



City of Tacoma
Environmental Services Department

August 16, 2021

Eleanor Ott, PSNGP Permit Writer
Department of Ecology, Water Quality Program
PO Box 47600
Olympia, WA 98504-7600

Dear Ms. Ott:

City of Tacoma, Environmental Services Department (Environmental Services) appreciates the opportunity to comment on the Department of Ecology's (Ecology) draft Puget Sound Nutrient General Permit (Permit) and draft Fact Sheet. Environmental Services operates two wastewater treatment facilities: the North End Treatment Plant No. 3, a 7.2 MGD, facility, and the Central Treatment Plant, a 60 MGD facility. Both facilities discharge secondary effluent to Commencement Bay.

The City of Tacoma is an advocate for clean water and Environmental Services is committed to the protection of Puget Sound and making meaningful progress towards water quality goals. This commitment has been demonstrated through our voluntary acceptance of our responsibility to clean up the Thea Foss waterway and the over 50 million dollars the City has put towards this effort. Environmental Services recognizes that it is important to address the growing challenge of nutrient over-enrichment in Puget Sound to ensure that science-based and effective controls are put in place to address all sources of pollution. Environmental Services has demonstrated its support of a scientific approach to protecting Puget Sound by, among other things, providing the funding for the establishment of the Salish Sea Modeling Center. Environmental Services is also a founding member of the Puget Sound Clean Water Alliance; an organization dedicated to analyzing peer-reviewed, scientific, environmental, and economic data and using it to develop regional strategies aimed at both protecting and enhancing Puget Sound.

Environmental Services provides the following comments and questions regarding the draft Permit and Fact Sheet:

COMMENT NO. 1: THE GENERAL PERMIT IS NOT THE RIGHT TOOL

Ecology's process of developing the Permit has revealed several facts that do not support issuance of nutrient controls in a general permit.

A general permit is available as an alternative to an individual permit when Ecology determines that the dischargers are more appropriately controlled under a general permit. This determination must be made in accordance with the governing regulations. As discussed more fully below, a general permit is appropriate only when a defined category of dischargers have the same or substantially similar types of operations, wastes, effluent limits or operating conditions, and require similar monitoring. The Fact Sheet states, "A general permit is designed to provide coverage for a group of related facilities or operations of a specific industry type or group of industries.

It is appropriate when the discharge characteristics are sufficiently similar, and a standard set of permit requirements can effectively provide environmental protection and comply with **water quality standards** for discharges.” See Fact Sheet, Page 12. Likewise, the NPDES Permit Writers’ Manual explains that, “a facility that otherwise qualifies for a general permit may opt to apply for an individual permit.” NPDES Permit Writers’ Manual, Section 4.4, at 4-12. Ecology has not explained when and how it made the determination that a general permit was appropriate, what process it followed, what criteria, facts and information were taken into consideration when it made this determination and how each of the criteria were met.

Ecology’s NPDES permit regulations provide in pertinent part as follows:

- (2) The director may issue general permits to cover categories of dischargers for geographic areas as described under subsection (3) of this section. The area shall correspond to existing geographic or political boundaries
- (3) General permits may be written to cover the following within a described area:
 - (a) Stormwater sources; or
 - (b) Categories of dischargers that meet all of the following requirements:
 - (i) Involve the same or substantially similar types of operations;
 - (ii) Discharge the same or substantially similar types of wastes;
 - (iii) Require the same or substantially similar effluent limitations or operating conditions, and require similar monitoring; and
 - (iv) In the opinion of the director are more appropriately controlled under a general permit than under individual permits.

WAC 173-226-050(2) & (3); See also, 40 C.F.R. § 122.28(a)(1). Requirements (b)(i) – (iv) are written in the conjunctive, meaning that each requirement must be met for the category of dischargers subject to the Permit. The NPDES Permit Writers’ Manual explains that,

In deciding whether to develop a general permit, permitting authorities consider whether

- A large number of facilities will be covered.
- The facilities have similar production processes or activities.
- The facilities generate similar pollutants.
- Whether uniform WQBELs (where necessary) will appropriately implement water quality standards.

The above requirements appropriately limit the use of a general permit to those circumstances in which the selected category of dischargers are engaged in substantially similar operations and types of discharges. As noted in the NPDES Permit Writers’ Manual, “. . . using a general permit ensures consistent permit conditions for comparable facilities.” See, NPDES Permit Writers’ Manual, Section 3.1.2, Page 3-2. Clearly, as explained below and as acknowledged by Ecology, the facilities are not comparable and the Permit conditions are not consistent.

First, several of the dischargers proposed to be covered under this Permit are not marine dischargers. The Permit itself recognizes this. Ecology has not explained how or why it is appropriate to include some non-marine dischargers in the Permit.

Second, a category of dischargers governed by a general permit must be within a designated geographical area. See, WAC 173-226-020(13).¹ The federal regulations (made applicable to Ecology pursuant to 40 C.F.R § 123.25 and 122.1(a)(2)) provide further clarification regarding what should be considered a geographic area for coverage,

(a) Coverage. The Director may issue a general permit in accordance with the following:

(1) . . . The area should correspond to existing geographic or political boundaries such as:

(i) Designated planning areas under sections 208 and 303 of CWA;

(ii) Sewer districts or sewer authorities;

(iii) City, county, or State political boundaries;

(iv) State highway systems;

(v) Standard metropolitan statistical areas as defined by the Office of Management and Budget;

(vi) Urbanized areas as designated by the Bureau of the Census according to criteria in 30 FR 15202 (May 1, 1974); or

(vii) Any other appropriate division or combination of boundaries.

40 CFR §§ 122.28(a)(1) & 123.25.

The included non-marine discharges are not located in the same geographic area as the marine dischargers. Ecology has not explained why or how the geographic area for the non-marine dischargers is rationally or appropriately included in the same geographic area as the marine dischargers.

Third, because the dischargers do not have similar production processes or activities, the requirements of the Permit are not uniform in application. The Permit has been constructed to recognize that larger facilities have a different impact than smaller facilities and therefore are subject to different requirements. For example, larger facilities are required to update their planning documents annually, monitor more frequently and implement “optimization”, while smaller facilities are only required to create optimization plans. Additionally, the Total Inorganic Nitrogen (TIN) Action Levels are effluent limits individualized for each plant. As noted in the NPDES Permit Writers’ Manual, the general permit is not intended to be applied where “*uniform*” water quality based effluent limitations (WQBELs) will not appropriately implement water quality standards. See, NPDES Permit Writers’ Manual, Section 3.1.2, Page 3-2.

¹ (13) "General permit" means a permit that covers multiple dischargers of a point source category within a designated geographical area, in lieu of individual permits being issued to each discharger.

Likewise, the planning requirements in the Permit recognize that each facility is unique in its process and its discharge and cannot be subject to the same general requirements. There is no one size fits all solution and each plant must create their own planning and engineering documents to address the operating conditions of that plant. The wastewater treatment plants (WWTPs) have different technologies and processes for treatment that should be addressed under individual permits, not a general permit. A general permit is not a suitable or appropriate regulatory control when the dischargers, as they are here, are substantively dissimilar.

