Appendix F – Responses to Comments

Introduction

Ecology placed a legal notice in the Everett Herald on October 17, 2023, to inform the public that a draft permit and fact sheet for the City of Everett Water Pollution Control Facility were available for review and comment. The comment period ran from October 17, 2023, through January 31, 2024. Ecology held a virtual public hearing on January 11, 2024, at 2:00 p.m., during which the public was given the opportunity to submit oral testimony.

Ecology received oral testimony during the January 11, 2024, hearing from Patty Goldman with Earth Justice, Don Miller with Snohomish County Indivisible, and Lucas Hall, Director of Projects at Long Live the Kings. During the public comment period Ecology received 1,477 comments from Earthjustice-affiliated individuals in addition to Patty Goldman's testimony at the hearing. Cosignatories on the Earthjustice letter included Puget Soundkeeper Alliance (Emily Gonzalez), Toxic-Free Future (Laurie Valeriano), RE Sources (Eleanor Hines), and Waste Action Project (Greg Wingard). During this time Ecology also received comments from the Orca Network (Cindy Hansen, Susan Berta, and Howard Garrett), Long Live the Kings (Jacques White), the Snohomish Basin Salmon Recovery Technical Committee (Stuart Baker, Norah Kates, and Matthew Pouley), the City of Everett (Derek Kerlee), and further comment from Snohomish County Indivisible (Don Miller). Comments were also received during the comment period from the Tulalip Tribes (Jason Gobin), the Washington State Department of Health (Merita Trohimovich), and from thirteen unaffiliated individuals.

Ecology thanks all commenters for their contributions to this process. In this document Ecology has assembled summaries and excerpts from the public comments, organized by commentor and topic or permit condition. Ecology has also provided a written response to comments on proposed permit conditions and has indicated where revisions were made. The record of each comment letter received by Ecology during the public comment period is available at https://apps.ecology.wa.gov/paris/DownloadDocument.aspx?id=513056

Summary of changes in the final permit

Condition S1.A – Added flow management condition for Outfall 015 which will be effective during juvenile Chinook outmigration season.

Condition S1.A – Revised the pH limits for Outfall 015.

Condition S1, (previously Table 7, footnote 9) – Removed footnote for effluent monitoring to clarify reporting requirements.

Condition S2.A (previously Table 11, now Table 13) – Quarterly PFAS and PBDE monitoring of WPCF **influent** will be required to help evaluate the effectiveness of the pretreatment program in reducing these contaminants from industrial sources. This monitoring is an increase from the original draft permit which contained a proposal for twice-per-year PBDE influent monitoring for two years and did not specify influent monitoring for PFAS. In addition, new semiannual PBDE monitoring of WPCF **effluent** will be required in 2025 and in 2029 to compare with influent data and to provide historical information in support of future PBDE-related studies. This effluent PBDE monitoring is an increase from the draft permit which did not include PBDE monitoring of WPCF effluent. In addition, new semiannual PFAS monitoring of WPCF effluent will be required in 2026 and in 2028, an increase from the draft permit which did not include PFAS monitoring of WPCF effluent.

Condition S3.F.2 – Updated noncompliance notification language in Condition S3.F to reflect new standard language which removes redundant text, requires immediate reporting of upsets, and adds new definitions to the glossary clarifying requirements in S3.F (see Fact Sheet Appendix C changes identified below). Also included a revision proposed by the Department of Health.

Condition S6 – Revised Condition S6 to reflect new standard pretreatment language. In 2024, Ecology updated the pretreatment permit conditions for delegated wastewater treatment plants. The following changes were incorporated into the final permit:

- Separating into subconditions the standard implementation activities (S6.A), slug discharges evaluations of industrial users (S6.B), modification of pretreatment program (S6.C), annual pretreatment reports (S6.D), and local limits evaluation (S6.H). This reorganization into subconditions is intended to improve clarity for the Permittee and the public regarding pretreatment requirements and expectations for submittals.
- Specific changes to S6.A include reducing redundant language and fixing grammatical issues.
- Specific changes to S6.B include conforming with federal requirements in 40 CFR 403.8(f)(2)(vi).
- Specific changes to S6.D include reducing redundant language. Additionally, Ecology is working towards compliance with the eReporting rule (40 CFR 127) which will affect the method in which annual reports have historically been collected. Therefore, language was added requiring use of an electronic format for annual reports when notified by

Ecology to use such new forms. Ecology does not anticipate the annual report format to change until January 1, 2026, and Ecology will provide advanced notice and training for the transition.

- Pretreatment monitoring requirements outlined in S2 and S6.E were modified to remove redundancy between the two conditions and to specify the minimum pretreatment-related monitoring at the WPCF for ongoing local limits evaluation and identification of pollutants of concern.
- Requirements surrounding local limits evaluation (S6.H), specifically timelines for when to conduct the evaluation and expected evaluation criteria, were included.

Condition S6.D – Revised Condition S6.D to require that the PBDE Reduction Program information in annual pretreatment reports be posted on the City of Everett Industrial Pretreatment Program website to help facilitate public access to it.

Condition S6.F (S6.E in draft permit) – Ecology made multiple changes to the requirements for a PBDE Reduction Program (previously titled “Pretreatment Identification and Control of PBDEs). These requirements were renumbered in Special Condition S6.F. Changes include:

- Requiring an evaluation and revision of legal authority to implement and enforce a PBDE Reduction Program.
- Development and use of a quality assurance project plan (QAPP) for PBDE monitoring.
- Requiring notice within 6 months of the permit effective date to certain industrial users regarding a new PBDE Characterization Study and the benefits of beginning BMP evaluations early in anticipation of the need to begin implementing BMPs by the end of 2026.
- Inclusion of a new Industrial User PBDE Characterization Study that specifies monitoring at certain industrial facilities semiannually in 2025 to identify PBDE Reduction Program participants.
- Requiring certain industrial users to implement BMPs to reduce PBDEs in 2026.
- Requiring industrial user BMP effectiveness monitoring quarterly starting in 2027 and recurring in odd years. Requiring WPCF quarterly influent effectiveness monitoring to assess overall PBDE Reduction Program performance. Requiring the use of adaptive management to modify BMPs based on monitoring results.
- Requiring semiannual monitoring of WPCF effluent (for two years) to compare with influent values, and in support of future receiving water studies.
- Requiring flow management to restrict discharges to the Snohomish River during peak juvenile Chinook outmigration.

Condition S6.G.1 –Revised to include aerospace and aircraft modification, industrial laundries, industrial gas manufacturing, and inorganic chemical manufacturing in the list of industries considered to be a known or suspected source of PFAS.

Condition S7.B – Added an optional dynamic model deliverable to reevaluate pH limits for Outfall 015.

Condition S7.C – Added a technical memorandum deliverable requiring an evaluation of the lagoon treatment process, including maintenance practices, that focuses on assessing strategies for reducing PBDEs in discharges from Outfall 015.

Condition S9.C.3 – Corrected permit language so that a reference to fact sheet section “IV.F” now refers to section “V.F”.

Condition S9.C.3.b –Updated to clarify the requirements for establishing eligibility for a mixing zone allowed by WAC 173-201A-400(11).

Miscellaneous Permit Conditions – Updated due dates throughout the permit to reflect new permit effective date.

Fact Sheet Appendix B – The appeals language was updated to reflect new standard language.

Fact Sheet Appendix C – Washington’s definition of PFAS in RCW 70A.350.010 has been added to the fact sheet glossary. Other edits to the glossary include the addition of a definition for “immediate reporting” and for “days (compliance period interval)”.

1. Comments from Earthjustice

Comment #1.1 – Comments regarding setting PBDE limits to protect salmon rearing and migration in the lower Snohomish River.

