



10311 Chambers Creek Road West
University Place, Washington 98467-1040
piercecountywa.gov/ppw

August 13, 2021

Eleanor Ott, P.E.
Washington State Department of Ecology
PO Box 47696
Olympia, WA 98504-7696

Subject: **Comments on the Puget Sound Nutrients General Permit (PSNGP) and Fact Sheet**

Dear Ms. Ott:

Pierce County appreciates the opportunity to provide comments on the Puget Sound Nutrients General Permit and Fact Sheet. In accordance with the direction provided, Pierce County's comments are attached and have also been submitted online on the Department of Ecology's website.

Pierce County has been proactive in the planning, financing, and building of capacity to treat our community's wastewater to much higher standards than has been required under NPDES Permit No. WA0039624. The County invested over \$350M, Pierce County's largest capital project, to achieve this goal. We are interested in protecting this investment, while at the same time developing a certain and reasonable path forward to accomplish our mutual goals with Ecology.

In support of the broader effort, Pierce County has been a collaborative partner throughout this process. This includes actively participating as a utility representative on the General Permit Advisory Committee. Pierce County worked side-by-side with representatives from the regulatory agencies, the environmental community, as well as our other utility colleagues to assist in the development of the draft recommendations document, which was considered during the development of this draft PSNGP and Fact Sheet.

Pierce County's recommendations and comments are included in comprehensive tables (Draft PSNGP Pierce County Sewer Division Comments and Draft Fact Sheet Pierce County Sewer Division Comments) for both the draft permit and fact sheet, along with this transmittal letter. We would like to highlight the following key concerns that relate to both direct impacts to the Chambers Creek Regional Wastewater Treatment Plant (CCRWWTP), as well as broader regional and long-range concerns including specific concerns about conditions that have been added to the Puget Sound Nutrients General Permit since the Preliminary DRAFT PSNGP was published:

- **Excessive Reporting Requirements:**
 - The permit documentation requirements within this permit are excessive and would create an administrative hardship to the Sewer Division. Nutrient reduction, though important, is only one area of treatment within a highly integrated system. Focusing so

much attention on documenting every step of this process (especially for early adopters) is not the best area to focus the utility's attention as it does nothing to improve the overall performance of active seasonal nutrient reduction processes.

- **Nutrient Reduction Evaluation:**
 - AKART assessment for achieving concentrations of 3 mg/L (or equivalent load reduction) on both an annual average and seasonal average basis.
 - Requiring facilities to assess 3 mg/L on an annual basis before WQBELs can be established is premature and would divert resources away from the current optimization goals. In-depth analysis should be conducted based on the water quality standards that will be identified through the bounding scenario runs with the Salish Sea Model (SSM) and not on arbitrary and unsubstantiated performance goals.

- **Incentives for Early Adopters:**
 - The excessive reporting requirements within this draft permit do not take in to account the effort early adopters have taken to reduce nutrients, nor does it streamline the reporting process to account for facilities that are further ahead than others. Plants that are currently implementing seasonal nutrient reduction efforts should not have to justify their efforts if they can show the plant is reducing nitrogen below the action levels.

- **Categories for Domestic WWTPs**
 - The term 'dominant' is not appropriate for classifying larger WWTPs that discharge to the Puget Sound. This term dominant can be perceived as negative and does not accurately reflect the situation. The term 'Largest Loaders' is used within the Fact Sheet and better reflects the situation. Pierce County would propose using 'Largest Loaders' (LL) for large dischargers and 'Smallest Loaders' (SL) for small quantity dischargers.

- **Develop a Multifaceted Long-Term Puget Sound Water Quality Program:**
 - This program should track the nitrogen reduction efforts and ensure the implementation strategy is working as intended to support the water quality goals of the Puget Sound. Ultimately, solutions will likely require actions outside of any one agency's governance/authority. The new General Permit should provide a pathway towards development of collaborative partnerships to do so.

Should you have any questions about these comments please contact me at (253) 798-3031 or Patrick.Kongslie@piercecounitywa.gov.

Sincerely,



Patrick G. Kongslie, MS-ITAM, CMRP, WWTPO IV
Sewer Maintenance & Operations Manager
Pierce County Planning & Public Works

**Draft Puget Sound Nutrient General Permit – Pierce County Sewer Division Comments
August 16, 2021**

Permit Section	Current Language	Comments/Suggested Modification	Impacts and/or Results
General Comments			
General	Submittal requirements associated with the Puget Sound Nutrient General Permit.	The Puget Sound Nutrient General Permit has an excessive expectation for the reporting/documentation associated with the implementation of nutrient reduction. This expectation will create an administrative burden for many utilities and divert resources away from implementation to administrative functions. Nutrients will be one of many regulated constituents, so requiring such an administrative process for one area of treatment will be problematic for many municipalities moving forward. This will ultimately distract the operations away from focusing on their primary objective of meeting water quality goals.	Reduce documentation to a practical level and incentivize forward thinking and proactive investments by utilities.
Section S - Special Conditions			
Table 1. Summary of Permit Report Submittals, pg. 5	Refer to the Special and General Conditions within this permit for additional submittal requirements.	All submittal requirements associated with this permit should be clearly defined under Table 1. Summary of Permit Report Submittals . This should include the submittal that is due (e.g. Annual Reports, Nitrogen Optimization Plan (NOP), Nutrient Reduction Evaluation (NRE), etc.) the frequency, and the first submittal date. This will help avoid the confusion associated with the various reporting requirements within this permit. Permit reporting requirements should be clearly identified with the submittal requirements outlined in the subsequent sections of the permit. With the current structure, the permittee may miss deadlines due to lack of clarity.	Poor structure and lack of clarity on submittal deadlines.