The Fact Sheet likewise recognizes the lack of similarity among the dischargers in its description of Ecology's "evolving" all known available and reasonable treatment technology (AKART) concept. The Fact Sheet states:

The prevalence of 303(d) listings related to depleted dissolved oxygen levels from increased levels of nitrogen and phosphorus requires Ecology to reconsider the basis of AKART for domestic WWTPs. It is apparent that the agency must start to consider refining what constitutes AKART for this treatment category. 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 at 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 rate payer base and any identified hardship that may exist due to the median household income in the community.

See Fact Sheet, at 18. Ecology thus acknowledges that each facility is unique and requires an individualized evaluation to determine the appropriate nutrient controls. It stands to reason that these controls should be in individual permits. Indeed, in recognition of the lack of similarity among the plants included in the Permit, Ecology exempts one facility from the substantive requirements of the Permit. Ecology does not explain how or why inclusion of dischargers that are not the same or substantively the same satisfies the requirements of Ecology's own regulations and the federal regulations applicable to general permits.

Fourth, for the WWTP operators the major advantage of a general permit is that it might better facilitate a collaborative approach to nutrient management through effluent trading. However, Ecology's statement in the Fact Sheet that an effluent trading program would require waste load allocations for each individual facility negates any benefit that a general permit might provide in establishing such a program since there are no waste load allocations or final WQBELs in the Permit. Ecology does not explain how an effluent trading program would be feasible without waste load allocations of a final WQBEL in the Permit.

Finally, the prevalence of 303(d) listings related to depleted dissolved oxygen levels from increased levels of nitrogen and phosphorus requires Ecology to reconsider the basis of AKART for domestic WWTPs. It is apparent that the agency must start to consider refining what constitutes AKART for this treatment category. The AKART provision needs evaluation on a case-by-case basis given its direct ties to economic impact to each of the operators.

Recently, the Court of Appeals reiterated that the term 'reasonable' in the AKART standard limits Ecology to require a treatment system that is both technically and economically feasible.

Nw. Env'tl. Advocates v Dep't of Ecology, 2021 Wash. App. LEXIS 1558, 2021 WL 2556573; citing to, *Puget Soundkeeper All. v Dep't of Ecology*, 102 Wn. App. 783, 793 (2000). What constitutes AKART at one facility will necessarily be different at 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 rate payer base and any identified hardship that may exist due to the median household income in the community. Ecology has not explained how use of the general permit to regulate nutrients rather than the use of individual permits will ensure compliance with AKART.

COMMENT NO. 2: THE GENERAL PERMIT IS AN UNAUTHORIZED SECOND PERMIT FOR A SINGLE DISCHARGE

Ecology is proposing two mandatory permits, an individual permit and a general permit, to regulate a single discharge. The general permit coverage requirement proposed by Ecology conflicts with state and federal law regarding concurrency of a general and individual permits and constitutes an unlawful modification of the Tacoma's expired but administratively continued individual permits.

Ecology states that the Permit "supersedes effluent requirements related to total inorganic nitrogen in the individual NPDES permits with the exception of ammonia effluent limitations developed for control of ammonia toxicity." Fact Sheet, at 13. Ecology also states that the "permit supplements the individual NPDES permits held by the dischargers proposed for coverage." Fact Sheet, at 34.

These statements indicate that Nitrogen limits in individual permits still apply but are superseded by the Permit except under certain circumstances and that the Permit adds conditions not contained in the individual permits. This is not only confusing but in direct conflict with the Clean Water Act (CWA) which does not allow more than one permit for a single discharge, does not allow an individual permit to be amended through a general permit, and does not allow enforcement actions to be taken under the CWA when an operator is in compliance with an individual permit. Additionally, for dischargers operating under an administratively extended individual permit like Tacoma, coverage under the Permit will, by operation of law, extinguish the individual permit.

State NPDES permit programs authorized under the CWA are required to conform to the provisions of 33 USC § 1342 and guidelines for establishing state NPDES programs. 33 USC § 1342(c)(2). All state programs must be administered in accordance with the program requirements enumerated at 40 CFR § 123.25. 40 CFR §§ 122.1(a)(2) & 123.5. The program requirements made applicable to state programs include EPA regulations for general permits under 40 CFR § 122.28. Finally, the 2018 Memorandum of Agreement between the EPA and Ecology (2018 MOA) provides that Ecology will issue and administer general permits in accordance with State regulations and requirements consistent with 40 CFR § 122.28 (hereafter referred to as the "General Permit Regulations"). Ecology's' decision to require dischargers identified in the Permit to apply for coverage under the Permit conflicts with the provisions of 40 CFR § 122.28, the 2018 MOA and the CWA.

The EPA general permit regulations provide that general permits shall be written to cover one or more categories or subcategories of discharges or facilities not covered by individual permits. See, 40 CFR §122.28(a)(1). This provision does not contemplate or allow a general permit to operate concurrently with an individual permit. This is made clear in the same regulations which

provide that, if a discharger is excluded from coverage under a general permit because the discharger already has an individual permit, the discharger may request that the individual permit be revoked in order to be covered under the general permit. 40 CFR § 122.28(a)(3)(G)(4)(v). Thus, to be covered by a general permit, the individual permit must be revoked.

Likewise, the application requirements for individual permits provide that any person discharging pollutants is required to apply for an individual permit unless that discharger is covered by a general permit. 40 CFR 122.21(a). And, if an individual NPDES permit is issued to a discharger already covered by a general permit, the general permit will be automatically terminated on the effective date of the individual permit. 40 CFR § 122.28(a)(3)(G)(4)(iv). The applicable EPA regulations do not provide for or allow concurrent coverage under both a general and individual permit. The same is true for Ecology's regulations.

Ecology's general permit program, at chapter 173-226 WAC, defines the term general permit as a permit that covers multiple dischargers of a point source category within a designated geographic area, in lieu of individual permits being issued to each discharger. WAC 173-226-020. Like the EPA regulations that Ecology's program must conform to, a general permit is an alternative to coverage under an individual permit. Ecology's regulations mirror the EPA regulations by providing that when an individual permit is issued to a discharger, the applicability of the general permit to that discharger is automatically terminated. In other words, there cannot be concurrent coverage. Further, a precondition to issuance of a general permit is a finding by Ecology that the category of dischargers to be covered are more appropriately controlled under a general permit than under individual permits. WAC 173-226-050(3)(b)(iv).² Again, the regulations establish that coverage must be under a general permit or an individual permit, but not both. Ecology has not explained its authority to require the operators to be subject to the Permit to be contemporaneously subject to the conditions of their individual permits and the Permit. Nor has Ecology explained why the individual permits for those operators subject to administratively extended permits will not terminate by operation of law upon coverage under the Permit, or why the Permit will not terminate by operation of law for those operators covered under an individual permit.