Summary of Comments:

- Multiple studies have evaluated the distribution of PBDEs in various media in the Snohomish River system. Everett's discharge is impairing the lower Snohomish River's ability to support salmon rearing and migration – a designated use for the waterbody.
- Permits must meet narrative water quality standards which require that discharges of toxics be below… levels that individually or cumulatively cause acute or chronic toxicity to fish. PBDE discharges from the Everett WPCF violate these standards.
- The permit must mandate requirements that will reduce PBDE discharges to levels that will not lead to concentrations in juvenile Chinook salmon that exceed adverse effect levels.
- Everett PBDE discharges have the potential to cause or contribute to water quality violations, but the draft permit does not include effluent limits for PBDEs. In establishing effluent limits, Ecology typically conducts an AKART analysis to establish TBELs. Only when a more protective standard is needed does Ecology establish WQBELs. Ecology is legally required to conduct an AKART analysis and develop limits to enforce narrative water quality standards and stop PBDE discharges that will cause or contribute to harmful PBDE concentrations in fish tissues. The effluent limit should be zero or non-detect, unless Ecology can establish a different limit that will meet its obligations. The permit can contain a compliance schedule with interim limits.

Ecology Response: We currently consider PBDEs to be pollutants for which establishing numeric effluent limits are infeasible. Numeric limits depend in part on approved analytical methods for a determination of compliance, however the current list of validated methods in 40 CFR Part 136 does not include a method for PBDEs. Numeric water quality criteria are also used to develop numeric effluent limits, but there are no approved numeric water quality criteria for PBDEs for aquatic life or human health. As discussed in the response to Comment #1.3 below, Ecology confirmed in 2021 that industrial facilities discharging to the Everett WPCF are contributors of PBDEs, underscoring the value of source control as the primary strategy for managing these contaminants.

This permit includes non-numeric "narrative limits" to control PBDEs. In accordance with 40 CFR 122.44(k), Ecology may establish non-numeric limits when it is not feasible to develop numeric effluent limits. These limits do not generally require meeting a specific numeric concentration or load but can still require the use of a measurable indicator or trend to demonstrate progress toward meeting desired water quality outcomes. The non-numeric effluent limits for PBDEs in this permit include conditions related to Everett's regulation of

industrial dischargers to the WPCF, specified monitoring, and an assessment of the Everett lagoon treatment system. Ecology expects the City of Everett to identify and require industrial users that discharge wastewater to the WPCF to implement best management practices (BMPs) for reducing the discharge of PBDEs as part of the PBDE Reduction Program required under permit Condition S6.F. Everett must evaluate the effectiveness of BMPs through periodic monitoring of industrial users employing these practices. Everett must evaluate the effectiveness of the PBDE Reduction Program overall through periodic monitoring of WPCF influent. The permit also uses adaptive management practices to adjust the BMPs as needed based on observed outcomes and changing conditions. Everett must demonstrate a declining trend in pollutant loads and/or concentrations over time as part of the confirmation of successful BMP implementation. To further address discharges to the Snohomish River, Ecology included permit language requiring seasonal preferential discharging to deepwater Outfall 100 during Chinook salmon outmigration (see revisions to Conditions S1.A and Condition S6.F). Ecology also added permit Condition S7.C which requires Everett to evaluate the lagoon treatment process, including maintenance practices, to identify strategies to reduce PBDEs being discharged to the Snohomish River. See Ecology's response to Comment #4.3 for more information.

Please see Ecology's website[1] for further information about additional ongoing initiatives to address the following priority toxic chemicals: flame retardants (primarily PBDEs), PFAS, PCBs, phthalates, 6PPD, lead, mercury, and PAHs.

Comment #1.2 – Comments relating to the applicability of other permits with PBDE conditions:

Summary of Comments:

- The Endangered Species Act concept of "take" is relevant for Everett. Ecology should draw from the Solo Point biological opinion which was prepared in response to the issuance by EPA of an NPDES permit for the treatment plant at Joint Base Lewis McChord. To minimize the take of Puget Sound Chinook and harm to orcas, Ecology should mandate monitoring of PBDEs in WPCF influent and effluent as well as at IUs and require that PBDE concentrations in fish tissues not exceed adverse biological effect levels. It should also direct Everett to consider treatment technologies for PBDEs and require rerouting discharges to deeper waters.
- Ecology should require that Everett reroute discharges during salmon outmigration and test for PBDEs in sediments, invertebrates, and salmon in Port Gardner to assess impacts of preferential discharging to Port Gardner.

[1] https://ecology.wa.gov/waste-toxics/reducing-toxic-chemicals/addressing-priority-toxic-chemicals

- Everett should be required to implement a PBDE toxics reduction plan like that required in the permit for Spokane's Riverside Park Water Reclamation Facility... The plan and updates to the plan must be public and approved by Ecology.

Ecology Response: Commenters propose adopting the terms of the permit for Spokane's Riverside Park facility, yet there are notable differences between the Spokane situation and Everett's. For example, the Washington State Department of Health has issued a fish consumption advisory for the Spokane River due to PBDEs in local fish tissue, but it has not done so for the Snohomish River.[2]

Commenters also drew parallels to another NPDES permit issued in Washington State, namely the permit issued to the treatment plant at Joint Base Lewis McChord (JBLM). This permit was issued by EPA. Ecology reviewed the PBDE language included in the JBLM permit, noting the treatment plant influent and effluent monitoring requirements for PBDEs. Given the lack of data for the JBLM treatment plant at the time, that permit mandated the collection of 8 influent and 8 effluent samples. These were to be collected over the course of one permit cycle. By comparison, four representative sampling events have already occurred at the Everett WPCF in recent years and ongoing monitoring is scheduled per the updated Everett permit. PBDEs that are discharged to the Everett system will be quantified at the WPCF influent sampler. This sampling location is where measurable reductions in PBDEs will be assessed for the PBDE Reduction Program overall. Unlike the JBLM permit, WPCF monitoring requirements in the Everett permit focus primarily on influent, reflecting the pretreatment program as the means of addressing PBDEs for this permittee. The JBLM permit does not utilize source control to any comparable extent, and it does not require ongoing effectiveness monitoring as does the updated Everett permit. In addition to influent monitoring of PBDEs, the final Everett permit requires semiannual effluent monitoring in 2025 and 2029.

The special permit condition for pretreatment at JBLM does not require PBDE source control monitoring. However, Ecology agrees that monitoring significant industrial users (SIUs) for PBDEs is essential for source tracing and assessing BMP effectiveness. Accordingly, Ecology added language to the Everett permit in Condition S6.F. The new language requires a source tracing study called the PBDE Characterization Study to canvas SIUs for the presence of PBDEs using EPA Method 1614.

Industrial Users identified as significant dischargers of PBDEs meet the criteria for inclusion in a PBDE Reduction Program and will be required to implement Best Management Practices (BMPs) within the permit cycle. The objective of BMP implementation will be to achieve a sustained, measurable decrease in PBDE loads and/or concentrations being discharged to the WPCF. New effectiveness monitoring requirements will provide confirmation that the BMPs are working or will indicate that new or additional BMPs are needed.

[2] https://doh.wa.gov/data-and-statistical-reports/washington-tracking-network-wtn/fish-advisories/fish-consumption-advisories-washington-state

Ecology maintains that implementing source control measures at Everett is the correct approach. Refer to the response to Comment #1.1. Meanwhile, by the end of 2025, Everett must begin evaluating treatment improvements at the WPCF that will reduce effluent inorganic nitrogen. Before the WPCF is upgraded to improve nutrient removal, Ecology expects the final engineering report will consider all parameters of concern at the facility. An examination of potential co-benefits to reducing other pollutants beyond nutrients known to be present in the facility's discharge will be expected as part of a wholistic assessment of needed facility capabilities. An in-depth study specific to PBDEs at the present time would needlessly duplicate efforts. That said, the final permit contains Condition S7.C which requires the submittal of a technical memorandum that must contain a preliminary evaluation of the lagoon treatment process in light of the need to reduce PBDEs in discharges from Outfall 015.