Table 1. Summary of Permit Report Submittals, pg. 5	Discharge Monitoring Reports (DMRs), Monthly, Within 28 days of applicable monitoring period.	The DMR data should be populated using the WQWebPortal as a calculate nutrient values feature. Plants should not have to duplicate the data entry process as part of the data entry portion of the submittal. Also, the language used in the ' First Submittal Date ' column is confusing. The first submittal date should be specified (e.g. January 15 th , 2022 or January 28 th , 2022) with the frequency being monthly.	Potential for errors due to duplication of data entry
Table 2. Summary of Required On-Site Documentation, pg. 6	List of documents required on-site.	Language should be included to allow for electronic documentation as hard copies quickly become outdated.	Update document language to allow electronic copies
Special Conditions, S1. Permit Coverage, A. Coverage Area and Eligible Discharges, pg. 9	Special conditions S4 lists permit conditions and limits for the WWTPs with dominant (D) TIN loads. Special Conditions S5 list the conditions and limits for the WWTPs with small (S) loads.	The term 'dominant' is not appropriate for classifying larger WWTPs that discharge to the Puget Sound. By definition, the term dominant means most important, powerful, or influential and the opposite of dominant is not "small" but rather weak, characterless, deficient, deplorable. The term 'Largest Loaders' is used within the Fact Sheet and better reflects the situation. Pierce County would propose using 'Largest Loaders' (LL) for large dischargers and 'Smallest Loaders' (SL) for small quantity dischargers.	Change language to accurately reflect the categories of discharges to the Puget Sound.
Special Conditions, S2. Application for Coverage, A. Obtaining Permit Coverage, Section 1, pg. 10	Upon submittal of a complete application for coverage (also called a Notice of Intent or NOI) Ecology will issue a decision on permit coverage pursuant to Special Conditions S2.C.	To improve clarity the current language should be revised as follows: Ecology will issue a decision on permit coverage <i>within 60 days upon receiving a completed NOI application or the permit becomes effective as per section S2.C.</i>	Improved Clarity

<p>Special Conditions, S4. Narrative Effluent Limits for WWTPs with Dominant TIN Loads, C. Nitrogen Optimization Plan and Report. pg. 14</p>	<p>Each permittee listed in Table 5 shall develop, implement and maintain a Nitrogen Optimization Plan to evaluate operational strategies for maximizing nitrogen removal from the existing treatment plant to stay below the calculated action level.</p>	<p>Treatment plants that have invested in nutrient reduction infrastructure should have reduced requirements for the Nitrogen Optimization Planning (NOP) process. If a plant is able to reduce nitrogen discharge seasonally to levels near 10 mg/L TIN as well as reducing the annual discharge levels to below the Action Level, TIN lbs/year, the NOP should not be required on an annual basis.</p>	<p>Incentivize forward thinking and proactive utilities</p>
<p>Special Conditions, S4. Narrative Effluent Limits for WWTPs with Dominant TIN Loads, C. Nitrogen Optimization Plan and Report. pg. 14</p>	<p>Each permittee must document their actions taken, any action level exceedances, and apply an adaptive management approach at the WWTP.</p>	<p>The term “adaptive management” is used several times throughout the permit and fact sheet but is not clearly defined. Since the permittee must apply the concept of adaptive management, a clear definition should be provided.</p>	<p>Improved clarity</p>
<p>Special Conditions, S4. Narrative Effluent Limits for WWTPs with Dominant TIN Loads, C. Nitrogen Optimization Plan and Report. 1a. Process Modeling, ii. pg. 14</p>	<p>Develop an initial assessment approach to evaluate possible optimization strategies at the WWTP prior to and after implementation. Update this assessment approach as necessary with each Annual Report.</p>	<p>facilities that have proactively invested in nutrient reduction infrastructure should be exempted from this requirement. A facility that is design for nutrient reduction will not need to holistically change their strategy from one year to the next. These administrative requirements do little to improve plant performance but rather divert resources to provide excessive documentation that will be reflected within the DMR by plant performance.</p>	<p>Reduce documentation to a practical level and incentivize forward thinking and proactive utilities.</p>

<p>Special Conditions, S4. Narrative Effluent Limits for WWTPs with Dominant TIN Loads, C. Nitrogen Optimization Plan and Report. 2.Optimization Implementation. pg. 15</p>	<p>All Permittees in Table 5 must document implementation of the selected optimization strategy (from S4.C.1.c) during the first reporting period in the first Annual Report due March 31, 2023. Permittees must document implementation during every reporting period thereafter.</p>	<p>Similar to above, facilities that have proactively invested in nutrient reduction infrastructure should be exempted from this requirement. A facility that is design for nutrient reduction will not need to holistically change their strategy from one year to the next. These administrative requirements do little to improve plant performance but rather divert resources to provide excessive documentation that will be reflected within the DMR by plant performance.</p>	<p>Reduce documentation to a practical level and incentivize forward thinking and proactive utilities.</p>
---	--	---	--

<p>Special Conditions, S4. Narrative Effluent Limits for WWTPs with Dominant TIN Loads, C. Nitrogen Optimization Plan and Report. 2. Optimization Implementation. pg. 15-17</p>	<p>Optimization implementation – Annual Report Components:</p> <ul style="list-style-type: none"> • Strategy Implementation • Load Evaluation • Strategy Assessment • Influent Nitrogen Load Reduction Measures/Source Control 	<p>Similar to above, facilities that have proactively invested in nutrient reduction infrastructure should be exempted from this requirement. A facility that is design for nutrient reduction will not need to holistically change their strategy from one year to the next. These administrative requirements do little to improve plant performance but rather divert resources to provide excessive documentation that will be reflected within the DMR by plant performance.</p>	<p>Reduce documentation to a practical level and incentivize forward thinking and proactive utilities.</p>
<p>Special Conditions, S4. Narrative Effluent Limits for WWTPs with Dominant TIN Loads, C. Nitrogen Optimization Plan and Report. 1b, pg. 15</p>	<p>Apply the assessment approach to document the optimization strategies...</p>	<p>The fact sheet states that “Optimization...is the suite of activities that result in improved nitrogen removal...It does not include activities that result in costly upgrades or large capital infrastructure improvements.” This should also be clearly stated in the permit, as many POTWs may be looking at large capital projects to comply with this permit.</p>	<p>Clarity</p>