The Permit coverage requirement is also unenforceable. The permit shield contained in the CWA, 33 U.S.C. § 1342(k) provides that compliance with the terms and conditions of a permit is deemed to be compliance with the CWA. The permit shield is also embodied in the Federal NPDES regulations.

. . . [C]ompliance with a permit during its term constitutes compliance, for purposes of enforcement, with sections 301,302,306,307, 318, 403 and 405 (a)-(b) of CWA.

40 CFR § 122.5.

Accordingly, compliance with the terms of an individual permit is deemed to be compliance with the CWA. Ecology has not identified a provision in the CWA and its implementing regulations, or the State Water Pollution Control Act and its implementing regulations, that authorize Ecology to require coverage under a general permit for a discharger already covered by an individual

² See also WAC 173-226-070(2)(a)(i) providing that where water quality-based effluent limitations shall be incorporated into a general permit if, among other things, Ecology determines that the use of a general permit rather than individual permits is appropriate.

permit. In the absence of such authority, Ecology cannot require any of the covered dischargers to apply for coverage under the Permit or take enforcement action if they fail to do so.

The Permit will also operate to modify the conditions of the individual permit in violation of the procedures set forth in the CWA and its implementing regulations for a permit modification. As noted above, Ecology has stated that the Permit will supersede effluent requirements related to TIN in the individual NPDES permits and that the Permit will supplement the individual NPDES permits. Fact Sheet, at 13, 34. In effect, the Permit will operate as a modification of the individual permit because it purports to modify the discharger's obligations under the individual permit. In other words, certain actions which were deemed to be compliance with the CWA under the terms and conditions of the individual permit, will no longer be deemed compliance with the CWA under the Permit. Ecology has not explained its authority to modify the terms and conditions of an individual permit through coverage under a concurrent general permit and has not explained its authority to impose conditions through a general permit that would vitiate the permit shield of the individual permit.

Modifications of permits are governed by 40 CFR §§ 122.62 & 124.5, made applicable to Ecology pursuant to 40 CFR § 123.25. A permit modification requires that Ecology find that cause exists for a modification. 40 CFR § 122.62. Assuming cause exists, permit modifications (other than minor modifications) must conform to the process set forth at 40 CFR § 124. 40 CFR § 122.63. Ecology has not followed this process for modification of Tacoma's obligations under its individual NPDES permits. Accordingly, issuance of the Permit cannot operate to modify any of the terms and conditions of the individual permits issued to Tacoma. Nor can issuance of the Permit alter the provisions under the CWA, and implementing regulations, establishing that compliance by Tacoma with the terms and conditions of its existing permits constitutes compliance with the CWA.

Finally, even if Ecology has such authority, issuance of the Permit would by operation of law result in termination of the Tacoma individual permits pursuant to WAC 173-226-200(5) and for some jurisdictions, would result in immediate termination of the general permit pursuant to WAC 173-226-080(3); WAC 173-226-200(7). Termination of the individual permit as required under WAC 173-226-200(5), would violate the anti-backsliding provisions of 33 USC 1342(0) and 40 CFR 122.44(l) because the effluent limits in the individual permits would not be included in the Permit. The absence of those limits would constitute permit conditions and effluent limits that are less stringent than the terminated individual permits. Ecology's action to require coverage under the Permit would therefore violate the state NPDES permit program, the CWA and the 2018 MOA. Ecology has not explained how or why these provisions would be inoperative with respect to the Permit.

Questions:

- In response to comments, can Ecology explain how EPA and Ecology regulations precluding coverage under an individual and a general permit for the same discharge do not apply to the proposed permit?

- In response to comments, can Ecology also explain for individual permits that are currently under administrative extension, whether the administrative extension will expire as provided in WAC 173-226-300(5) ("...continuation of an expired individual permit, pursuant to WAC 173-220-180(5), shall terminate upon coverage by the general permit.")?

- In response to comments, can Ecology explain whether coverage under the general permit will be mandatory or voluntary?

COMMENT NO. 3: THE SSM DOES NOT HAVE THE PRECISION TO PREDICT WATER QUALITY (DO) IMPAIRMENTS

Ecology is misusing the Salish Sea Model (SSM) to drive an ineffective general permit. Using models to calculate wasteload allocations is entirely different from using models to predict the impact of nitrogen discharges on dissolved oxygen (DO) levels. Ecology's own guidance on water quality assessments requires the use of actual data to establish a water quality impairment for DO. Water Quality Policy 1-11 Chapter 1, at 50 (Ecology 2020)(Pub. No. 18-10-035). The SSM would be extremely useful in designing strategies for reducing impacts for various sources of Nitrogen. It is completely inappropriate for assessing water quality. Models have been used to predict DO in a waterbody and even to help calculate wasteload allocations. In these cases they have been compared against water quality samples not as Ecology has done here, by simply comparing the results of two hypothetical model runs. No model, not the SSM or the Chesapeake Bay or the San Francisco Bay model, has the precision to estimate 0.2 mg/L difference between two model runs. Indeed, the 2019 bounding scenarios report includes an assessment of the Mean Square Error (MSE) of the SSM. The MSE indicates that DO levels can be predicted within an error of 0.8 mg/L, an error rate that is nearly an order of magnitude greater than 0.2mg/L standard. Thus the SSM cannot determine if the water quality standard is being met. Ecology has presented no evidence of near field, or localized, impacts. If Ecology believes the model is capable of predicting far field impacts, that information should be used in constructing individual permits.

The Fact Sheet, at 31, states that following review, "Ecology will use the draft Puget Sound Nutrient Reduction Plan (NRP) to assign the applicable allocations, possibly at the basin level." If the ultimate outcome of the SSM is to derive waste load allocations, Ecology should use the TMDL process, not a general permit to regulate individual permit strategies. Ecology incorrectly claims that the "benefits of this alternative restoration plan approach include achieving cleaner water more quickly than a traditional TMDL and improved opportunities for stakeholder input throughout the document development." *Id.* This is clearly not the case. Assuming there is an impairment, Ecology's process does nothing to address the problem for at least five years when WQBELs are supposed to be established. A TMDL approach would more precisely (and probably more accurately) identify where the impairments are so that a more targeted strategy including effluent limits and non-point source reductions could be employed sooner.

The proposed process takes a sledge hammer approach that will have a minor, if any, effect everywhere and a major impact nowhere.

Ecology cites the 2019 Bounding Scenarios Report to support a conclusion that Puget Sound is impaired due to low DO. Ecology has not explained its reasoning or process for how it determined that there is a reasonable potential to exceed water quality standards. EPA guidance refers to the model selection decision tool (MSDT) available in the Nutrient Management Toolbox (NMT), a process which requires the permit writer to go through a series of steps to determine which modeling approach is best to use in a reasonable potential analysis. Neither the Fact Sheet nor the Permit give any indication that Ecology has gone through the proper steps to select the correct model and used the correct procedures to perform a reasonable potential analysis. A conclusion of reasonable potential to exceed a water quality

(nutrient) standard requires Ecology to link nutrient loads to ecological response indicators for purposes of developing nutrient criteria or setting allowable load based response. This requires Ecology to identify the dominant habitat and ecological responder. Ecology has not done this and in fact has used a blanket approach that evaluates all of Puget Sound including shallow embayments and depths greater than 30 meters and lumps them together. Ecology has failed to identify the ecological responder as well as the dominant habitat of the ecological responder.

