CITY OF SPOKANE
PUBLIC WORKS
808 WEST SPOKANE FALLS BLVD.
SPOKANE, WASHINGTON 99201

June 10, 2022

Diana Washington
Senior Water Quality Engineer/Permit Manager
Water Quality Program
Washington State Department of Ecology
4601 North Monroe Street
Spokane, WA 99205-1295

Re: Public Comments on Revised Draft NPDES Permit
City of Spokane, Riverside Park Water Reclamation Facility
NPDES Draft Permit WA0034473

Dear Diana,

Please find enclosed the City of Spokane's Public comments for the Revised NPDES Draft Permit and Fact Sheet for the Riverside Park Water Reclamation Facility (Permit No. WA0024473). While we have serious concerns with some of the conditions in the Draft Permit, we are hopeful that workable solutions can be mutually agreed upon. The City is proud of the investments we've made in improving the Spokane River water quality and values the support we've been given by Ecology in achieving our shared goals. Building on this long-term good working relationship, we look forward to meeting with you to discuss the enclosed comments.

The City appreciates being given the opportunity to provide comments on the proposed Permit and looks forward to hearing your response. If you have questions, comments, or require additional information on the enclosed material, please contact Jeff Donovan (jdonovan@spokanecity.org, or 509-625-4638).

Sincerely,

Marlene Feist

Marlene Feist
Public Works Director

Enclosure

City of Spokane Public Review Comments: RPWRF Draft NPDES Permit and Fact Sheet

The City of Spokane (City) offers the following additional comments on the Washington Department of Ecology's (Ecology) Revised Draft National Pollutant Discharge Elimination System (NPDES) Permit No. WA0024473 for the City's Riverside Park Water Reclamation Facility (RPWRF) and controlled Combined Sewer Overflows (CSOs) (Draft Permit). The Draft Permit proposes revisions to the City's administratively extended 2011 NPDES Permit.[1] The below comments apply to the May 11, 2022, Public Review version of the Draft Permit and supplement the City's previous comments submitted on February 28, 2022. Ecology now proposes significant revisions to the initial draft permit and fact sheet. The City supports Ecology's efforts to prepare the Draft Permit for review and requests that Ecology consider and incorporate the comments below into the Final version of the Permit (Final Permit).

Primary Comments/Concerns

The City appreciates Ecology addressing some of the prior concerns in this version of the Draft Permit. However, this revised Draft Permit contains significant issues which need to be addressed prior to the issuance of the Final Permit. The City respectfully requests that Ecology address the following items in the Draft Permit:

NLT – Net Environmental Benefit

- **Permit § S5.F, Bypass Procedures:** The City's Next Level Treatment (NLT) Engineering Report/Wastewater Facilities Plan Amendment No. 3 (Facility Plan), approved by Ecology on June 10, 2020, includes the operation of the membrane facility to treat flows of up to 50 million gallons per day (MGD). This is also a key part of the City's Integrated Clean Water Plan (ICWP) which was accepted by Ecology on June 1, 2015. Ecology also highlights the ICWP on their Spokane River webpage.[2] Additional flows beyond 50 MGD would receive primary and secondary treatments. This is a key feature of NLT design and operations, and is not considered a bypass of treatment. Secondary treatment is considered "all known, available and reasonable methods of prevention, control and treatment" (AKART) for domestic wastewater (173-221 WAC). By operating NLT, the City is providing treatment above and beyond most all other wastewater utilities across the State and nation. Furthermore, this approach is consistent with other permits issued by Ecology, such as King County Brightwater Treatment Plant[3] Permit (No. WA. WA0032247) (Brightwater Permit), effective March 1, 2018.

  The Net Environmental Benefit (NEB) concept, the basis for design of NLT, was developed closely with Ecology. As detailed in the Facility Plan, the 50 MGD membrane facility was selected because it would provide treatment above and beyond that of a 100 MGD sand filtration unit, even with episodic wet weather flows only receiving secondary

[1] In December 2015, the City of Spokane submitted a complete application for renewal of its 2011 NPDES Permit. In January 2016, Ecology administratively extended the 2011 Permit.