<p>Special Conditions, S4. Narrative Effluent Limits for WWTPs with Dominant TIN Loads, C. Nitrogen Optimization Plan and Report. 2, pg. 15</p>	<p>...the first Annual Report due March 31. 2023</p>	<p>This due date does not allow a full year of implementation, optimization, and data collection since the first strategy is not selected until May 1, 2022. This can impact the assessment of how the process is performing. For example, if a strategy is selected in May that requires 3 months to implement and troubleshoot, it would not be implemented until September when temperatures are already starting to cool down and bacterial activity decreases. This would leave the fall and winter months to determine effectiveness, and the strategy under these conditions may not perform as well as it could during warmer summer months.</p>	<p>Effective strategy</p>
<p>Special Conditions, S4. Narrative Effluent Limits for WWTPs with Dominant TIN Loads, C. Nitrogen Optimization Plan and Report. 2, a,i pg. 15</p>	<p>Initial implementation costs and costs to operate and maintain the optimization strategy.</p>	<p>There are several references to providing costs for implementation throughout the permit and fact sheet. What information does Ecology hope to gain through this information?</p>	<p>Clarity</p>
<p>Special Conditions, S4. Narrative Effluent Limits for WWTPs with Dominant TIN Loads, C. Nitrogen Optimization Plan and Report. 2, b pg. 16</p>	<p>By March 31 each year beginning in 2023 each Permittee shall review effluent data collected during the previous calendar year to determine whether TIN loads are increasing.</p>	<p>What will the 2022 data be compared to? Coverage under this permit will not begin until the conditions listed in S2.C which is approximately May 2022 and the permittee may not have any prior effluent TIN data with which to compare. This will also skew comparing 2022 with 2023 data since 2022 won't have a complete year of monitoring under this permit.</p>	<p>Reduce documentation to a practical level and incentivize forward thinking and proactive utilities.</p>

<p>Special Conditions, S4. Narrative Effluent Limits for WWTPs with Dominant TIN Loads, C. Nitrogen Optimization Plan and Report. 2, c. iv pg. 16</p>	<p>Document changes made to the optimization strategy, if any. c. If the Permittee proposes no changes to the optimization strategy, it must provide reasons for not making changes.</p>	<p>The permittee should only need to document changes to the strategy if the strategy did not meet the performance metric.</p>	<p>Reduce documentation to a practical level and incentivize forward thinking and proactive utilities.</p>
<p>Special Conditions, S4. Narrative Effluent Limits for WWTPs with Dominant TIN Loads, C. Nitrogen Optimization Plan and Report. 2, C.3 pg. 17</p>	<p>Permittees must develop an ongoing program to reduce influent TIN loads from septage handling practices, commercial, dense residential and industrial sources...</p>	<p>How does Ecology propose POTWs reduce TIN loads from residences?</p>	<p>Unreasonable Request</p>
<p>Special Conditions, S4. Narrative Effluent Limits for WWTPs with Dominant TIN Loads, C. Nitrogen Optimization Plan and Report. 2, D., 1. C. pg. 17</p>	<p>Submit for review a proposed approach to reduce the most recent calculated annual effluent nitrogen load by at least 10%.</p>	<p>Is the intent of this to still use optimization strategies as opposed to implementing large capital projects? Requiring an engineering report will take time and involve unexpected costs for permittees. For the first action level exceedance, selecting an additional optimization strategy as stated in S4.D.1.b seems a more reasonable course of action.</p>	<p>Effective strategy/Unreasonable Request</p>
<p>Special Conditions, S4. Narrative Effluent Limits for WWTPs with Dominant TIN Loads, C. Nitrogen Optimization Plan and Report. 2, D., 1. C. pg. 17</p>	<p>If a permittee exceeds an action level two years in a row, or for a third year during the permit term, the permittee must begin to reduce N loads by implementing...</p>	<p>This approach does not allow the POTW to go through their identified list of optimization strategies and immediately forces potentially more costly measures to be implemented.</p>	<p>Unreasonable request</p>

<p>Special Conditions, S4. Narrative Effluent Limits for WWTPs with Dominant TIN Loads, C. Nitrogen Optimization Plan and Report. 2. Optimization Implementation. C. Strategy Assessment, iv., e. pg. 18</p>	<p>Submit an update to the Permittee's Operation and Maintenance Manual no later than 30 days following implementation.</p>	<p>Operation and Maintenance Manuals are expected to be updated annually as part of the annual report requirements. Requiring this to be done within 30 days is unreasonable as the plant needs should take priority when implementing a new process/strategy.</p>	<p>Unreasonable request</p>
<p>Special Conditions, S4. Narrative Effluent Limits for WWTPs with Dominant TIN Loads, C. Nitrogen Optimization Plan and Report. 2. Optimization Implementation. E. Nutrient Reduction Evaluation, 1. pg. 18</p>	<p>All permittees in Table 5 except for LOTT must prepare and submit an approvable Nutrient Reduction Evaluation (NRE) to Ecology for review by December 31, 2025.</p>	<p>Why is LOTT excluded and not other facilities with nutrient reduction capabilities/infrastructure? This NRE includes a requirement to assess reaching 3 mg/L on both a seasonal and annual average. LOTT is not obtaining this goal as they reduce their TIN only during the summer months. Budd Inlet's water quality is of high concern, so why would other facilities need to go through this effort if it is not necessary in an area with significant water quality impairment.</p>	<p>Unreasonable request</p>
<p>Special Conditions, S4. Narrative Effluent Limits for WWTPs with Dominant TIN Loads, C. Nitrogen Optimization Plan and Report. 2. Optimization Implementation. E. Nutrient Reduction Evaluation, 3. pg. 18</p>	<p>..., and other nutrient reduction opportunities that could achieve a final effluent concentration of 3 mg/L TIN (or equivalent load reduction) on both an annual average and seasonal average basis.</p>	<p>Requiring plants to assess treatment strategies for reducing annual average TIN to concentrations of 3 mg/L is unreasonable and should be removed from the permit. WQBELs should be the driver for assessing advanced treatment capabilities for each system. This type of assessment may never be necessary to be done as the Fact Sheet states, "Consistent with the findings from Mohamedali, et.al (2011), WWTPs contribute a much larger proportion (92%) of the anthropogenic DIN loads to Washington water of the Salish Sea during the low flow season.". Requiring this type of an assessment at this point is unreasonable.</p>	<p>Unreasonable request.</p>

<p>Special Conditions, S4. Narrative Effluent Limits for WWTPs with Dominant TIN Loads, C. Nitrogen Optimization Plan and Report. 2. Optimization Implementation. E. Nutrient Reduction Evaluation, 3. pg. 18 - 20</p>	<p>Nutrient Reduction Evaluation:</p> <ul style="list-style-type: none"> • AKART Analysis • Wastewater Characterization • Influent Nitrogen Reduction Measures/Source Control 	<p>POTWs will not have clear nutrient reduction targets until Ecology is able to establish WQBELs. Going too far down the assessment path before having a target can result in stranded investments. This is especially true for facilities that have invested in nutrient reduction infrastructure and may be able to meet the nutrient reduction/optimization goals during this first permit cycle.</p>	<p>Incentivize forward thinking and proactive utilities</p>
--	--	---	---

S6. A. Table 9. Influent Sampling Requirements for S4 Permittees. pg. 26

Analytical Method and Laboratory Quantitation Level (QL) for Total Ammonia, Nitrate plus nitrite, and TKN include standard methods (SM) **only and the most sensitive QL.**

1. Analytical Methods should follow 40CFR PART 136—GUIDELINES ESTABLISHING TEST PROCEDURES FOR THE ANALYSIS OF POLLUTANTS, Table IB—List of Approved Inorganic Test Procedures, which include EPA methods, Standard Methods (SM), ASTM methods, USGA/AOAC/Other methods.