COMMENT NO. 4: ECOLOGY HAS NOT PROVIDED ADEQUATE INFORMATION FOR A MEANINGFUL COMMENT ON THE REASONABLE POTENTIAL ANALYSIS THAT FORMS THE BASIS FOR THE GENERAL PERMIT

EPA and Ecology regulations require sufficient information to evaluate and comment on the basis for a NPDES permit. This information must be set forth in a draft Fact Sheet that is available for public review at the time a draft NPDES permit is issued for public comment. In the case of the Permit, Ecology has relied entirely on the 2019 Bounding Scenarios Report and the SSM model runs described therein. The Fact Sheet and report lack sufficient information for Tacoma to comment on the reasonable potential determination.

Tacoma made several requests to Ecology to obtain documentation on the assumptions and values that were used in the Bounding Scenarios Report SSM. Despite receiving thousands of pages of documents there is no documentation by Ecology of the values that were inputted to the SSM. Tacoma cannot determine, for example, how the inputs assigned its plants or any other plants were calculated. There is no document that can be identified that explains this information. Likewise, and again despite repeated requests, there is no documentation of how the model results were processed. The Bounding Scenarios Report provides a single set of figures that depict model cells that apparently fall below the applicable DO standard. It is impossible to determine from this generalized information what exact cells fall into this category, which layers of the cell were deemed impaired, and the duration of such impairment.

It appears from Ecology presentations that many, if not most, of the cells that Ecology deems to be impaired in the Bounding Scenarios Report and for the purposes of the reasonable potential analysis for the Permit were from modeled results in the deepest of ten layers for each cell in the SSM. This is contrary to the DO water quality standard under WAC 173-201A-210(d)(iii) where the standard must be applied to the "dominant aquatic habitat." Since the standards are based on salmon habitat, there is no basis for finding an impairment or interpreting the model results from deep layers in the model cells to make a reasonable potential determination.

Likewise, Ecology's WQP 1-11 is clear that data, or in this case model results, should not be used "if a water column meets the criterion except at depths close to the sediment interface." WQP 1-11, Ch. 1, Page 50. Ecology's own policy states that it is not appropriate to attribute a criterion exceedance to the data since "DO levels near the sediment interface are naturally depleted in certain waters." WQP 1-11, Ch. 1, Page 51.

Tacoma has been attempting to reverse engineer the SSM runs done by Ecology for the bounding scenarios report. This effort is compounded by the fact that Ecology did the modelling internally, with no documentation, and without any external peer review. Tacoma cannot provide meaningful comments on the reasonable potential analysis forming the basis for the Permit without completing this work.

Questions:

- In response to comments, can Ecology disclose how it processed the results from the SSM modeling to make impairment determinations used in its reasonable potential analysis?
- In response to comments, can Ecology explain the extent of cells deemed out of compliance with DO standards based solely on model results in the deepest layer of a cell?
- In response to comments, can Ecology explain if WQP 1-11 represents the current interpretation and application of the marine DO water quality standard?
- In response to comments, can Ecology explain if it has adopted a new DO standard in the manner in which it has processed and applied the results from the SSM described in the Bounding Scenario Report?

COMMENT NO. 5: A TMDL WOULD BE THE MORE EFFECTIVE APPROACH TO MAINTAINING AND IMPROVING WATER QUALITY

Assuming there is an impairment, Ecology's proposed process does nothing to address the problem for at least five years when WQBELs may be established. A TMDL approach would more precisely and probably more accurately identify where the impairments are so that a targeted strategy including WQBELs and non-point source reductions could be employed. In addition a TMDL approach would more likely result in waste load allocations that would provide reasonable assurance that water quality standards will be achieved. The proposed process takes a sledge hammer approach that will have a minor, if any, effect everywhere and a major effect nowhere.

COMMENT NO. 6: THE DRAFT NARRATIVE WATER QUALITY-BASED EFFLUENT LIMITS (WQBELS) DO NOT CONTROL DISCHARGES AS NECESSARY TO MEET APPLICABLE WATER QUALITY STANDARDS FOR DO

As Ecology admits it does not have the data to determine if this Permit will control discharges in a manner that will result in meeting water quality standards. Ecology has further determined that current levels of TIN in WWTP effluent are causing or contributing to violations of the DO standards in Puget Sound. See Fact Sheet, Page 30. Ecology has not proposed a monitoring program that adequately measures DO in the "impaired" water bodies. Without this data there is no way to tell whether the proposed actions in the Permit have any impact on DO.

Questions:

- In response to comments, can Ecology explain whether discharges from a facility at or below the total inorganic nitrogen action levels in Condition S4.B will cause or contribute to a violation of water quality standards?
- In response to comments, can Ecology explain how the proposed permit narrative effluent limits will meet water quality standards for DO?
- In response to comments, can Ecology explain whether a facility in full compliance with the permit and discharging total inorganic nitrogen at or below

action levels in Condition S4.B will be meeting water quality standards for dissolved oxygen? Can Ecology explain the basis for its answer to this question?

COMMENT NO. 7: THE ACTION LEVEL CALCULATION DATA SET IS TOO SMALL

Ecology recognizes that most facilities did not have adequate data sets to represent the Nitrogen discharge from the facilities covered under the Permit. Ecology developed a calculation tool for ALo that uses a nonparametric method called “bootstrapping” to calculate the annual load from facility data.

Bootstrapping disregards the underlying problem that Ecology does not have a data set that accurately represents nitrogen discharges from the covered operators. In addition, some operators had only quarterly data which Ecology extrapolated in an illogical attempt to represent the variability. Using extrapolated data in the bootstrapping calculation destroys what little statistical validity existed in the bootstrapping analysis. The action level that Ecology is using is an annual total load of TIN. The bootstrapping analysis is based on monthly averages. The confidence interval calculated, that is the basis for the action levels, is based on the estimated monthly mean not the annual load. This greatly exaggerates the precision of this estimate and could result in a high probability of immediate exceedances of the action level. Tacoma estimates that it has a one in five chance of exceeding the action level in the first year of the Permit.

There is no way that meaningful confidence intervals for annual loads can be calculated from monthly data, particularly if the extrapolation and bootstrapping have been used to artificially increase the sample size. Ecology should design and require a sampling program for each plant to more precisely estimate current nitrogen discharges before setting effluent limits or action levels. Ecology should defer setting action levels until more data is collected.

Additionally, Ecology’s reference for Bootstrapping in the bibliography is not reliable.

