September 13, 2016

Ms. Shara Joy
Permit Coordinator
Department of Ecology
4601 N Monroe St
Spokane WA 992015
Sent via email to stra461@ecy.wa.gov

Subject: Comments on draft NPDES permit and fact sheet, City of Spokane RPWRF and CSOs, permit WA0024473

Dear Ms. Joy:

Thank you for the opportunity to review and comment on the subject draft City of Spokane Riverside Park Water Reclamation Facility (RPWRF) and Combined Sewer Overflows (CSOs) NPDES permit and fact sheet (dated June 30, 2016). Please find below several comments from Spokane County Environmental Services Department.

PCB-related comments

1. **PCB numeric effluent limits, either interim or final, are not appropriate for Spokane River NPDES permits at this time.**

The draft Fact Sheets stated for PCBs:

> *"The RPA did not show an exceedance of the water quality standard at the edge of the chronic mixing zone. However, because PCBs are present in the effluent, and because the Spokane River exceeds applicable water quality standards for PCBs, Ecology* ***assumes*** *the discharge has a reasonable potential to contribute to excursions above water quality standards for PCBs."* (Emphasis added)

Ecology's assumption of contribution to excursions is not reasonable, nor is it valid because according to EPA:

> *"…the fact that the Spokane River is currently impaired in Washington due to high concentrations of PCBs does not by itself justify a finding that the subject discharges have the reasonable potential to cause or contribute to excursions above water quality standards for PCBs…The mere fact that the waterbody is currently impaired does not necessarily require the conclusion that all dischargers to the waterbody are contributing*

> *to the impairment."* (US EPA, response to comments on 2013 renewal of NPDES permits for the Cities of Coeur d'Alene and Post Falls and the Hayden Area Regional Sewer Board, Idaho.)

Additionally, in the July 14, 2015 response to US District Court direction (Sierra Club, et. al. v. McLerran), EPA said:

> *"…the EPA is currently recommending a best management practices (BMP) approach to controlling and abating discharges of PCBs from point sources in the Spokane watershed. As explained below, the EPA believes this approach will be more effective in reducing discharges of PCBs than numeric effluent limits. The authority to establish BMP conditions in NPDES permits is provided in 40 CFR 122.44(k)."*

The RPA did not show an exceedance of water column PCB criteria, and it is not appropriate to assume a contribution to the existing river PCB impairment. Limits, either interim or final, are not appropriate and the EPA-endorsed BMP approach for point source discharges should be pursued.

2. **Assuming that final effluent limits for PCBs based on the Human Health Water Quality Standard were appropriate (they are not), then limits should be calculated based on use of a mixing zone.**

In the draft fact sheet, Ecology authorizes the use of mixing zones as allowed under WAC 173-201A-400. The fact sheet clearly describes the eight requirements for allowance of mixing zones, and concludes that the requirements are met and that mixing zones are authorized. The fact sheet then uses mixing zones for a variety of parameters for RPAs, and in most cases, including PCBs, the RPAs result in determination of no limits needed.

Yet when describing the process used to set PCB limits, the fact sheet states:

> *"A water quality based effluent limit for total PCBs is require with the point of compliance at the end of pipe (**e.g. no mixing zone allowed**)."* (Emphasis added)

It is not appropriate to disregard the authorized use of mixing zones when setting limits. If final PCBs limits were required (they are not), then they should be calculated using the appropriate chronic mixing zone based on the river harmonic mean flow.

3. **Assuming that final numeric effluent limits for PCBs at the end-of-pipe based on the Human Health Water Quality Standard were appropriate (they are not), then any effluent limits should be based upon the long-term risk nature of PCBs.**

Recognizing the risk of PCBs is from long-term exposure over a 70 year period, any effluent limit determined to be necessary for PCBs should be based on a long term averaging period such as an annual average. Shorter term averaging periods should not be used because they are not consistent with the basis for the human health based criteria, sampling for PCBs is infrequent,

and the high degree of variability in laboratory analysis makes compliance with shorter timeframe effluent limits impracticable.

