Puget Soundkeeper

Please see the attached PDF letter.

PUGET SOUNDKEEPER®

Eleanor Ott
PSNGP Permit Writer
Department of Ecology
Water Quality Program
PO Box 47600
Olympia, WA 98504-7600
Submitted via: http://wq.ecology.commentinput.com/?id=aiK7u

March 12, 2021

RE: Comments on Preliminary Draft Puget Sound Nutrient General Permit

Dear Eleanor:

Puget Soundkeeper (Soundkeeper) is a non-profit environmental organization whose mission is to is to protect and enhance the waters of Puget Sound for the health and restoration of our aquatic ecosystems and the communities that depend on them. We strive to improve water quality through our monitoring and enforcement, education and stewardship, and policy and civic engagement work. On behalf of our 1,500+ members, we write to urge you to strengthen and improve the Preliminary Draft of the Puget Sound Nutrient General Permit.

The Washington Department of Ecology (Ecology) has known for decades that wastewater treatment plants are causing or contributing to water quality violations throughout Puget Sound. Puget Sound is impaired for dissolved oxygen as a result of excessive nutrient pollution. Nutrient pollution is causing too much plant and algae growth, reducing the amount of dissolved oxygen in the water. Many parts of Puget Sound have oxygen levels that fall below what is needed for marine life to thrive, causing fish kills, and do not meet water quality standards. Some algal blooms are harmful to humans because they produce elevated toxins and bacterial growth. Nutrient pollution can make people sick if they come into contact with polluted water, consume tainted fish or shellfish, or drink contaminated water. Research has shown that wastewater treatment plants are the most significant anthropogenic contributor to the nutrient pollution problem. Many wastewater treatment plants are out of date, with outdated permits. While individual permits must be updated, a Nutrient General Permit has the potential to stop pollution from all, or most, of these wastewater treatment plants at the same time without requiring individual permit updates.

Soundkeeper supports a Nutrient General Permit to ensure that Puget Sound meets Clean Water Act requirements, including protecting water quality, human health, and aquatic life.

Soundkeeper has participated in Ecology's Puget Sound Nutrient Forum and Nutrient Source Reduction Project since 2017 to address this pollution source. Soundkeeper also held one of two environmental seats on the Puget Sound Nutrient General Permit Advisory Committee (the AC), which convened from April – October 2020 to provide input to Ecology on the Permit on behalf of the environmental community. Throughout the Advisory Committee process, the environmental community identified reasonable approaches to achieving clean water. The Final Recommendations of the AC ultimately included compromise provisions negotiated by utilities, the environmental community, the federal caucus, and Ecology staff in an effort to reach consensus. Soundkeeper endorsed the Environmental Caucus recommendations.

We regret that the Water Quality Based Effluent Limits (WQBELs) require additional time to complete, and we offered interim approaches for pragmatic steps that utilities should undertake toward the transition. However, WQBELs must be made available by 2022 or 2023. WQBELs must be added to the Permit as soon as developed and no later than when the second Permit is issued. As we have reiterated throughout the Advisory Committee process, the first Permit should include a compliance timeline for plants to achieve water quality standards by a deadline no later than the 10th year/end of the second Permit cycle.

While this Preliminary Draft Permit captures the breadth of the Advisory Committee discussion points, several provisions are weaker than those discussed on the AC. We recommend additional improvements to strengthen and clarify key provisions here.

1. Additional Improvements Needed.

a. Require AKART

Per RCW 90.54.020(3)(b): "Regardless of the quality of the waters of the state, all wastes and other materials and substances proposed for entry into said waters shall be provided with all known, available, and reasonable methods of treatment prior to entry." Ecology must perform or require an AKART analysis with the issuance of every NPDES Permit under the Clean Water Act. The proposed Nutrient Reduction Evaluation Requirement under Section VI. B. of the Draft Permit might be redrafted to fulfill AKART requirements but falls short as written. Ecology should modify this Section to explicitly require that the Nutrient Reduction Evaluation Requirement include an AKART analysis. An AKART analysis is not dependent upon ranges such as 8-10mg/L or 3-4mg/L reductions, nor on WQBELs or water quality standards. Furthermore, the AKART requirement applies to all plants, including small plants operating under 10mg/L TIN.

b. Include Privately Owned Plants and Upstream Plants Under the Permit

The apparent exemption of private facilities as a result of RCW 173-220 was not identified nor discussed during the Advisory Committee process. While private facilities must incorporate before they are allowed to expand or make substantial modifications, each of them still has an NPDES permit for their existing discharges. These plants are arguably very similar to the covered plants in terms of their operations and discharges. As such, they should be covered under the Nutrient General Permit as well. Several of these facilities - such as Carlyon Beach (NPDES WA0037915) - serve completely built-out areas and likely would not trigger flow-based upgrades as provided for under RCW 173-240-104. In fact, Carlyon has some of the highest TIN concentrations of any plant discharging to the Salish Sea, mainly because it is dominated by septage.

If Ecology has identified some limit in state law that precludes nutrient reduction from private facilities, then we want to work with Ecology to change state law to ensure that the Clean Water Act is fully enforced for privately owned treatment plants. The requirement to transition to a publicly owned entity before any upgrades would be considered is insufficient as these can serve already-built out areas that may not trigger a flow increase in the near future.