Regarding mandating seasonal preferential discharging to Outfall 100, Ecology has added language to the permit directing Everett to restrict discharges to Outfall 015 during the salmon outmigration season whenever feasible. Operational decisions regarding the management of effluent flows during the months of March-June depend in part on flow and rainfall levels and must rely on the expertise of Everett WPCF staff to be implemented safely.

Regarding ambient studies, the Washington Department of Fish and Wildlife conducted studies on PBDEs in salmon and Ecology's Environmental Assessment Program collected PBDE data throughout the watershed (the latter has not yet been published). The Everett WPCF is not the sole contributor of PBDEs to the environment. While broader ambient studies fall outside the scope of this NPDES permit, the permit does contain conditions addressing Everett's PBDE contributions to receiving waters. These conditions include a narrative effluent limit for PBDEs and effectiveness monitoring. The new special conditions will benefit both Port Gardner and the Snohomish River.

Comment #1.3 – Comments about pretreatment monitoring and controls to reduce PBDEs:

Summary of Comments:

- The permit should mandate the modification of pretreatment permits to require ongoing PBDE monitoring at each IU, including at Boeing facilities, using the most sensitive test method for total and individual PBDE congeners. IU-specific monitoring should coincide with PBDE monitoring at the WPCF.
- EPA recommends quarterly IU-specific monitoring for PFAS. IUs should conduct quarterly PBDE sampling of pretreated wastewater in the first year and odd-numbered years thereafter (for baseline and effectiveness monitoring respectively). The permit must require all results to be submitted by IUs to Everett and from Everett to Ecology within three months, including all lab sheets, raw data, and analyses.

- The draft permit requires Everett to evaluate BMPs and pollution prevention strategies it can include in pretreatment permits, but these do not read as compulsory pollution reduction actions.
- The permit fails to require that Everett seek immediate toxic reductions from sources that are "known or suspected sources of PBDEs." Ecology has sufficient data to begin immediate pollution reduction measures at certain industrial users in the Everett system.
- The draft permit requirement to "assess whether the facility uses or has historically used any products containing PBDEs, whether use of those products or legacy contamination reasonably can be reduced or eliminated and include a plan to take action on those findings" is vague and would not capture sources like industrial laundries and landfills whose PBDE discharges are not associated with the use of products containing those chemicals.
- The permit should require that Everett reevaluate its local limits, within one year, in consultation with Ecology, to determine whether local limits need to be strengthened to reduce PBDEs and prevent pass through PDBE pollution.
- The following timeline is proposed for the introduction of new pretreatment conditions:
    - Year 1: Everett must impose pretreatment requirements on industrial laundries and landfills and the Boeing facility. The permit should direct Everett to modify pretreatment permits for aircraft industries to have effluent limits based, at a minimum, on AKART with compliance deadlines calling for measurable reductions annually and meeting limits by the end of the permit cycle.
    - Year 2: Everett must impose such pretreatment requirements on other IUs shown through monitoring to discharge PBDEs to the WPCF. IUs should be required to identify the product substitution, AKART, and pollution reduction measures that would eliminate or substantially reduce their PBDE discharges. Everett must modify pretreatment permits to incorporate effluent limits based on AKART, and other pollution reduction measures to reduce the PBDE discharges below levels that harm juvenile Chinook salmon.
    - Year 3+: A substantial % reduction in PBDE discharges must be required by this point (recommend 50%) and additional reductions annually each subsequent year (recommend an additional 10% reduction each year).

Ecology Response: In 2021, Ecology published a report called Chemicals of Emerging Concern in Pretreated Industrial Wastewater in Northwestern Washington State Screening Study Results. The report identified PBDE concentrations and estimated loads from nine sampled industrial facilities as shown in the table below.

Facility Site ID	Total PBDE Concentration (pg/L)	Total PBDE Instantaneous Load (lbs/day)
H-Industrial Laundry	3,490,000	0.00172
D-Aerospace/Aircraft Modification	167,000	0.00000278
G-Landfill	104,000	0.000124
I-Ship Building and Repair	13,400	0.0000457
E-Metal Finishing	9,200	0.000000115
B-Metal Finishing	4,110	0.0000000514
F-Aerospace/Aircraft Modification	471	0.0000000507
C-Steel Foundry	52	0.000000000122
A-Food Processing	29	0.00000000767

When comparing samples across different industries, the industrial laundry sector showed some of the highest concentrations of PBDEs. Aerospace and landfill categories also showed relatively high PBDE concentrations. These industrial types are included in special condition S6.F of the permit which requires the City of Everett to complete a PBDE characterization study in 2025. This condition requires the use of EPA Method 1614 to quantify total and individual PBDE congeners in industrial user discharges. As the delegated pretreatment authority, Everett must use results of the characterization study to develop and implement pretreatment controls requiring certain facilities from the study to implement BMPs. Everett must provide the basis for their selection of facilities from the characterization study for participation in the PBDE Reduction Program. The criteria they establish must include at minimum the PBDE concentrations but may also include consideration of PBDE loads if there exists a reasonable means of establishing a representative flow from the industrial dischargers for each effectiveness monitoring period. The permit requires quarterly effectiveness monitoring at participating facilities beginning in 2027 and repeating in subsequent odd years. Everett must assess whether the facilities are effectively achieving PBDE reductions because of BMP implementation. A BMP would be considered effective if it results in a sustained measurable decrease in PBDEs that an industrial user discharges to the WPCF over the course of the permit cycle. In addition, Everett must assess overall program effectiveness by conducting quarterly monitoring WPCF influent to look for sustained measurable decreases in PBDEs discharged to the WPCF overall over the course of the permit cycle. Everett must submit annual pretreatment reports to Ecology, including assessments of PBDE monitoring results and all data reports obtained under the PBDE Reduction Program. Ecology will review and evaluate these annual reports.

Ecology also revised the language in the permit to ensure facilities like laundries and landfills, which did not use PBDEs themselves, are not inadvertently exempted from pretreatment requirements aimed at PBDE control. Ecology acknowledges that laundries in residences are also an important source of PBDEs from residential areas since this pollutant can leach from household products, adhering to dust and clothing, and then transfer into the laundry which drains ultimately to the WPCF. This permit does not regulate this potential source of PBDEs,

instead relying on product bans to change residential wastewater characteristics over time. Ecology supports the City of Everett developing voluntary outreach efforts aimed at educating the public about PBDEs at home.

In summary, PBDE monitoring requirements in the final permit have been specified to include monitoring that is part of a new industrial source control PBDE Characterization Study. The study requires industrial users in the following categories to be sampled twice in 2025 for PBDEs: Industrial Laundries, Waste Management/Landfills/Incineration/Recycling Facilities, Aerospace Industry, Electronics Manufacturing, Textile and Upholstery Manufacturing, Automotive Industry, Plastics and Polymers Production, Construction Materials Manufacturing, Furniture Manufacturing, and Fire Safety Equipment Manufacturing. Under Everett's pretreatment program, those industrial users confirmed during the Characterization Study to be significant contributors of PBDEs will be required to identify and implement source control BMPs to reduce the amount of PBDEs being discharged into the Everett system. Industrial user BMP implementation will begin in 2026 and quarterly effectiveness monitoring will begin in 2027, timed to coincide with quarterly PBDE monitoring of WPCF influent.

Everett will provide all PBDE data collected from industrial users and from the WPCF, as well as status updates about source control BMP implementation, effectiveness monitoring results and analysis in their annual pretreatment reports. These annual reports will be available to the public online via the Permitting and Reporting Information System (PARIS) permitting database[3] when they are submitted to Ecology. The permit also contains a new condition S6.D.5 which requires the PBDE and PFAS portions of annual pretreatment reports to be posted to the City of Everett Industrial Pretreatment Program website to help facilitate public access to the information. WPCF PBDE monitoring data will also be available to the public online via the PARIS database as part of quarterly electronic discharge monitoring report (DMR) submittals.