[2] https://ecology.wa.gov/Water-Shorelines/Water-quality/Water-improvement/Total-Maximum-Daily-Load-process/Directory-of-improvement-projects/Spokane-River/

[3] See sections S9.A & S9.D.

treatment. The City's approved Facility Plan is clear by the selection of membrane treatment, a small fraction of storm-related flows would only get secondary treatment, subject to the end-of-pipe discharge limits. This operational regime for treating storm flows was also a key part of the City's ICWP. The analysis shows that the combined discharge would still receive better treatment than a 100 MGD sized sand filtration unit (and thus result in a net environmental benefit).

Based on model results contained in the Facility Plan, an average of 0.7% of flows reaching RPWRF would receive only secondary treatment (with a range of 0.1% to 2%, depending on precipitation/snowmelt for that year). All other flows would get processed through the membrane facility. Expanding the membrane facility to treat such a small fraction of RPWRF's flow would not be reasonable.

To provide clarity, as well as recognize the net environmental benefits of NLT, the City requests that Ecology add language to the Final Permit, similar to that which was proposed by Ecology in the 2016 draft permit, as follows[4]:

- *Normal operation of Next Level of Treatment includes treatment of up to 50 MGD through the membrane filtration process and blending with secondary effluent prior to disinfection/dechlorination and discharge. Ecology agrees that there is a net environmental benefit to operating the facility in this manner and does not consider this normal operation to fall under any bypass conditions. Effluent limits still apply to this combined discharge.*

This proposed language is consistent with communications between Ecology and the City and what was approved in the Facility Plan and accepted in the City's ICWP. It is also consistent with prior Permits issued by Ecology.

Consistent with the information above, the City also requests that Ecology make the following revisions to page 48 of the Fact Sheet:

> The system only has an average of 50 mgd capacity. During storm events, flows may exceed 90 mgd. ~~**This results in a bypass of the tertiary membranes during high flow events.**~~
>
> This means that 50 mgd is treated through the membranes and the rest of the flow is treated through the secondary treatment then flows are combined and disinfected prior to discharge. **This constitutes normal operation of the City's treatment system and does not constitute a "bypass" as defined in Condition S5.F.**

Alternatively, if Ecology will not expressly acknowledge in the Final Permit and Fact Sheet that normal operation of the membrane system does not constitute a bypass, the City respectfully requests that Ecology consider and adopt an approach similar to that in King County's Brightwater Permit (Permit No. WA0032247). The Brightwater Permit provides an example of where Ecology has implemented NEB into a NPDES permit. Section S9 of the Brightwater Permit provides for flow blending of membrane treated effluent. Flow blending, which is identified as a bypass of the membrane bioreactor treatment components, is allowed and there are metrics that must be obtained to

[4] This language should be added as a separate paragraph: Net Environmental Benefit Performance Standard.

maintain a net environmental benefit. This method acknowledges flow blending as a bypass, but allows it, subject to compliance with the terms of section S9.

The City requests Ecology incorporate this concept into the City's Final Permit, either by amending § S5.F to add a Flow blending approval and NEB or establishing a separate section within the Permit. The City would be willing to work with Ecology to define the specifics on appropriate performance standards for these situations. However, similar to the Brightwater Permit, § S9.A, the City would propose the following criteria:

- *The Permittee may initiate a bypass of the membrane facility when the flows entering the facility exceed the following criteria:*

	Critical Season (Mar – Oct)	*Non-Critical Season (Nov – Feb)*
Peak flow max (sustained for up to 12 hours)	*75 MGD*	*50 MGD*
Sustained flow max (sustained for over 12 hours)	*50 MGD*	*50 MGD*

- *The Permittee must minimize the release of pollutants to the environment by taking the following actions:*
  - *Maximize flow through the membrane treatment system, and*
  - *Maximize the use of storage capacity in the influent and clarifier system*
- *Effluent limits still apply to any combined discharge.*
- *The bypass event must result from increased flows caused by wet weather, snowmelt, or high river levels.*

