



King County

Department of Natural Resources and Parks

Wastewater Treatment Division

King Street Center, KSC-NR-5501
201 South Jackson Street
Seattle, WA 98104-3855

July 7, 2023

SUBMITTED VIA ONLINE COMMENT FORM

Sean Wilson, P.E.
Senior Facility Management Engineer
Washington State Department of Ecology
Northwest Regional Office
P.O. Box 330316
Shoreline, WA 98133-9716

RE: Comments on the Draft National Pollutant Discharge Elimination System Permit for the West Point Wastewater Treatment Plant and Combined Sewer Overflow System (WA0029181)

Dear Mr. Wilson:

Thank you for the opportunity to offer comments on the Department of Ecology's (Ecology) public review draft National Pollutant Discharge Elimination System (NPDES) permit for the West Point Wastewater Treatment Plant and Combined Sewer Overflow (CSO) System (WA0029181). This letter requests Ecology's reconsideration of several proposed permit requirements. We believe these changes will achieve the best outcomes for water quality.

The King County Wastewater Treatment Division is proud of our role in protecting public health and the environment while creating valuable resources from wastewater. Our facilities that convey, treat and discharge cleaned wastewater within the West Point service area are the largest in Washington State, and among the largest and most complex of similar systems in the country. We look forward to continuing to work with Ecology, our local city and district partners, our customers, and many others in our region to continue improving water quality in Puget Sound.

Managing the County's wastewater utility consistent with the NPDES permit is a mission-critical objective to our work across our operations, planning, and capital delivery programs and functions. We offer these comments in the spirit that collaborative development of the NPDES permit will lead to optimized and reliable water quality outcomes and best serve the public interest. Attachment one summarizes our comments on several proposed permit requirements, including concerns about:

- More restrictive performance conditions for CSO wet weather treatment that have uncertain or hard to verify water quality benefits.

Sean Wilson, King County - Comments on Draft NPDES Permit for West Point Treatment Plant
July 7, 2023


Page 2

- Further accelerating the capital project already underway at the Elliott West CSO facility and exacerbating an already challenging capital program driven largely by regulatory requirements.
- Proposed highly ambitious schedules and conditions for our industrial waste program regarding source control for the emerging per- and polyfluoroalkyl substances (PFAS) chemicals.
- A new pollution prevention program for the CSO system that places duties on King County that we lack authority to implement.

Attachment two provides detailed comments on these issues and other specific permit conditions in tabular format. Thank you for your review and serious consideration of these comments and concerns. We ask that Ecology modify the final NPDES permit accordingly.

If you have any questions, please contact me at 206-549-1190 or by email at kgurol@kingcounty.gov

Sincerely,

DocuSigned by:


6F7ECDE169354C2...
Kamuron Gurol, Division Director
Wastewater Treatment Division

Attachments:

- (1) Summary of Comments – Draft West Point Wastewater Treatment Plant NPDES Permit
- (2) Tabulated Detailed Comments – Draft West Point Wastewater Treatment Plant NPDES Permit

cc: Rachel McCrea, Water Quality Section Manager, Department of Ecology, Northwest Regional Office (NWRO)
Shawn McKone, Municipal Unit Supervisor, Department of Ecology, NWRO
Bruce Kessler, Deputy Division Director, Wastewater Treatment Division (WTD), Department of Natural Resources and Parks (DNRP)
Rebecca Singer, Operations Manager, WTD, DNRP
Tom Bauer, West Point Wastewater Treatment Plant Manager, WTD, DNRP
Chapin Brackett, Asst. Manager – Process & Environmental Compliance, WTD, DNRP
Jeff Lafer, NPDES Permit Administrator, WTD, DNRP
Verna Bromley, Senior Deputy Prosecuting Attorney, King County Prosecuting Attorney's Office, Civil Division

King County Department of Natural Resources and Parks
Wastewater Treatment Division

Attachment #1

Summary Comments (July 7, 2023) –

Draft West Point Wastewater Treatment Plant NPDES Permit (WA0029181)

1. **S1.B – New and more restrictive effluent limits for West Point and the CSO wet weather treatment stations.** WTD has identified potential concerns with several new permit requirements for the County’s wet weather treatment stations (WWTS) including the new monitoring protocols for total residual chlorine (TRC), a new more stringent TRC effluent limit for the Elliott West WWTS, and new procedures for assessing total suspended solid (TSS) removal efficiency. Some of the new requirements represent potentially significant changes compared to the operational objectives that the County’s existing WWTS facilities were previously designed, approved, and constructed to meet. Therefore, they likely will require considerable resources to effectively evaluate, manage, and implement alternative operations or facility modifications.

The new TRC monitoring procedures appear to affect compliance performance at our treatment facilities that use chlorine-based disinfection, and the new TRC effluent limit for the Elliott West WWTS is significantly lower than the current limit. The Elliott West facility historically encounters challenging operational conditions and non-compliance with the existing TRC effluent limit. Thus, the new standard could cause the facility to more frequently exceed the new lower effluent limit. The changes also could exacerbate non-compliance with a lower pH effluent limit that can occur with the use of sodium bisulfite for dechlorination.

In our detailed comments, WTD requests Ecology’s consideration of modified TRC monitoring protocols and an allowance to modify the acute mixing zone for the Elliott West outfall based on the changed conditions. A modified mixing zone is technically appropriate, and the resulting changes to effluent limits would be consistent with the discharge and receiving water environment. The accommodation will partially reduce WTD’s concerns with the adverse effects of the new requirements on our programs. Moreover, we are currently underway with a project for the Elliott West facility (described below under permit condition S15.A) to improve the disinfection process operations and potentially improve the existing marine outfall. Thus, we request an appropriate compliance time schedule to address development and implementation of compliance measures for any new TRC effluent limits and exacerbation of pH compliance conditions. These allowances will directly support the overall compliance schedule justifications for the Elliott West project schedule concerns outlined below regarding permit condition S15.A.

The revised TSS removal efficiency monitoring protocols and requirements represent several broad changes compared to existing WWTS operational objectives during CSO-related flow events that partially rely on detaining, storing, and returning solids to the West Point treatment plant. WTD has insufficient data with which to fully assess the effects of these proposed permit requirements on future compliance, as they are different than the existing operating conditions and original facility design criteria. Additionally, both the Elliott West and Alki WWTS facilities experience conditions where achieving routine compliance with the TSS removal effluent limit is challenging. Therefore, these two facilities will have an increased likelihood of exceedances under the new requirements. Thus, the County is requesting a compliance time schedule to evaluate the performance of the WWTS facilities, and if needed to plan facility improvements necessary to achieve compliance. Addressing any needs for improvements at Alki could involve substantial new planning and capital improvements depending on the magnitude of any deficiencies identified. We also note that the combined annual average quantity of TSS managed by all five existing County WWTS facilities is a tiny fraction (<1%) of the total amount conveyed to West Point. The new TSS removal requirements could involve operational and capital improvement costs that far outweigh the likely benefits.

Overall, with respect to the new TRC and TSS removal efficiency requirements, WTD believes it is imperative that new and broad changes to permit approaches, effluent limits, and monitoring requirements should include review and deliberation in their development. The County requests that Ecology consider all available permitting approaches such as compliance time schedules, interim measures, data collection and special studies, adaptive project planning and implementation provisions, and further evaluation in developing effective and appropriate final requirements.

2. S6.E – Identification and Control of Per- and Polyfluoroalkyl (PFAS) Discharges.

The draft permit includes a new requirement, and extremely ambitious schedule (about two years), for WTD's industrial waste pretreatment program to develop and implement a plan to identify "all possible" industrial sources of PFAS in the service area and begin implementing control mechanisms for industrial customers. While we strongly support work to evaluate PFAS and other contaminants entering our system that may adversely affect public health and the environment, we are concerned that including such ambitious and broad-based requirements prior to a state and/or federal regulatory framework risks adding unnecessary cost and inefficiency. At present, the necessary information for utilities to adequately address PFAS concerns is lacking in the areas of risk analysis methodologies, laboratory protocols and capacity, available and cost-effective PFAS treatment or destruction technology, guidance for source control, and additional resources for regulated clean water utilities.

Even with these uncertainties, King County is currently identifying sources of PFAS across our system, developing a conceptual model of the sewer-shed, and surveying available wastewater treatment technologies. WTD is also committed to voluntarily sampling influent, effluent, biosolids, and landfill leachate at our three regional treatment plants and in our service area, respectively, thereby already undertaking the proposed

requirement to conduct influent only sampling, as a permit condition, at West Point WWTP. An initial assessment of potential PFAS sources in King County's service area indicates domestic sources are likely larger than industrial sources, and thus public education and other source control methods may be the most effective strategies in the future. Consequently, WTD would appreciate revisions to the proposed requirements that complement these voluntary efforts, and don't cost ratepayers more than necessary. Finally, with over 70,000 potential commercial businesses in the service area, WTD recommends that a reasonable timeframe of four years be provided to complete the S6.E requirements.