Comment #1.4 – Miscellaneous comments related to PBDEs:

Summary of Comments:

- The permit must require quarterly influent and effluent monitoring from both Outfalls 100 and 015 (24-hour composite samples, EPA Method 1614 in pg/L, total and individual congeners). The permit must require ongoing semi-annual PBDE monitoring of the Everett WPCF influent and effluent using the most sensitive test method. One of the semi-annual sampling events each year must coincide with high flow conditions. PBDE sampling results must be reported to Ecology and must be made public.
- EPA recently proposed an amendment to its decaBDE rule that would prohibit releases of decaBDE to water "during the manufacturing, processing, and distribution in commerce of decaBDE [and] decaBDE-containing products." 88 Fed. Reg. 82,287,

[3] https://apps.ecology.wa.gov/paris/PermitLookup.aspx

82,298 (Nov. 24, 2023). Ecology should either incorporate the final federal prohibition into this permit or require Everett to do so.

- Ecology failed to consider imposing more stringent limits on total suspended solids (TSS). PBDEs bind to solids, and studies have found correlations between reduced PBDE concentrations and TSS removal.
- Halt biosolid application until PBDE/PFAS controls are in place. The permit should require PBDE testing of biosolids before allowing them to be used on agricultural lands. The permit should require Everett to pursue more effective disposal of PBDE-laden sludge. Ecology/Everett must explore greater restrictions on biosolid disposal when high concentrations of persistent bioaccumulative toxics are involved.

Ecology Response: The permit specifies that PBDE monitoring at the WPCF must use 24-hour composite sampling and analysis with EPA Method 1614 to determine total and individual PBDE congeners. Influent PBDE monitoring requirements at the WPCF will begin in 2027 in coordination with the start of effectiveness monitoring of select industrial users.

The comment regarding the decaBDE rule proposes actions that are outside of the scope of this permit. The cited revisions to decaBDE standards relate to changes EPA has proposed to regulations authorized by the Toxic Substances Control Act (TSCA). This NPDES permit does not implement TSCA regulations and may only include conditions authorized by the federal Clean Water Act and Washington's Water Pollution Control law.

Regarding the use of TSS controls as a proximate means of controlling PBDEs, Ecology is not proposing numeric limits at the WPCF for PBDEs or for proxy parameters at this time. We have instead proposed a program that uses narrative limits to control PBDEs as discussed in our responses to Comment #1.1.

Everett WPCF biosolids are regulated by the Solid Waste Management Program under a different permit, #BA0024490. You can track biosolids related actions at the Everett WPCF by signing up to be notified via e-mail about biosolids permitting activities, including land application projects specific to the facility and opportunities to review and provide input regarding these actions and activities[4]. Ecology is also currently revising the biosolids general permit. You may sign up to be an "interested party" in relation to the new biosolids general permit, as well.[5]

[4] *Biosolids facility-specific notifications sign up.*
https://apps.ecology.wa.gov/solidwastefacilities/(S(jfr5npjivq0jjoy1yp3x3lhd))/Subscriptions/Subscribe

[5] *Biosolids general permit information sign up.*
https://public.govdelivery.com/accounts/WAECY/subscriber/new?topic_id=WAECY_24

Comment #1.5 – Summary of Earthjustice comments regarding PFAS

Summary of Comments:

- EPA guidance urges states to require monitoring of industrial discharges for PFAS and the development of pollution prevention plans.
- The Everett permit must mandate PFAS monitoring to identify industrial sources and implement pollution controls to reduce or eliminate PFAS discharges.
- The permit should include technology-based or water-quality based effluent limits for PFAS, specific sampling for each industrial user, pretreatment pollution reduction requirements with deadlines, and an adaptive management approach for setting and updating PFAS reduction targets.
- Ecology is required to evaluate AKART for PFAS and set technology-based effluent limits, and to determine if more stringent water quality-based effluent limits (WQBELs) are needed to protect designated water body uses or fish.
- PFAS monitoring should be required for industrial users (IUs), WPCF influent, and effluent.
- The permit should mandate quarterly PFAS sampling for all IUs confirmed to discharge PFAS, using draft analytical method 1633.
- Everett must establish a sampling schedule to assess contributions from IUs and non-regulated sources, and to evaluate PFAS changes during WPCF treatment.
- The permit should require evaluation of source reduction (e.g., product substitution) and treatment technologies for PFAS removal before wastewater reaches the WPCF.
- Everett must impose testing, pollution prevention measures, or treatment requirements on IUs for PFAS.
- Ecology's AKART analysis and effluent limits are needed to inform IU pretreatment permits and additional WPCF efforts.
- The permit should define PFAS as per RCW 70A.350.010.
- The permit should expand the list of suspected or known PFAS dischargers to include aerospace, industrial laundries, industrial gas manufacturing, and inorganic chemical manufacturing.
- The permit should require source-specific, time-series sampling and concurrent sampling of WPCF influent and effluent.
- All PFAS monitoring data from IUs and the WPCF should be submitted to Ecology and made publicly available.
- In Michigan, routine PFAS sampling includes WWTPs and industrial dischargers, with measures such as cleaning contaminated areas and product substitution required.

- The permit should require a PFAS source tracing study and ongoing sampling to monitor pretreatment effectiveness and PFAS fate and transport.
- Everett must evaluate PFAS sources, implement operational changes, and introduce treatment technologies for PFAS removal before discharge.
- Everett should establish a toxics reduction plan with targets, actions, and timelines, and include annual updates if targets are unmet.
- The permit should set deadlines for IU sampling, best practices selection, and implementation of monitoring and pollution prevention measures.
- Initial IU screening should be completed within one year of permit issuance.
- Best practices selection and implementation plans should be completed by the end of the second year after permit issuance.
- Implementation of best management practices should begin in the third year of the permit.
- Waste treatment installation for sources with limited capacity to prevent PFAS should start in the fourth year of the permit.
- Initial screening deadlines for PFAS sampling have varied, with some WWTPs completing within six months. EPA guidance suggests an initial screening deadline of six months.
- If PFAS levels remain high after pretreatment controls, WPCF improvements should be considered for the next permit cycle, including evaluating new treatment technologies.
- Ecology should halt land application of biosolids until PFAS and other persistent toxics like PBDEs are sampled, and users should be informed of PFAS concentrations.
- Ongoing sampling of sludge for PFAS should be ensured.
- Ecology should separately determine if PFAS concentration limits for land application should be established or if land application should be stopped.

Ecology Response:

Due to PFAS widespread use and persistence in the environment and their capacity to cause adverse health effects, Ecology has included new requirements in the Everett permit to control PFAS (Special condition S6.G). Ecology set timelines in the permit based on its assessment of the efforts required by Everett to complete work necessary to comply with the permit conditions.

These permit requirements are designed to minimize the introduction of PFAS from certain industrial sources. PFAS likely enters the Everett collection system from other sources in addition to industrial facilities subject to pretreatment standards. For most people, exposure to PFAS occurs through food, drinking water, and contact with things like disposable packaging or treated textile products. PFAS may be introduced into wastewater systems from residential

sources. As with PBDEs, Ecology encourages the City of Everett to engage in public education and outreach efforts regarding PFAS in the home, as these voluntary efforts may complement the efforts of the delegated pretreatment program in reducing the contribution of PFAS from industrial sources.

Ecology based the list of industries included in S6.G on the industrial categories known or suspected to discharge PFAS as identified by the December 5, 2022 EPA memo. Ecology revised the permit condition to clarify that it also applies to organic chemical manufacturers and wholesalers, consistent with EPA guidance. Note however that there are no applicable Effluent Limit Guidelines for PFAS in industrial wastewater.