- **Permit § S4.A, Design Criteria:** Please remove the design criteria from Table 14 in the Draft Permit for the Membrane Filtration Unit, currently listed as average monthly flow 50.0 MGD. Additional facility planning should only occur if the facility approaches the Maximum Month Design criteria earlier in the table of 68.1 MGD (Mar -Oct) and 56.4 MGD (Nov-Feb), not the Membrane Filtration Unit design capacity. Design criteria specific to the membrane facility is discussed in the Facility Plan at Page 5-42, as highlighted below:
  - *When critical season total phosphorus reaches 85 percent of the NPDES permit limit after the NLT facilities are optimized, the City will submit a plan to Ecology to show how the City will consistently meet the total phosphorus limit for RPWRF in the critical season. The plan will evaluate flow reduction using cost-effective measures from the previous list of alternatives compared to expansion of the NLT facilities and further optimization of the NLT facilities.*
- **Permit § S18, Compliance Schedule for Treating PCBs:** Please remove the compliance schedule for meeting polychlorinated biphenyl (PCB) limits (Items 5, 6, and 7). This is the first time a compliance schedule has been proposed to the City. It is premature and unwarranted to engineer additional PCB controls prior to the resolution of the PCB total maximum daily load (TMDL) and applicable water quality standards. The

City requests that Ecology defer any discussion of or requirement for PCB-related compliance schedules until after the U.S. Environmental Protection Agency (EPA) issues a final PCB TMDL and the final rulemaking on human health water quality criteria applicable to Washington State. The City's variance application, which was filed at Ecology's request in February 2019, should also be addressed prior to establishing any compliance schedule for PCBs.

Ecology has failed to provide a basis for a compliance schedule and appears to assume that membrane treatment is AKART for PCBs. Please describe the methodology and justifications that were used to reach this conclusion. What new information has come to light that was not available when Ecology approved the City's Facility Plan on June 10, 2020? Is this just for the current PCB standard of 170 pg/L? What data was used to make this assertion? Page 48 of the draft Fact Sheet states, "After the system is optimized, it is likely that the tertiary membrane filtration treatment system will be able to meet the end-of-pipe limits for PCBs." Recall, the NLT membrane filtration treatment system was installed for the DO TMDL, not PCBs. Robust, facility-specific data needs to be collected before any such claims can be made and before any compliance schedules are included in the Final Permit.

As an additional point, running the membranes in the non-critical season is much more cost effective for pollutant removal than upsizing the membrane facility. Preliminary analysis indicates that this approach provides more benefit for PCBs removal. NLT was implemented for dissolved oxygen and phosphorus. It simply has never been run to manage PCBs. Regardless, the City and its ICWP is already going above and beyond what is required by operating the membrane facility in the non-critical season. In fact, The ICWP estimated the cost of upsizing the membrane facility from 50 MGD to 85 MGD and found that for PCBs it would cost $19 million dollars per additional gram of PCBs removed (see Table 7 below). This cost will likely be much higher today and in the future with recent inflation trends. Given most PCBs enter the Spokane River upstream of the RPWRF discharge, there are likely much more cost-effective ways of removing PCBs from the River than expanding the RPWRF membrane facility. For example, further remediating non-point sources, cleanup sites, and upstream legacy sediments would all be much more efficient in reducing PCBs in the Spokane River.

TABLE 7
Comparison of the Life-Cycle Cost per unit of Pollutant Removed

Pollutant	NLT During the Non-Critical Season	Upsize NLT from 50-mgd to 85-mgd	CSO Reduction Projects[a]	Cochran Stormwater Project
Critical Season Total Phosphorus ($/lb)	NA[c]	$7,294	$55,964	$5,441
Non-Critical Season Total Phosphorus ($/lb)	$13	NA[d]	$111,929	$3,876
Fecal Coliform ($/Billion CFU)	$503	$55,517	$26	NA[b]
Total Suspended Solids ($/lb)	$3	$367	$325	$6
Total Zinc ($/lb)	$2,553	$1,744,311	$827,858	$5,878
Dissolved Zinc ($/lb)	NA[b]	NA[b]	NA[b]	NA[b]
PCBs ($/gram)	$163,345	$19,116,872	$23,709,150	$545,546

[a] Life-cycle cost per unit pollutant removed for CSO projects recommended in the 2013 CSO Plan Amendment.
[b] No removal expected.
[c] No critical season total phosphorus removed.
[d] No non-critical season total phosphorus removed.