TABLE IB—LIST OF APPROVED INORGANIC TEST PROCEDURES

Parameter	Methodology ⁵⁸	EPA ⁵²	Standard methods ⁸⁴	ASTM	USGS/AOAC/Other
-----------	---------------------------	-------------------	--------------------------------	------	-----------------

Permittee should be allowed to use any of the approved methods in Table 1B with sufficient sensitivity for compliance.

2. Laboratory QL should be based on sufficiently sensitive methods, not **most** sensitive method. The justification for mandating ‘most sensitive method’ as explained in Fact Sheet is based on Federal Register 49001, but Federal Register 49001 contains no such requirement.

3. The original language is in Federal Register 49003 with regard to analytical methods, “This rule requires that, where EPA-approved methods exist, NPDES applicants must use **sufficiently sensitive** EPA-approved analytical methods when quantifying the presence of pollutants in a discharge”

4. Suggested Modification:

Under “Analytical Method” for total ammonia, nitrate plus nitrite, TKN, replaced referenced standard methods with “EPA approved methods, as listed in Table 1B of 40CFR Part 136, with sufficient sensitivity”

Under “Laboratory Quantitation Level”, replace the numeric QL for total ammonia, nitrate plus nitrite and TKN with “Corresponding QL for sufficiently sensitive methods”

Unreasonable and Costly Request

<p>S6. A. Table 10. Effluent Sampling. Requirements for S4 Permittees pg. 27</p>	<p>Analytical Method and Laboratory Quantitation Level (QL) for Total Ammonia, Nitrate plus nitrite, and TKN include standard methods (SM) only and the most sensitive QL.</p>	<p>1. Analytical Methods should follow 40CFR PART 136—GUIDELINES ESTABLISHING TEST PROCEDURES FOR THE ANALYSIS OF POLLUTANTS, Table IB—List of Approved Inorganic Test Procedures, which include EPA methods, Standard Methods (SM), ASTM methods, USGA/AOAC/Other methods.</p> <p style="text-align: center;"><small>TABLE 1B—LIST OF APPROVED INORGANIC TEST PROCEDURES</small></p> <table border="1" data-bbox="1100 427 1656 472"> <thead> <tr> <th>Parameter</th> <th>Methodology⁵⁸</th> <th>EPA⁵²</th> <th>Standard methods⁸⁴</th> <th>ASTM</th> <th>USGS/AOAC/Other</th> </tr> </thead> </table> <p>Permittee should be allowed to use any of the approved methods in Table 1B with sufficient sensitivity for compliance.</p> <p>2. Laboratory QL should be based on sufficiently sensitive methods, not most sensitive method. The justification for mandating ‘most sensitive method’ as explained in Fact Sheet is based on Federal Register 49001, but Federal Register 49001 contains no such requirement.</p> <p>3. The original language is in Federal Register 49003 with regard to analytical methods, “This rule requires that, where EPA-approved methods exist, NPDES applicants must use sufficiently sensitive EPA-approved analytical methods when quantifying the presence of pollutants in a discharge”</p> <p>4. Suggested Modification: Under “Analytical Method” for total ammonia, nitrate plus nitrite, TKN, replaced referenced standard methods with “EPA approved methods, as listed in Table 1B of 40CFR Part 136, with sufficient sensitivity” Under “Laboratory Quantitation Level”, replace the numeric QL for total ammonia, nitrate plus nitrite and TKN with “Corresponding QL for sufficiently sensitive methods”</p>	Parameter	Methodology ⁵⁸	EPA ⁵²	Standard methods ⁸⁴	ASTM	USGS/AOAC/Other	<p>Unreasonable and Costly Request</p>
Parameter	Methodology ⁵⁸	EPA ⁵²	Standard methods ⁸⁴	ASTM	USGS/AOAC/Other				

<p>S6. A Table 11. Footnotes for Influent and Effluent Monitoring Tables 9 and 10</p> <p>Foot Note b.</p>	<p>2/week means two (2) times during each week and on a rotational basis throughout the days of the week</p>	<p>While it is expected that pollutant loadings to treatment facilities varies from day to day, samplings on a rotational basis is no more representative than an established sampling schedule. Historically, a fixed sampling schedule for other pollutants such as BOD and TSS in individual NPDES permits has been proven to be representative of pollutant loadings.</p> <p>Suggested modification: remove the requirement of sampling on a rotational basis.</p>	<p>Unreasonable and Costly Request - Permittees will likely need to increase staffing level to meet the requirement.</p>
<p>S6. A Table 11. Footnotes for Influent and Effluent Monitoring Tables 9 and 10</p> <p>Foot Note K.</p>	<p>The Permittee must ensure laboratory results comply with the quantitation level (QL) specified in the table</p>	<p>QL for the most sensitive method should be removed</p>	<p>Unreasonable and Costly Request</p>
<p>Special Conditions, S9. Reporting and Recordkeeping Requirements, C. Annual Report for Dominant Loaders, 1. pg. 35</p>	<p>The Permittee must submit their first annual report by March 31, 2023 for the reporting period that begins on January 1, 2022 and lasts through December 31, 2022.</p>	<p>As outlined in S2.C, Permit coverage effective date does not occur until Ecology issues a coverage letter to the applicant, which could conceivably occur as late as May 1, 2022. Does Ecology expect permittees to begin monitoring prior to the general permit effective coverage date?</p>	<p>Clarify</p>