3. **S11.B(7) – Nine Minimum Controls for the CSO System.** The proposed modifications to the S11.B(7) condition build upon, and provide expanded requirements for, “pollution prevention” activities that currently exist and are being implemented under the current NPDES permit. However, as proposed, the provision broadly outlines new requirements for the County to develop and implement additional “pollution prevention program” measures. The provision would have the County lead and implement new stormwater best management practice, and stormwater and wastewater conveyance system inspection and cleaning activities, on private and public properties where the County has no jurisdiction and cannot readily obtain such authority under state law. Many of the activities outlined for this provision would occur in facilities and locations owned by or under the City of Seattle's jurisdiction. Consequently, WTD requests that the requirement be revised to include an initial task to develop the plan that appropriately identifies, shares and focuses the pollution prevention activities between jurisdictional agencies in the service area consistent with each of their responsibilities and authorities, and include an appropriate time schedule of no less than three years to develop the plan.
4. **S15.A – Elliott West CSO Treatment Plant Improvements (Compliance Schedule).** WTD appreciates its responsibility to develop and implement improvements to increase treatment performance of the Elliott West WWTS facility. The Elliott West facility was designed in the late 1990's and became operational in 2005. The combined conveyance, storage tunnel, and physical/chemical treatment processes for the Elliott West project have functioned to substantially reduce the discharge of untreated wastewater into Elliott Bay and bring a large CSO basin to near compliance with the CSO policy overflow performance standard. Currently, the County has completed an alternatives analysis, and is underway with the design process to resolve performance deficiencies of the facility.

In developing the proposed permit requirements, WTD appreciates Ecology's consideration of the County's proposed capital delivery and schedule milestones that we provided for the Elliott West project. However, the draft NPDES permit includes two project milestones, and a project completion goal by the end of 2031, that are unreasonable in light of technical and economic conditions and uncertainties existing at this time. WTD believes the continued development of the project requires additional flexibility to accommodate the many uncertainties that lie ahead, not least of which is the efficient delivery capacity for the other remaining CSO control projects yet to be developed and implemented along with our other ongoing capacity improvement and

July 7, 2023

Page 4

asset management obligations. Additionally, other factors could affect the Elliott West project schedule including other regulatory projects such as nutrient controls for the Puget Sound Nutrient General Permit, and the ongoing concerns with labor and supply chain constraints in the local, national and global markets. Therefore, WTD requests Ecology's consideration to adjust the final bidding milestone schedule proposed within this permit cycle and allow the County to instead define the final project completion schedule as a component of the next permit renewal process.

King County Department of Natural Resources and Parks
Wastewater Treatment Division

Attachment #2

Tabulated Detailed Comments (July 7, 2023) –
Draft West Point Wastewater Treatment Plant NPDES Permit (WA0029181)

COMMENTS ON DRAFT NPDES PERMIT
Permit, Page 7, Table 2 (Summary of Permit Report Submittals): Note that several conditions/deliverables listed in Table 2 are stated with due dates occurring in 2023 prior to adoption of the permit. These dates need to be adjusted in the final NPDES permit to include a sufficient/reasonable duration for completion after the permit effective date.
Permit, Page 7, Table 2 (Summary of Permit Report Submittals), A4 (Annual DMR) and Page 25, S3.A.4(c): The proposed recurring due date of January 15th for submittal of the annual DMR is a change from the current permit date of July 31st, and is very close (only 15 days) to the end of the year and is challenging to achieve given the time to compile laboratory analytical reports and other relevant information and prepare the report. The County requests a March 15th deadline for Annual Reports to provide sufficient time to prepare the report, and to be consistent and efficient in preparing other reports that utilize the compiled laboratory information such as the pretreatment report.
Permit, Page 7, Table 2 (Summary of Permit Report Submittals), A4 (Semiannual DMR) and Page 25, S3.A.4(d): The County requests the January 15th due date be changed to March 15th and September 15th to provide sufficient time to prepare the semi-annual reports.
Permit, Page 7, Table 2 (Summary of Permit Report Submittals), S6.E(1) (Updated Industrial User Inventory – PFAS): Table 2 identifies a date of April 30, 2024 for completion of the industrial user survey and is inconsistent with the S6.E(1) condition stated on p.43. However, please see the County's detailed comment to condition S6.E(1) below and request to extend this due date to April 30, 2027. Also, Table 2 should include conditions S6.E(2) and S6.E(3) - and please note our request to extend the due date for both tasks to July 31, 2027.
Permit, Page 7, Table 2 (Summary of Permit Report Submittals), S9.B: Table 2 identifies a date of Dec. 31, 2026 which is inconsistent with the permit condition of Feb. 15, 2027 (p. 45); also please see the detailed comment below for S9.B requesting an extension of this date to October 2027.
Permit, Page 7, Table 2 (Summary of Permit Report Submittals), S11.F: Table 2 identifies a date of Dec. 31, 2026 which is inconsistent with the permit condition text of Dec. 31, 2027 (p. 55) which is the latter date that the County prefers.
Permit, Page 7, Table 2 (Summary of Permit Report Submittals), S12: Please adjust the submittal due date for the CSO outfall sampling and quality assurance plan to no sooner than 3 months after issuance of the permit.
Permit, Page 8, Table 2 (Summary of Permit Report Submittals), S15.A: Table 2 identifies submittal due dates for the Elliott West compliance schedule that are inconsistent with the permit

condition. Additionally, please see the County's detailed comment to condition S15.A below and request to modify milestones and due dates in Table 36.

Permit, Page 10, S1.B., Table 5 (Effluent Limits: Elliott West CSO Treatment Plant): Under the proposed draft NPDES permit, the dilution ratio for Elliott West discharges to Elliott Bay (based on a current peak steady-state facility discharge capacity of 244 mgd) is substantially reduced from 8.4:1 to 2.6:1 due to Ecology's modified dilution modeling requirements. Consequently, the proposed revised total residual chlorine (TRC) maximum daily effluent limit (MDEL) of 33.8 ug/L is considerably lower than the current 109 ug/L limit. The reduced TRC effluent limit is a concern because the Elliott West facility currently exhibits hydraulic and equipment performance conditions that make it difficult to reduce TRC to remain in compliance with the existing effluent limit. As operations of the current Elliott West facility are expected to more frequently violate the proposed effluent limit, the County requests that an interim performance-based TRC effluent limit be issued for Elliott West.

There are no technologies, facility improvements, or operational changes that can be immediately implemented to improve the disinfection and dichlorination processes to achieve routine compliance with the proposed TRC effluent limit. Additionally, the currently installed automated chlorine analyzer has a lower limit of quantitation of approximately 50 ug/L. Therefore, monitoring of Elliott West WWTS's operations will not be available to immediately quantify on a reliable basis whether the final effluent TRC concentrations are in compliance with the effluent limit. The County's estimated timeframe for reconfiguration of analyzer equipment, and implementation of supporting equipment such as a dedicated chlorine-free water system for the analyzer to be capable of monitoring for a lower range of TRC concentrations under the draft permit is September 2025. An uncertainty that would contribute to the implementation schedule is whether a secondary/backup analyzer would be required to quantify elevated ranges of TRC concentrations that exceed the new lower effluent limit and modified performance of the existing analyzer.

Current operations can result in exceedances of the lower pH (6.0) effluent limit due to the low alkalinity content in CSO flows and the use of sodium bisulfite (SBS) for dechlorination and reduction of TRC levels in the final effluent. Operations will need to increase the use of SBS to achieve the proposed lower TRC limit and this is expected to increase the frequency of exceeding the lower pH effluent limit at Elliott West.

Therefore, to accommodate the additional potential for non-compliance with the permit that is beyond the County's ability to immediately resolve, the County requests that an interim performance-based TRC effluent limit be issued for Elliott West (Table 5 of the permit) until the Elliott West facility improvements project is completed and operational. Accordingly, the County also requests that the permit include a provision for interim performance limit and time schedule that recognizes the additional and unavoidable exceedances of the pH effluent limit that will occur as a result of modified chemical SBS dosing operations needed to achieve compliance with the new TRC effluent limit. Please also note that this compliance schedule request is a related

and necessary supporting element of the County's comments and requests for additional consideration of the proposed compliance schedule for the Elliott West capital improvement project that is outlined under Special Condition S15.A.

Based on the demonstrated challenges of the Elliott West facility operations to meet the current effluent limits, and reasonable expectation that the current facility would more frequently exceed the future final TRC effluent limit (as well as potential future facility improvements), the County also requests that Ecology grant an exception to the acute mixing zone size as allowed and conditioned by state regulations (WAC 173-201A-400[12], [13], and [14]). Under the current critical conditions identified for the discharge, the mixing analysis calculated a dilution of 2.6:1 (at the acute mixing zone boundary 26 ft from the discharge). At this distance from the outfall, the discharge plume is above the seafloor with a horizontal velocity of 1.13 m/s or 3.7 ft/s and a diameter of 18.8 ft. Additionally, the discharge plume speed exceeds 0.8 m/s or 2.6 ft/s until it reaches the surface 70 ft from the discharge. These plume velocities are sufficient to prevent aquatic pelagic organisms from remaining within the discharge for durations longer than a few minutes. Given the inability for aquatic organisms to be exposed to the diluted effluent at the calculated concentrations for the one-hour period associated with acute water quality standards, there will be no adverse impact to an increased acute mixing zone size. Therefore, the County requests Ecology revise the acute mixing zone size to a distance of 70 ft from the discharge point and utilize the corresponding 7.8:1 dilution in the reasonable potential analysis and derivation of effluent limits based on acute water quality standards.