pH Limits

- **Permit § S1.A, Table 2, pH Limits:** Please remove the final pH limits of 7.85 to 8.5 and maintain the current and proposed interim pH limits of 6.0 to 9.0 throughout the duration of the Final Permit. Establishing final limits now, based on very limited data, could be overly restrictive and result in anti-backsliding issues in future permit cycles. The City questions whether a valid reasonable potential analysis could be conducted, given the limited nature of previous upstream pH measurements. Only four pH samples were measured in the data set that Ecology reportedly used (EIM Study ID WHM_WAM0 Spokane River at RM 69.6). Allowing the City to conduct the pH study of the receiving water, as outlined in the proposed permit, will allow Ecology the ability to conduct an accurate reasonable potential analysis and permit limit calculation. Imposing final pH limits without further study are premature and could lead to adverse environmental impacts and require an alternatives assessment under the State Environmental Policy Act (SEPA).

  Other draft permits issued to dischargers on the Spokane River have much less stringent pH limits. For example:

  - Spokane County Regional Water Reclamation Facility has pH Limits of 6.5 to 8.5
  - Liberty Lake Sewer and Water District has pH Limits of 6.8 to 8.5
  - Inland Empire Paper Company has pH limits of 6.6 to 9.0
  - Kaiser Aluminum (final permit) has pH limits of 6.0 to 9.0

  Please describe why the City's facility requires much more stringent limits than these other dischargers.

  What changes occurred that necessitated a modification in Ecology's approach to pH limits for the RPWRF discharge? When did the change happen? Had the City been made aware of the proposed stricter pH limits, that would have factored into the facility planning and construction of NLT. Engineering and building a pH control system now will be much more expensive for the community than if it had been included in the NLT Facility Plan. The City has concerns whether a system could be reliably operated given

the proposed tight range of 0.65 pH units and the various flow and operational regimes that need to be considered.

- **Permit § S18, Compliance Schedule for Treating pH:** Please remove the compliance schedule for pH limits (Items 2, 3, and 4). This is the first time a compliance schedule has been proposed to the City. The City requests that Ecology revert back to the approach outlined in Ecology's December 29, 2021, public notice of the Draft Permit; specifically, that the City will gather receiving water monitoring during the permit cycle to obtain updated ambient water quality information, which Ecology will use to model and reevaluate the pH limits in the next permit cycle.

PCB Limits and Toxics Sections

- **Permit § S1.A, Table 2, PCB Limits:** The Final Permit should acknowledge that it may be premature to include a numeric PCB limit due to the regulatory uncertainty posed by ongoing litigation over the PCB TMDL and PCB human health water quality standard. EPA is currently in rulemaking status to reinstate certain human health water quality criteria applicable to Washington State, which when finalized, would have an impact on the Draft Permit. EPA's final action is expected in the next few months. The Final Permit and Fact Sheet must also address the status of and Ecology's eventual final decision on the City's application for an individual discharger variance from the PCB water quality standard, which was filed over three (3) years ago. Action should be deferred on implementing a numeric PCB limit until these issues are resolved.

  It is not clear why Ecology is imposing both a numeric and narrative limit on PCBs when it only imposes a narrative limit on similar pollutants such as PBDEs. If the agency does impose a numeric limit for PCBs, then a narrative limit (i.e., § S17) is no longer necessary. The Final Permit should not require narrative limits for PCBs if the numeric limits are maintained.

  The City is uncertain whether the proposed final PCB numeric limits will be attainable (170 pg/L average monthly, 392 pg/L maximum daily). The pending TMDL and potential upcoming revisions to the human health water quality criteria for PCBs could make meeting any revised numeric limits even more challenging. On February 11, 2022, a federal judge approved the proposed consent decree to resolve litigation brought by the Sierra Club v. EPA in 2011 regarding a TMDL for PCBs in the Spokane River. Under the consent decree, EPA will develop a PCB TMDL for the Spokane River by September 2024. While EPA is in charge of completing the PCB TMDL, Ecology will be responsible for the PCB TMDL implementation plan. Still pending is a separate lawsuit brought by Ecology against EPA with regard to the State's human health water quality criteria for PCBs. As mentioned above, EPA is currently undertaking a rulemaking to reinstate the previous human health criteria for PCBs of 7 pg/L. As the PCB TMDL is scheduled to be developed by 2024 and litigation involving the PCB water quality criteria is ongoing, it may be premature to issue NPDES permits for the Spokane River with a numeric PCB limit.