4. **The work of the SRRTTF has been productive and is superior to imposing numeric effluent limits in the permit.**

The SRRTTF was established to determine causes of PCB impairment in the Spokane River. It is a well-conceived, collaborative approach to define and characterize PCB loading from both NPDES permit holders and non-point sources. The SRRTTF has not yet completed its comprehensive plan to bring the river into compliance with applicable water quality standards. Therefore, establishing numeric NPDES permit effluent limits for PCBs is premature.

5. **Toxics reduction strategy – BMP effectiveness monitoring**

The Toxics Reduction Strategy requires the quantification of toxic reductions in the collection system and treatment plant effluent to the maximum extent practicable. The fact sheet should include a discussion of the impracticality of demonstrating quantitative reductions, both in the collection system (influent) and effluent.

In reality, it is unlikely that influent sampling will be sufficient to demonstrate BMP effectiveness. The effectiveness of any BMP will be masked by the inherent variability of the influent and effluent data.

The County supports the use of a BMP approach to toxics reductions. We anticipate that indirect measurements and analytical approaches will be required to assess BMP effectiveness, and this should be recognized in all Spokane River NPDES permits and fact sheets.

6. **Because there are no PCB design loadings associated with advanced wastewater treatment systems, the technical memo to assess PCB loading when influent exceeds design criteria is not appropriate.**

The requirement to develop design influent criteria for PCBs is unreasonable. Although selected treatment technology will likely remove PCBs, there is insufficient documented evidence of the effectiveness of the treatment process in the removal of PCBs. Because of inherent inaccuracies of testing methods, it should not be the responsibility of Permittee to establish design criteria for pollutants and treatment processes for which there is no documented research of treatment effectiveness in the low concentration ranges required for permit compliance. It is worth noting that the EPA did not recommend requiring the Permittees to determine a “design influent loading value” in the discharger permits (EPA, Permitting Recommendations for the Spokane River Watershed, July 13, 2015). The EPA only recommended that “An estimate of the reduction in PCB loading or concentration achieved through TMP or BMP plan activities…” be included in the required annual report of PCB monitoring results and activities.

Comments other than PCB-related

7. **Ecology recently re-categorized the Spokane River as Category 1 for cadmium, making effluent limits far below water quality standards excessive and unnecessary.**

Ecology's 2015 state Water Quality Assessment, approved by EPA in July 2016, lists the Spokane River as Category 1 for cadmium. In previous assessments as recent as 2012, the river was Category 4A as impaired for cadmium. This improvement in river water quality should be recognized, and in fact, celebrated as a success. Yet, instead of congratulating the effort to improve water quality, some cadmium effluent limits for the permit are reduced (tightened). This reduction is the result of the wasteload allocation set by the 1999 Spokane River Dissolved Metals TMDL, whereby limits are set as performance-based (plus 10%). The impact is that effluent limits are set irrespective of water quality criteria, when in fact effluent discharges are several orders of magnitude below water quality standards and have no reasonable potential to cause an exceedance of water quality standards. Additionally, improved treatment performance in one 5-year permit cycle often results in excessive and unnecessary reductions in effluent limits in the following cycle, again irrespective of receiving water quality.

The Metals TMDL appears to have never anticipated a river that met water quality standards. Ecology now has an opportunity to recognize the success in improving river water quality and eliminate the unnecessary effluent cadmium limits. To keep the TMDL defined limits in place is to continue to apply an ever-tightening limit that does nothing to further protect the environment.

8. **Similar to cadmium, effluent limits for lead and zinc are inappropriately restrictive and should be revised.**

Lead and cadmium limits in the draft permit are defined by the wasteload allocations set in the 1999 Spokane River Dissolved Metals TMDL. The limits from the TMDL are defined as performance-based (plus 10%). While the Spokane River continues to be Category 4A for zinc and lead, the cause is largely due to historic mining activities upstream. NPDES-permitted effluents are well below water quality standards for lead and zinc and have no reasonable potential to cause an exceedance of water quality standards.

As a result of the Metals TMDL wasteload allocation, effluent limits for lead and zinc are set irrespective of water quality standards and continually ratchet lower as treatment plant performance improves. It seems necessary that the Metals TMDL be re-calculated in order to set appropriate discharge limits (if limits are necessary at all). In the meantime, an alternative application of the wasteload allocation from the Metals TMDL could be to set limits based on:

"…maintaining existing concentration of metals in effluent…"

This would mean retaining lead and zinc limits from the previously-issued permit until a more appropriate basis for limits can be determined.