The request to modify the mixing zone is a reasonable and practical approach that would facilitate the County's cost-efficient planning and design of the facility improvements and is consistent with the regulatory considerations of WAC 173-201A-400(12), (13), and (14) for mixing zone authorizations. While the County acknowledges treatment performance deficiencies have developed over the years, the County believes AKART appropriate to the discharge is being fully applied, as recognized by Ecology for the design of the existing Elliott West facility and prior regulatory requirements. The County's current planning and design also includes state-of-the-science treatment technologies to address the challenging hydraulic and water quality conditions that are recognized with flows reaching the Elliott West facility. Prior to the publication of the draft NPDES permit, the alternatives analysis for the Elliott West project identified optional strategies for improvement of a chlorine-based disinfection process including high-rate clarification technologies, and modified approaches to treatment flow and process control via Mercer Tunnel equalization and pumping operations. The County also investigated optional outfall diffuser improvements; however, modeling analyses to date indicate that improving dispersion and mixing of the outfall discharges would be significantly more challenging than anticipated and thus considered a lower priority option for consideration in the project. However, the proposed new NPDES permit requirements would necessitate the consideration of additional enhanced treatment strategies for the project such as changing from chlorine- to ultraviolet light-based disinfection and re-evaluation of outfall diffuser modifications. These additional considerations could increase the capital project budget by up to about 25 percent (i.e., an

additional ~\$100 million) or more if upgrades to the facility pumping systems would be required, or if upgrades to the outfall diffuser are necessary. The County believes that these substantive additional facility upgrades to meet the new permit requirements would certainly be of marginal reasonable value in an AKART evaluation of the alternatives, compared to a relatively small expansion of a mixing zone. Therefore, the County's analyses to-date indicate that all siting, technological, and managerial options which would result in full or significantly closer compliance that are economically achievable are being utilized through the County's ongoing planning and design process. Furthermore, the proposed mixing zone increase would only incrementally change the influence of the Elliott West facility discharge to Elliott Bay and is expected to result in greater protection to existing and characteristic uses through improved compliance with the pH effluent limit (if chlorine were to remain the preferred disinfection method). Therefore, the proposed mixing zone exception would be consistent with subsection (4) of WAC 173-201A-400 regarding the effects of the discharge and protections necessary for the ecosystem, habitat, characteristic uses, and public health.

The issue of the increased rate of apparent non-compliance for the intermittent WWTS discharges due to data averaging, or reduction in dilution based on revised steady state critical flows modeling, also could potentially be addressed by considering flow-adjusted (dynamic) effluent limits as described in Chapter 6, section 3.3.17 of the Permit Writers Manual. The manual notes that dynamic limits are often complex to determine and assess for compliance, in which case permit writers are directed to consider compliance schedules for the static water quality-based limits. The manual also notes that dynamic limits are assumed to be less stringent than static limits, but real applications have demonstrated otherwise. In the case of the Elliott West facility discharge with its marine receiving water conditions, dynamic effluent limits may be an appropriate option to better reflect the actual effects of the discharge and be more easily assessed than for discharges into rivers with seasonal flows. Consequently, the County requests that the permit also consider provisions for the interim measures of a compliance schedule to include the allowance for the County to develop and submit a plan within four years of permit issuance for evaluation of the preferred effluent limit derivation methods most suitable for the Elliott West capital project facility design.

Permit: Page 10, Table 10-Footnotes for tables 5-9 (S1.B, Effluent limits for CSO Treatment Plants); and Page 22, Table 28-Footnotes for Tables 24-27 (S2.B, Monitoring Schedule–CSO Treatment Plants: Elliott West, Henderson/MLK, Carkeek, Alki, and Georgetown); and Page 60-61, Fact Sheet: The draft NPDES permit proposes to modify conditions of the current permit for both the effluent limit and monitoring protocols that pertain to assessing compliance of total suspended solids (TSS) removal efficiency at the County's five WWTS facility discharges during CSO treatment events. The draft permit can be characterized as including three new sets of substantive conditions that re-define the TSS removal compliance assessment procedures, as follows:

1. First, the draft permit proposes the TSS removal efficiency to be based on TSS concentration and thus deviates from the current permit that uses mass-based methods for this assessment.

Table 10 (footnote “b”) contains a new condition that TSS removal efficiency will be assessed based on the data collected only on days of CSO events when both inflow to, and discharge from, the WWTS occurs. Table 28 (footnotes “d” and “j”) prescribe that flow-proportional composite sampling shall occur over the duration of the inflow and discharge event on a daily basis. The Fact Sheet (p. 60, 3rd paragraph) describes that continuation of a mass-based monitoring and assessment method for TSS removal was considered but rejected since state and federal regulations generally refer to concentration when defining percent reduction of pollutants.

2. Second, Table 10 (footnote “b”) defines a restriction that the effluent limit is to be assessed based only on the annual average concentration of TSS removed during “discharge events” (emphasis added), and that monitoring must demonstrate that each WWTS removes at least 50% of the average TSS prior to discharge (emphasis added). Additionally, Table 28 (footnote “k”) requires TSS removal efficiency to be assessed with monitoring data collected only on days when a WWTS receives inflow and discharges treated effluent to the facility’s marine outfall. These conditions mean that TSS captured at a WWTS and conveyed to West Point during a day with only inflow (i.e., filling period of the WWTS), or on days after the storm recedes and the treated discharge period has stopped (i.e., draining period), would not be included in the TSS removal efficiency calculation. The Fact Sheet (p. 60, 2nd paragraph) further describes that TSS captured and removed at a WWTS during a CSO event that does not result in a treated discharge (i.e., referred to as a “storage-only” event) also will not be included in the assessment.

3. Third, the draft NPDES permit (Fact Sheet, p. 60, 2nd paragraph) eliminates a condition of the current permit that required the TSS removal efficiency calculation for each CSO event of a WWTS to also include the removal occurring at West Point of the TSS captured at each WWTS site and conveyed to West Point. The County agrees with Ecology’s rationale for this change because it eliminates the compliance of TSS removal determined for the CSO flows at a WWTS site being partially dependent on removal that occurs at the entirely separate (“offsite”) West Point facility. The current permit is inconsistent with the effluent limit of at least 50% removal (and Washington’s underlying regulations) because the compliance dependency on West Point performance means that each WWTS must exceed 50% on average by the extra amount of TSS discharged from West Point. The change also is consistent with the Clean Water Act and associated regulations governing reissuance of altered permit conditions because, as noted by Ecology in the Fact Sheet, it corrects an error in the interpretation of state standards.

The County has questions and concerns with the two substantive issues listed above (#1 and #2) in that some of the conditions are entirely new, and there also is a general lack of available data and information, and limited time within this brief NPDES permit renewal process, to determine with certainty the ability of the County’s existing WWTS facilities to achieve and maintain compliance in the future. The County recognizes that Ecology’s analysis of existing data presented in Appendix E (p. 156-157) may represent a coarse estimation of compliance under the proposed permit requirements. However, the County believes that the proposed conditions alternatively could be interpreted to meaningfully vary from relevant federal (40 CFR Part 122)

and state (Chapter 173-245 WAC) regulations, given that existing guidance for the “permitting policy” for CSO treatment articulated in the Criteria for Sewage Works Design (“Orange Book”, C3-3.3.1) specifically aligns with the current NPDES permit framework of conditions.

With respect to second concern above, the County believes the general deviation of the proposed requirements from the current mass-based regulatory framework needs careful consideration, given the potential consequences for the County’s programs and impact on the interpretation of conditions that would be required to support the proposed changes. The existing WWTS facilities include a variety of flow detention and attenuation features (tankage, tunnels), pumping systems, and treatment process control strategies to hydraulically capture and detain (or “store”) flows and solids during each unique storm and CSO flow event. The WWTS “storage” functions are important for the capacity to return captured TSS to West Point and achieve other CSO treatment objectives and hydraulic control of the untreated CSO outfall(s) associated with the CSO site(s) to meet the state’s CSO performance standard of one overflow per year, on average. By limiting the assessment of TSS removal to only days when the WWTS has both inflow and discharges to the outfall, only a limited amount of solids capture occurring during a CSO event is included when, in fact, there may be substantial additional solids capture and return to West Point during the facility’s filling and draining periods as well as storage-only events. Consequently, storage processes are as critical for facilitating TSS compliance based on mass as other treatment processes (e.g., screening, disinfection) are important to other treatment objectives.

The Fact Sheet describes that the proposed permit changes regarding TSS removal through storage and at West Point are based on the Chapter 173-245 WAC regulations for “at-site” treatment that don’t provide “...a basis to allow a credit for solids removed through treatment at another location...”. However, the County is concerned that the proposed specific restrictions on storage in the effluent limit and monitoring protocols would be inconsistent with WAC 173-245-020(16) that defines primary treatment as “...any process [emphasis added] that removes at least 50% of the total suspended solids from the waste stream...” of a CSO site. While the County agrees that West Point is an offsite location for the purposes of the regulations, the storage features and functions in question are integrated in facilitating TSS removal from flows associated with each CSO site. Moreover, as noted above, the Orange Book (C3-3.3) specifically outlines that TSS removal efficiency is accomplished and assessed by methods consistent with the existing permit including the use of “combinations of storage and treatment” (C3-3.3), and compliance based on an annual mass balance approach (C3-3.3.1). Thus, regarding the County’s requests below for further deliberation on optional TSS removal efficiency protocols, the allowance of storage processes should be considered in any modifications to a mass-based TSS removal assessment approach because of the central role storage has in solids capture and removal at some of the County’s existing WWTS treatment facilities.

With respect to the first concern above, the County believes that the proposed change to evaluate TSS removal efficiency based on the annual average TSS concentration basis may likely be a less accurate and representative method of evaluating WWTS facility performance than

mass-based monitoring. WTD also is uncertain that existing WWTS operational data are suitable or sufficient to assess the effects of the proposed permit requirements on future compliance, as there are design and operational features of each facility that may vary considerably from the proposed requirements. For example, there are multiple inflow points to the Elliott West facility that lack an independent monitoring location; thus, upon permit issuance it will not be possible to immediately and directly monitor influent concentrations. Additionally, both the Elliott West and Alki WWTS facilities periodically encounter conditions where achieving compliance with the annual TSS removal effluent limit is challenging. The Fact Sheet (Appendix E) also demonstrates that compliance at Elliott West, Alki, and Henderson/MLK facilities are expected to have considerably lower achieving TSS removal performance based on concentration compared to a mass-based approach. Therefore, WTD is concerned that upon issuance of the NPDES permit, the WWTS facilities will immediately be at risk of an increased likelihood and frequency of permit exceedances. Additionally, because data is unavailable to fully assess the existing facility performance characteristics, there is considerable uncertainty whether existing equipment and WWTS operational strategies can be immediately implemented upon permit issuance to achieve routine compliance with the new requirements.