Bootstrapping (statistics). (2021, May 7). In *Wikipedia*.
[https://en.wikipedia.org/w/index.php?title=Bootstrapping_\(statistics\)&oldid=1021858475](https://en.wikipedia.org/w/index.php?title=Bootstrapping_(statistics)&oldid=1021858475) [11]

Wikipedia’s general disclaimer provides in pertinent part as follows:

Wikipedia is an online open-content collaborative encyclopedia; that is, a voluntary association of individuals and groups working to develop a common resource of human knowledge. The structure of the project allows anyone with an Internet connection to alter its content. Please be advised that nothing found here has necessarily been reviewed by people with the expertise required to provide you with complete, accurate or reliable information.

That is not to say that you will not find valuable and accurate information in Wikipedia; much of the time you will. However, **Wikipedia cannot guarantee the validity of the information found here.** The content of any given article may recently have been changed, vandalized or altered by someone whose opinion does not correspond with the state of knowledge in the relevant fields. Note that most other encyclopedias and reference works also have disclaimers.

No formal peer review our active community of editor's uses tools such as the Special:Recent Changes and Special:NewPages feeds to monitor new and changing content. However, Wikipedia is not uniformly peer reviewed; while readers may correct errors or engage in casual peer review, they have no legal duty to do so and thus all information read here is without any implied warranty of fitness for any purpose or use whatsoever. Even articles that have been vetted by informal peer review or *featured article* processes may later have been edited inappropriately, just before you view them.

[https://en.wikipedia.org/wiki/Wikipedia: General-Disclaimer](https://en.wikipedia.org/wiki/Wikipedia:General-Disclaimer).

Information contained on the Wikipedia website is not reliable or peer reviewed, and can be changed by anyone with an internet connection.

COMMENT NO. 8: ALTERNATIVE RATE STRUCTURES ARE NOT LEGAL UNDER STATE LAW OR THE WASHINGTON STATE CONSTITUTION

Ecology has recognized that the financial impact of the costs of treatment can create an unreasonable burden upon communities served by wastewater treatment plants. See, *Northwest Environmental Advocates v State*, 2021 Wash. App. LEXIS 1558 (2021). Overburdened communities will bear a significant and disproportionate burden of the cost of compliance with the Permit.

While the City appreciates Ecology's effort to address environmental justice by requiring an affordability assessment, the assessment will do nothing to address the disparate impact of the cost burden of the Permit upon communities of color, Tribes, indigenous communities, and low income populations. State law does not allow dischargers to create rate classifications based upon ability to pay, except as authorized pursuant to RCW 74.38.070 for low-income citizens. See, RCW Chapters 35.67 and 35.92. Tacoma already has a program for rate reductions under this statute. All other rate classifications must be based upon the cost of service and must be allocated equitably based upon service received. See generally, *King County Water Dist. No. 75 v Seattle*, 89 Wn. 2d 890, 903 (1978). A utility has a duty to fix rates that are just and reasonable and not unduly discriminatory. *Faxe v Grandview*, 48 Wn. 2d 342, 347 (1956).

Rates must comply with Article 1 § 12 of the State Constitution which requires that rates be non-discriminatory, meaning that rates apply alike to all persons within a class, and that there must be a reasonable ground for creation of different rate classifications. *Faxe*, 89 Wn. 2d at 348. Rate classifications under state law are based upon such factors as cost of service, the character of the service furnished, or the quantity or amount received. *Faxe*, 89 Wn. 2d at 349-350. State law sets for the criteria in Chapter 35.67 and 35.92 RCW. Neither state law nor the state constitution allow rate classifications based upon an affordability assessment with the exception of low income rate reductions authorized under state law and which are already being implemented. Accordingly, the concept of a study and proposal for rate alternatives only serves to create false hope that the enormous impact of funding the cost of treatment can be more equitably distributed. Further, it will not address the reasonableness of the overall costs of compliance to be borne by all of the rate payers.

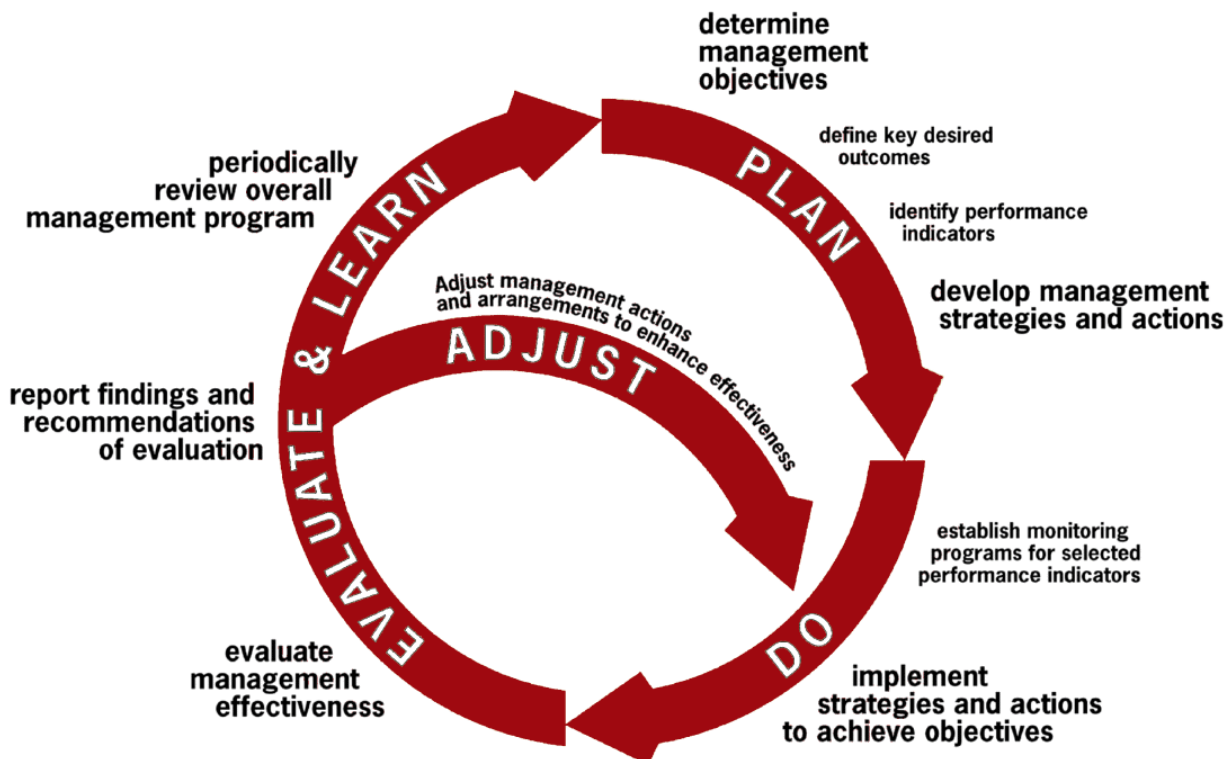
Question:

- In response to comments, can Ecology explain what assessment Ecology has made to address environmental justice impacts from the proposed permit?

- In response to comments, can Ecology explain how the requested report will be used to regulate NPDES permits for publically owned WWTPs?