In closing, Spokane County is committed to working with Ecology and others to improve water quality in the Spokane River and our region. We appreciate the opportunity to comment on this draft permit and fact sheet and to work collaboratively with you on these important topics. Please direct any questions on this letter to Dave Moss, P.E., Water Reclamation Manager, dmoss@spokanecounty.org or 509-477-7268.

Sincerely,

Kevin R. Cooke, P.E.
Environmental Services Director

Comments on the Draft NPDES Permit for the City of Spokane Riverside Park WRF

Permit No. WA0024473
August 29, 2016

Comments on the Draft Permit

Section S1.B: Final Effluent Limits for Compliance with the Spokane River DO TMDL

In order to grant a compliance schedule for a water quality-based effluent limit (WQBEL), the permitting authority must require compliance as soon as possible (40 CFR 122.47(a)(1)). As a practical matter, this means that the permittee cannot immediately comply with the new effluent limitation on the effective date of the permit, because, if compliance can be achieved, then a compliance schedule is not available. See the May 10, 2007 memo from James A. Hanlon to the water division director of EPA Region 9[1] and the *U.S. Environmental Protection Agency NPDES Permit Writers' Manual*[2] at Section 9.1.3.

It appears that the permittee could comply with the final WQBELs for ammonia and $CBOD_5$. Based on the average effluent flow (28.5 mgd) and average concentration values reported in Table 4 of the Fact Sheet, the average effluent loading of $CBOD_5$ is about 784 lb/day[3] and the average effluent loading of ammonia is about 29 lb/day[4]. The most stringent final $CBOD_5$ and ammonia WQBELs are 1,781 lb/day and 89 lb/day, respectively, which are generally expressed as seasonal averages. Since the current average discharges of $CBOD_5$ and ammonia are less than the final seasonal average WQBELs for $CBOD_5$ and ammonia, the permit should require compliance with the final WQBELs for $CBOD_5$ and ammonia based on the TMDL WLAs immediately on the effective date of the final permit.

Section S2.A: Monitoring Schedule

The draft permit does not currently require sampling of the Spokane River for PCB congeners. Congener analysis is possible using EPA Method 1668C. The reason for recommending congener analysis is explained in the permitting recommendation submitted by the EPA to Ecology on July 13, 2015.[5] The EPA notes that the Fact Sheet for the draft permit for Kaiser Aluminum Washington, LLC (Permit #WA0000892) states on Page 37 that the Spokane River Regional Toxics Task Force plans to characterize PCB concentrations in the Spokane River.

Characterizing PCB data is relevant for determining whether the Spokane River has met the water column concentration targets in the PCB on Pages 11 and 12 of the EPA's Plan for Addressing PCBs in the

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[1] "Compliance Schedules for Water Quality-Based Effluent Limitations in NPDES Permits" https://www3.epa.gov/npdes/pubs/memo_complianceschedules_may07.pdf
[2] https://www.epa.gov/npdes/npdes-permit-writers-manual
[3] 28.5 mgd × 3.3 ppm × 8.34 lb/gallon = 784 lb/day
[4] 28.5 mgd × 0.12 ppm × 8.34 lb/gallon = 29 lb/day
[5] Permitting Recommendations for the Spokane River Watershed. Included as Appendix B to EPA's Plan for Addressing PCBs in the Spokane River. July 14, 2015. http://srrttf.org/wp-content/uploads/2015/07/Spokane-TMDLNotice_of_Filing_EPA-Response_to_Remand_filed_7.14.15.pdf

Spokane River (dated July 14, 2015). In the event that the Task Force does not continue to characterize PCB concentrations (which it is not required to do), and if Ecology does not require point source dischargers to the Spokane River to conduct monitoring for PCB congeners in the Spokane River (through a permit condition or other means), then EPA recommends that Ecology itself commit to monitoring PCB congeners in the Spokane River at a frequency adequate to assess both high and low river flow conditions.