There are other characteristics of a concentration-based approach to monitoring TSS removal that support the conclusion that concentration may be less suitable than a mass-based approach. The factors listed below indicate typical CSO event and WWTS facility process control characteristics that lead the proposed approach to concentration-based monitoring to potentially be inaccurate and unrepresentative of actual solids removal performance. Conversely, WTD is unaware of any issues that would substantively affect the accuracy or representativeness of monitoring the mass balance of inflow and effluent TSS over the duration of a CSO event. Consequently, the information would indicate that mass-based TSS monitoring is adequately representative for the purposes of evaluating TSS removal efficiency consistent with 40 CFR Part 122.45(f).

- The proposed monitoring restriction to CSO event days with both inflow and discharge will necessarily represent a narrow period of the typical storm hydrograph when facility flow and hydraulic loading rates are elevated, and conditions less suitable for effective solids settleability and removal. Additionally, because of solids removal from the detention and storage functions described above, influent TSS concentrations can be lower during the later stages of a CSO event that result in generally lower potential removal efficiency. Therefore, the monitoring restrictions will result in data unlikely to be as representative of average TSS removal efficiency as a method that uses data from the entire CSO event.
- Evaluating “average” TSS removal based on concentrations is effective when influent and effluent rates/volumes are approximately equal. However, due to the WWTS detention/storage functions, the influent and effluent characteristics can vary over the course of a CSO event. Therefore, an unequal volumetric-TSS concentration relationship between influent and effluent will adversely affect the calculation of average TSS removal performance over an entire event or an annual average basis.
- The proposed TSS removal calculation based on the annual arithmetic average influent and effluent TSS concentrations will be positively skewed to larger treatment event concentrations,

and thus may provide a measure of central tendency of effluent concentrations that are unrepresentative of the respective influent conditions, and TSS reduction efficiency.

Based on the concerns above, increased risks of effluent limit violations upon permit issuance, and inability to immediately collect data and modify WWTS facility performance to achieve compliance with the new requirements, the County requests a compliance schedule and interim requirements based on the existing performance and requirements until such time that further deliberation and finalization of TSS removal requirements are developed. While planning and design of the Elliott West facility improvements was already ongoing in part to address solids removal performance under the existing permit requirements, addressing any needs for improvements at the Alki WWTS in particular (or our other WWTS) could involve substantial new planning and capital improvements depending on the magnitude of any deficiencies identified. We believe it's noteworthy that the combined annual average quantity of TSS managed by all five existing County WWTS facilities is a minor fraction (<1%) of the total system-wide amount conveyed to West Point. Accordingly, WTD is concerned that the new TSS removal requirements could have operational and capital cost implications that far outweigh the scale of the regulatory or facility performance objectives involved. Therefore, the proposed actions and supporting rationale for a compliance schedule include:

- The uncertainties of the broad changes to the proposed requirements warrants additional review and discussion to develop the permitting approach that best achieves consistency, reasonable, and cost-efficient outcomes relative to the underlying regulatory objectives.
- WTD needs to develop a plan of action to conduct appropriate data collection and engineering evaluations of existing WWTS facility performance under the new requirements and determine the need for any updates to each facility plan (i.e., engineering report) and operations manuals.
- A compliance schedule needs to consider development of the actions and information sufficiency for WTD to plan, schedule, and implement any necessary WWTS facility improvements into our operations and capital delivery programs.
- The broad changes to the requirements, and existing lack of available information to assess the implications to the County's programs, supports the need for the renewed permit to achieve the actions above within the forthcoming NPDES permit cycle. Development of planning, design, and implementation of any needed facility improvements would require substantial additional resources, effort, and regulatory coordination with relevant regulatory authorities and are activities suitable only for identification at the time of application for renewal of the subsequent NPDES permit cycle.

Permit, Page 12, Table 10 (Footnotes for tables 5-9), footnote "b": Table 10, footnote "b" states "Monitoring data must demonstrate that each individual CSO treatment facility removes at least 50% of the average TSS *prior to discharge*. (emphasis added). The County believes the 'prior to discharge' phrase should be deleted because it doesn't occur in the relevant WAC 173-245-020(16), yet could be interpreted explicitly to require achieving at least 50% TSS removal at all times - as opposed to meeting the limit on an average basis over time.

Permit, Page 15, S2.A (Monitoring schedule – West Point WWTP), Table 17 (Final wastewater effluent), and Page 19, Table 25 (Treated CSO effluent): The County treatment labs are not currently accredited for performing the Enterococci tests. Therefore, the County requests a period of time before this new monitoring requirement is effective. The labs will need time to ramp up with the new method before applying for accreditation, which would take up to 12 months to complete (which is the standard practice and timeframe). Additionally, the proposed 2/wk monitoring frequency for Enterococci will generate a large sample data set within a very short period of time (3-6 months). Because a relatively short monitoring period would be sufficient to generate a suitable paired data set for comparison with fecal coliform data, the County requests this monitoring requirement be a time-limited study to evaluate whether the technology-based effluent limit based on fecal coliform bacteria will remain the appropriate basis of the effluent limit.

Permit, Page 17, S2.A (Monitoring schedule – West Point WWTP), Table 21 (Influent PFAS monitoring): WTD does not believe that influent PFAS monitoring, as a defined permit condition, should be required at West Point WWTP because it could lead to unnecessary permit violations, if monitoring is missed or not conducted to the stringent proposed protocols. WTD is proactively and voluntarily committed to taking a number of actions that supersede the monitoring requirement in Table 21. For example, WTD is committed to a yearlong sampling effort at West Point, South Plant, and Brightwater and its service area for influent, effluent, biosolids and landfill leachate, development of a conceptual PFAS sewershed model, a survey of available treatment technologies, and a direct utility effort to support source control policy. The expected impacts of complying with the proposed monitoring requirements of Table 21 would unnecessarily add compliance risk and our planned sampling at our three regional treatment plants is more comprehensive in nature. It is also unclear or not explained in the fact sheet how Ecology will use influent only data in the future, as water quality criteria for marine waters has not been developed and differentiation of upstream sources cannot be derived with influent data only. Accordingly, WTD respectfully requests that Table 21 be removed from the final West Point NPDES permit.

Permit, Page 18, S2.B (Monitoring Schedule), Table 23 (Footnotes for Tables 16-22), footnote “e”; and Page 22, Table 28 (Footnotes for Tables 24-27), footnote “m”: The footnotes “e” (Table 23) and “m” (Table 28) for the monitoring of TRC in final West Point and CSO WWTS effluent specify that the daily maximum concentration is “...the highest concentration discharge during each day the CSO treatment plant discharges using instantaneous data averaged over a maximum interval of 10 minutes.” The Fact Sheet does not provide any supporting rationale for this changed condition, and WTD disagrees with the application of a 10-min averaging period as being appropriate for the assessment of compliance with an applicable TRC effluent limit because the acute water quality criterion for chlorine is based on protection of organisms in the receiving water body with chlorine exposure over a one-hour period. Consequently, the requirement to assess compliance with effluent limits based on a sample frequency of 10-minute collection intervals is exceedingly short relative to the basis of the effluent limit, the underlying water quality standard, and the practical considerations of the County’s existing WWTS facility-related discharge characteristics in particular.

The primary concern is that the significant reduction in the sample averaging period for TRC, and thus increased frequency of sample data for assessment of compliance, would be expected to result in the immediate increased probability of non-compliance with effluent limitations, whether they are based on a 10-min average or even longer averaging such as a 1-hr interval in alignment with the basis of the water quality standard. The following tables summarizing effluent TRC concentration data from recent CSO events at the four chlorine-using WWTS demonstrate that the maximum daily effluent TRC concentrations based on 10-minute averages would be substantially higher than both the current daily average data as well as a longer 1-hr interval averaging period. The Elliott West data summary also indicates that the rate of non-compliance of 10-min sample average data would certainly increase substantially under either the current or new MDEL compared to data based on a 24-hr average period (as well as for data based on an alternatively longer 1-hr averaging period).

Summary of TRC Effluent Limit Compliance for Elliot West WWTS Discharge Events with variable sample frequency			
Date	TRC final effluent concentration (ug/L)		
	Max 10-min avg	Max 1-hr avg	24-hr avg (current reporting)
2021-09-26	1,000	350	53
2021-10-28	3,200	540	57
2022-10-30	72	13	6
2022-11-6	2,300	410	230
2022-11-22	1,500	500	110
2022-11-29	71	140	19
2022-12-24	4,800	2,800	642
2022-12-25	2,100	1,000	280
2022-12-26	1,100	226	62
2022-12-27	2,300	400	87
Compliance with existing permit limit 109 ug/L but not draft permit limit of 33.8 ug/L.			
Compliance with both existing permit limit and draft permit limit of 33.8 ug/L.			
Non-compliance (either limit)			

Summary of TRC Effluent Limit Compliance for Carkeek WWTS Discharge Events with variable sample frequency			
Date	TRC final effluent concentration (ug/L)		
	Max 10-min avg	Max 1-hr avg	24-hr avg (current reporting)
1/3/2022	5,000	5,000	4,600
1/4/2022	5,000	5,000	3,400
1/6/2022	2,500	1,700	454
1/7/2022	3,400	3,000	552
1/8/2022	9	7	6
2/28/2023	1,000	381	32
12/24/2022	4,990	4,990	2,300
12/25/2022	873	761	264
12/26/2022	1,680	1,580	267
12/27/2022	1,057	945	234
Compliance with both existing permit limit and draft permit limit of 490 ug/L.			
Non-compliance (either limit)			

Summary of TRC Effluent Limit Compliance for Alki WWTS Discharge Events with variable sample frequency			
Date	TRC final effluent concentration (ug/L)		
	Max 10-min avg	Max 1-hr avg	24-hr avg (current reporting)
1/2/2022	1,000	180	23
1/3/2022	3	3	2
1/6/2022	50	30	5
1/7/2022	3	3	3
1/11/2023	3	10	5
2/27/2022	1,530	650	87
2/28/2022	1,360	260	19
12/24/2022	30	10	3
12/26/2022	3	3	3
12/27/2022	2	2	2
Compliance with existing permit limit 234 ug/L but not draft permit limit of 221 ug/L.			

