See attached document.

## **Preliminary Draft General Permit Comments**

By: Rebecca Fox (Plant Manager) & Corrin Hamburg (Laboratory Supervisor)



### Responses to question embedded within draft:

- Do reviewers have feedback on whether the 95% UCL or 99% UCL is more appropriate for ALO?
   Ecology has considered both and would like additional input.
  - 99% Most Appropriate
- Do reviewers agree with this approach proposed for plants that have existing nitrogen-related effluent limits in their individual permits?
  - > Yes
- Do reviewers agree with the approach proposed for calculating AL1 for facilities that have historically been able to maintain their annual average TIN effluent concentration below 10 mg/L?
  - No comment
- Do reviewers have suggestions on what information permittees use to justify their decision making process when conducting financial and technical analyses to select (or eliminate) optimization strategies?
  - Effluent quality, energy costs, process stability (if the plant can nitrify how stable is it to maintain season to season? Is it possible without chemical addition?) Operational requirements and constraints, sustainability, impacts to downstream processes, impact to solids handling.
- Do reviewers have suggestions for "reasonable investments" at small (<3 MGD), medium (3-10 MGD) and large (>10 MGD) that could be used to separate the two tiers of optimization actions required by this permit?
  - No comment
- Are there any additional Tier 1 optimization actions that should be included in this document?
  - Evaluate long term (2 year-3year) stability of modification success and the seasonal influence on the process.
- Are there any additional Tier 2 optimization actions that should be included in this document?
  - Collection system loading investigation.
- Are the tiers broken out appropriately?
  - No comment
- Ecology is soliciting input on what types of Tier 3 actions plants must take to achieve further nutrient reduction, sooner, if they exceed their second action level trigger. Should these actions vary by facility size?
  - No comment

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- Do reviewers have feedback on Ecology's proposed use of a standardized form for the annual optimization report?
  - Perhaps a standardized form would be useful so everyone reports similar information and has a framework to use when putting the report together. Additional information could be added as Appendices or attachments. This report should have the flexibility to morph to be a long term study to determine the stability of the of the initially identified strategy.
- Do reviewers have examples of information from an existing, unrelated planning process that could meaningfully apply to meet this nutrient reduction evaluation requirement?
  - No comment
- Aside from treatment solutions, do reviewers have feedback on types of questions a regional study could answer? How could a regional study like this be used to develop and/or support a nutrient trading framework?
  - No comment
- Do reviewers prefer one approach to a regional study over the other? Ecology is soliciting
  specific feedback on how to develop permit requirements for a regional study that advances
  understanding of treatment upgrades by building on existing bodies of knowledge related to
  nutrient treatment processes.
  - Regional study preferred. No specific feedback at this time.
- Do reviewers have feedback on whether a regional study should be limited to WWTPs < 10 MGD so that larger facilities can conduct their own evaluation? Or, should Ecology provide minimum elements that must be satisfied leaving participation up to each discharger?
  - Regional study should be wholistic and include all sized treatment plants.
- Is there interest in folding this type of treatment technology information sharing into an existing stakeholder process?
  - No comment
- Do reviewers have feedback on the proposed timeframes for this evaluation?
  - No comment
- Do reviewers have suggestions or ideas for other Tier 3 actions that Ecology should consider?
   Should plants be able to identify different Tier 3 actions during the permit term provided Ecology pre-approval?
  - Plants should be allowed to identify different Tier 3 actions with pre-approval from Ecology

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#### **Other Comments**

- Monitoring
  - Table 6- 3-10MGD Plants
    - Sample Frequency:
      - Sample frequency of weekly is too frequent for CBOD, Total Organic Carbon, Total Ammonia, Nitrate plus Nitrite Nitrogen and Total Kjeldahl. This would nearly double our laboratory expenses not including operator and laboratory supervisor hours.
      - Bi-weekly testing would be more reasonable for scheduling and financial considerations.
      - Question of purpose for CBOD & TOC: The general permit purpose is to address nitrogen loading. TOC & CBOD seem out of place and inappropriate at this time.
      - If CBOD & TOC were to be included once per month would be more reasonable. (for most plants these are not even a monthly requirement thus they would be required to go from 1 or 0 samples per year to 96 samples per year- this is seen as too aggressive from a financial and logistical standpoint).
    - Footnote a: Take effluent samples for the CBOD5 analysis before or after the disinfection process. If taken after, dechlorinate and reseed the sample.
      - Too frequent. Once per month.
      - Question of purpose. The permit is to address nitrogen concerns at this time.
    - Footnote b: 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.
      - Need to define sampling period for rotation through the days of the week. Composite samples span 2 days, requiring sampling to begin on a Sunday or end on a Saturday to represent Monday through Friday.
      - Scheduling lab work based on a continual rotational basis is challenging and leaves a lot of opportunities for error. Lab work follows a set weekly schedule to ensure tests are not missed or conducted on the wrong day. Rotating testing through the days of the week requires a 5 week schedule, resulting in a different schedule each week and each month since there are 4 weeks in a month. This rotation would be confusing to staff and hard to track especially if Holidays disrupted the rotation. Current sampling- Sunday-Thursday for composites. Samplers are set up Sunday and samples are collected Monday through Friday when staffing is sufficient.
      - Results from samples sent to an outside lab will likely not be available for reporting on the monthly DMR for samples collected in the last 2 weeks of the month.
      - In order to retrieve a composite sample representing Friday samples would be collected on a Saturday. Staffing is limited on the weekends.