Section S6: Pretreatment

The draft permit does not include a requirement for sampling of significant industrial users' (SIU) effluents for PCB aroclors. This was one of the permitting recommendations submitted by the EPA to Ecology on July 13, 2015. This recommendation may not be applicable if there is reason to believe that industrial users contribute a small percentage of the influent loading of PCBs.

The draft permit does not implement the EPA's permitting recommendation to prohibit the POTW from authorizing discharges of PCBs to the treatment works from any person, including industrial users, unless the PCB concentration is < 3 µg/L or unless the discharge is in accordance with a PCB discharge limit included in a pretreatment permit issued under §307(b) of the Clean Water Act. Such discharges to POTWs are prohibited under Toxic Substances Control Act (TSCA) regulations (40 CFR 761.50(a)(3)).

Comments on the Fact Sheet

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The Fact Sheet states that "water quality-based limits are calculated so that the effluent will comply with the Surface Water Quality Standards (chapter 173-201A WAC), Ground Water Standards (chapter 173-200 WAC), Sediment Quality Standards (chapter 173-204 WAC), or the National Toxics Rule (40 CFR 131.36)."

This facility discharges upstream from waters of the Spokane Tribe of Indians. The Spokane Tribe of Indians has treatment as a State under the Clean Water Act, and has established water quality standards that have been approved by the EPA and which are applicable to the Spokane River downstream from this facility.[6] In some cases, the Spokane Tribe's water quality standards are more stringent than Washington's water quality standards, or the National Toxics Rule.

Federal regulations state that no permit may be issued when the imposition of conditions cannot ensure compliance with the applicable water quality requirements of all affected States (40 CFR 122.4(d)). Ecology should analyze the discharge's effect upon downstream waters of the Spokane Tribe of Indians, and, if necessary, should establish WQBELs that do not cause, have the reasonable potential to cause, or contribute to non-attainment of the EPA-approved water quality standards of the Spokane Tribe of Indians, in addition to the Washington water and sediment quality standards and the National Toxics Rule.

Page 34

The Fact Sheet describes the physical size of the acute and chronic mixing zones. The EPA also notes that the mixing zone dilution factors were determined using Ecology's permit calculation tool (see also Pages 81 and 84), which uses a water balance calculation, but which cannot predict the spatial extent of a mixing zone. The Fact Sheet should describe how the physical sizes of the acute and chronic mixing

[6] Tribes in Idaho, Washington and Oregon with EPA approved Water Quality Standards (WQS) https://yosemite.epa.gov/R10/WATER.NSF/Water+Quality+Standards/tribalWQStext

zones were determined. If there are seasonal differences in the sizes of the mixing zones (e.g., due to differences in critical river flow rates or effluent and ambient temperatures), the Fact Sheet should explain this as well.

Page 38

The Fact Sheet states, "Cadmium average monthly effluent limits have changed and are less restrictive than the previous permit; however, Ecology believes there to be an error in the calculation of the limit in the 2011 discharge permit. Therefore, adjusting this average monthly effluent limit does not trigger anti-backsliding provisions listed in the Clean Water Act."

Errors made in the previous permit are not an exception to anti-backsliding for water quality-based effluent limits. The cadmium limits in the prior permit were water quality-based because they were based on a TMDL. Technical mistakes are an exception to anti-backsliding for limits established under CWA section 402(a)(1)(b) (best professional judgment technology-based limits). See the *U.S. Environmental Protection Agency NPDES Permit Writers' Manual* at Page 7-3.

The anti-backsliding analysis for cadmium should be repeated following the guidance provided in Section 7.2 of the *U.S. Environmental Protection Agency NPDES Permit Writers' Manual*.

Prepared 9/13/2016
Compiled by Jeff Donovan
RPWRF Laboratory
City of Spokane

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

The City of Spokane has compiled comments addressing the Draft NPDES Permit for its Riverside Park Water Reclamation Facility (RPWRF) and CSOs (WA0024473). The public comment period for this permit was June 30, 2016, through August 29, 2016, and was extended by Ecology to September 13, 2016. Comments are summarized below with specific comments organized by the section in the draft Permit and Fact Sheet to which they apply.

Summary

The City requests that language regarding pH limits be added so that short excursions outside the range of 6.0 to 9.0 would not be counted as violations. The current RPWRF permit and other NPDES permits for the Spokane River include this language.