Compliance with both existing permit limit and draft permit limit of 221 ug/L.
Non-compliance (either limit)

Summary of TRC Effluent Limit Compliance for Henderson/MLK WWTS Discharge Events with variable sample frequency

Date	TRC final effluent concentration (ug/L)		
	Max 10-min avg	Max 1-hr avg	24-hr avg (current reporting)
1/2/2021	73	10.5	1.6
1/12/2021	75	14*	1.4
1/2/2022	>100	>98	>41
1/3/2022	0	0	0
1/6/2022	36	31	23
1/7/2022	43	33	24
2/28/2022	298	71	6

Compliance with existing permit limit 39 ug/L but not draft permit limit of 32.5 ug/L.

Compliance with both existing permit limit and draft permit limit of 32.5 ug/L.

Non-compliance (either limit)

There are additional practical WWTS facility, as well as West Point, disinfection system operating considerations that could increase the probability of non-compliance with TRC effluent limits with the shorter 10-minute averaging period. Given that the WWTS facilities only operate intermittently for individually unique storm event conditions (as opposed to the relatively stabilized flow of a continuously operated treatment plant like West Point), the initial WWTS flow and water quality characteristics at the start of a CSO treatment event can be highly variable. Consequently, the WWTS disinfection and process control equipment is typically set to conservatively dose flows at initial startup to compensate for variable and uncertain conditions to ensure effective disinfection. As a result of the process control challenges at startup, final effluent quality can be less predictable and representative of the overall treatment event flows for many minutes during the startup period. Additionally, the time period of sample collection and pumping equipment to convey process samples to the automated chlorine analyzers, and time for chemical dosing and process control equipment (or manual operations) to react to changing TRC concentrations, can approach or significantly exceed 10 minutes. Therefore, under a 10-min averaging requirement, effluent TRC levels would be expected to change at a rate greater than the typical capacity for operations to monitor and make responsive process control

adjustments, and thus would add to the challenges of maintaining permit compliance with the TRC effluent limits.

Based on a cursory review of West Point Wastewater Treatment Plant final effluent TRC data during plant start-up following scheduled plant outages, the proposed 10-minute TRC average concentrations also would likely result in additional exceedances of the effluent limit compared to assessment based on a daily average concentration. The West Point wastewater treatment plant operates 24 hours 7 days a week requiring scheduled plant outages for maintenance activities, equipment upgrades and capital project activities. These plant outages are planned weeks in advance and cannot be avoided. The startup after plant outages places the plant and the equipment at risk and operations and maintenance staff prepare in advance to assure a safe and effective startup while protecting the public and environmental health and staying within the NPDES effluent permit conditions. However, the disinfection chemical feed systems during varied hydraulic and loading conditions typical of plant startups cannot respond and stabilize within the ten-minute interval. In addition, the County has similar concerns about the disinfection system being able to control effluent TRC levels during high flow conditions from storm events.

Overall, the County is concerned that the shorter TRC averaging period for West Point and WWTS facility effluent discharge monitoring that would increase the probability and rate of non-compliance with effluent limits, yet in fact only reflect apparent noncompliance conditions inconsistent with the underlying regulatory basis of the TRC effluent limits developed for the protection of organisms from exposure of up to one hour. The additional non-compliance will be subject to potential enforcement as permit violations, issuance of stipulated penalties, and citizen lawsuits. Moreover, the County has not conducted any evaluation at this time to determine the remedial measures that would be needed for WWTS or West Point process control and monitoring equipment to achieve compliance. Consequently, the County requests that Ecology develop the reasonable averaging period(s) for the treatment facilities that considers a statistically appropriate measure of average concentration consistent with the effluent limit derivation procedures, and the practical constraints of intermittent and remotely-located WWTS facility process control operations. In particular, the averaging period should be no shorter than one hour for consistency with the basis of the acute chlorine water quality standard. Additionally, because the WWTS and West Point facilities will be immediately at risk of non-compliance with any effluent limits upon issuance of the final NPDES permit, the County requests that a compliance schedule of no less than three years be provided to develop a plan for the corrective actions that will be necessary to achieve compliance with a reduced averaging period. The ultimate time schedule for construction of facility improvements cannot be determined at this time; thus, the compliance schedule also should identify that the final construction plan (and associated milestones) would be provided in a submittal as a component of the application for renewal of the NPDES permit.

Permit, Page 20, Section S2.B, Table 26 (Final effluent characterization – Georgetown CSO Treatment Plant): The County supports sampling four times during the first year of operation. However, in order to not miss opportunities to collect samples during discharge events, we ask for an additional sentence to be added that states, "If more than one discharge event occurs during the same month, and the County has

<p>the capacity to collect and analyze samples, this will count toward the 4 event requirement. We also request the table be changed to “4 samples during the 1st year wet season; 1/year thereafter”.</p>
<p>Permit, Page 22, S2.B (Monitoring Schedule), Table 28 (Footnotes for Tables 24-27), footnote “m” and “n”: The proposed monitoring schedule has removed the requirement to sample every hour when continuous monitoring is not possible. The County requests including the clarification: “Continuous” means uninterrupted except for brief lengths of time for calibration, power failure, or unanticipated equipment repair or maintenance. The Permittee must sample every hour when continuous monitoring is not possible.</p>
<p>Permit, Page 24, S2.D (Sampling and analytical procedures): The last sentence of the first paragraph, in limiting the condition to CFR Part 136 methods, could limit the use of SW-846 methods that need to be used for the sediment or biosolids. This sentence could be modified to only apply to influent/effluent samples, or it should allow other methods for the biosolids/sediment sample matrices.</p>
<p>Permit, Page 24, S2.E(3)(c) (Flow measurement and continuous monitoring devices): S2.E(3)(c) requires <i>"Must calibrate continuous chlorine measurement instruments using a grab sample analyzed in the laboratory within 15 minutes of sampling."</i> The County is concerned with the capacity and feasibility of personnel to implement this calibration procedure at the WWTS facilities under the practical constraints of these facility operating conditions including the intermittent and highly variable storm and CSO event timing, remote location and travel time for treatment event response, shift status of qualified analytical personnel and degradation time of prepared standard solutions, and availability of other suitable industry- and instrument manufacturer-recommended procedures for ensuring accurate and reliable calibration of monitoring instrumentation that are consistent with objectives for the work. The element of the provision requiring calibration to be by “grab sample” within 15 min. would seem to suggest that the sample being analyzed is from a sample taken during an actual event. Given the unpredictability of these events, we would suggest that these calibrations be done on a routine basis, under controlled and consistent conditions, using standard solutions prepared by lab staff. We would suggest continuing the current practice for 8 of the 9 chlorine analyzers at the West CSO facilities. The current practice was reviewed with the Wallace and Tiernan representative and they considered the County's calibration protocols to be consistent with best practices. Each week on Thursday, the West Point lab prepares three chlorine standard solutions for each treatment facility by 7:00 -7:30 am, and then instrument technicians calibrate the analyzers at each facility. The lab has conducted studies of the standard solutions and found that there is little degradation in TRC levels relative to the concentrations being monitored, except for the final effluent at Elliott West. It should also be noted that any calibration based on a slightly degraded solution would mean that the analyzer would read slightly higher than the actual sample concentration so it would be more conservative and protective of water quality. Due to the proposed lower effluent TRC limit at Elliott West, a slight degradation in the standard would have a larger relative impact on measured concentrations. Consequently, for analyzing TRC during Elliott West treatment events in the future, the County will re-range the analyzer at the Denny regulator station to evaluate compliance with the new lower TRC effluent limit (i.e., to 0 - 0.1</p>