COMMENT NO. 9: ADAPTIVE MANAGEMENT

Tacoma supports an adaptive management approach, however the Permit does not include the basic tenet of adaptive management. Adaptive management is based off of the Deming Cycle of plan, do, study, act.



Determine Management Objectives:

Ecology’s stated management objective for the first Permit is to “prevent the dissolved oxygen problem in Puget Sound from getting any worse.” To that end, Ecology’s key desired outcome would be to prevent DO levels from declining throughout Puget Sound. The key performance indicator would be DO.

The problem is that there is no provision in the Permit that requires DO to be measured or to use that data in determining the success or failure of any actions taken. The performance provisions in the Permit are limited to the total nitrogen loading from the WWTPs. Presumably this data will be used to do additional model runs that will tell us that DO conditions have improved. But without actual measurements of DO all we will know is that we have successfully manipulated the model. A robust monitoring program designed to detect improvements in DO levels is absolutely essential to a successful adaptive management program.

The ultimate management objective of the Permit is to improve DO conditions in Puget Sound. Assuming that limiting TIN loads from marine dischargers will actually have a meaningful impact

on DO impairment, Ecology should use the first Permit cycle to collect the data necessary to inform the strategies for accomplishing the ultimate objective. Rather than write plans that may never be implemented or implement strategies that will, at best, maintain the status quo, Ecology should use the first Permit cycle to develop strategies and actions that most efficiently and effectively achieve target DO levels.

Implement Strategies and Actions to Achieve Objectives:

Ecology's timeframes for implementation are far too short. Once a strategy has been selected and appropriate metrics determined, baseline data must be collected to determine the nominal state before implementation of the strategy. If we don't know where we began, how will we know how far we have travelled or if there has been any meaningful benefit from reduction of nutrient loads from marine dischargers? Measurement of the effectiveness of a strategy is the basis of adaptive management. Collecting baseline data can take months. Actually implementing the strategy can take months to years depending on the amount of construction involved and the difficulty in optimizing the process change. Finally the action must proceed for a long enough period of time that any differences can be reliably measured.

Evaluate Management Effectiveness:

The time required for data collection, strategy development and implementation suggest long term objectives rather than short term, first Permit cycle, objectives should be the focus of adaptive management.

COMMENT NO. 10: CONDITION S3 – COMPLIANCE WITH STANDARDS

The Permit provides as follows:

A. Discharges must not cause or contribute to a violation of surface water quality standards (Chapter 173-201A WAC), sediment management standards (Chapter 173-204 WAC), and human health-based criteria in the Federal water quality criteria applicable to Washington (40 CFR Part 135.45). This Permit does not authorize discharge in violation of water quality standards.

Permit, Condition S3.A

Ecology has determined that WWTPs discharges are causing or contributing to violations of the DO standards in Puget Sound. Fact Sheet, at 30. Indeed Ecology has determined that excess nutrients discharged from WWTPs in one location cumulatively contribute to DO impairments in other locations due to the water exchange that occurs between basins. *Id.* Based on these determinations compliance with the conditions of Permit will not result in meeting water quality standards putting dischargers in immediate violation of Condition S3.A of the Permit. Accordingly, the Permit will not meet the requirements of the CWA because compliance with the permit will not result in meeting water quality standards.

Questions:

- In response to comments, can Ecology explain the scope of the prohibition in Condition S3 in the permit? Does the prohibition only apply to TIN?

- In response to comments, can Ecology explain the basis for its presumption that compliance with permit conditions will result in compliance with water quality standards?

- In response to comments, can Ecology explain whether discharges from a facility at or below the total inorganic nitrogen action levels in Condition S4.B will cause or contribute to a violation of water quality standards?

- In response to comments, can Ecology explain the basis for its presumption in Condition S3 that compliance with permit conditions will result in compliance with water quality standards?

- In response to comments, can Ecology explain whether discharges from a facility at or below the total inorganic nitrogen action levels in Condition S4.B will cause or contribute to a violation of water quality standards?

- In response to comments, can Ecology explain whether the reasonable potential determination in the Draft Fact Sheet, at 30, constitutes site specific information for each facility covered under the permit that the facility has a discharge that is causing or contributing to a violation of water quality standards?

COMMENT NO. 11: S4.A APPLICABILITY OF NARRATIVE EFFLUENT LIMITS

Condition S4 does not meet the requirements under 40 CFR §§ 122.44(d) and (k) for establishing narrative effluent limits. Effluent limits means any restriction, prohibition, or specification established by the Ecology in a permit on:

. . . (a) Quantities, rates, percent removals, and/or concentrations of physical, chemical, or biological characteristics of wastes which are discharged into waters of the state; and (b) Management practices relevant to the prevention or control of such waste discharges.

WAC 173-221-030.

When Ecology has determined that there exists a reasonable potential for a discharger to cause, or contribute to an excursion above any water quality standard for a particular pollutant, the Permit must contain effluent limits for that pollutant. See, 40 CFR § 112.4(d). Best management practices may be used in lieu of a numeric effluent limit when numeric effluent limitations are infeasible. 40 CFR § 122.44(k)(3). Best management practices (BMPs) means,

. . . schedules of activities, prohibitions of practices, maintenance procedures, and other management practices to prevent or reduce the pollution of "waters of the United States." BMPs also include treatment requirements, operating procedures, and practices to control plant site runoff, spillage or leaks, sludge or waste disposal, or drainage from raw material storage.

See, 40 CFR § 122.2

Ecology acknowledges in the Fact Sheet that under 40 CFR § 122.44 the Permit must contain effluent limits to control pollutants which have the reasonable potential to cause an excursion

above water qualities standards. Fact Sheet, at 33. As noted above, Ecology has stated in the Fact Sheet that it has determined that domestic wastewater discharges may cause or contribute to a violation of water quality standards for DO. See, Fact Sheet, at 34. If Ecology stands by this determination, numeric WQBELs are required to be included in the Permit. See, 40 CFR § 122.44(d). The Permit does not meet the requirements of 40 CFR § 122.44(d) for the following reasons.

As noted above, narrative effluent limits may be used in lieu of a numeric effluent limit when numeric effluent limits are infeasible. 40 CFR § 122.4(k)(3). However, Ecology has acknowledged that not only is it feasible to establish numeric water quality limits, it plans to do so in the second iteration of the Permit. Fact Sheet, at 33.³ The fact that it will take more time to perform additional model runs to establish numeric effluent limits does not mean that it is infeasible to do so. Accordingly, the Permit does not meet the requirements of 40 CFR § 122.44(k)(3). The Permit also fails to comply with NPDES permit regulations because it does not require actions that will result in meeting water quality standards. 40 § CFR 122.44(k)(4). At best the Permit will require compliance with actions levels that Ecology has determined are causing violations of the DO water quality standard throughout Puget Sound.

