

Corina Hayes

Pierce County Planning and Public Works - PSNGP comments

PierceCountyWa.gov/PPW**Josh Diekmann** - Director

August 27, 2025

William Weaver
WA Department of Ecology
PO Box 47696
Olympia, WA 98504-7696

Subject: **Draft Puget Sound Nutrient General Permit – Request for Comments**

Dear Mr. Weaver:

Thank you for the opportunity to review the Draft Puget Sound Nutrient General Permit. Pierce County is providing this letter in response to the request for public comment.

We fully understand the challenges faced when addressing the dissolved oxygen levels in the Puget Sound, Pierce County is supportive of efforts to overcome these challenges. We have significant concerns that Ecology's proposed solution to this complex and costly problem will be unfairly burdensome to wastewater utilities who have proactively invested to meet previously established nutrient reduction levels. It should be acknowledged that wastewater treatment plants, in general, discharge cleaner water to the Puget Sound than other anthropogenic sources.

Pierce County encourages Ecology to make the permit requirements clear and binding. The language in the draft permit that allows Ecology to set interim limits at the time of coverage of the permit should be removed. The general permit should be consistently implemented across all facilities. Additionally, Ecology should reconsider the term of the permit and allow a full five years of coverage.

Detailed comments are included in the attached spreadsheet.

William Weaver
August 27, 2025
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If you have any questions, need additional information, or would like to arrange a meeting to discuss these permit review items, please do not hesitate to contact Patrick Kongsle via email at patrick.kongsle@piercecountywa.gov or by telephone at (253) 798-3031.

Sincerely,

Steven L. Hartwig

Steven L. Hartwig, PE
Utilities Manager

Cc: Anita Gallagher – Government Relations Director
Josh Diekmann, PE, PTOE – PPW Director
Brandon Smith, PE – PPW Deputy Director
Patrick Kongsle – Utilities O&M Manager
Corina Hayes – Utilities Planning Manager
Laurie Pierce – Wastewater Operations Manager

Draft Puget Sound Nutrient General Permit – Pierce County Sewer Division Comments August 2025			
Permit Section	Current Language	Revised Language	Comments
General Comments			
Permit Expiration date. Pg 1	Expiration Date: December 31, 2027	Change the Expiration Date to December 31, 3031	Extending the permit to 5 years would align with other permit terms, limits allowed by the CWA and may encourage
Section S - Special Conditions			
S.4 - Narrative Effluent Limits for WWTPS with Dominant TIN Loads C. Nitrogen Optimization Plan and Report 3. Influent Nitrogen Reduction Measures/Source Control, Pg. 11	Influent Nitrogen Reduction Measures/Source Control Permittees listed in Table 5 must investigate opportunities to reduce influent TIN loads from septage handling practices, commercial, dense residential and industrial sources and submit documentation with the Annual Report. The investigation must: a. Review non-residential sources of nitrogen and identify any possible pretreatment opportunities. b. Identify potential strategies for reducing TIN from new multi-family/dense residential developments and commercial buildings.	Influent Nitrogen Reduction Measures/Source Control Permittees listed in Table 5 must investigate opportunities to reduce influent TIN loads from septage handling practices, commercial, dense residential and industrial sources and submit documentation with the Annual Report. The investigation must: a. Review non-residential sources of nitrogen and identify any possible pretreatment opportunities. b. Identify potential strategies for reducing TIN from new multi-family/dense residential developments and commercial buildings. c. WWTP's meeting effluent nutrient limits are exempt from influent nitrogen reduction measures/source control.	Not all forms of nitrogen have the same impact. Nitrate, in particular, stands out due to its well-established role as an oxygen donor in anaerobic environments aiding in control of microbially-induced odor and corrosion attributable to the formation of hydrogen sulfide, which is a highly toxic gas and highly damaging to collection system infrastructure. We commonly inject additives such as Bioxide, a calcium nitrate solution, to introduce additional nitrate into our collection system to reduce the formation of hydrogen sulfide gas. We have also worked with Significant Industrial Users to convert ammonia into nitrate before they discharge to offset some of the cost of injecting Bioxide in our collection system. This has saved the County millions of dollars that would otherwise be spent on achieving the same protective outcomes. The Puget Sound Nutrient General Permit should acknowledge the beneficial use of nitrate in collection systems, and allow WWTPs to manage their influent nitrate (or TIN) concentrations accordingly as long as they are meeting their effluent nutrient limits.
S4. Narrative Effluent Limits for WWTPS with Dominant TIN Loads E. Nutrient Reduction Evaluation 2. AKART, Pg. 12	The NRE must include an all known, available and reasonable treatment (AKART) analysis for purposes of evaluating reasonable treatment alternatives capable of reducing total inorganic nitrogen (TIN). It must present an alternative representing the greatest TIN reduction that is reasonably feasible on an annual basis.	The NRE must include an all known, available and reasonable treatment (AKART) analysis for purposes of evaluating reasonable treatment alternatives capable of reducing total inorganic nitrogen (TIN). It must present an alternative representing the greatest TIN reduction that is reasonably feasible on an annual basis. This condition does not apply to facilities that are required/allowed to submit a truncated NRE.	Revise language in this section to make it clear that this condition does not apply to facilities that are required to prepare a truncated NRE. Adding this clarification will limit confusion about the requirements of a truncated NRE.
S4. Narrative Effluent Limits for WWTPS with Dominant TIN Loads E. Nutrient Reduction Evaluation 2. AKART, Pg. 12	The NRE must include an all known, available and reasonable treatment (AKART) analysis for purposes of evaluating reasonable treatment alternatives capable of reducing total inorganic nitrogen (TIN). It must present an alternative representing the greatest TIN reduction that is reasonably feasible on an annual basis.	The NRE must include an all known, available and reasonable treatment (AKART) analysis for purposes of evaluating reasonable treatment alternatives capable of reducing total inorganic nitrogen (TIN). It must present an alternative representing the greatest TIN reduction that is reasonably feasible (i.e., no more than 5% of the annual O&M budget.)	Consider defining the limits of "reasonably feasible". There should be a clear benefit/cost association when determining "reasonably feasible" Investing millions of dollars in additional tankage and or hundreds of thousands on large amounts of chemicals to reduce the FE TIN by a few milligrams per liter should be carefully evaluated. This infrastructure comes at a significant cost to the ratepayers, and are in addition to already needed rate increased to address system preservation. Pierce County discharges 7% of the point-source nitrogen loading into the Sound. Other WWTPs discharges over 50%. Let's focus our resources where actual progress can be realized.