<p>mg/L), and will prepare a lower range of standard solution onsite at Denny for immediate calibration by the instrument tech during the Thursday calibration process.</p>
<p>Permit, Page 26, S3.A(9) and S3.A(10) (Discharge monitoring reports): The County believes the condition should be modified to specify the use of a geometric mean of all bacteria samples collected during a day, rather than an arithmetic average. A geometric mean will provide a more representative daily concentration by avoiding the positive skewing that occurs with the exponentially varying characteristics of bacteria data.</p>
<p>Permit, Page 27, S3.A(13)(b) (Discharge monitoring reports): The use of "1/2 detection limit" in averaging of sample results should have an disclaimer that it's not appropriate for parameters where the regulatory objective is lower than the instrument detection limit (e.g., PCBs).</p>
<p>Permit, Page 27, S3.F(2)(c) (5-day reporting): The County would appreciate the report submittal due date exclude non-business days to provide sufficient time to gather relevant incident information for the report. Suggested additional text to include is: "<i>...the submittal due date shall be the close of business of the next business day if the 5th day falls on a Saturday, Sunday, or federal holiday.</i>"</p>
<p>Permit, Page 42, S6.B (Monitoring requirements), #11: The reference to "30 ug/L" should be in units of "mg/L" in the extract.</p>
<p>Permit, Page 42, S6.E.1, Identification and control of PFAS discharges: The King County Industrial Waste (KCIW) program regulates over 650 industrial users (IU) and commercial entities through some form of control document, and within the WTD service area there are over 70,000 businesses. The expected impact of complying with the requirement to update or revise its IU inventory for known or suspected IUs discharging PFAS will require a significant shift in KCIW program priorities, and require additional staff and resources. Specifically, KCIW will need to procure consultant services, identify businesses who should receive the survey, develop the survey (questionnaire), transmit the survey, record and manage responses in a database, provide follow-up for non-responsive industrial users, conduct education and outreach to the IU community, and update the IU inventory to meet the permit requirements. We don't believe this can realistically be accomplished by the proposed deadline of April 30, 2025. King County requests that Ecology revise this permit condition to limit the revision of the IU inventory to Significant IUs only and that the deadline in the final permit be extended to April 30, 2027. This will avoid focus on zero or de minimus entities, allow staff to focus on the most important likely sources for the inventory and related prevention efforts, and result in better water quality benefits. The requested time extension will also result in a more comprehensive and meaningful IU inventory.</p>
<p>Permit, Page 42, S6.E.2, Identification and control of PFAS discharges: As noted above, King County requests that this special condition be limited to SIUs only. The federal pretreatment regulations only require delegated pretreatment programs such as KCIW, to issue permits to SIUs. KCIW issues many forms of control documents including waste discharge permits (for SIUs), major and minor discharge authorizations, letters of authorizations, verbal/email authorizations and 'no control documents required' letters. We ask that the permit explicitly note that the pollution prevention/source reduction evaluation pertains to SIUs only. The development of a PFAS pollution prevention/source reduction evaluation will be affected by the currently limited</p>

information and guidance available from Ecology to accomplish this requirement. King County requests that the deadline in the final permit be revised to July 1, 2027.

Permit, Page 42, S6.E.3, Identification and control of PFAS discharges: The federal pretreatment regulations only require control documents or permits for SIUs. BMPs and pollution prevention strategies will need to be developed and outreach efforts will be needed before they can be put into SIU permits. King County requests that the deadline in the final permit be July 1, 2027. WTD is making these requests under S6.E.1, 2, and 3 in light of the fact that EPA intends to conduct a nation-wide POTW influent PFAS study, according to the agency's published Effluent Guidelines Program Plan 15 (January 2023), in collaboration with a proposed 150 voluntary POTWs and targeted industry sampling. WTD believes that EPA's efforts will help inform more specific regulatory approaches in PFAS very soon and a revised permit deadline would allow for an incorporation of informed, specific pollution prevention strategies.

Permit, Page 45, S9 (Sediment monitoring) and Fact Sheet, Page 96 (Section III.I. Sediment quality): The County has demonstrated during several past permit cycles that there are only occasional transient exceedances of the Sediment Management Standards (SMS) chemical criteria in the vicinity of the West Point outfall and that those exceedances are the result of physical not chemical conditions, as demonstrated through bioassays (see past reports). The County has also conducted sediment toxicity identification evaluation (TIE) analyses to demonstrate that no chemical in the effluent was tied to the toxicity. During the last permit cycle, the County resampled every station with SMS exceedances since 1998 and demonstrated that no toxicity existed from chemistry. Therefore, we do not understand why it is necessary to repeat this effort. Due to the long period of demonstration and understanding of site conditions at the outfall (25 years), the County requests that the West Point sediment sampling requirement be removed from the permit—as has been done for Brightwater.

If Ecology is not willing to remove the requirement, the County requests clarifications to the sampling in light of the above. Regarding sediment monitoring at the West Point outfall, the fact sheet notes, “this monitoring must, at a minimum, include chemistry and bioassay testing at stations that have previously shown exceedances of chemistry standards or failed bioassay tests.” However, it is unclear in the draft permit (Section S9 - Paragraph 1) if only locations monitored during the last permit cycle with previous exceedances/failures are required to be monitored or if this requirement applies to any station ever monitored since 1998 (> 20 sites). Additionally, King County has demonstrated numerous times that any bioassay failures resulted from physical, not chemical, components created the toxicity. Therefore, the County requests that the fact sheet and S9.A be clarified and recommends that the permit focus on stations with a recent prior sediment quality exceedance and that bioassays not be required.

Permit, Page 45, S9.A (Sediment sampling and analysis plan – West Point WWTP), bullet #2: - If bioassays are required, the County advocates for collecting parallel samples to facilitate bioassays when needed, but bioassay analyses await pending the chemistry results and only proceed if chemistry exceedances occur.

Permit, Page 45, S9.A (Sediment sampling and analysis plan – West Point WWTP), bullet #4: If bioassay testing is required in S9.A, the County requests that only the screen tube manipulation

<p>protocol be used for the larval echinoderm testing requirement. Parallel tests have been conducted during the last two monitoring events using the standard method and screen tube manipulation. These results indicated that physical influence from turbidity in the overlying test water is leading to the failed bioassay tests using the standard methodology, and that sediment chemistry is not the reason for bioassay failures.</p>
<p>Permit, Page 45, S9.A (Sediment sampling and analysis plan – West Point WWTP), bullet #5: The County recommends the same stations as in 2011 and 2017 specifically. These sites include all of the stations sampled since 1998 that had chemistry exceedances or bioassay failures.</p>
<p>Permit, Page 45, S9.B (Sediment data report – West Point WWTP), 1st paragraph: The County requests that Ecology delete the requirement to collect sediments between August 15 and September 30 for both West Point’s main outfall. There are no state regulatory basis to require sampling to occur during this period of the year. Ecology’s Sediment Cleanup User’s Manual does not require this specific sampling period and it would present unnecessary costs and logistical challenges for laboratory and sampling staff.</p>
<p>Permit, Page 45, S9.B (Sediment data report – West Point WWTP), 1st paragraph: The County requests that the due date for the West Point report be changed to October of 2027 to allow adequate time for completion of the laboratory analysis and preparation of the report. If sampling is to occur in Late August or early September of 2026, the lab may or may not be able to even have the analysis complete by December of 2026. Turnaround time is typically 60-90 days, which would leave little time for writing formal report and internal review of that report for submittal by February 2027.</p>
<p>Permit, Page 46, S9.C(Sediment sampling and analysis plan – CSO Outfalls): The County completed sediment sampling in August 2022 per the County’s Sediment Management Plan that covered both the Martin Luther King Jr. Avenue Regulator (013) and Henderson Pump Station (045)outfall location. In addition, the County is currently scheduled to complete sediment sampling at Barton CSO (057) outfall in 2023. The County developed an updated programmatic sampling and analysis plan in July 2022 for these sampling events. The County will be drafting and submitting to Ecology a sediment data report for each monitoring event within approximately one year of sample collection. Therefore, the County requests that the Section S9.C and S9.D permit requirement be removed because this work has either already occurred or will occur in 2023. If Ecology elects to retain this provision, please modify the permit language to identify the existing work that the County has completed to satisfy this requirement.</p>
<p>Permit, Page 47, S9.C: Per the comment above for S9.B, the County further requests that Ecology provide rationale for requiring sediments to be sampled between August 15 and September 30 for the CSO outfalls. There are no state regulatory basis to require sampling to occur during this period. Ecology’s Sediment Cleanup User’s Manual does not require this specific sampling period.</p>
<p>Permit, Page 49, Table 32, S11.A (Authorized combined sewer overflow (CSO) discharge locations), and Fact Sheet, Page 29, Table 9 (Combined Sewer Overflow Outfalls): Please change the location of "Murray St. PS Emergency Overflow" to "Murray PS Emergency Overflow". There is no Murray St. in Seattle, and this corrects the name.</p>
<p>Permit, Page 51, S11.B(7) (Nine Minimum Controls): The proposed modifications to the S11.B(7) condition build upon, and provide expanded requirements for, pollution prevention activities that</p>

exist and are being implemented under the current NPDES permit. The County's current contaminant source control activities implemented in the West Point service area are limited to: (1) the delegated industrial waste pretreatment program (which, in the CSO basins, includes only prescribed stormwater associated with industrial activities, as described and limited to per King County Code); (2) contaminant tracing and cleaning of the County-owned conveyance system; and (3), various other programs reported on in our annual CSO report (e.g., Water Works grant program, public outreach and support services such as pet waste disposal, and pharmaceutical take back efforts). The County relies on the programs and services of other jurisdictional entities in the service area that provide certain other contaminant control activities (e.g., municipal stormwater management under NPDES permits, sewer maintenance, municipal garbage/solid waste management, street sweeping).

The proposed S11.B(7) condition increases the County's responsibility for pollution prevention activities in stating terms such as, "...the Permittee must implement..." the program, and the program must include "...all areas served by King County's CSO facilities..." The proposed changes to the provision are of significant concern because the County lacks ownership and jurisdictional authority for most of the locales, facilities, and activities that would need to be addressed for compliance with the proposed conditions as written. In particular, the condition broadly outlines new requirements to develop and implement a "pollution prevention program" consisting of new stormwater best management practice implementation, and stormwater and wastewater conveyance system inspection and cleaning activities, on private and public properties where the County has no jurisdiction or authority for this under state law. The County does not have jurisdiction over stormwater or land use (building or occupancy permits) in the Seattle city limits (or any other incorporated cities within the West Point sewer service area). Other than availability of basic information regarding the general zoning and land use types in the service area, the County does not have ready access, or the ability to acquire, sufficient information that would be needed to effectively implement the program outlined in this condition. Lastly, the broad requirements provide no latitude for considering the scope of implementation or attenuating circumstances (e.g., technical feasibility or practicality of actions based on site-specific factors or environmental risk). Therefore, due to these constraints, the revised condition could readily lead to unintended and uncontrollable violations of the permit, enforcement consequences, or exposure to third-party lawsuits. Upon permit issuance, we are concerned that the County could be found to be immediately out of compliance with the conditions, and the County is unable to quickly develop planning and development of the required activities to achieve compliance.

