

# Kitsap County Sewer Utility

Please see uploaded file for comments.

## KITSAP COUNTY RESPONSE TO DOE's PUGET SOUND NUTRIENT GENERAL PERMIT (PSNGP) PRELIMINARY DRAFT, JANUARY 2021

### General Comment:

1. Reclamation and Reuse of POTW effluent is not mentioned in the preliminary draft as a viable nutrient reduction strategy. Kitsap County believes that Reuse provides multiple benefits and is in-line with our "Water as a Resource" policy. Ecology needs to evaluate the proposed general permit optimization requirements and determine how to incorporate a permittees Reuse planning effort that may influence nutrient reduction improvements. POTW's that are evaluating or in progress of producing reclaimed water should have an alternative path recognized by Ecology to pursue implementation of Water Reuse systems. In addition, as Ecology works to determine future WQBEL's, consideration should be given to a POTW that has reduced effluent discharge loads including and beyond TIN loads.

### Specific Comments:

2. Section II.C. Facilities excluded from Permit Coverage, pg 5: "Federal and tribal facilities. Ecology does not have delegated authority to write NPDES permits for these treatment plants. EPA is the responsible permitting authority for federal and tribal wastewater treatment plants in Washington State. Conditions for nutrient controls will be implemented through the 401 Water Quality Certification process."

Section II.D Facilities with current limits: "Results from the individual permit's monitoring requirements may be used to satisfy the general permit's monitoring schedule provided the timing and frequencies align. Ecology will work to streamline permit compliance between the proposed general permit and active individual permits."

Kitsap County Comment: The Suquamish Wastewater Treatment Plant's NPDES is administered by the EPA. WA State DOE has issued a 401 Water Quality Certification Letter certifying EPA's recently issued NPDES permit with conditions.

- Will the Suquamish Wastewater Treatment Plant permit monitoring requirements (timing and frequency) as described in the 401 Certification prevail or will monitoring requirements need to comply with the PSNGP?
  - Will conditions for nutrient controls found in the PSNGP be included in future 401 Water Quality Certifications issued by DOE?
  - If PSNGP nutrient controls are to be included in future 401 Water Quality Certifications, then will Ecology use the Nutrient Action Level Calculation Methods as described in section III.C?
- Please comment or expand on future coordination efforts related to issuing 401 Water Certification letters.

3. Section III.C. Calculating the baseline, AL0 , pg 9: "Monthly or more frequent data were available for 28 facilities. Quarterly or less frequent data were available for 19 facilities. Some facilities sample different parameters on different frequencies. Ecology made the following assumptions"

Kitsap County Comment: Kitsap County believes that Ecology is making several assumptions in the

bullets that follow the statement above that will affect the accuracy of the baseline AL0. This baseline is critical to the success of future optimization metrics. The County has confidence in the accuracy of the reported sample results but not that the data is representative of historical TIN discharge loads at each POTW outfall. For example; past scheduling of ammonia and nitrate-nitrogen was influenced by staff workflow and scheduling of couriers between the County plants. This resulted in no samples collected during weekend days. This oversight provides a sampling profile that does not consider the impacts of weekend loadings at the POTW.

All POTW's covered under the PSNGP will benefit from a defined sampling and monitoring plan as described in section IV of the PSNGP. However, a verified baseline for AL0 at the conclusion of permit year 2 should be the basis for Tier 2 and 3 actions.

4. Section III.D Facilities discharging less than 10 mg/L Total Inorganic Nitrogen: "Ecology proposes that facilities currently discharging 10 mg/L TIN or less do not need to complete actions beyond monitoring and annual optimization reporting during this permit cycle, provided they are able to stay below AL1. For those 13 facilities that qualify, Ecology proposes that AL1 be calculated as 10 mg/L concentration for 85% of the design flow, the capacity at which all plants are required to plan for maintaining capacity." "These facilities are not required to implement Tier 2 nutrient reduction actions if AL0 is exceeded. If AL1 is exceeded, these facilities must select and complete a Tier 3 action."

Kitsap County Comment: Kitsap County understands that the Kingston Wastewater Treatment Plant's AL1 calculation is based on the 85% design capacity for this permit cycle due to the plants historical TIN discharge of less than 10 mg/L.

- Will the AL1 calculation be revised if the TIN concentration exceeds an annual average of 10 mg/L for a calendar year during the first permit cycle?
- Will the AL1 calculation be revised if a WQBEL is developed during the first permit cycle?
- If in the second permit cycle a WQBEL is developed and included as a condition of TIN discharge limit in either a general permit or individual permit; then will POTW's with the AL1 calculation exception be provided a schedule to complete Tier 2 and/or Tier 3 actions?

Ecology needs to explain how the modification to AL1 will be carried through into the second permit cycle and/or if WQBEL's are issued. This is necessary so the County can develop capital improvement plans beyond a 5-year horizon.

5. Section III.E Calculated action load options by facility, table 4 pg 12: "Ecology's individual permit managers worked with their dischargers' data to determine the range of previously collected representative effluent data for use in the total inorganic nitrogen load limit calculation."

Footnote at bottom of table 4 for Kitsap County Central Kitsap WWTP\*\*\* reads "Insufficient TIN data for AL calculation".

Kitsap County Comment: Kitsap County disagrees that there is insufficient data to calculate the action level for the Central Kitsap Wastewater Treatment Plant. Per conversation with DOE's Facility Manager, the data source for this calculation is from PARIS. PARIS only reports data that is required by the permit and included in the DMR. If a permittee performs analysis on Ammonia and/or Nitrate-Nitrogen more frequently than the permit requirement the formatting of Web DMR / SAW does not provide a field to enter the daily data result for reporting.