Regarding biosolids, this permit does not regulate the application of biosolids. Ecology's Solid Waste Management program, which oversees the regulation of biosolids in Washington, was involved in the drafting of the PFAS Chemical Action Plan (CAP) that recommends actions for reducing the environmental impacts of this chemical. See Ecology's CAP website [6] for additional information on this topic. Ecology believes source control and reduction to be the most effective way to reduce the concentrations of PFAS in wastewater and biosolids. For more information about biosolids, please refer to response to Comment #1.4.

Comment #1.6 – Summary of Earthjustice comments regarding Nutrients

Summary of Comments:

- The PSNGP should have included effluent limits for nutrients based on AKART or water quality. Because the PSNGP is being litigated and is partially stayed, the Everett permit must be revised to add nutrient conditions.
- Due to litigation of the PSNGP, it can't be relied upon to regulate nutrients. This permit cannot defer to the PSNGP but must instead include nutrient limits with compliance deadlines to ensure the limits are met within the permit cycle.
- Ecology should incorporate into the Everett permit monitoring, planning, and engineering provisions from the PSNGP.
- Ecology should determine AKART for nutrients and include nutrient effluent limits in the Everett permit, specifically 3 mg/L for nitrogen and 0.3 mg/L for phosphorus.
- The Everett permit must include implementation deadlines for treatment plant upgrades sufficient to meet nutrient effluent limits.
- Planning and permitting for an upgrade to the WPCF should be completed within the first year of the permit, and construction should be completed by year four with achievement of limits by the following year (at the latest).

[6] https://apps.ecology.wa.gov/publications/documents/0507048.pdf

Ecology Response: Comments on the Puget Sound Nutrient General Permit (PSNGP) and its implementation are beyond the scope of this individual NPDES permit. Ecology agrees that this discharge contributes to existing dissolved oxygen (DO) impairments in Washington Waters of the Salish Sea. As stated in the fact sheet, Ecology has chosen to address this discharge's contribution to the impairment by regulating the discharge of nutrients (as total inorganic nitrogen) to Puget Sound via the PSNGP. Consequently, nutrients at the Everett WPCF are regulated under permit #WAG994571. The PSNGP contains narrative effluent limits that include a numeric action level, a program of nutrient monitoring, nutrient removal process optimization, and long-term planning that includes a required AKART evaluation and an evaluation of how to achieve a seasonal design concentration as low as 3 mg/L total inorganic nitrogen (TIN). While the PSNGP is being litigated, the above requirements remain in effect and are not stayed for any general permit permittee, including the City of Everett.

Ecology is actively engaged in modeling to determine numeric water quality-based effluent limits for facilities covered by the general permit. Once developed, Ecology will implement these limits in the general permit. Until that time, the Everett WPCF is bound by the requirement of the PSNGP to prevent increases to their nutrient load over the permit term. If Everett is no longer subject to the PSNGP or if the requirements of the PSNGP change substantially, Ecology will modify the individual permit for the Everett WPCF as appropriate to ensure water quality is protected.

2. Comments from the City of Everett

Comment #2.1 – Condition S9.C.3.b Post Construction Monitoring Plan (PCMP)

Summary of comments:

- The City requests that CSO outfalls PSO1, 2, 3, 4, 5, 6, and 7 be excluded from the requirement for water quality and sediment data under a PCMP. Computer modeling indicates these outfalls would not have had any CSO events in the last 34 years had the PGSF been in operation. Modeling further indicates CSO events at these outfalls is expected to have <3% chance of occurring in any one year going forward based on the past 34 years of rainfall data. The City proposes that real-time monitoring of CSO frequency and duration at PSO1, 2, 3, 5, 6, and 7 is sufficient to satisfy the requirements of the presumption approach and therefore water quality monitoring is not needed to demonstrate compliance with numeric water quality standards.
- Similarly, modeling indicates that PSO4 (a.k.a. Outfall 100) would have had 1 CSO event over this 34-year period. This location is also associated with an acute dilution factor of 156 (55 feet from the diffuser ports) and a chronic factor of 696 (550 feet from the diffuser ports). The City proposes that these reasons support a determination that real-time level monitoring of frequency and duration of CSOs at PS04 is also sufficient in lieu of water quality compliance monitoring.

Ecology Response: The federal CSO control policy requires NPDES permittees with combined sewer overflow outfalls to develop and implement a post-construction compliance monitoring program as part of its overall CSO control efforts. This requirement applies regardless of whether the permittee designed controls are based on either the "presumption" or "demonstration" approaches discussed in the federal policy. The monitoring program must, at a minimum, collect sufficient information necessary to assess the effectiveness of the controls as well as to verify that the controls are sufficient to meet applicable water quality standards and are protective of designated uses. Ecology cannot exempt any outfall that has the potential to discharge untreated CSOs. Decommissioning a current CSO outfall is the only way to eliminate the post-construction monitoring requirement for that outfall.

This permit requires Everett to implement controls that reduce the frequency of untreated discharges from each CSO outfall so that they comply with the state's performance standard of no more than one discharge per year, on average. Therefore, the post construction monitoring must describe how the City will monitor to verify compliance with this standard. In addition, the state's water quality standards allow for the use of mixing zones as a tool for demonstrating compliance with numeric water quality criteria. As discussed in the fact sheet, WAC 173-201A-400(11) exempts mixing zones for controlled CSO outfalls from size restrictions and overlap prohibitions. However, this exemption is not allowed if the discharge has a reasonable potential to cause the loss of sensitive or important habitat, substantially interferes with existing or characteristic uses, results in damage to the ecosystem, or adversely affects public health (see WAC 173-201A-400(4)). Because of this, the post-construction monitoring plan must include justification that any discharge from the CSO outfalls will not cause a condition that would disqualify it from a mixing zone allowance.

Ecology recognizes that effective post-construction monitoring could rely solely on discharge frequency and volume monitoring. Other permittees have received approval for this level of monitoring. However, the City must first submit an approvable post-construction monitoring plan that justifies this level of monitoring is adequate.

Comment #2.2 – Condition S9.C.3

Summary of comment:

- The reference to section "IV.F" in the fact sheet appears to be incorrect. The correct reference appears to be section V.F in the fact sheet.

Ecology Response: Ecology corrected the Fact Sheet reference.

Comment #2.3 – Condition S9.E

Summary of comments:

- Propose incorporating Agreed Order language in lieu of the text and table in condition S9.E which is about a compliance schedule pertaining to the 2020 CSO Control Plan Update. Everett requested that the language reflect that of Section IV in the 2015

Agreed Order, Docket No. 11638, as agreed to between Ecology and the City. The Agreed Order allows for amendments to modify, with Ecology approval, projects in the plan as long as the compliance deadline remains the same.

Ecology Response: Ecology changed the permit condition by removing the reference to the "CSO reduction plan" and converting the table into a bulleted list of projects that the City must complete by December 31, 2027. The edit also clarified that the City must submit a letter upon completion of each project to confirm completion and identified that the last letter is due by January 30, 2028.

Comment #2.4 – Condition S1.A

Summary of comments:

- Request reevaluation of new pH limits proposed for Outfall 015. Instead of using a dynamic model, Ecology's calculation assumes static conditions and is unnecessarily restrictive for compliance with a pH of 7.0 at the mixing zone boundary.

Ecology Response: Ecology's standard approach to determining pH limits does not use dynamic modeling, and it is correct to characterize this as a conservative approach. Ecology reevaluated the pH limits using a larger dataset and updated the proposed pH limits based on that analysis. Ecology added condition S7.B to the permit, which gives the City the option to conduct dynamic modeling in support of alternative pH limits. Ecology will review the alternative proposal, should the City submit one, and may modify the permit to establish new pH limits for Outfall 015 if appropriate. This may include establishing more stringent limits if the modeling demonstrates that more stringent limits are warranted. The updated pH limits described below will remain in effect while the City does the modeling analysis, if they chose to do so.