The County requests that this provision provide the opportunity for the County, SPU, and other jurisdictions to coordinate and prepare a plan and program of activities for the proposed additional pollution prevention actions. The County also requests that the permit include a compliance time schedule of no less than three years to complete and submit the plan to Ecology. The plan would identify data gaps, appropriately consider each jurisdictional entity's planning and implementation role and authority in the service area, and tailor the program based on scientific, environmental, and feasibility factors.

Permit, Page 52-54, S11.C(d) (Corrective actions for previously controlled CSO outfalls): The County supports condition S11.D (“corrective action”) and its structure of flexible and adaptive management principles outlined in condition S11.D for addressing CSO basins that need remedial measures to return the CSO control projects to a “controlled” status with the state performance standard of one overflow per year on average. We have found that determining the root causes of CSO facilities that are not achieving control, and developing corrective actions to improve the hydraulic performance typically requires multiple lines of investigation to provide sufficient information and certainty of the improvements needed to reduce overflow frequency. It also often requires more than one or two years to monitor and model the effectiveness of the improvements since CSO control facilities operate intermittently.

The proposed Tier I and Tier II requirements, however, could unnecessarily escalate the non-compliance and need to develop additional remedial actions in advance of a lesser level of interventions. Tier II actions are triggered if Tier I compliance isn’t achieved within one additional year, and Tier III can be triggered if certain Tier I/II actions cannot be implemented within one year. As described above, one year has generally been insufficient to effectively evaluate control status after implementation. The Tier I/II requirements also don’t accommodate the situation of an outfall drifting out of control one year, but returning to control in a following year. The County’s preferred approach would increase these “one year” requirement restrictions to two years, and provide for control status that drifts in and out of control. Additionally, a general preferred approach for consideration by Ecology would be to allow Tier I/II corrective action plans to be included in the periodic LTCP Updates which would allow the County to align and prioritize all corrective action projects in a coordinated and cost-effective fashion.

The draft permit Tier III states that a corrective action report will be used to place a compliance schedule in a future NPDES permit or separate administrative order. We recommend that the LTCP Update process should be included as an option instead of these enforcement methods as a means for the County the ability to assess, align, and prioritize potentially large capital delivery obligations with other ongoing CSO control project activities based on the project-specific circumstances. The LTCP requires approval by Ecology and thus would be an effective method for both parties to have the assurances necessary for completion.

Permit, Page 56, S12 (CSO Solids Characterization Study): King County has been collecting both solids and wastewater samples for the five CSOs listed in Table 32 in support of the County’s CSO control projects. The sampling includes in-pipe sediment traps with analysis of grain size, total organic carbon, metals, PCBs, and semi-volatile organic compounds such as PAHs and phthalates. In-pipe sediment traps collect samples over an approximately one-year period to increase the probability of obtaining sufficient sample mass for all target parameters. The wastewater sampling is targeting combined sewer and stormwater flows with analysis of conventional parameters, including TSS and settleable solids, metals, and organic compounds. The wastewater samples are collected during CSO discharge events or CSO-like pipe conditions. Sampling and analysis plans for both solids and wastewater collection were developed in 2018, with an addendum in 2020. Because these data have already been collected, the County requests that Ecology remove this requirement from the permit. The County can provide Ecology the sampling

and analysis plans and the data memoranda once all sample analyses are completed in 2023. If the requirement remains in the permit, the County requests the following clarifications and modifications to this section:

- For solids samples (such as those collected with sediment traps or in-line grab samples), please adjust the parameters to those applicable to solids samples. For example, the solids samples would not be analyzed for TSS, settleable solids, pH, and salinity because those parameters apply to aqueous samples. In addition, there is insufficient water content in sediment trap samples for separate analysis.
- To target sufficient mass for analysis, sediment traps must be deployed for approximately 9 to 12 months; the level in the pipe, where deployed, will capture combined flows, which may or may not be discharged through an outfall. It is not possible to place the sample containers at the level to only capture combined flows that would be discharged through the CSO outfall. Please adjust requirement for collecting solids only during time the outfall is actively discharging as this is infeasible.
- To collect at least 10 sediment trap samples per CSO, it would take 10 years (one sample per year). Two samples per CSO would be possible to collect and report during the permit cycle period. Please clarify the sampling to 2 samples per location for a total of 10 samples. It is important to note that parameters need to be allowed to be prioritized because sufficient sample mass is not always available for all target analyses.
- Due to the complex nature of combined sewer solids, there is often analytical inferences that require sample dilutions for organic chemical analysis, and therefore, detection limits can be higher than targeted goal. Thus, the laboratory cannot guarantee that detection limit goals will be achieved in this matrix.
- For Environmental Information Management (EIM) database submittal, there is not a code that adequately characterizes what the samples represent. Please clarify why these data would be appropriate for EIM submittal.

Permit, Page 60-61, S15.A (Elliott West CSO Treatment Plant Improvements – Compliance schedule for improvements), and Table 36: The Elliott West WWTS facility was designed in the late 1990's and became operational in 2005. The combined conveyance, tunnel, and physical/chemical treatment elements of the Elliott West project has functioned to substantially reduce the discharge of untreated wastewater into Elliott Bay and the South Lake Union area, and bring a large CSO basin to near compliance with the CSO policy overflow performance standard. However, the County also acknowledges the responsibility to develop and implement facility improvements to address treatment performance deficiencies that have developed over the years, and to achieve compliance with new and emerging regulations. The County recently completed an alternatives analysis (December 2021) for the Elliott West WWTS and is underway with a multi-year planning and design process for the express purpose of developing and constructing new facility improvements for the facility. The County appreciates Ecology's consideration of a proposed schedule of planning and design milestones for the Elliott West project that was discussed in a conference call on February 7, 2023. The County's proposed schedule is based on consideration of new information, several changes in design considerations, and evolving economic conditions since the alternatives analysis was completed. The proposed

new draft NPDES permit requirements also will influence the ongoing planning and design of the project.

Based on the ongoing coordination with Ecology for delivery of the capital improvements project, the draft NPDES permit includes a new untenable compliance schedule for achieving project deliverable milestones. WTD believes the continued development of the project will require flexibility to accommodate the many uncertainties that lie ahead, not least of which is the efficient delivery capacity for the other remaining CSO control projects yet to be developed and implemented under a modified federal Consent Decree for the CSO program. The proposed new more stringent effluent limits for TRC and copper are important requirements that will require the project design process to reconsider the appropriate treatment process strategies and design criteria, disinfection technology including potentially changing the disinfection system design entirely from the use of hypochlorite to ultraviolet (UV) light, and potential for modification of the outfall and diffuser system. Additionally, factors that affect the Elliott West project development include effective implementation of WTD's other capital programs, additional facility improvements for nutrient control for compliance with the Puget Sound Nutrient General Permit, and the future financial and industry constraints of multiple and compounded (i.e., "stacking") capital project delivery obligations occurring in the same general timeframe. Other related factors that could directly influence the uncertainty of the Elliott West project schedule include: (a) the project planning necessary to achieve control with the state CSO overflow performance standard for the Denny Way local CSO outfall ; (b) integration of currently planned near-term projects with potential for system operational changes such as the West Point passive weir and Interbay Pump Station capacity improvements; (c) planning for the upstream Mouth of Duwamish CSO control project; and, finally, (d) ongoing uncertainty with the supply chain, labor, and economic effects as recovery continues from the COVID-19 pandemic.

The overall uncertainties in the economic, supply chain, and construction industry that currently exist and are anticipated to continue for the foreseeable future are of significant concern to the County's ability to confidently plan, schedule, and successfully execute on the capital delivery obligations. King County continues to grow internal and external resources to increase annual volume of capital delivery of its portfolio from a current level of \$200M to over \$600M. In doing so, the County is assessing the construction market conditions and is actively taking steps to adapt to these market conditions; however, it is important to note that many factors lie outside of the direct control of the County and will impact the cost of new facilities and the timelines for delivery. In particular, schedule delays are probable based on the identified market risks. In ongoing planning for the Mouth of Duwamish project, WTD recently had its consultant (Parametrix, Technical Memorandum, May 22, 2023) evaluate and provide guidance for anticipating and forecasting macro, regional, and program specific factors which influence material, labor, and other construction costs related to the CSO program and similar types of capital projects. The Technical Memorandum from Parametrix that presents the complete analysis is available upon request. Key takeaways drawn from the assessment are summarized as follows:

- Coinciding with WTD's capital delivery increase, there is heightened competition from numerous large-scale infrastructure projects in the region accounting for billions of dollars of construction works over the next decade. This includes capital programs such as Sound Transit 3 and various Washington State Department of Transportation projects. This is unfolding against a backdrop of an already strained labor market, with notable constraints in both engineering consultant support and construction contractors, and ongoing difficulties in ensuring the availability of specialized construction equipment due to the volume of construction work in the region.
- Construction costs are anticipated to continue to escalate beyond current costs at an average annualized rate of approximately 4-6% for the next five years. Further, in 2023 cumulative escalation from 2019 is projected to be 31%.
- The driving market factors influencing CSO projects, namely concurrent large projects, labor availability, and schedule compression, are interconnected and would positively correlate with the goal of delivering the CSO program in addition to increasing capital delivery over the next 5-7 years. As more projects are undertaken, the available capacity in the market decreases, which also leads to intensified competition for skilled labor resources. Additionally, tighter schedules could strain County resources, necessitate alternative project delivery methods, and potentially elevate costs due to expedited engineering and design timelines. This could impact estimated WTD project costs based on the current saturated construction market and labor shortages, escalating costs potentially up to 25% (or more) in worst case scenarios.
- Key uncertainties and risks identified in the analysis include volatility in local construction markets as the region absorbs heightened construction activity, as well as supply chain shocks, regulatory changes, technological advancements, political/geopolitical events, and macroeconomic stability (ex: recession).
- Cumulatively, the critical factors of labor shortages, stacking of concurrent projects, contractor availability, and supply chain imbalances are probable to impact project schedules, thereby resulting in a need for risk-adjusted schedules that fully capture the delay effects that could challenge the meeting of regulatory and compliance driven timelines.