Draft Fact Sheet – Pierce County Sewer Division Comments
August 16, 2021

Fact Sheet Section	Current Language	Comments/Suggested Modification	Impacts and/or Results
Summary (cover page)	The permit authorizes the discharge of municipal wastewater containing total inorganic nitrogen.	Change 'authorizes' to 'regulates.' The permit regulates the discharge of municipal wastewater containing total inorganic nitrogen.	Clarity
General Permit Approach (pg. 12)	In addition, critical benefits to a general permit for municipal dischargers include an equitable roll out of nutrient controls in the region and a shared basis for working together to develop treatment solutions that may ultimately include a water quality trading framework.	This summary does not provide a definitive direction on Ecology's future strategy. Developing a water quality trading framework has been brought up by utilities during this permit development process with minimal perceived interest from Ecology or the other NGOs.	Provide clear direction
General Permit Approach (pg. 13)	Ecology has prioritized permit reissuance schedules in the Northwest and Southwest Regions working towards minimizing the current permit backlog.	Ecology's backlog of permit reissuances is significant. Ecology should make a clear and definitive commitment on reducing this backlog to ensure permit reissuances do not continue to be an issue moving forward. Also, Ecology should make a commitment on timeline for reissuance on future permits once the backlog has been reduced (e.g. permits will be renewed within six (6) months of their expiration, unless delays occur that are outside of their control).	Timely Permit Reissuance
Table 2. Proposed PSNGP Permittees (pg. 13)	Chambers Creek WWTP is not the correct facility name.	Many of the municipalities are identified by the organization (e.g. King County) and also by the WWTP facility (e.g. Brightwater WWTP). If Ecology is using a consistent approach, Chambers Creek would be identified as ' Pierce County Chambers Creek Regional WWTP. '	Consistent identification of facilities within PSNGP Permittee Table 2
Technology-Based Limitations (pg. 18)	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 difference 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.	If Ecology is not proposing TBELs as a provision of AKART, why are we assessing what it would take to obtain 3 mg/L as an annual average? Establishing WQBEL based on the bounding scenarios of the Salish Sea Model should be the basis for lower level regulation.	Reasonable Requirements/assessments

Draft Fact Sheet – Pierce County Sewer Division Comments
August 16, 2021

Fact Sheet Section	Current Language	Comments/Suggested Modification	Impacts and/or Results
Surface Water Quality Limits (pg. 19)	When surface water quality-based limits are more stringent or potentially more stringent than technology-based limitations, they must be used in a discharge permit.	With this statement, isn't the inverse argument also true? Why should TBEL limits be considered if surface water quality-based limits don't require treatment to these lower thresholds. This could be considered punishment for early adopters that were forward thinking by installing infrastructure to comply with future regulations.	Reasonable Requirements/assessments
Antidegradation (pg. 21)	Each time Ecology reissues the PSNGP, the agency will evaluate the effluent limits and permit conditions to determine if the revised permit should incorporate additional or more stringent requirements.	This statement provides flexibility to add additional permit conditions based on future needs. This provides additional support for removing the AKART assessment for obtaining a 3 mg/L annual average in this first permit cycle.	Reasonable Requirements/assessments
Numeric Criteria for the Protection of Human Health (pg. 22)	<p>Ecology has not established a critical condition for the Puget Sound region at this time. Longer residence times occur in Puget Sound during summer months when watershed inflows subside.</p> <p>Narrative limits will apply for the entire first permit cycle and the critical condition for the receiving water will be considered as part of the second permit iteration.</p> <p>The proposed permit does not authorize mixing zones specific to total inorganic nitrogen.</p>	These statements continue to support removing the AKART study for obtaining 3 mg/L on an annual average as it is not necessary and or obtainable. WQBEL should identify the need for additional assessments for each of the Puget Sound dischargers on a case by case basis.	Reasonable Requirements/assessments
Description of the Receiving Water (pg. 22)	It would be helpful to include the 303(d) listed portions of the Salish Sea or at the very least a hyperlink to that list here.	<p>It would be helpful to include the 303(d) listed portions of the Salish Sea or at the very least a hyperlink to that list here.</p> <p>Also, the 303(d) list does not reflect the impairment throughout the Puget Sound that would warrant the level of regulation/monitoring that is proposed within this draft PSNGP. For this reason, the AKART assessment should be put on hold until WQBELs can be established.</p>	<p>Clarify</p> <p>Reasonable Requirements/assessments</p>

**Draft Fact Sheet – Pierce County Sewer Division Comments
August 16, 2021**

Fact Sheet Section	Current Language	Comments/Suggested Modification	Impacts and/or Results
Marine Aquatic Life Uses and Corresponding DO Criteria (pg. 26)	The Salish Sea’s shallow bays and terminal inlets, like Budd Inlet in South Puget Sound, are the most sensitive to eutrophication due to diminished flushing rates when compared to other basins with higher rates of water exchange.	Why is LOTT exempt from conducting a Nutrient Reduction Evaluation (NRE) for obtaining an annual average of 3 mg/L if they are located at a terminal inlet with diminished flushing and are not anywhere close to obtaining 3 mg/L on an annual average. This requirement should be removed from the permit for this first PSNGP.	Reasonable Requirements/assessments

**Draft Fact Sheet – Pierce County Sewer Division Comments
August 16, 2021**

Fact Sheet Section	Current Language	Comments/Suggested Modification	Impacts and/or Results
<p>The Salish Sea Model (SSM) – (pg. 30)</p>	<p>The following key findings from the Bounding Scenarios report led Ecology to make this determination:</p> <ul style="list-style-type: none"> Consistent with the findings from Mohamedali, et.al (2011), WWTPs contribute a much larger proportion (92%) of the anthropogenic DIN loads to Washington waters of the Salish Sea during the low flow season. 	<p>This statement clearly identifies the need for seasonal considerations, but not annual average load regulations. Further discussions will need to occur once the bounding scenarios are available that identify the WQBEL for each permitted discharger.</p> <p><i>As stated by Ecology, “early results indicate greater need for water quality improvement from annual point source load reductions and also confirm the need for watershed reductions to attain standards.</i></p> <p><i>“Ecology plans to use the Year 2 optimization scenarios to evaluate targets for individual basin load reductions, watershed inflow load reductions and point source watershed allocations for different basins. These Year 2 scenarios will constitute the basin from which numerical WQBELs will be developed.”</i></p> <p><i>“Ecology establishes reasonable potential for a discharge or group of dischargers to violate surface water quality standards, the agency must implement water quality based effluent limit (WQBEL) for that pollutant.”</i></p> <p>These statements validate that it is too early to begin high level assessments until it can be confirmed they are needed.</p>	<p>Reasonable Requirements/assessments</p>