Table 4 (Condition S4) sets forth what are labeled “Narrative Effluent Limitations for Dominant TIN Loaders” that include three items: (1) monitoring and reporting, (2) nitrogen optimization plan, and (3) a nutrient reduction evaluation. The Permit and Fact Sheet do not explain how these narrative effluent limitations will result in compliance with water quality standards as required under EPA and Ecology regulations.

In *Washington Dairy Federation v. Department of Ecology*, 2021 WL 2660024, *13, ___ Wn. App. ___ (Div. II June 29, 2021) (citing WAC 173-226-100(1)(j)(ii)), the court ruled that with NPDES Ecology must “issue a fact sheet that includes an explanation of how the permits meet groundwater and surface water quality standards.”

Questions:

- In response to comments, can Ecology explain how these narrative effluent limitations will result in compliance with DO water quality standards?**

- In response to comments, can Ecology explain whether a facility in full compliance with the permit and discharging total inorganic nitrogen at or below action levels in Condition S4.B will be meeting water quality standards for dissolved oxygen? Can Ecology explain the basis for its answer to this question?**

³ “Ecology continues to review model results from the first year of optimization scenarios and scope future model runs through the Puget Sound Nutrient Forum. Additional model runs will be defined in 2021 to further quantify far and near field effects of wastewater discharges to marine waters along with the anthropogenic nutrient loads from Puget Sound watershed. Once Ecology can establish a nutrient loading capacity that meets DO criteria in the marine waters of Puget Sound, allocations that will lead to numeric WQBELs can be established. The NRP will include draft allocations for point sources and watershed inflows. After internal and external review, the allocations will be finalized and numeric WQBELs will no longer be infeasible. It is anticipated that for the second iteration of this permit the approach will shift to working towards compliance with those numeric limits.” Fact Sheet, at 33.

COMMENT NO. 12: TIN ACTION LEVELS

Table 5 in the Permit includes “action levels” for TIN applicable to some WWTPs.

Questions:

- In response to comments, can Ecology explain how the actions levels were calculated?**
- In response to comments, can Ecology explain the basis and information that were used to derive the action levels?**
- In response to comments, can Ecology explain if the actions levels were calculated at a level to achieve compliance with DO water quality standards?**

COMMENT NO. 13: CONDITION S4.A NITROGEN OPTMIZATION PLAN AND REPORT

Condition S4.A requires a permittee to develop and implement a Nitrogen Optimization Plan and apply an adaptive management approach at the WWTP. Ecology has not adequately defined what optimization means and how an operator can determine if it has optimized or how Ecology or a third party will determine if the operator has optimized. The Permit defines “optimization” as a BMP resulting in the refinement of WWTP operations that lead to improved effluent water quality and/or treatment efficiencies. By Ecology’s own admission, optimization does not have a large impact on the perceived DO impairment. A more effective measure would be to put effort into determining WQBELs and begin planning design and construction of facilities that would actually have a significant impact on DO impairment, assuming there is an impairment.

Nitrogen Optimization Plan and Report. If a plant initially optimizes for maximum Nitrogen removal and then exceeds the Action Level, the Permit does not explain what adaptive management strategies are available since the WWTPs have presumably already optimized for maximum nitrogen removal.

Ecology’s requirement that optimization strategies be planned and implemented in under a year is unrealistic. The facility must select a strategy, define metrics, measure the baseline data, and implement the strategy and then using the selected metrics determine if the strategy works. It is not feasible to complete this work within one year.

Question:

- In response to comments, can Ecology explain if a plant initially optimizes for maximum nitrogen removal but exceeds the action level, then what adaptive management strategies are left since they have presumably already optimized for maximum nitrogen removal?**

COMMENT NO. 14: CONDITION S4.C NITROGEN OPTIMIZATION PLAN AND REPORT

Condition S4.C.1.b requires that the nitrogen optimization plan determine the optimization goal(s) for the WWTP. It is not clear from this language what goal or goals should be considered other than maximizing nitrogen removal. In the same section of the Permit Ecology allows the plan to exclude any strategy that would exceed a one year timeframe. There are no strategies for optimizing nitrogen removal at Tacoma facilities that can be

developed, tested, modelled, and implemented in under a year.

In Condition S4.C.2.a.iv requires documentation of any impacts to the overall treatment performance as a result of process changes. Ecology does not explain how a facility, or how Ecology, will address potential negative impacts from optimization to overall treatment performance. It is not clear if a facility may violate its individual permit if negative impacts result from implementing optimization efforts, or whether negative impacts from optimization will be addressed in modified or reissued individual permits. It is not clear if optimization strategies that will have negative impacts to overall treatment performance must be considered.

Condition A4.C.2.b.i requires a load evaluation by March 31 each year to determine the facility's annual average TIN concentration and load from the reporting period. Since there will only be one year of data in year two of the Permit, it is impossible to calculate an annual loading average.

Condition S4.C.3.b requires identification of strategies for reducing TIN from new multi-family/dense residential developments and commercial buildings. The Fact Sheet does not explain or provide any guidance on what strategies should be considered under this condition of the Permit.

Condition S4.D.1.c requires, when a facility exceeds its action level, it must include in its next Annual Report a proposed approach to reduce the annual effluent nitrogen level by 10 percent. The Permit does not explain how a facility can be capable of obtaining an additional 10 percent reduction in loading if it has already reduced nitrogen loading to the maximum extent under the Permit.

The Fact Sheet, at 44, cites two EPA Case Studies on Implementing Low-Cost Modifications to Improve Nutrient Reduction at Wastewater Treatment Plants (2015) as a resource for evaluating alternatives for optimizing nitrogen reductions at activated sludge plants. The EPA study concluded that most opportunities for optimization were only found in facilities with existing BNR capabilities. The EPA document does not apply to the Tacoma facilities and Ecology has cited no other guidance for optimization alternatives.

The Fact Sheet, at 47, suggests that facilities evaluate strategies for reducing nitrogen loading including increasing production volumes of reclaimed water (if applicable to the facility), implementing side stream treatment for a portion of return flows from solids treatment, reducing influent nitrogen loads, alternative effluent disposal options and any other intermediate treatment alternative which results in decreased nitrogen loads into Puget Sound prior to major facility upgrades. All of these alternatives require substantial capital investment or growth moratoria. This is contrary to the previous statement that substantial capital investment would not be part of the optimization program.

Questions:

- In response to comments, can Ecology explain how a facility can document the exclusion of optimization strategies under this section?

- In response to comments, can Ecology explain whether Condition S4.C.1.b applies to consideration of an additional 10 percent reduction – namely, that a

facility does not need to consider optimization strategies that exceed a reasonable implementation cost or timeframe that exceeds one year?

- In response to comments, can Ecology explain the consequence to a facility if there are no optimization strategies that can reasonably be implemented to reduce nitrogen loading by an additional 10 percent within five years?

- In response to comments, can Ecology explain whether a facility will be in violation of the permit where there are no reasonably available optimization strategies to achieve a 10 percent reduction in annual nitrogen loading?

