water quality standards. The nutrient impacts addressed in your Petition result in dissolved oxygen water quality impairments, and a water quality-based approach is more appropriate than a broad AKART determination for Puget Sound.

Ecology agrees that portions of Puget Sound are impaired by nutrient pollution. We are actively leading efforts to reduce nutrient loading to Puget Sound, both in our permitting and non-point practices, and through public forums.

As you are aware, the Puget Sound Nutrient Source Reduction Project (PSNSRP) is a stakeholder engagement process aimed at finding holistic solutions to dissolved oxygen impairments in Puget Sound. The Salish Sea Model lies at the core of this effort. The Bounding Scenario Report will inform the spatial water quality response from different discharges located throughout Puget Sound. The initial report confirms the broad spatial relationships among discharges. Further model iterations are necessary to define discharger-specific nutrient loading limits based on localized and far-field impacts.

Ecology remains committed to continuing the PSNSRP process. While this work is progressing, Ecology will, through the individual permitting process:

1. Set nutrient loading limits at current levels from all permitted dischargers in Puget Sound and its key tributaries to prevent increases in loading that would continue to contribute to Puget Sound's impaired status.
2. Require permittees to initiate planning efforts to evaluate different effluent nutrient reduction targets.
3. For treatment plants that already use a nutrient removal process, require reissued discharge permits to reflect the treatment efficiency of the existing plant by implementing numeric effluent limits used as design parameters in facility specific engineering reports.

Ecology will use current permit reissuance schedules to include these requirements in National Pollutant Discharge Elimination System (NPDES) permits by mid-2019. These requirements for facilities that discharge directly into Puget Sound and the key tributaries will prevent increased nutrient loading as modeling efforts progress. Ecology will use PSNSRP outputs and outcomes to develop water quality-based effluent limits for nutrients and appropriate vehicles to implement them. This will include individual water quality permits, and may include a general permit, rulemaking, or other mechanisms identified through the PSNSRP process.

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Ecology believes the actions identified above are achievable in the near term and appropriate for our current level of understanding of nutrient dynamics in Puget Sound. Communication and outreach of these requirements will occur through the Puget Sound Nutrient Forum beginning in January 2019.

In closing, although Ecology is denying your request to engage in rulemaking, we are committed to reducing nutrient pollution in Puget Sound. We are confident that by working collaboratively with Puget Sound stakeholders, and working directly with permitted discharges, we will find lasting solutions to improve the health of Puget Sound.

Sincerely,

A handwritten signature in black ink that reads "Maia D. Bellon". The signature is fluid and cursive, with a long horizontal flourish extending to the right.

Maia D. Bellon  
Director

cc: Heather R. Bartlett, Program Manager – Ecology Water Quality Program