Draft Fact Sheet – Pierce County Sewer Division Comments
August 16, 2021

Fact Sheet Section	Current Language	Comments/Suggested Modification	Impacts and/or Results
Condition S3. Compliance with Standards (pg. 35)	The suite of BMPs that constitute narrative WQBELs are unique to this permit term. They require the permittee to document and assess the adaptive management procedures used to reduce nutrients in the effluent.	Utilizing narrative WQBELs is an interim nutrient reduction strategy and not a long-term solution. With this said, Ecology needs to be mindful of the implications involved in the anti-backsliding regulation and ensure this permit is a first step in a progressive regulatory framework and does not over regulate in the short-term while waiting for the Salish Sea Model bounding scenario results.	Reasonable Requirements/assessments
Anti-Backsliding (pg. 37)	NPDES permits may not be reissued or modified with less stringent limitations or conditions than those defined in a previous permit unless the changes comply with anti-backsliding requirements.	Ecology needs to be mindful of the implications involved in the anti-backsliding regulation and ensure this permit is a first step in a progressive regulatory framework and does not overregulate in the short-term while waiting for the Salish Sea Model bounding scenario results.	Reasonable Requirements/assessments
S1. Permit Coverage (pg. 38)	Categories for domestic WWTPs that must apply for coverage under the draft permit are identified using (D) and (S) for dominant and small TIN Loads in draft permit section...	The term 'dominant' is not appropriate for classifying larger WWTPs that discharge to the Puget Sound. By definition, the term dominant means most important, powerful, or influential and the opposite of dominant is not "small" but rather weak, characterless, deficient, deplorable. The term 'Largest Loaders' is used within the Fact Sheet and better reflects the situation. Pierce County would propose using 'Largest Loaders' (LL) for large dischargers and 'Smallest Loaders' (SL) for small quantity dischargers.	Perception
S1. Permit Coverage (pg. 39)	Fourth paragraph – there are words missing	"Ecology must limit coverage under the general permit"	Completes the sentence
S1. Permit Coverage (pg. 39)	Ecology plans to develop these additional watershed modeling tools during the first PSNGP five-year term.	Change ' plans ' to ' will ' Ecology will develop these additional watershed modeling tools during the first PSNGP five-year term.	Clarify intent

**Draft Fact Sheet – Pierce County Sewer Division Comments
August 16, 2021**

Fact Sheet Section	Current Language	Comments/Suggested Modification	Impacts and/or Results
S4. Requirements for WWTPs with Dominant TIN Loads (pg. 42)	Permittees may request an action level reassessment after completing one year of sampling. In order for Ecology to accept their request to reassess the action level, Permittees must show that the overall loading to the facility has not increased by providing an influent BOD5 load comparison.	This statement could lead to moratoriums as most systems are seeing some increase in loading. Recommend that Ecology changes this language to allow some flexibility by stating they will reassess action levels on a case by case basis.	Reasonable Requirements/assessments
S4. Draft Condition S4.C Nitrogen Optimization Plan (pg. 42)	For the largest loaders, submittal of the annual Nitrogen Optimization Plan (NOP) via the Annual Report Requirement constitutes a portion of the narrative WQBEL for this 5-year permit term as it represents an adaptively managed BMP.	Facilities that have been actively moving forward with seasonal nutrient reduction should get credit for their work over the past few years. If nutrients are being reduced below the action thresholds through a biological nutrient reduction process, some of these reporting criteria should be waived/reduced.	Reasonable Requirements/assessments
Page 42 S4.C	“To reduce nitrogen to the greatest extent possible during the permit term.”	How will the reporting requirements within this general permit actually make this happen? As long as treatment plants are implementing optimization strategies and staying below their action limit, they shouldn't have to focus on extensive justification documents.	Reasonable Requirements/assessments
S4. Draft Condition S4.C Nitrogen Optimization Plan (pg. 43)	In the Annual Report, Permittees must document optimization opportunities at their WWTP, implementation process, the success of the implementation strategy compared to expected performance, any necessary refinements to improve performance, and the application of adaptive management.	Nutrient reduction is one part of wastewater treatment. Once the system is operational and performing as intended, the changes will not be drastic. Year after year the plan will stay the same with minor alterations. Updating this strategy on an annual basis is not necessary and causes an administrative burden.	Reasonable Requirements/assessments
S4. Draft Condition S4.C Nitrogen Optimization Plan (pg. 43)	Permittees must begin to identify optimization strategies starting upon the effective date of the PSNGP, following receipt of the coverage letter from Ecology with implementation occurring as soon as possible during permit year 1.	ASAP is not a clear and definite time frame to which you can hold permittees accountable. A concrete date by which each facility must begin implementing its first optimization strategy provides accountability.	Clear, direct, provides accountability

**Draft Fact Sheet – Pierce County Sewer Division Comments
August 16, 2021**

Fact Sheet Section	Current Language	Comments/Suggested Modification	Impacts and/or Results
Draft Condition S4.C.1 Treatment Process Performance Assessment (pg. 45-46)	Permittees must conduct a process evaluation to establish current treatment performance and the existing TIN removal rates. This process evaluation may be conducted through process modeling or an equivalent analysis.	The Chambers Creek Regional WWTP has conducted four seasonal nutrient reduction pilots. Requiring Pierce County to perform this analysis would not benefit our performance at all as we have been actively testing the various control strategies. Ecology should give credit for proactive efforts and remove this requirement for WWTP that have been proactively performing seasonal nutrient reduction pilots.	Reasonable Requirements, while incentivizing early adoption
Draft Condition S4.C.1 Treatment Process Performance Assessment (pg. 45)	Determine the three most viable optimization strategies capable of achieving the goal	What if there are not three viable options?	Clarify
Draft Condition S4.C.1 Treatment Process Performance Assessment (pg. 46)	Permittee must develop an anticipated performance metric.	All plants use a performance metric to measure their overall success for each parameter. Some of these requirements should not be included in the permit as they are more the means and methods of process control strategies. Ecology should focus more on the final performance of the facility and less on the nuances of process control for one specific parameter.	Reasonable Requirements/assessments
Draft Condition S4.C.1 Treatment Process Performance Assessment (pg. 46)	Permittees must also document how they implemented the preferred optimization strategy including costs, the time required for full implementation, the start date of the preferred strategy, unanticipated challenges, and impacts to the overall treatment performance as a result of any process changes.	This requirement should not be included in the permit as they are more the means and methods of process control strategies. Ecology should focus more on the final performance of the facility and less on the nuances of process control for one specific parameter. This requirement will add significant administrative burden on the facility and ultimately this has no positive influence on plant performance. Requirements like this will strain limited resources and divert the effort from actual performance to another administrative exercise.	Reasonable Requirements, while incentivizing early adoption

