Mukilteo Water and Wastewater District
7824 Mukilteo Speedway
Mukilteo, WA 98275-0260
Phone 425 355-3355

Department of Ecology
Attention: Eleanor Ott, P.E.
P.O. Box 47696
Olympia, WA 98504-7696

August 12, 2021

Re: Draft Puget Sound Nutrient General Permit Comments

Dear Ms. Ott,

Please consider the following comments regarding Ecology's draft Puget Sound Nutrient General Permit.

General Comments

Ecology has previously indicated that initial modeling suggests a target TIN discharge of 8mg/l to 10mg/l, recognizing some plants will need to achieve lower levels due to their discharge locations into shallow embayments. Currently 11 of the 31 small plants discharge less than 8mg/l of TIN. The combined TIN loading from these 11 small, low TIN discharging plants represent around one-half of one percent of the total TIN loading into Puget Sound (5 lbs. for every 1000 lbs. of TIN). Analysis from the Bay Area Clean Water Agencies (BACWA) Nutrient Reduction Study concluded that, *"Implementation of the optimization strategies could result in a load reduction of approximately seven percent for total nitrogen"*. As there is no reason to believe plants in Puget Sound will achieve substantially different results and assuming these 11 small, low TIN discharging plants were to achieve a seven percent reduction (a high assumption for plants effectively removing nutrients), the nutrient loading from these 11 plants would be reduced from 5 lbs. per 1000 lbs. of TIN to 4.65 lbs. per 1000 lbs. of TIN, a potential reduction that isn't even within the range of error of nutrient testing and monitoring. Given Ecology's initial modeling targets and the inconsequential benefit of optimizing small, low TIN discharging plants, small plants with nutrient discharge less than 8mg/l should be exempt from optimization and AKART requirements.

According to a King County presentation, 88% of nutrient loading into Puget Sound comes from the Pacific Ocean, 3% from natural watershed inputs, 2% from human watershed inputs and 7% from wastewater treatment plants. Based on these nutrient inputs, the overall issue of low dissolved oxygen levels cannot be addressed solely by Ecology's desire to regulate wastewater treatment plants. The issue is complex, modeling continues to evolve and input data is changing. For example, Victoria, B.C. no longer discharges raw sewage into upper Puget Sound with its new tertiary plant coming on-line in December of 2020, which has not been accounted for in the modeling. Additionally, a third party review has yet to be conducted on the complex modeling. Given significant changes to Puget Sound have occurred and that the modeling is progressing, but not complete, it's difficult to accept "the science has been settled". Ecology may need to accept that the General Permit as proposed will not produce the results desired and consider partnering with the handful of plants that actually have the opportunity and capability to improve dissolved oxygen levels in Puget Sound.

The impact of regulating wastewater treatment plants to reduce nutrient loading into Puget Sound is staggering. King County projects rates to double by 2030. Snohomish County in their draft 2022-2027 CIP update specifically addressed Ecology's regulation of nutrients by stating, *".....agencies do not know whether they will be able to comply through operational changes or by making minor facility improvements, or whether significant capital improvements will be needed. It is also possible that changing facility operation to reduce nutrients in the effluent will reduce the plant's effective capacity. This in turn could necessitate major capital construction to add capacity. Lacking such improvements, agencies may not be able to provide the minimum service levels prescribed in its plan due to a reduction in capacity, thereby necessitating a moratorium on connections".* While it is recognized the discharge of nutrients from wastewater treatment plants may need to be regulated, regulations should be set on a basin and sometimes sub-basin basis, targeting the handful of major contributing plants that have the opportunity and capability to make improvements. Ecology has not yet explained or justified its philosophy that all plants must participate. At a minimum and prior to any new regulation of this magnitude, Ecology should conduct an economic and affordability analysis on the impact of their proposed regulations.

Specific Comments

S5 B and C: The cost to perform an optimization plan and AKART analysis for a small plant is in the neighborhood of $50,000. For small, low TIN discharging plants that currently discharge less than 8mg/l of TIN, this cost does not justify the insignificant benefit, if any, to further reduce TIN loading. Specifically, for Mukilteo Water and Wastewater District which is treating to a TIN level of less than 3mg/l, there is absolutely no justification or benefit to performing an optimization plan and AKART analysis. As mentioned above, small plants with nutrient discharge of less than 8mg/l should be exempt from optimization and AKART requirements.

S5 B 3: Ecology appears to be asking local agencies to regulate nutrients at the source. Ecology was given the authority to manage the federal pretreatment program by the EPA in September of 1986. As noted in the July 2011 Guidance Manual for Performing an Industrial User Survey, *"POTWs are in the best position to locate industries subject to regulation, and Ecology maintains a staff of permit writers and managers with the skills to efficiently and properly permit and oversee them"*. Unless a municipality/district has requested delegation of authority, Ecology not only has the responsibility and authority but is better equipped to develop strategies to regulate the reduction of nutrients at the source through its pretreatment program. Ecology cannot unilaterally delegate pretreatment responsibilities to municipalities/districts.

S6 B: Language should be included to allow small plants with consistent data the opportunity/ability to reduce the frequency of influent and effluent sampling and testing. As influent information is more important to the operator than the regulator, influent sampling and testing requirements should be established on a plant by plant basis after consultation between the plant and the plant's Ecology Permit Manager.

Thank you for your consideration.

Sincerely,

Jeff Clarke, Commissioner
Mukilteo Water and Wastewater District

Jim Voetberg, General Manager
Mukilteo Water and Wastewater District