Kitsap County request Ecology recalculate the Central Kitsap Wastewater Treatment Plant action level with additional data provided by the County to Ecology's Facility Manager. A copy of the .csv file is uploaded to the e-comments site provided by Ecology and has been emailed separately to the Ecology's Facility Manager.

6. Section IV.A Monitoring Requirements, Table 6 and Table 7: Monitoring requirement to analyze influent Nitrate plus Nitrite Nitrogen.

Kitsap County Comment: Kitsap County does not see the value for monitoring this parameter as frequently as proposed. Recommend influent sampling of ammonia-nitrogen only.

7. Section IV.A Monitoring Requirements, Footnote B typical of all in Table 5, 6, and 7: "1/week means one (1) time during each calendar week and on a rotational basis throughout the days of the week, except weekends and holidays".

Kitsap County Comment: Allowing an exception for weekend sampling will not account for a true representation of influent and effluent load characterization. Recommend striking "weekends" from footnote B.

8. Section IV.A Monitoring Requirements, Table 6 and Table 7:

a. The proposed monitoring schedule for medium treatment plants shown in Table 6 requires the additional analysis of CBOD5 and Total Organic Carbon. These parameters are not required in the current permit for Central Kitsap Wastewater Treatment Plant.

b. The proposed monitoring schedule for medium treatment plants shown in Table 7 requires the additional analysis of Total Organic Carbon. These parameters are not required in the current permit for the Kingston and Manchester Kitsap Wastewater Treatment Plants.

c. The proposed monitoring schedule for Total Ammonia, Nitrate plus Nitrite and Total Kjeldahl Nitrogen is an increase of 12 times the analysis per month compared to existing Central Kitsap permit monitoring requirements. This is also an increase of 6 times the analysis per month for Manchester, Suquamish and Kingston,

Kitsap County Comments: The County understands that new effluent permit requirements will re-prioritizing testing in our accredited laboratory. However, Ecology must be aware that this increased labor and the process to obtain accreditation cannot be addressed in a short time period. Also, the capacity of private sector labs may be tested in the short term with a wave of new testing. For example; most POTW labs are not accredited to analyze Total Organic Carbon therefore options are limited to either obtaining DOE accreditation or send the samples to an outside lab.

The additional frequency and the requirement to collect samples representative of an entire month for the analysis of Total Ammonia, Nitrate plus Nitrite and Total Kjeldahl Nitrogen may require labs to perform analysis of these parameters in batches. Scheduled sample collections in the last week of a month will make it difficult to for a municipal and contract lab to return results in time to report on the DMR by the 15th of every month.

- Ecology must recognize that enforcing the proposed new monitoring schedule "one month after the effective date of the proposed general permit" (pg 14) is not realistic for Kitsap County.
- Ecology should consider modifying the DMR submittal date to the 20th of each month to accommodate the proposed PSNGP sampling schedule.

9. Section V.C Tier 2 actions, pg 20: In answer to "Are there any additional Tier 2 optimization actions that should be included in this document?"

Kitsap County Comment: Recommend including "planning for effluent reclamation and reuse" to divert TIN loadings from the POTW outfall."

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11. Section V.D Nutrient Optimization Plan Components, item e: "Evaluate the different optimization strategies identified in C.ii to maximize nitrogen removal capabilities and select the actions your facility will implement over the next year. Provide detail on cost implications and lack of affordability for those strategies not selected due to financial reasons."

Kitsap County Comments: In the first year of the general permit the requirement to provide detail on cost implications is not realistic. It may take several years and external expertise to provide cost implications. Recommend revision "provide an estimate of cost implications..."

12. Section V.D.c.ii Nutrient Optimization Plan Components: "Identification of recommended actions to improve the facility's nitrogen removal performance"

Kitsap County Comments: Component C is unclear and requires a better description.

- If a POTW consistently maintains a concentration below 10 mg/L TIN as described in C.ii.1 then what does "then maintain or work to improve performance" mean?
- If a POTW consistently maintains a concentration below 10 mg/L then is POTW required to develop facility specific nitrogen reduction optimization strategies as described in items d, e and f?

13. Section VI Planning Requirements:

- "...each plant that is not already achieving TIN concentrations
- "The above proposed Nutrient Removal (sic) Evaluation is not intended to be an engineering report. Rather it is a feasibility investigation and does not require the level of detail required in WAC 173-240-060 for an engineering report. It will, however, require the seal of a registered professional engineer given that it is a document that will be reviewed under RCW 90.48.110." pg 26
- "If a WWTP formally chooses instead to develop their own independent, facility specific nutrient reduction evaluation, it must be submitted in permit year 3." Pg 27 2nd bullet

Kitsap County Comments: Kitsap County understands the importance of the Nutrient Reduction Evaluation report. The report described in this section is comprehensive, and even though it may not be intended to be an engineering report, it will require specialized expertise to develop. The County is concerned that the engineering expertise may not be available if many POTW in the Puget Sound region are contracting for this service. Ecology should note that the proposed timeline of 5 years (first permit cycle) on page 25 conflicts with the 2nd bullet on page 27 requiring submittal in permit year 3.



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**13. Section VI Planning Requirements:**

- *“...each plant that is not already achieving TIN concentrations <10 mg/L will be required to conduct a nutrient reduction evaluation during this first permit cycle.” pg 25*
- *“The above proposed Nutrient Removal (sic) Evaluation is not intended to be an engineering report. Rather it is a feasibility investigation and does not require the level of detail required in WAC 173-240-060 for an engineering report. It will, however, require the seal of a registered professional engineer given that it is a document that will be reviewed under RCW 90.48.110.” pg 26*
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