Furthermore, wastewater treatment plants that discharge to rivers and streams upstream of marine waters are included in Ecology's analyses as human sources in rivers. These plants are causing or contributing to the nutrient problem in Puget Sound. Ecology should include upstream plants in the Nutrient General Permit, or otherwise explain how they plan to address these points sources. What is the proposed path forward to compliance for these dischargers?

c. A 99% UCL is Unreasonable

Soundkeeper believes that the AL0 "Nutrient Action Level," or trigger for Best Management Practices (BMPs), should be as low as reasonably possible to be more protective of water quality. For that reason, *at most*, a 95% UCL should be used to derive the AL0, using a bootstrapping method. During the Advisory Committee proceedings, no organization made a public argument in favor of the 99th upper confidence percentile of the bootstrapping calculation, yet that value shows up in the Preliminary Draft permit. We were consistent in our feedback that the 95th percentile was a better level than the 99th percentile. In the world of statistics, a 5% error rate is the typical approach used, and a 1% error only tolerated with the repercussions or impacts of being wrong are extreme. Functionally, using the 99th percentile produces a higher load number than the 95th percentile, and we believe using the 99th percentile will effectively increase the nutrient loads to Puget Sound.

Use of a 99% UCL is unreasonable in light of the fact that exceedances of the Nutrient Action Level do not constitute a Permit violation, rather, they only trigger protective actions – which we want. The tiered actions are reasonable steps that should be taken by all utilities during the first

permit term regardless. By setting the UCL so high, Ecology is setting such a low bar that the Nutrient Action Level might be meaningless as a cap meant to trigger clean water protections.

Soundkeeper is also concerned that, when comparing nutrient loading numbers that were shared with the AC against the nutrient numbers used for the AL0 in Table 4, it appears that the numbers for King County plants were calculated using a different method. The King County numbers appear higher (more permissive) when compared against the numbers from the AC. We request that Ecology publish the datasets used for the Preliminary Draft Permit calculation, as well as any modifications to those datasets and the rationale therefore. All plants should be treated fairly and use the same methodology to calculate the AL0.

d. The AL1 Approach is Flawed and Should Be Abandoned Entirely

Soundkeeper believes the AL1 approaches for both <10mg/L and >10mg/L plants are too permissive. Ecology should entirely do away with the AL1 level concept. A 5% allowance shouldn't be needed for any plants as all plants should be performing optimization that reduces their concentrations a few % points. Soundkeeper has firmly advocated from the beginning that any increases in flows must be accompanied by reductions in loads to ensure the total nutrient outputs do not increase. We stand by this point.

Moreover, while we are not seeking to penalize the 13 or so plants already achieving 10mg/L less, allowing them 2-3x more wiggle room as an AL1 is unacceptable. This gives some Permittees an unrealistic expectation that they can triple their TIN output and remain in compliance with the Permit. Growth is adequately provided for in the way the Draft Permit is crafted to set the AL0 level as a "Nutrient Action Level" instead of as a limit. To allow a 5% increase for >10mg/L plants, and 2-3 times the load for <10mg/L, as the AL1 would fly in the face of the goals and requirements of the Clean Water Act. The AL1 level concept should be abandoned.

e. The Largest Plants Need to do More, Including Facilities Serving Seattle, King County, and Tacoma.

A primary goal of this Permit should include demonstrable improvements in the form of nutrient reductions in the first Permit cycle, with the biggest plants making the most improvements. All plants need to begin the transition to nutrient-removal technology during the 5-year permit term, and we agree with the concept that smaller plants should receive additional support. However, we would like to reiterate that five plants serving the largest population centers discharge over 67% of nutrients in treated wastewater in the entire Puget Sound – King County's West Point, South King, and Brightwater plants, and Tacoma's Central and North End plants. They should be required to do more.

To advance this goal, first, the optimization requirements need to include specific actions now for all plants, with more stringent optimization requirements for the largest dischargers, rather than wait for a load estimate to be exceeded. Second, as currently constructed we do not believe the Tiers are strong enough to achieve nutrient reductions. They are too permissive and could allow for paper shuffling for the first Permit cycle. Third, sidestream treatment should not be a Tier 3 action, and the Nutrient Reduction Evaluation should be modified to a clear AKART requirement, that is a separate Permit requirement for all plants instead of a Tier 3 action.

Upon review of the optimization actions, we recommend that Ecology banish Tiers and lump all optimization actions into one menu. Ecology should require plants to consider and explain their rationale for applying or not applying every optimization action in their Annual Optimization Report until reductions are achieved. Importantly, if plants have already assessed or implemented optimization actions, this should not become a repetitive paper exercise – Ecology should require plants exceeding their Nutrient Action Levels, that have already assessed or implemented the current Tier 1 and 2 actions, go right to sidestream treatment. Plants that already have nutrient reduction technology should be required to turn it on if feasible.

f. Regional Study Concerns

Soundkeeper reiterates that a regional study, whether performed or not, should not interfere with Permit implementation or serve as an excuse for lack of performance. Furthermore, the regional study should not be referenced or included in the Permit unless it is necessary to achieve Clean Water Act requirements, such as the regional monitoring requirement in the Municipal Stormwater General Permit.

2. Conclusion

Ecology must require plants to transition to nutrient removal technology under the Clean Water Act. Approximately 20% of the Sound is impaired for low D.O. throughout the year, at least in part due to nutrient pollution. We have known about the nutrient pollution problem for decades - we cannot keep kicking the can down the road, particularly when treatment technologies could become more expensive as time passes, and the dual pressures of climate change and population growth compound the problem. Furthermore, the post-pandemic economy presents unique opportunities to fund clean water infrastructure projects, and Soundkeeper, environmental groups, EPA, Ecology, and utilities have a shared common interest to advocate for funding to advance nutrient pollution controls that will soon be required. Now is the time to seize an opportunity by issuing the strongest Nutrient General Permit possible.

We appreciate this opportunity to comment now on the Preliminary Draft Nutrient General Permit. We look forward to continuing to work with you to stop nutrient pollution to Puget Sound.

Sincerely,

Alyssa Barton
Policy Manager
Puget Soundkeeper Alliance