- **Permit § S17.A, Toxics narrative limits (BMPs):** Pages 64 – 65 requires use of BMPs "throughout the City" to control toxics, such as PCBs, and PBDEs. The reasonable potential analysis for PCBs is questionable. It does not appear a reasonable potential analysis was conducted for PBDEs. Narrative limits should not apply to these pollutants unless a reasonable potential can be established. The narrative limits' focus on BMPs and toxic reduction and removal strategies rather than "end-of-pipe" solutions (see

pages 37 – 39). The rationale for narrative, rather than numeric, limits for PBDEs seems to apply equally to PCBs: the 303(d) listings are based on fish tissue samples and not water column samples; the segment where RPWRF discharges is not listed as impaired for PBDEs or PCBs; they are legacy pollutants; they are persistent and bioaccumulate; they are no longer intentionally created or used; and, RPWRF already reduces concentrations prior to discharge by over 95%. the City requests that Ecology explain the rationale and regulatory basis for the numeric limit and the basis for the different approach to PCBs as compared to PBDEs.

- **Permit § S17.B, Toxics narrative limits (Community Based Toxics Reduction):** The City is a proponent of community-based collaborative problem solving. We worked side-by side with our regulators, fellow dischargers and the environmental community to create the Spokane River Regional Toxics Task Force. At that time, the City and the community believed that a voluntary collaborative approach using direct-to-implementation strategies to solving PCB issues in the watershed better served the community than a TMDL. Now that the Task Force is no longer a TMDL alternative, no longer voluntary, collaborative or community-based, there is no further reason to convene. The City is committed to continuing to serve as fiscal agent alongside the County to complete our stewardship of the funds awarded to the Task Force through the end of the biennium, June 2023. The City is supportive of exploring future structures for collaboration around water quality improvements to the Spokane River when a compelling problem statement can be developed. Collaboration works best when a problem exists that is better solved collectively than individually. Therefore, we request the requirement for participation in the Task Force or similar collaborative be removed from the Final Permit.

- **Fact Sheet - Page 29, PCB discussion:** The ongoing uncertainty around the applicable water quality standard for PCBs gives the City concern. The City does not believe the EPA's proposed 7 pg/L criteria is attainable for RPWRF. For this reason, and at Ecology's request, in February 2019, the City applied for an individual discharger variance from the PCB water quality standard. Ecology has not yet made a decision on that application. The current status of Ecology's variance rule (https://ecology.wa.gov/Regulations-Permits/Laws-rules-rulemaking/Rulemaking/WAC173-201A-variances) and any decision by Ecology on the City's variance application should be explained in the Fact Sheet and incorporated into the Final Permit. Should the water quality standard again become more restrictive for PCBs, please issue a decision on the City's pending variance application prior to implementing changes to the permit.

- **Fact Sheet - Page 90-91, PCB Reasonable Potential Calculation:** It appears in Ecology's calculation that a reasonable potential to exceed only exists at the end of pipe without a mixing zone. The City does not follow the logic that bioaccumulative pollutants such as PCBs should not be allowed a mixing zone. Only a small fraction of the lifespan of a fish would be spent within the RPWRF mixing zone. Ecology's reasonable potential calculation assumes all bioaccumulation would occur within the mixing zone, which would never be the case for free-flowing water bodies such as the Spokane River.

  Based on the City's calculations and available upstream PCB water column data compiled by Ecology (http://srrttf.org/wp-content/uploads/2021/05/5-Technical-Memo_Spokane-PCB-Central-Tendency_3-22-2021.pdf), no reasonable potential exists with an appropriate dilution factor. See calculations below:

Pollutant, CAS No. & NPDES Application Ref. No.			Polychlorinated Biphenyls (PCB's) 53469219, 11097691, 1104282, 11141165, 12672296, 11096825, 12674112 18P-24P
Effluent Data	# of Samples (n)		23
	Coeff of Variation (Cv)		0.81
	Effluent Concentration, ug/L (Max. or 95th Percentile)		0.000643
	Calculated 50th percentile Effluent Conc. (when n>10)		0.000265
Receiving Water Data	90th Percentile Conc., ug/L		0.0001932
	Geo Mean, ug/L		0.0000674
Water Quality Criteria	Aquatic Life Criteria, ug/L	Acute	2
		Chronic	0.014
	WQ Criteria for Protection of Human Health, ug/L		0.00017
	Metal Criteria Translator, decimal	Acute	-
		Chronic	-
	Carcinogen?		Y