The permit issued in 2015 included effluent pH limits of 6.4-9.0 standard units for Outfall 015. Based on new information discussed below, Ecology revised the limits to 6.6-9.0 standard units. Among the data considered when reevaluating the pH limits was a larger set of effluent alkalinity data than was evaluated during the preparation of the draft permit. The statistical bases used in the development of the new pH limits are as follows: Ambient data reflects 90th percentile values for ambient temperature, pH and total alkalinity values obtained from Snohomish River monitoring station 07A090. Effluent temperature was the 95th percentile of values reported on DMRs, and effluent total alkalinity was the 95th percentile of effluent alkalinity as recorded in Acute WET Tests. River and effluent salinity data is harder to come by, so ambient salinity was obtained from the 1993 TMDL study (see reference in current Fact Sheet) and a common value, 0.50 psu, was again used as the effluent salinity. These values are recorded in the pHmix spreadsheet input/output tables below. Setting new limits at 6.6-9.0 standard units ensures that pH at the edge of the chronic mixing within Outfall 015 receiving waters meets the water quality standard of 7.0-8.5 standard units with a human-caused variation of less than 0.5 standard units.

Calculation of pH of a Mixture in Marine Water, Outfall 015

Based on the CO2SYS program (Lewis and Wallace, 1998), http://cdiac.esd.ornl.gov/oceans/co2rprt.html

INPUT	
1. MIXING ZONE BOUNDARY CHARACTERISTICS	
Dilution factor at mixing zone boundary	14.2
Depth at plume trapping level (m)	0
2. BACKGROUND RECEIVING WATER CHARACTERISTICS	
Temperature (deg C):	17.82
pH:	7.24
Salinity (psu):	8.00
Total alkalinity (meq/L)	0.96
3. EFFLUENT CHARACTERISTICS	
Temperature (deg C):	26.30
pH:	**6.60**
Salinity (psu)	0.50
Total alkalinity (meq/L):	3.69
OUTPUT	
CONDITIONS AT THE MIXING ZONE BOUNDARY	
Temperature (deg C):	18.42
Salinity (psu)	7.47
Density (kg/m^3)	1004
Alkalinity (mmol/kg-SW):	1.15
Total Inorganic Carbon (mmol/kg-SW):	1
pH at Mixing Zone Boundary:	**7.0**

Calculation of pH of a Mixture in Marine Water, Outfall 015

Based on the CO2SYS program (Lewis and Wallace, 1998), http://cdiac.esd.ornl.gov/oceans/co2rprt.html

INPUT	
1. MIXING ZONE BOUNDARY CHARACTERISTICS	
Dilution factor at mixing zone boundary	14.2
Depth at plume trapping level (m)	0
2. BACKGROUND RECEIVING WATER CHARACTERISTICS	
Temperature (deg C):	17.82
pH:	7.24
Salinity (psu):	8.00
Total alkalinity (meq/L)	0.96
3. EFFLUENT CHARACTERISTICS	
Temperature (deg C):	26.30
pH:	**9.00**
Salinity (psu)	0.50
Total alkalinity (meq/L):	3.69
OUTPUT	
CONDITIONS AT THE MIXING ZONE BOUNDARY	
Temperature (deg C):	18.42
Salinity (psu)	7.47
Density (kg/m^3)	1004
Alkalinity (mmol/kg-SW):	1.15
Total Inorganic Carbon (mmol/kg-SW):	1
pH at Mixing Zone Boundary:	**7.7**

Comment #2.5 – Condition S6.E

Summary of comment:

- The City proposes only sampling IUs that are actively using PBDEs in their process.
- The City requests that industrial sampling not be included in the required PBDE survey of industrial users, stating that "PBDEs are primarily a legacy contaminant and therefore should not be actively used in industrial processes." Everett suggests SNUR and TSCA are better means for regulating PBDEs than would be sampling industrial users.
- Everett states that current analytical methods for PBDEs are very expensive and requiring IUs to sample would have a negative fiscal impact on the community.

Ecology Response: Industries do not need to be actively using PBDEs in an industrial process to be a source. Previous PBDE monitoring at industrial laundries and landfills have demonstrated that these industries are sources of PBDEs in wastewater, yet they do not actively use PBDEs as part of an industrial process. Previous testing by Ecology at an industrial laundry within the Everett area found that the facility's discharge contained the highest PBDE concentrations found in the study.

Ecology does not consider reliance on Significant New Use Rules (SNUR) under the Toxic Substances Control Act (TSCA) a sufficient means for regulating PBDEs in domestic wastewater for several reasons. SNURs typically regulate new uses or significant changes in use patterns for chemicals. However, PBDEs are legacy pollutants that are already present in numerous existing products, including common household goods and textiles. Despite some forms of PBDEs being banned or restricted by the federal government and by the state of Washington, others may still be in use or present in imported products that are not subject to the same regulations. Even with regulatory controls on new uses, PBDEs already present in products and in the environment can continue to find their way into wastewater and/or stormwater over time, perpetuating environmental exposure. In short, while SNURs and TSCA play a role in regulating new uses and applications of chemicals like PBDEs, they would not adequately address the broader challenges posed by existing products and their contribution to environmental contamination. The Clean Water Act is intended to control pollutants that end up in wastewater discharged to the environment.

PBDE monitoring of industrial users is an essential part of narrative limits placed in the Everett WPCF permit to protect Chinook salmon, a threatened species under the Endangered Species Act. Salmonid migration, spawning, and rearing are beneficial aquatic life uses of the lower Snohomish River. The fact sheet discusses the harmful effect of PBDEs on fish and documents the presence of PBDEs in WPCF effluent as well as in the discharges from multiple industrial users in the Everett system. Based on this evidence, Ecology determined that the permit must include effluent limits to regulate the discharge of PBDEs. Refer to response to Comment #1.1 for information about narrative effluent limits, and Comment #1.3 for discussion of the updated source control approach Ecology uses in the final permit.

3. Comments from the Snohomish Basin Salmon Recovery Technical Committee

Comment #3.1 – Reconsider PBDE requirements in the draft permit

Summary of comment: The Committee calls for more monitoring, more source control identification and BMPs, mitigation and remediation of PBDEs.

- The committee wants to see in this permit:
  - increases in the geographic extent of monitoring locations
  - increases in the frequency in which the monitoring is occurring
  - expanding monitoring locations to include influent, effluent at both the deepwater and Snohomish River outfalls, as well as monitoring of lagoon sediments and biosolids
  - requiring the use of monitoring data to identify the most effective best management practices (BMPs) and corrective measures
  - increased mitigation and remediation of PBDEs, as well as source control identification and correction
- The Committee also states their support of "permit considerations and provision of resources to avoid inequitably concentrating negative impacts of source control and remediation efforts on small businesses and underserved communities, as well as exploring ways to equitably distribute any impacts on ratepayers, such as progressive rate structures".

Ecology Response: Please refer to Ecology's responses to Comments #1.1-1.4 for a discussion about new PBDE conditions in the final permit.

Regarding biosolids, as discussed previously Ecology regulates biosolids under the biosolids general permit, #BA0024490. Please refer to Response to Comment #1.4 for more information.

Thank you for recognizing the potential costs of implementing new PBDE controls, particularly on small businesses and underserved communities. Ecology does not establish local ratepayer policies or rate structures. We support efforts made by local utilities to make rates as equitable as possible. Ecology recognizes that PBDE monitoring is expensive and that other water quality imperatives, such as significant investments in CSO management and long-term planning for nutrient removal, compete for funds in Everett. As with these other water quality imperatives, a PBDE reduction program will necessarily require balancing the objectives of addressing water quality problems with financial constraints at any given time. We believe the permit language revisions made in response to comments received during the public comment period strike a balance that does not create an undue burden on the utility. Regarding what Ecology can do to potentially help offset costs, Ecology notes that the 2021 federal "Bipartisan Infrastructure Law" set aside approximately $1 billion in the Clean Water State Revolving Fund

(CWSRF) for use nationally over fiscal years 2022-2026 to fund projects that respond to emerging contaminants in wastewater, stormwater, and nonpoint source pollution. The program offers low-cost financing, forgivable loans and grants to communities for a wide range of water quality infrastructure projects. Everett may consider applying for funding under the Water Quality Combined Funding program[7] to help reduce the cost burden to residential ratepayers.