**Draft Fact Sheet – Pierce County Sewer Division Comments
August 16, 2021**

Fact Sheet Section	Current Language	Comments/Suggested Modification	Impacts and/or Results
Draft Condition S4.C.1 Treatment Process Performance Assessment (pg. 46)	Ecology intends for the implemented optimization strategies to help each Permittee stay below their facility specific action level. This prevents additional nitrogen loading into Puget Sound during the period while Ecology completes modeling necessary to determine numeric WQBELs.	The requirements within this permit demonstrate the lack of trust within this process. Many of the requirement seem to need continuous justification through extensive reporting. Requiring this level of documentation would not be useful to plant operations as things change daily.	Reasonable Requirements/assessments
Draft Condition S4.C.2 Optimization Implementation (pg. 46)	Permittees must maintain a prioritized list of optimization strategies at all times and update that list as part of the Annual Report requirement.	Is there a specific place that this list should be kept? Does Ecology keep it? On PARIS?	Clarity, accountability
Draft Condition S4.C.2 Optimization Implementation (pg. 46)	Adaptive management is required if the Permittee stayed below the action level but did not meet the performance metric.	Need a definition of Adaptive Management.	Clarity, accountability
Draft Condition S4.D. Action Level Exceedance Corrective Actions (pg. 47)	Strategies considered for reducing loading must include increasing production volumes of reclaimed water (if applicable to the facility), implementing side stream treatment for portions of return flow from solids treatment, ...	Ecology should be recognizing facilities that have proactively implemented nutrient reduction measures by reducing the reporting requirements within this permit. Pierce County implemented side stream treatment in 2017 and have ran four consecutive seasonal nutrient reduction pilots since 2018 - present. None of this forward thinking or initiative is reflected in these permit requirements. Ecology should reduce the reporting requirements for facilities that are well into this process.	Reasonable Requirements/assessments
Draft Condition S4.D. Action Level Exceedance Corrective Actions (pg. 48)	An update to the WWTP's Operations and Maintenance manual must be provided to Ecology no later than 30 days after implementation so that facility records are kept current.	This should continue to be an annual update requirement. The plant process is highly integrated and making one-off changes will lead to inaccuracies within the plant O&M documentation. Many of the plant O&Ms are now electronic and organizations have put processes in place with multiple levels of review to ensure they continue to be accurate. This process can take multiple months to allow adequate time for review/comment. This is an unrealistic requirement.	Reasonable Requirements/assessments

**Draft Fact Sheet – Pierce County Sewer Division Comments
August 16, 2021**

Fact Sheet Section	Current Language	Comments/Suggested Modification	Impacts and/or Results
Draft Condition S4.D. Action Level Exceedance Corrective Actions (pg. 47-48)	“Permittees must also develop a program to reduce influent TIN loads.” “Permittees must also begin to identify different approaches for reducing TIN from new dense residential development and commercial buildings.”	This requirement should be removed as this is a very broad and long-term exercise. Accomplishing this task will require state and federal changes to building code, zoning regulations, as well as industry and development standards and as such is probably better suited to a state agency as opposed to individual sewer providers.	Reasonable Requirements/assessments
Draft Condition S4.E. Nutrient Reduction Evaluation (pg. 48)	LOTT does not need to complete the NRE requirement described in Condition S4.E. This treatment plant already has an effluent limit below 3 mg/L TIN in their individual NPDES permit for TIN during the critical season of April through October.	Why is LOTT excluded and not other facilities with nutrient reduction capabilities/infrastructure? This NRE includes a requirement to assess reaching 3 mg/L on both a seasonal and annual average. LOTT is not obtaining this goal as they reduce their TIN only during the summer months. Budd Inlet’s water quality is of high concern, so why would other facilities need to go through this effort if it is not necessary in an area with significant water quality impairment.	Reasonable Requirements/assessments
Draft Condition S4.E. Nutrient Reduction Evaluation (pg. 49)	Ecology expects final numeric effluent limits for domestic WWTPs in the region to be a mix of technology and water quality-based limits.	How will this statement be factored into the bounding scenarios? Will Ecology select the regulatory framework for a facility on a case-by-case? How do facilities anticipate if they will fall under TBELS or QBELS? Will this be based on the modeling results and Ecology will use the more stringent of the two?	Clarify Statement
Draft Condition S4.E. Nutrient Reduction Evaluation (pg. 50)	In addition to making an AKART determination, which will represent a technology-based approach for controlling nitrogen, the NRE must evaluate treatment alternatives for meeting the lower limit of technology for nitrogen removal both year-round and seasonally.	Requiring plants to assess treatment strategies for reducing annual average TIN to concentrations of 3 mg/L is unreasonable. WQBEL should be the driver for assessing advanced treatment capabilities for each system. Requiring this type of an assessment at this point is unreasonable and will result in stranded time and money.	Reasonable Requirements/assessments

**Draft Fact Sheet – Pierce County Sewer Division Comments
August 16, 2021**

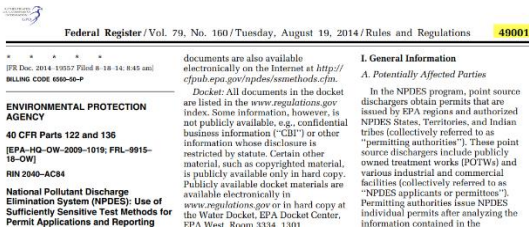
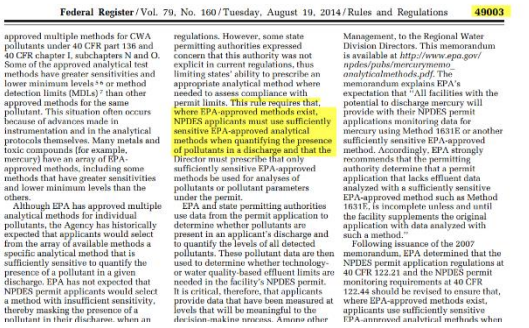
Fact Sheet Section	Current Language	Comments/Suggested Modification	Impacts and/or Results
Economic Evaluation (pg. 50)	<p>As with AKART determination, this treatment assessment must include an economic evaluation.</p> <p>Permittees need to indicate how allocations of direct costs for operation and capital expenditures are recovered from payment of utility fees, how often the rate structure is reviewed to ensure financial solvency, and the last time wastewater rates were either increased or decreased and the impetus for that change.</p>	<p>WQBELs should drive the regulatory limits that will be establish on future reissuances of the PSNGP, not TBELs based on economic availability of funds based on rate structure. Blending these strategies will be problematic and could lead to inconsistencies in regulatory approach for each utility.</p>	<p>Reasonable Requirements/assessments</p>