Aquatic Life Reasonable Potential			
Effluent percentile value			0.950
s	$s^2=\ln(CV^2+1)$		0.710
Pn	Pn=(1-confidence level)$^{1/n}$		0.878
Multiplier			1.00
Max concentration (ug/L) at edge of...		Acute	0.001
		Chronic	0.000
Reasonable Potential? Limit Required?			NO

Human Health Reasonable Potential		
s	$s^2=\ln(CV^2+1)$	0.71025731
Pn	Pn=(1-confidence level)1/n	0.878
Multiplier		0.43733744
Dilution Factor		12.5
Max Conc. at edge of Chronic Zone, ug/L		8.3208E-05
Reasonable Potential? Limit Required?		NO

Additional Comments

- **General comment:** There are numerous studies/plans/submittals that are listed, most to be finished within one (1) year of Permit issuance. The City questions the value to be gained from much of this work. Most of these proposed studies/plans/submittals are elaborate and will require significant City staff time to develop. Many of the

studies/plans/submittals will require additional FTEs and/or subcontracting of portions of the work.

The City requests that Ecology eliminate from the Final Permit some of the studies that are of limited value to the community. For those deemed necessary, the City requests that Ecology spread the deliverable due dates throughout the term of the Permit. Completing all the studies/plans/submittals described in the Draft Permit within one year of Permit issuance will not give the City adequate time to produce quality and meaningful submittals and will force the City to concentrate costs within a limited time period. Ecology has not made it clear why they want this information and of what advantages or insights such information will provide. Example requirements in the Draft Permit which have limited value include:

- CSO Pollutant Monitoring: This requires significant City staffing to be on standby for rare CSO events.
- Sediment Monitoring (CSOs and RPWRF Outfall): Regulatory need for this requirement is uncertain.
- Mixing zone study: Regulatory need for this requirement is uncertain.
- Collection system exfiltration testing: The City already does extensive infiltration identification and mitigation to maintain collection system integrity.
- Collection system source tracing for PCBs: Previous efforts have not been very fruitful in identifying hot spots – most PCBs entering the collection system are diffused throughout the City.
- Receiving water temperature monitoring: 10+ years of data has already been collected during the current permit cycle.
- CSO Post Construction Monitoring (Permit § S14.C.c): Biological assessments, toxicity testing, ambient monitoring, and sediment sampling are all huge undertakings. The City does not see value in this.

- **Permit § S1.A, Table 2 Cadmium Limits:** Given the Spokane River is no longer listed as impaired for cadmium, the City believes the performance-based limits specified under the 1992 Metals TMDL are no longer necessary. The way the performance-based limits are calculated in the Metals TMDL will eventually lead to compliance issues as they are continually ratcheted down over permit cycles. If the river is no longer listed for cadmium, it seems that limits have been lowered enough, and the Metals TMDL should be declared a success for cadmium. The current cadmium limits in the 2011 permit should be maintained.

- **Permit § S2.A, Table 7 Effluent Monitoring.** The City appreciates Ecology maintaining the monitoring frequency for cadmium, lead, and zinc of one (1) event every two (2) weeks for these metals. Hardness testing is currently performed alongside our metals testing and is primarily used for applying the water quality standard to metals. The City does not see a need to do this on a weekly basis, as proposed in the draft permit. The monitoring frequency for Hardness should be changed to one (1) event every two (2) weeks, to match the frequency of the metals testing.

- **Permit § S5.H, Collection System Exfiltration Testing:** The City does not see a successful way of completing this effort, as written, within the time given. The criteria of "Adjacent to (within 100 yards) surface water" and "Within 50-feet above the groundwater table" encompasses large swaths of the sewer system and likely more than 100 miles of pipe. Simply identifying applicable areas to be tested for exfiltration, will be

an overly burdensome undertaking. Is there a regulatory basis for this requirement? Ecology should provide an example protocol for this testing. Is this requirement just for new sewer construction or would it apply to existing sewer pipes? This requirement should be removed unless a regulatory basis and feasible exfiltration testing protocol can be provided.

