

August 16, 2021

Eleanor Ott, P.E.
Water Quality Program
Washington State Department of Ecology
P.O. Box 47600
Olympia, WA 98504-7600

RE: Comments on the Draft Puget Sound Nutrient General Permit

Dear Ms. Ott,

LOTT has been providing nutrient removal for 26 years at the Budd Inlet Treatment Plant. The upgrade to nutrient removal was mandated by Ecology in 1989, and successfully constructed and brought online by 1994. We are one of the few Puget Sound plants subject to stringent discharge permit limits for nutrients. We are also subject to an active TMDL that indicates 20% of the dissolved oxygen impairment to our receiving waters is from wastewater discharges and non-point sources north of Budd Inlet. LOTT is encouraged that the draft Puget Sound Nutrient General Permit provides a pathway to reduce a portion of this nutrient loading. In general, LOTT supports the draft permit.

LOTT's comments on the draft general permit are presented below.

1) Requirement for a Nitrogen Optimization Plan

According to the draft permit, "Each Permittee listed in Table 5 shall develop, implement and maintain a Nitrogen Optimization Plan to evaluate operational strategies for maximizing nitrogen removal from the existing treatment plant to stay below the calculated action level." Because of LOTT's unique status of employing nitrogen removal and successfully meeting stringent nitrogen discharge requirements for nearly three decades, LOTT should be exempt from the optimization plan requirement. LOTT actively manages and adjusts operational strategies to optimize the nitrogen removal process on a daily basis and is engaged in an ambitious capital project to upgrade to a second generation nutrient removal system. As with the nutrient reduction evaluation from which LOTT is excused, the annual Nitrogen Optimization Plan would not provide any meaningful information to Ecology or to LOTT on LOTT's nitrogen removal processes. The annual report would merely be an exercise in paperwork. To remedy this, the permit could include an exclusion specific to LOTT similar to the nutrient reduction evaluation section.

2) Reference to TIN Limit of 3 mg/L on an annual basis

The permit references a potential effluent concentration of 3 mg/L TIN on an annual basis when it outlines the requirements for the Nutrient Reduction Evaluation. "In addition, the NRE must assess other site- specific main stream treatment plant upgrades, side stream treatment opportunities, alternative effluent management options (e.g., disposal to ground, reclaimed water beneficial uses), the viability of satellite treatment, and other nutrient reduction opportunities that could achieve a final effluent concentration of 3 mg/L TIN (or equivalent load reduction) on both an annual average

and seasonal average basis.” Based on LOTT’s experience managing a biological nitrogen removal process over decades, maintaining TIN at 3 mg/L on an annual basis is not likely possible. The temperature of influent dictates whether nitrification can or cannot happen effectively. In the cooler months, very little nitrification and subsequent denitrification can occur. LOTT strongly suggests that Ecology remove the reference to an annual average of 3 mg/L. If Ecology wishes to regulate based on an annual average, the number should be in line with that which is more realistically attainable, such as 8 mg/L.

3) **AKART determined on case-by-case basis due to economic impact**

The permit references a need to refine what constitutes AKART for WWTPs. “The AKART provision needs evaluation on a case-by-case basis given its direct ties to economic impact. What constitutes AKART at one facility may be different than the next. This is especially true when considering the size differences between WWTPs, available space for expansion at the existing location, costs of additional treatment processes, the ratepayer base and any identified hardship...” To be clear, adding a higher level of treatment to existing WWTPs will be economically impactful in all cases, and hardship exists in all communities. How will water quality improvements be realized and equity between communities be addressed if AKART is determined by these criteria?

- Economic hardship should not play an outsized role in AKART determination. Utilities have tools at their disposal to provide relief to ratepayers that are experiencing hardship while at the same time implementing finance plans adequate to support necessary WWTP upgrades.
- Requiring each permittee to conduct their own assessment of hardship and affordability will result in different methodologies and criteria being applied to each case-by-case AKART determination. At the very least, the assessment methodology should be uniform across permittees and the same economic hardship thresholds should be applied to all.
- In LOTT’s case, our ratepayers have been shouldering the added cost of nitrogen removal for years, and continue to invest in upgrades to ensure our continued ability to meet the most stringent discharge limits on Puget Sound. The fact that the investments have been made in the past does not lessen the impact our ratepayers have experienced.

4) **Influent nitrogen reduction measures/source control**

“Permittees in Table 5 must develop an ongoing program to reduce influent TIN loads from septage handling practices, commercial, dense residential and industrial sources...The program must...review non-residential sources of nitrogen and identify any possible pretreatment opportunities...identify strategies for reducing TIN from new multi-family/dense residential developments and commercial buildings.” The intent here is somewhat unclear but raises serious concerns about the concept of diverting TIN loads from WWTPs.

- It is the express mission of municipal WWTPs to manage and properly treat wastewater for communities within their service area. WWTPs are uniquely designed and operated to ensure wastewater is properly treated prior to discharge to the environment. If the intent of this section is to achieve WWTP load reduction by encouraging dense development on on-site septic systems or other decentralized or on-site wastewater systems that are privately managed, this serves only to place the nutrient loading on entities other than the WWTPs and increases the likelihood that wastewater would not be reliably treated to appropriate standards. It could also limit the opportunity for resource recovery such as production of reclaimed water.

- Increases in the number or size of septic systems is directly counter to local goals to convert high density septic systems to sewer to ensure proper treatment and provide water quality protection for surface and groundwater. This is not a sustainable approach to reducing WWTP loadings or to accommodating growth. It would put water resources at greater risk by shifting the nutrient burden to on-site systems that have a lesser ability to reliably treat wastewater to high standards.
- Increasing pretreatment requirements for non-residential sources of nitrogen also shifts the nutrient reduction/treatment to private entities that are not likely to be able to provide as reliable a level of treatment as WWTPs. Is it Ecology's intention to require WWTPs to regulate nitrogen discharges from non-residential sources through their pretreatment programs?
- Similarly, suggesting that WWTPs cease accepting hauled septage is not a sustainable approach to managing nutrient loads within a watershed. This waste must go somewhere, and it must be properly treated. LOTT made the difficult decision to stop accepting commercial hauled waste in 2020 to reduce loadings and ensure continued discharge permit compliance. This decision was not well received by commercial septage haulers who must now travel further to a facility that accepts hauled waste. Wide-spread prohibition on hauled waste loads at WWTPs in the region could result in an increase in illicit dumping.
- If this element remains in the permit, please define "septage". Is this intended to include STEP tanks, debris tanks, OSS loads, etc.?

5) Definitions

There are several definitions missing in the draft permit, including: bubbled action levels, dominant loads and small loads, superscripts found in Tables 5 and 6, and septage (referred to in S4.C).

6) Instructions

In Appendix C, some elements of the instructions are unclear.

- Question 17 "Attach document including: date the exceedance occurred, the number of days the Action Level was exceeded during the reporting period, the adaptive management..." The Action Level is evaluated on an annual basis, thus the date of exceedance and the number of days exceeded do not apply.
- Question 21 "Did you submit discharge monitoring reports according to the required schedule? If no, attach a document describing/listing the missing records and corrective actions taken/or planned." Please clarify whether the DMRs for the general permit will be in addition to those for individual permits, or if the intent is that WWTPs can submit DMRs per the individual permit schedule and thus meet the requirements in the general permit.

Thank you for the opportunity to provide comments on the draft nutrient permit.

Sincerely,



Lisa Dennis-Perez
Director of Environmental Planning & Communications