Based on the information above, the County requests Ecology's consideration of the additional proposed ~~strikeout~~ and underlined additions to the milestones articulated in Table 36 to ensure that the County can implement the project in alignment with its other program and project obligations. In particular, the County believes the Ecology-proposed final milestone to complete bidding is not a feasible objective since a large majority of the work to secure the construction and environmental regulatory permits, agency clearances, and agreements occurs in the intervening period following completion of the final engineering plans and specifications. The anticipated regulatory and environmental consultations and approvals for any modifications to the outfall diffuser alone could require up to several years to negotiate and complete. Therefore, along with all the aforementioned factors affecting the County's programs, and uncertainties for the Elliott West project of this magnitude and complexity, the County believes that the dates set forth in the Draft permit for submission of plans and specifications and completion of bidding are unreasonable. Thus, the County's proposed schedule modifications best reflect the realistic and

expedient timeframe to appropriately assess the engineering, financial, and schedule impacts of the changed conditions described above. Moreover, as the Elliott West project is a remedial action for an already-completed CSO control project, the proposal is consistent with the state’s CSO policy to consider the overall sequencing, prioritization, total cost of compliance, engineering feasibility, and reasonableness in the anticipated consequences to ratepayer affordability in aligning the work with the other remaining initial CSO control project obligations for uncontrolled outfalls.

Table 36 — Compliance Schedule

	Tasks	Date Due
1.	Submit a draft engineering report to Ecology for review. The engineering report must describe the modifications required to bring the Elliott West CSO Treatment Plant effluent into compliance with its permitted limits and identify the anticipated construction schedule necessary to complete the project by December 31, 2031.	June 30, 2024
2.	Submit a final engineering report to Ecology for review and approval.	June 30, 2025
3.	Submit for Ecology review the 60% draft plans and specifications that provide the detailed design requirements for facility improvements, as described in the approved engineering report.	June 30, 2026
4.	Submit 90% draft plans and specifications for Ecology review.	July 1, 2027
5.	Submit final plans and specifications for the facility improvement project to Ecology for review and approval.	December 31, 2027 <u>June 30, 2028</u>
6.	Complete bidding for construction of the approved improvement project.	May 30, 2028

Permit, Page 69, Appendix A: Please change "• The method used produces measurable results in the sample and EPA has listed it as an EPA- approved method in 40 CFR Part 136." to "• The method used is an EPA- approved method in 40 CFR Part 136 and either produces measurable results in the sample or has detection limits at or below the method listed in Appendix A."

Permit, Page 69, Appendix A. first sentence: Please remove the word "influent" so that it reads as prior KC NPDES permits which acknowledge that Appendix A detection limits are not always achievable for influents and other non-effluent wastewater matrices. This can be done by either eliminating the word influent as in prior permits, or by adding this sentence which was part of NPDES Waste Discharge Permit No. WA002918: "If the Permittee is unable to obtain the required DL and QL due to matrix effects (such as for treatment plant influent or CSO effluent), the Permittee must strive to achieve to lowest possible DL and QL and report the DL and QL in the required report." Non-effluent matrices may have significant matrix interferences depending

upon the parameter tested and it is not uncommon to have to report data from diluted samples for some parameters.
Permit, Page 70, Appendix A, Table 2: Please add method SM4110 B to Fluoride.
Permit, Page 70, Appendix A, Table 2: Please add method EPA 351.2 to Nitrogen, Total Kjeldahl (as N).
Permit, Page 71, Appendix A, Table 3: Please add method EPA 218.6 to Chromium hex, dissolved.
Permit, Page 72, Appendix A, Table 4: Please add method SM4500-CN-C,E to Cyanide, Total.
Permit, Page 72, Appendix A, Table 4: Please add method EPA SW846 9065 to Phenols, Total.
Permit, Page 72, Appendix A, Table 5: Methylene chloride is the only VOA compound that specifies lower detection and quantitation limits than the current permit. The County requests adjustment of the DL and QL to 5 and 10, respectively.
COMMENTS ON FACT SHEET
Fact Sheet, Page 14, Table 3: Please add the name "Auto-Chlor System" to Table 3 as an SIU (it is also a CIU). City - Seattle, Industrial Process - Detergent Manufacturing, Permitted Flow (gpd) - 2,500
Fact Sheet, Page 50, Section 11.F.6, second to last sentence of paragraph: The current Superfund investigations conducted for the remedial design of the upper reach of the Lower Duwamish Waterway (LDW) indicates the following contaminants of concern in the area near and downstream of the Norfolk outfall: total PCBs and benzoic acid. Arsenic, PAHs and dioxins/furans are not at levels of concern in this area. This text appears to be highlighting general contaminants of concern for the LDW as a whole not specific to the Norfolk area. Please correct the list of contaminants of concern. The citation to support this is the Pre-Design Investigation Data Evaluation Report for the Lower Duwamish Waterway-Upper Reach (July 2022). The report can be found on https://ldwg.org/project-library/ under Upper Reach Design folder.
Fact Sheet, Page 50, Section 11.F.7: The information presented would benefit from the inclusion of the information concerning potential for other sources to affect the areas sampled. That information is presented in table ES-1 of the SMP update referenced. As currently presented, it appears all chemicals come from the CSOs.
Fact Sheet, Page 96, Section III.I, last paragraph: The fact sheet does not recognize that King County has already been performing source control in-line sediment monitoring in combined sewer basins within the Duwamish Basin. The permit inclusion of this is not necessary as King County has already collected the data referenced in Section S.12 of the Draft Permit to support the CSO Control Project for the five CSOs listed. We request Ecology remove this from permit and fact sheet as the work has already been completed.
Fact Sheet, Page 103, Section V.D.2. 1st bullet: The expected impacts of complying with the proposed requirement to monitor PFAS in the West Point WWTP influent would add extraneous burden on staff performing sampling and analytical services and unduly put WTD at risk for non-compliance as a permit condition, if unfulfilled. WTD is already planning to undertake a voluntary effort to monitor for PFAS in the influent, effluent, and biosolids at West Point, South Plant, and Brightwater, and landfill leachate in the South Plant service area, but does not believe there is benefit in making this a hard permit condition. Further, USEPA's Effluent Limit Guideline Plan 15

indicates that there is a national study underway to better understand PFAS at POTWs and WTD recommends that Ecology delete this permit requirement and rely on the ELGP 15 study information instead of requiring WTD to monitor for it as a NPDES permit condition. The fact sheet should also be transparent and explain that EPA has not yet proposed CWA aquatic life criteria for PFOA and PFOS to protect aquatic life in the US for marine waters. In a June 2023 webinar, EPA staff made a point of linking POTW discharges to human health risk by noting that POTW discharges are upstream of drinking water intakes in rivers. For the West Point permit, WTD's outfall discharges to marine waters and the drinking water source comes from Seattle Public Utilities' protected watershed in the mountains. Therefore, there is not a linkage between WTD's marine outfall discharge in Puget Sound and drinking water risk to ratepayers in the West Point service area. It would be helpful if Ecology made this distinction in the fact sheet to avoid unnecessary concern from the public.

Fact Sheet, Page 103, Section V.D.2. 2nd bullet: King County Industrial Waste Program (KCIW) should not be required to identify and locate "all possible" industrial users with discharges that are expected or suspected to contain PFAS, as this is an unrealistic if not, impossible task to accomplish. KCIW regulates over 650 industrial and commercial entities through some form of control document and within the WTD service area, there are over 70,000 businesses. The expected impact of complying with the requirement to identify and locate "all possible" industrial users that are suspected to contain PFAS would unnecessarily put the program at risk for non-compliance and necessitate a shift in KCIW program priorities and staff resources to accomplish. Consultant services and additional expense to conduct the survey and update the inventory would be required. We don't believe this can realistically be accomplished by the proposed deadline of April 30, 2025, King County requests that Ecology clarify in the fact sheet and permit that KCIW is to identify and locate all Significant Industrial Users (SIUs) that may be expected or suspected to contain PFAS by April 30, 2027. The identification and location process is lengthy and will entail procurement of a consultant, SIU education, outreach, and data management as initial tasks.

Fact Sheet, Page 103, Section V.D.2. 3rd bullet: The development, research, and identification of BMPs for SIUs to reduce or eliminate PFAS in their discharges will take time longer than the April 30, 2025, deadline in the permit. KCIW will have to conduct outreach efforts with the industrial community to explain this requirement and therefore requests that the permit deadline be revised to July 1, 2027.