The City has an extensive maintenance and retrofitting strategy towards identifying and remediating areas of infiltration within the collection system. Much progress has been made on this front, but areas remain that require addressing. This work is ongoing and will drive improvements in the future in the integrity of the collection system.

- **Permit § S10, Mixing and Tracer Study:** The City requests that mixing study be eliminated from the Final Permit. As stated in the Fact Sheet "Ecology has effectively minimized the size of the mixing zone authorized in the proposed permit." Fact Sheet p. 35. That is all the regulations require. Accordingly, there is no need for the mixing zone and tracer study to verify the mixing zone is minimized. Ecology should therefore eliminate the study in the Final Permit.

- **Permit § S13 Sediment Monitoring:** The City requests that Ecology eliminate the proposed sediment sampling study from the Final Permit. At the very least, additional clarity is needed regarding the basis for and purpose of the proposed sediment sampling.

  The basis for Ecology requiring this study is not clear. The Fact Sheet says the Agency has made a "determination" but does not articulate what data that determination was based on, or when it was made. There is no support in the Draft Permit or Fact Sheet to show that Ecology considered the required factors in 173-204-400 before imposing the sediment study.

  It is also unclear what, if any, value such a study would provide in terms of NPDES permit requirements. How far downstream would such a study entail? Would the study include both the RPWRF and CSO outfalls? What would distinguish sediment between the City discharge and other upstream sediment loading. It is well established that Hangman Creek provides most of the sediment load to the river upstream of the RPWRF outfall. This loading dwarfs any load coming from the treatment facility, especially now with membranes operational and CSOs controlled.

  It will also be difficult to differentiate between current and historic discharges and impacts from other potential sources of sediment pollution. If Ecology is ultimately looking for information on historical impacts and potential natural resource damages rather than an analysis focused on the impact of current discharges on sediment quality, other programs such as MTCA should be used to develop that type of information.

  The Fact Sheet, on page 49, states: "Ecology determined that this discharge has the potential to cause a violation of the sediment quality standards" for toxics. When was this determination made? What was the basis for it? Appendix D to the Fact Sheet presents the agency's "reasonable potential" analyses but sediment quality is not addressed.

  Was Ecology's Sediment Management Unit (SMU) consulted on the proposed sediment study? The Ecology Permit Writers Manual states for freshwater permits: "Contact the

SMU before placing any sediment-related requirements in permits." Please cite the guidance given by the SMU in the Fact Sheet.

- **Fact Sheet - Page 1 (Summary):** Variance – At Ecology's request, in February 2019, the City applied for a variance from the PCB water quality standard. Ecology has not yet made a decision on that application. The fact that the variance application was submitted, and is still pending, should be mentioned in the Summary section. If the agency has made a decision on that application, then the agency's decision should be articulated in detail in the body of the Fact Sheet.

- **Fact Sheet - Page 8, Facility Contact:** Please update the facility contact to Michael Cannon, Plant Manager; (509) 625-4642; mcannon@spokanecity.org.

- **Fact Sheet - Page 11, CSO Outfalls:** Under collection system status, 4th bullet: Eighteen controlled CSO Outfalls should be changed to seventeen controlled CSO outfalls (2, 6, 7, 10/12, 14, 15, 16, 19, 23, 24, 25, 26, 33, 34, 38, 41, & 42)

- **Fact Sheet - Page 66, CSO Annual Report:** This section states: "The report must indicate whether a CSO site has increased over the baseline annual condition." What is Ecology referring to as the "baseline annual condition"? In our current documents, the average # of overflows between 2003 and 2012 are being used as the "baseline". Please clarify.

Conclusion

The RPWRF facility not only serves the City of Spokane, but also the greater Spokane area. The requirements of this permit not only have implications for the City of Spokane ratepayers, but also those of Spokane County and other contributing jurisdictions. The conditions in the Draft Permit, as written, will be costly and have economic impacts to the entire region. The City is already spending above and beyond other communities in the State and country on water quality improvements. These costs are especially burdensome for the Spokane Area, given the low relative incomes and rising costs of living. The City is committed to protecting and improving water quality in the Spokane River, but this must be balanced against other challenges facing our community. With that in mind, the City looks forward to working with Ecology to successfully implement the Final Permit with the changes described in this comment letter.