The City requests that the current limits of 200/100 mL monthly and 400/100 mL weekly for fecal coliforms be maintained. As is stated in the Fact Sheet, these limits are sufficient to protect the water quality standard.

The City requests that the decision whether to operate Next Level of Treatment (NLT) year-round be deferred. There is currently only limited data on the additional benefit of year-round NLT for PCB removal. The City will be conducting further study of PCB removal by the NLT system after that system has been installed. While the City is hopeful that NLT will provide cost-effective PCB removal at RPWRF, there is not enough data yet to conclude it should be operated year round to control PCBs.

These comments and others are discussed in further detail below.

Draft Permit

- **S1.A. pH limits.** The 2011 permit for the City has language in footnote c which reads:

  > When pH is continuously monitored, excursions between 5.0 and 6.0, or 9.0 and 10 shall not be considered violations provided no single excursion exceeds 60 minutes in length and total excursions do not exceed 7 hours and 30 minutes per month. Any excursions below 5.0 and above 10.0 are violations. The instantaneous maximum and minimum pH shall be reported monthly. Continuous for digital equipment means data acquisition every 2 minutes.

Similar language should be included with the proposed permit. The Spokane County water reclamation facility has similar language in its current permit. The draft permit currently being proposed for Kaiser Aluminum also has this language.

S1.A. Fecal Coliform limits. The current fecal coliform limits of 200/100 mL monthly and 400/100 mL weekly should be maintained. Page 36 of the Draft Fact Sheet states that the current limits are not modeled to cause a violation of the water quality criterion. The proposed limits appear to be excessively stringent and unwarranted given Ecology's determination that the current limits are sufficient to protect designated uses under critical conditions.

Page 178 of the Ecology Permit Writer's Manual states that: "The point of compliance for the fecal coliform standard is at the boundary of the chronic mixing zone if one is allowed." Setting the end of pipe limit to the WQ standard ignores the chronic mixing zone authorized by the permit. While one of the four options highlighted in the Permit Writer's Manual includes setting the limit to the WQ standard, it provides the caveat that: "This minimizes the mixing zone and may be appropriate for fresh water dischargers with reliable UV disinfection." Since RPWRF uses chlorination instead of UV for disinfection, it seems that this method would not be appropriate and that one of the other three options should be used for determining the permit limits for fecal coliforms.

Spokane County currently has limits of 200/100 mL monthly and 400/100 mL weekly. The draft permit currently being proposed for Kaiser Aluminum also has limits of 200/100 mL monthly and 400/100 mL weekly. The City does not believe that a demonstration of historical compliance with a more stringent limit is justification for imposing that limit on a given discharge.

- **S1.A. Total PCB Limits (Interim and Final).** Imposing PCB limits undermines the collaborative efforts undertaken by the Spokane River Regional Toxics Task Force (SRRTTF) and will hamper progress towards meeting the water quality standards and removing fish advisories for PCBs in the Spokane River.

  On July 14, 2015, the EPA submitted a plan for addressing PCBs in the Spokane River to the United States District Court (Sierra Club, *et al*. v. Dennis Mclerran (EPA), *et. al*.). In an appendix to this plan, the EPA made recommendations to Ecology titled "Permitting Recommendations for the Spokane River Watershed."[1] As is quoted below, the EPA recommends a BMP approach rather than a numeric effluent limit approach to the PCB problem:

  > …the EPA is currently recommending a best management practices (BMP) approach to controlling and abating discharges of PCBs from point sources in the Spokane watershed. …the EPA believes this approach will be more effective in reducing discharges of PCBs than numeric effluent limits. The authority to establish BMP conditions in NPDES permits is provided in 40 CFR 122.44(k).