4. Comments from Long Live the Kings

Comment #4.1 – Call for stronger PBDE conditions in the permit.

Summary of Comments:

- Comments call for stronger permit conditions, noting that PBDEs while largely banned are still being discharged and pose a threat to Chinook salmon. “Millions of dollars and years of effort have been invested to restore habitat in the Snohomish Estuary and ongoing pollution jeopardizes these investments.”
- Comments summarize various research efforts and conclude by stating that “unintentionally harming an ESA-listed species is an Incidental Take and may not be permissible”.
- Comments refer to data collected by the City of Everett and an investigation into Snohomish River PBDEs by Ecology’s Environmental Assessment Program, summarizing their work as confirming a PBDE “hotspot” near Outfall 015 and that PBDEs are passing through the Everett WPCF.

Ecology Response: Please refer to our responses to Comments #1.1-1.4 for details about the final PBDE-related requirements.

Comment #4.2 – Ensure a robust pretreatment program through specific requirements.

Summary of Comments:

- Comment states that the draft permit “looks to” the delegated pretreatment authority to define a pretreatment program for PBDEs but challenges that model by suggesting it sets up inherent conflicts of interest.
- The permit should “focus [Everett] on finding the most equitable and effective ways to protect the environment” and “avoid putting the City in a position to choose between the protection of listed species or ratepayers”.
- Recommendation for PBDE tests of each industrial user at least quarterly in the first year of permit issuance to assess baseline PBDE conditions.

[7] https://ecology.wa.gov/about-us/payments-contracts-grants/grants-loans/find-a-grant-or-loan/water-quality-combined

- Recommendation for requiring subsequent quarterly PBDE testing of each industrial user with baseline testing results above background PBDE levels to assess the effectiveness of PBDE removal efforts.
- Ecology should evaluate AKART for PBDEs.
- Require pollution reduction plans for industrial users with baseline testing results above background PBDE levels.
- Set timelines for reduction plans and measurable goals for PBDE reduction.
- Revisit plans at least annually to adaptively manage a strong response to PBDE reduction (plans should be approved by Ecology).
- Publish test results and specific sample sources to the public in a timely manner.

Ecology Response: Federal and state regulations support delegating pretreatment authority to local jurisdictions since local municipalities are in closer proximity to local industries, which enables the local delegated pretreatment program staff to conduct inspections and address violations more efficiently. When combined with state oversight, this geographic advantage enhances oversight effectiveness. Delegation also promotes community engagement and accountability. That said, if Ecology determined that a delegated pretreatment program was not effectively managing an industrial user or group of users, there are a number of actions we could take to address the issue, up to and including directly issuing individual State Waste Discharge Permits to particular users. Please refer to our responses to Comments #1.1-1.4 for details about the final PBDE-related requirements.

Comment #4.3 – The WPCF should minimize PDBE discharges from the lagoon system during the Chinook outmigration period (February-July with the peak in April and May).

Summary of Comments:

- Commenter recommends the following additional permit measures to reduce PBDEs:
    - Require Everett to minimize discharges from Outfall 015 during February-July and redirect flow to the Port Gardner outfall.
    - Assess PBDEs near the Port Gardner outfall by sampling water, juvenile Chinook, biofilm, and Chinook prey. Discontinue redirecting effluent to Port Gardner if monitoring indicates that discharging at Port Gardner is similarly harmful to Chinook as compared to discharging in the estuary.
    - Test sediment in the lagoons for PBDE contamination that may be contributing to PBDEs in wastewater effluent.
    - Remove contaminated lagoon sediment if it appears to be substantially above background levels in comparable sediment.
    - Test biosolids for PBDEs and inform biosolid users of the results.

- Test influent and effluent for PBDEs on a quarterly basis throughout the whole permit cycle and test treatment systems (lagoon and trickling filter) outfalls separately.
- Use sampling methods that can establish PBDE removal efficiency so facility performance can be compared to other facilities.
- Set PBDE reduction goals through a pollution reduction plan that is updated annually and approved by Ecology.
- Publish test results and specific sample sources to the public in a timely manner.

Ecology Response: Ecology revised special condition S1.A to include language that directs Everett to route discharges to Outfall 100 during the salmon outmigration season whenever feasible. The language relies on the expertise of the Everett WPCF staff to make operational decisions and Ecology defers to the plant operators to implement this change appropriately and safely. To ensure consistency in this decision making, the permit also requires the Everett WPCF to submit a document that describes the factors operators will consider along with criteria they will use to support decisions to discharge through Outfall 015 instead of Outfall 100.

Ecology added special condition S7.C to the permit which requires Everett to complete a technical assessment of the lagoon treatment system, including maintenance practices such as lagoon solids management and handling, and to evaluate strategies for reducing PBDEs from passing through Outfall 015. Like most domestic wastewater treatment plants, the Everett WPCF was not designed specifically to remove PBDEs. While the new permit condition requires Everett to examine the existing treatment process, Ecology believes that source control designed to minimize the arrival of PBDEs at the WPCF remains the best approach for addressing this pollutant at this time. The pretreatment strategy requires time to demonstrate its effectiveness before the City and Ecology can make informed decisions about the need for additional controls at the WPCF. Please see responses to Comments #1.1-1.4 details about the final PBDE-related requirements.

Ecology plans to gather PBDE data from sediments in Port Gardner Bay in June 2026 as part of an ongoing study conducted by the Marine Monitoring Unit.[8]

Special condition S6.F of the permit requires Everett to submit documentation related to the PBDE Reduction Program in annual pretreatment reports which are submitted to Ecology. The annual report along with all monitoring data and summary reports are public records accessible through Ecology's PARIS online permit database[9]*.*

Condition S6.D.5 has also been added to the permit to mandate that the PBDE Reduction Program section of the annual pretreatment reports be posted on the City of Everett Industrial Pretreatment Program website to improve public access.

[8] https://ecology.wa.gov/water-shorelines/puget-sound/sound-science/marine-sediments
[9] https://apps.ecology.wa.gov/paris/

Comment #4.4 – Assess progress using ongoing Chinook sampling and analysis from WDFW and other descriptive measurements.

Summary of Comments:

- WDFW's T-Bios team plans to continue monitoring juvenile Chinook for PBDEs during the permit period. Data from this research should be used as a gauge to assess the effectiveness of changes intended to reduce PBDE pollution.
- Additional measures of progress could include percent reduction of total PBDEs and reduction in total suspended solids.

Ecology Response: Ecology considers all relevant studies and data available at the time we renew permits. We will review and consider any additional juvenile Chinook tissue data information and analysis from WDFW when evaluating potential conditions to place in the next permit for the WPCF. Please refer to response to Comment #1.3 for more discussion about measuring progress in PBDE reductions.

Comment #4.5 – Evaluate long-term capital improvements to reduce the impact of multiple waste streams.

Summary of comments:

- PBDEs are not the only pollutant highlighted in the draft permit (e.g. PFAS and nutrients) and it is likely that the facility will face problems with other CECs in the future. Ecology should support Everett in completing a cost/benefit assessment during the permit cycle regarding more advanced treatment technologies and should require the creation of a plan to implement more advanced treatment.

Ecology Response: Thank you for your recognition of nutrient challenges facing permittees along with those posed by emerging contaminants. The Puget Sound Nutrient General Permit requires the City of Everett to evaluate more advanced treatment technologies that they can construct in the future to meet either technology-based or water quality-based effluent limits (see Nutrient Reduction Evaluation requirement in PSNGP Condition S4.E[10]). Ecology believes that treatment strategies for nutrient removal can have ancillary benefits of reducing other pollutants, including emerging contaminants. However, while advanced treatment technologies may improve treatment for emerging contaminants, Ecology believes that source control remains the best (and most cost-effective) approach to managing novel emerging contaminants at this time.