COMMENT NO. 15: CONDITION S4.E NUTRIENT REDUCTION EVALUATION

Condition S4.E.2 states that a facility must submit an “approvable” nutrient reduction evaluation report. There is no regulatory standard for nutrient reduction evaluation report and no basis for a permittee to know what might constitute an approvable or unapprovable evaluation. The Permit states that the nutrient reduction evaluation must include an AKART analysis. Since Ecology has determined, and the state courts have affirmed, that BNR and other tertiary treatment technology are not AKART for Puget Sound WWTPs, it is assumed that these technologies do not have to be considered in the evaluation. The Permit and Fact Sheet do not provide any explanation or basis for considering these types of treatment technologies as AKART.

Condition S4.E.3 of the Permit requires consideration of treatment technologies to achieve an effluent concentration of 3 mg/L. The Permit and fact sheet do not explain the basis for this requirement and how this requirement applies in the context of the Condition S4.E.2 AKART evaluation. It is assumed that a facility does not need to include an evaluation of any technology that would not constitute AKART.

Question:

- In response to comments, can Ecology explain what specifically constitutes an “approvable” Nutrient Reduction Evaluation?

- In response to comments, can Ecology explain the basis for inclusion of a requirement to evaluate treatment technologies to achieve TIN effluent concentrations of 3 mg/L?

COMMENT NO. 16: CONDITION S4.E.5.C IS VAGUE

Condition S4.E.5.c requires an environmental justice review and affordability assessment for what “overburdened communities” can afford to pay for the wastewater utility. There is no explanation as to what constitutes an overburdened community or how to determine what a member of an overburdened community can afford to pay for the wastewater utility. It is not clear the basis on which Ecology is asking for this information. There are no regulatory standards under Ecology regulations for the assessment and there is no basis for a facility under the state constitution or state statutes to vary the utility rates of its customers based on environmental justice. This is an assessment that Ecology should undertake on its own initiative prior to issuance of the Permit.

COMMENT NO. 17: CONDITION G25 BYPASS PROHIBITED

General Condition G25 imposes a bypass prohibition that directly modifies the administratively extended individual permits for the Tacoma facilities. This is a clear violation of federal and state regulations and case law that prohibit the modification of expired and administratively extended permits. This condition cannot lawfully be included in a general permit applicable to the Tacoma facilities.

COMMENT NO. 18: SEPA COMPLIANCE

Ecology should withdraw its SEPA determination for the Permit and prepare an environmental impact statement. Ecology acknowledges that a “modification of permit coverage for physical alterations, modifications, or additions to the wastewater treatment process that are substantially different from the original design and/or expands the existing treatment footprint requires State Environmental Policy Act (SEPA) compliance.” Ecology is incorrect, however, in concluding that optimization does not require additional SEPA review. The draft Fact Sheet, at 47, suggests that facilities evaluate strategies for reducing nitrogen loading including increasing production volumes of reclaimed water, if applicable to the facility, implementing side stream treatment for a portion of return flows from solids treatment, reducing influent nitrogen loads, alternative effluent disposal options and any other intermediate treatment alternative which results in decreased nitrogen loads into Puget Sound prior to major facility upgrades.” All of these alternatives will require substantial capital investment or some sort of growth moratoria by Tacoma.

The Tacoma facilities were not designed for de-nitrification and the optimization alternatives proposed by Ecology will require modifications that subject the Permit to SEPA review under an environmental impact statement.

Additionally, condition S4.C.3.b requires identification of strategies for reducing TIN from new multi-family/dense residential developments and commercial buildings. This condition requires Tacoma to propose development regulations that would trigger SEPA review. See, WAC 365-196-620 (Adoption of comprehensive plans and development regulations are "actions" as defined under SEPA. Counties and cities must comply with SEPA when adopting new or amended comprehensive plans and development regulations.)

Regardless of the applicability of any SEPA exemption, Ecology is also required to assess the potential climate impacts from the optimization requirements and the evaluation of treatment technologies, particularly treatment technologies that can achieve an effluent concentration of TIN at 3 mg/L. These alternatives will have a profound impact on energy consumption at the Tacoma facilities. See *Washington Dairy Federation v. Department of Ecology*, 2021 WL 2660024, *23 ___ Wn. App. ___ (Div. II June 29, 2021) (Ecology must consider climate change impacts in issuing a NPDES permit).

COMMENT NO. 19: PERMIT LIMITS BASED ON CURRENT TIN LOADING CONFLICT WITH TACOMA'S OBLIGATION TO PROVIDE WASTEWATER SERVICES WITH THE SERVICE AREAS OF ITS FACILITIES

Ecology has improperly based numeric effluent action levels on calculated levels of TIN loading from flow data and nitrogen concentration data in recent years. Tacoma is obligated under the Growth Management Act to accept and facilitate growth within the applicable urban growth

boundaries. Associated with this obligation is the parallel requirement under its NPDES permits to maintain sufficient capacity to provide wastewater treatment within the service areas of its two facilities. This is a permit condition in both of the individual NPDES permits issued by Ecology and a requirement that is reflected in the general facility plans and engineering documents generated by Tacoma under WAC 173-240-050 and WAC 173-240-060. By adopting an effluent limit based on current loading and concentrations Ecology will be denying Tacoma any ability to provide for anticipated growth or leave the City in violation of its individual permits. Moreover, Ecology is locking in effluent limitations that fail to consider the permitted design flows for its facilities and that may be irrevocable under state and federal water quality anti-backsliding regulations. This is a critical issue that should compel Ecology to abandon the Permit until it has completed a DO TMDL for Puget Sound and is able to address nitrogen issues in individual NPDES permits.

Questions:

- In response to comments, can Ecology explain why it has not considered design flows and the need to maintain treatment capacity in setting effluent limitations in the permit?**
- In response to comments, can Ecology explain whether the general permit will supersede and modify the obligations in the individual Tacoma permits to maintain treatment capacity within the service areas of the facilities?**
- In response to comments, can Ecology explain whether, based on the general permit, the department will now consider void those portions of Tacoma's general sewer plan and engineering reports that are based on providing and maintaining wastewater treatment capacity within the respective service areas of its two facilities?**
- In response to comments, can Ecology explain how it has evaluated the likelihood that Tacoma will have to put building moratoria in place to meet the proposed effluent limitations?**
- In response to comments, can Ecology explain how it has evaluated the impact of the effluent limitations on the ability to develop low and moderate income housing?**
- In response to comments, can Ecology explain how it has evaluated the potential environmental justice concerns that will result from reduced access to affordable housing?**
- In response to comments, can Ecology explain how it has evaluated the applicability of anti-backsliding regulations to the proposed effluent limitations?**

Department of Ecology, Water Quality Program
August 16, 2021
Page 22 of 22

Thank you for this opportunity to comment on the Puget Sound Nutrient General Permit. We trust our comments are useful. If you have any questions or would like additional information please contact Daniel C. Thompson, Ph.D at 253 502-2191 dthomps@cityoftacoma.org.

Sincerely

Michael P. Slevin III, P.E.

Michael P. Slevin III, P.E.
Environmental Services Director