Draft Fact Sheet – Pierce County Sewer Division Comments August 16, 2021

Fact Sheet Section	Current Language	Comments/Suggested Modification	Impacts and/or Results																																				
	<p>The table below should list all of the required reports/report components that the permittee is expected to submit and the due dates for each</p> <p>SUMMARY OF PERMIT REPORT SUBMITTALS</p> <p>Refer to the Special and General Conditions within this permit for additional submittal requirements. Appendix A provides a list of definitions. Appendix B provides a list of acronyms.</p> <p>Table 1. Summary of Permit Report Submittals</p> <table border="1"> <thead> <tr> <th>Permit Section</th> <th>Submittal</th> <th>Frequency</th> <th>First Submittal Date</th> </tr> </thead> <tbody> <tr> <td>S2.A.1</td> <td>Permit Application (Notice of Intent)</td> <td>Once</td> <td>For new Permittees: No later than 90 days following permit issuance</td> </tr> <tr> <td>G9</td> <td>Transfer of Coverage</td> <td>As necessary</td> <td>As necessary</td> </tr> <tr> <td>S9.A</td> <td>Discharge Monitoring Reports (DMRs)</td> <td>Monthly</td> <td>Within 28 days of applicable monitoring period</td> </tr> <tr> <td>G2</td> <td>Notice of Change in Authorization</td> <td>As necessary</td> <td>As necessary</td> </tr> <tr> <td>G6</td> <td>Permit Application for Substantive Changes to the Discharge</td> <td>As necessary</td> <td>As necessary</td> </tr> <tr> <td>G8</td> <td>Application for Permit Renewal</td> <td>1/permit cycle</td> <td>No later than 180 days before expiration</td> </tr> <tr> <td>G20</td> <td>Notice of Planned Changes</td> <td>As necessary</td> <td>As necessary</td> </tr> <tr> <td>G22</td> <td>Reporting Anticipated Non-Compliance</td> <td>As necessary</td> <td>As necessary</td> </tr> </tbody> </table>	Permit Section	Submittal	Frequency	First Submittal Date	S2.A.1	Permit Application (Notice of Intent)	Once	For new Permittees: No later than 90 days following permit issuance	G9	Transfer of Coverage	As necessary	As necessary	S9.A	Discharge Monitoring Reports (DMRs)	Monthly	Within 28 days of applicable monitoring period	G2	Notice of Change in Authorization	As necessary	As necessary	G6	Permit Application for Substantive Changes to the Discharge	As necessary	As necessary	G8	Application for Permit Renewal	1/permit cycle	No later than 180 days before expiration	G20	Notice of Planned Changes	As necessary	As necessary	G22	Reporting Anticipated Non-Compliance	As necessary	As necessary	<p>Include report submittals and due dates in table 1</p> <p>Optimization Selection – Due May 1, 2022</p> <p>Nutrient Optimization Plan – Due March 31, 2023</p> <p>Annual Report – Due March 31, 2023</p> <p>Load Evaluation</p> <p>Strategy Assessment</p> <p>Influent Nitrogen Reduction</p> <p>Measures/Source Control</p> <p>Nutrient Reduction Evaluation – Due December 31, 2025</p> <p>AKART Analysis</p> <p>Engineering Report Identifying Treatment Plant Upgrades to meet 3 mg/L TIN</p> <p>Annually and Seasonally?</p> <p>Wastewater Characterization</p> <p>Technology Analysis</p> <p>Economic Evaluation</p> <p>Environmental Justice Review</p> <p>Technology Selection (to meet 3 mg/L TIN)</p> <p>Viable Implementation Timelines</p>	<p>The requirement to meet a TIN of 3 mg/L annually is virtually impossible. The biological process is highly dependent on temperature.</p>
Permit Section	Submittal	Frequency	First Submittal Date																																				
S2.A.1	Permit Application (Notice of Intent)	Once	For new Permittees: No later than 90 days following permit issuance																																				
G9	Transfer of Coverage	As necessary	As necessary																																				
S9.A	Discharge Monitoring Reports (DMRs)	Monthly	Within 28 days of applicable monitoring period																																				
G2	Notice of Change in Authorization	As necessary	As necessary																																				
G6	Permit Application for Substantive Changes to the Discharge	As necessary	As necessary																																				
G8	Application for Permit Renewal	1/permit cycle	No later than 180 days before expiration																																				
G20	Notice of Planned Changes	As necessary	As necessary																																				
G22	Reporting Anticipated Non-Compliance	As necessary	As necessary																																				

Draft Fact Sheet – Pierce County Sewer Division Comments

August 16, 2021

Fact Sheet Section	Current Language	Comments/Suggested Modification	Impacts and/or Results
Page 55	<p>ANALYTICAL METHODS AND QUANTITATION LEVELS</p> <p>Federal Register 49001 “Use of Sufficiently Sensitive Test methods for Permit application and Reporting Rule” is cited to be the justification for mandating “... that when an EPA-approved method exists, the most sensitive method must be used when quantifying the pollutant in a discharge...”</p>	<p>1. This mandate doesn't exist in Federal Register 49001</p>  <p>2. The original language is in Federal Register 49003 with regard to analytical methods, “This rule requires that, where EPA-approved methods exist, NPDES applicants must use sufficiently sensitive EPA-approved analytical methods when quantifying the presence of pollutants in a discharge”</p>  <p>Suggested Modification: Adopt “...sufficiently sensitive EPA-approved analytical methods...” as the rule intended, not mandating “...the most sensitive method..’</p>	Interpret and apply federal rules correctly