[10] https://ecology.wa.gov/regulations-permits/permits-certifications/nutrient-permit

Comment #4.6 – Minimize costs associated with PBDE pollution being shouldered by the least able to pay.

Summary of Comment:

- "We would encourage Everett, with Ecology's support, to pursue rate structures that are adjusted to address this circumstance and grant programs that may offset these expenses to users or directly to the facility. A pretreatment program that holds individual industrial users accountable for PBDE pollution will also help minimize these costs from being externalized to other users."

Ecology Response: Please see Ecology's response to comment #3.1 related to cost equity and financial assistance opportunities. Regarding individual industrial user responsibility for the costs associated with their discharges, delegated pretreatment programs typically collect permitting fees from these industrial users. The fees help to cover costs associated with administering and enforcing the delegated pretreatment program, including activities such as issuing permits, conducting inspections, and ensuring compliance with local limits and other applicable regulations.

5. Comments from the Orca Network

Comment #5.1 – Strengthen permit requirements

Summary of comment:

- Comments expressed concern about toxic chemicals and nutrient pollution posing a threat to the health of salmon, orcas, gray whales, and the marine food web. Expressed concern about toxics and nutrients passing through the WPCF. Called for stronger permit requirements and monitoring.

Ecology Response: Please see our responses to Comments #1.1-1.6, for details regarding PBDEs, PFAS and nutrients.

6. Comments from Washington State Department of Health, Shellfish Program

Comment #6.1 – Requesting modification of permit section S3.F.3

Summary of comments: DOH-Shellfish proposed changes to the standard noncompliance notification language to ensure that the Shellfish Growing Area Program is notified promptly when conditions that may affect shellfish harvest occur.

Ecology Response: Ecology revised special condition S3.F to clarify when the City must notify DOH's Shellfish Program.

7. Comments from the Tulalip Tribes

Comment #7.1

Summary of Comments:

- The Draft Permit fails to reduce and prevent the discharge of PBDEs into Tulalip's ancestral waters. Ecology is bound by the Treaty of Point Elliott. The permitting of and actual discharge of toxics known to harm ESA-listed Chinook salmon appear to violate the treaty and the ESA take prohibition.
- The draft permit perpetuates the status quo and as such violates the State's water quality standards which protect the Snohomish River from introducing toxic substances at levels which may have the potential to "adversely affect" salmon spawning, rearing, and migration.
- In 2021 Ecology identified two industrial users, a laundry and landfill, discharging PBDEs to the WPCF however the permit only requires information gathering during this permit cycle and does not require either known PBDE source IU (or any other source of PBDE pollution) to take any action to reduce PBDEs in their discharges.
- Ecology must mandate pollution reduction action through the pretreatment permits for known sources of PBDE pollution to prevent harm to Chinook salmon during this permit cycle.
- Ecology must mandate that pretreatment permits be modified to require pollution reduction actions for all IUs that sampling confirms are a source of PBDEs.
- Ecology must mandate a toxic reduction plan similar to that required under the Ecology-issued NPDES permit for the City of Spokane's Riverside Park Water Reclamation Facility. The plan must require adaptive management based on effective monitoring to ensure efficacy of toxic reduction actions.
- Ecology should evaluate effluent limits for PBDEs at Everett for both outfalls.
- Ecology should establish AKART for PBDEs at Everett in light of the treatment system at the Spokane Riverside Park Water Reclamation Facility.
- Everett must route flows during the Chinook salmon outmigration to the Port Gardner Bay outfall, and PBDE monitoring must occur to determine environmental impacts of PBDEs discharged at Outfall 100.
- Tulalip opposes the spreading of biosolids from the Everett facility onto agricultural fields and insists that such biosolids be monitored.
- Tulalip insists that all data and toxic reduction plans and updates be made publicly available.

Ecology Response: Please refer to Ecology's responses to Comments #1.1-1.4 for information regarding new and revised PBDE-related conditions in the final permit.

8. Comments From Unaffiliated Individuals

Comment #8.1 – General concern about the permit conditions for PBDEs and PFAS.

Summary of Comments:

- There is significant, widespread support for new measures to monitor and reduce PBDEs and PFAS that are entering the Everett WPCF system.
- Commenters support the use of the pretreatment program to control PBDEs and PFAS.
- Commenters want the WPCF to minimize PDBE loads discharged to the Snohomish River during the Chinook outmigration period from February-July (April and May peak).
- Ecology should track the results of ongoing Chinook sampling and analysis taking place at the Washington Department of Fish and Wildlife.
- There should be an investigation of more advanced treatment to control the discharge of PBDEs and other pollutants at the WPCF.
- Everett pretreatment permits should include quarterly monitoring of PBDE discharges at IUs and should require that concrete steps are taken by IUs to reduce the discharge of these pollutants to the Everett system.
- The permit should set deadlines for IUs to conduct initial PFAS sampling and implement pollution prevention and reduction measures.
- The permit should require that IUs conduct EPA-recommended quarterly PFAS monitoring on an ongoing basis.
- The permit should require Everett to evaluate strategies to reduce PFAS at the WPCF if source control efforts aren't adequate.

Ecology Response: Please see our responses to Comments #1.1-1.5, for details regarding PBDE and PFAS requirements in the final permit.

Comment #8.2 – Requests to regulate nutrients in this permit instead of the PSNGP.

Summary of Comments:

- The permit should set limits on the levels of nitrogen and phosphorous that can be discharged. Scientists have already established limits that are achievable and will help address Puget Sound's persistent nutrient pollution problems – Everett and Ecology just need to listen to the experts.

Ecology response: Please see our response to Comment #1.6.

9. Oral testimony

Patty Goldman, representing Earth Justice; Lucas Hall, Director of Projects at Long Live the Kings; and Don Miller with Snohomish County Indivisible each provided statements for the record during the January 11, 2024, public hearing. A full transcript of statements received during the hearing is included with the written comments. Each statement addressed concerns about salmon recovery in light of PBDE levels documented in the Snohomish River and suggested approaches to reduce those PBDE levels, as summarized below:

- Pretreatment as a principle control strategy for PBDEs is the right approach.
- The permit should have monitoring of each individual industrial user so there's a baseline of PBDE contributions for each user. Monitoring should occur on at least a quarterly basis.
- The permit should require WPCF effluent monitoring in addition to the influent monitoring in order to define a baseline leaving the WPCF.
- Pretreatment agreements must have pollution reduction requirements that go beyond just planning. There must be quantifiable reductions of PBDEs.
- Given the PBDE hotspot in the Snohomish River system, the permit should require Everett to adopt a toxics reduction plan modeled on the Spokane Riverside Park Water Facility Permit.
- The permit must implement PBDE controls on the WPCF itself. The permit should address whether further limiting TSS could be used as a way to reduce PBDEs, which bind to soil.
- The permit should require that Everett preferentially discharge to the Port Gardener outfall during juvenile Salmon out-migration in the Snohomish River. This approach should include effectiveness monitoring to quantify PBDE contributions to Port Gardner as a result of the rerouting approach.
- The permit should provide the City of Everett with a strong enough mechanism to effectively address the problem with PBDEs.
- There should be ongoing industrial source monitoring to establish a PBDE baseline and trends.
- Industrial PBDE source monitoring should occur more frequently than what is stated in the draft permit of twice per year WPCF in influent during 2026 and 2027.
- Target levels and intervention plans for PBDE reduction must be established with the monitoring data used to evaluate results and compliance with those requirements.
- The permit must have transparent and accountable goals to reduce PBDEs that are tied to measurable outcomes in fish.

- The permit should require long-term planning for WPCF upgrades that would remove PBDEs.

Ecology Response: Refer to Ecology's response to Comments 1.1 – 1.4 for details about PBDE-related requirements in the final permit.