[1] http://srrttf.org/wp-content/uploads/2015/07/Spokane-TMDLNotice_of_Filing_EPA-Response_to_Remand_filed_7.14.15.pdf

Additionally, the reasonable potential analysis (RPA) discussed on page 37 of the Fact Sheet (and calculated on page 83), indicates that RPWRF does not have the reasonable potential to cause an exceedance of the water quality standard for PCBs. The Fact Sheet concludes, however, given the presence of PCBs in the RPWRF effluent and that the Spokane River is listed as impaired for PCBs, a water quality-based effluent limit should still be required. The City would point out that based on PCB monitoring conducted by SRRTTF in 2014-2016, the Spokane River appears to be actually below the water quality criteria of 170 pg/L on an annual average basis. All of the listings for PCBs on the Spokane River are based on fish-tissue equivalent concentrations and bioconcentration factors which do not correlate with the surface water concentrations found in the Spokane River. If the River meets the water quality standard for PCBs, it would seem that the RPA should take precedence in the determination of whether RPWRF should be required to have effluent limits for PCBs.

Given the EPA's recommendations for a BMP approach and the conclusion from Ecology that RPWRF does not have a reasonable potential to cause an exceedance of the water quality criteria, it would be prudent to forego imposing permit limits for this permit cycle and to continue to focus on success with the SRRTTF.

- **S1.A. Total PCB Limits (Interim and Final).** Should they be required, the average monthly and average weekly interim limits, and max daily final limits for PCBs should be changed to either seasonal or annual average limits. PCBs are not acutely toxic at the levels found in wastewater and are only of concern in the Spokane River because of their tendency to bioaccumulate over long periods of time in fish. This is reflected in PCB compliance monitoring, which is required twice a year. Any samples that are taken that were above the average monthly limit or the maximum daily limit would create unwarranted permit compliance issues for the City if the data were interpreted to suggest that all months, weeks or days between sampling events were on-going violations.

  The City would request that the final PCB limit be stated in the same manner as the interim limits.

- **S1.A. Total PCB Interim Limits.** It is arbitrary and unnecessary to have different PCB limits between the two seasons defined in the current Draft Permit. If interim, performance-based PCB limits are required for the proposed permit, they should be recalculated for the entire year. The permit seasons are based on DO-TMDL requirements. If waste load allocations were developed for PCBs, it would likely fall under differing seasons since the endpoint would be fish exposure rather than DO-impairment.

  The seasonal limits are also inconsistent with the other Spokane River permits currently up for renewal. Both the proposed Kaiser Aluminum and Liberty Lake permits have the same interim limits year-round for PCBs.

- **S1.A Total PCB Final Limits.** The final limit of 170 pg/L should be replaced with "--" or "to be determined". As is alluded to in footnote e, this limit will be reassessed when additional data is collected. It is premature to impose a final effluent limit for 2026 when there are so many unknowns that could potentially change how a final effluent limit is determined (e.g., effluent data collection showing the effectiveness of NLT and additional river data indicating how successful ALL the actions all parties are taking to reduce PCBs in the Spokane River).

  Additionally, setting the end of pipe limit to the water quality standard ignores dilution authorized from the mixing zone. The second sentence in footnote e should either be removed or reworded as follows: "The final limit listed applies to ~~effluent at the end of pipe and not at~~ the edge of the chronic mixing zone."

- **S1.A Metals Limits (Cadmium, Lead, Zinc).** As was discussed above with the interim PCB limits, it seems arbitrary and unnecessary to have differing seasons for the cadmium, lead, and zinc limits. The City would recommend recalculating and changing these limits to be the same year-round regardless of the seasons defined by the DO-TMDL.

- **S1.B. Page 11. Footnote f.** Please clarify that CBOD, ammonia, and TP are allowed to be above the average early in the Critical Season so long as the average comes down by the end of the Season.

  The City suggests rewording the footnote to read: "Compliance with the effluent limitation for CBOD5, NH3-N, and TP will be **assessed at the end of the season.** ~~based on~~ A running seasonal average **shall be** reported on a monthly basis for ~~tracking~~ **estimating** compliance with the allowable mass limit."

- **S6.A. 12.b.** An outdated version of the ordinance is referenced. Please change to the following: "…Section ~~13.03.0416~~ **13.03A.0204** of Ordinance ~~13.03~~ **13.03A**."

- **S6.D.** Local limits development. "As sufficient data become available, the Permittee, in consultation with Ecology, must reevaluate its local limits in order to prevent pass through or interference." Please provide clarification. What is "sufficient data"?

- **S13. Page 44. List Item 2.** There are no PCB design loadings associated with the NLT treatment system design. NLT was designed solely for phosphorus removal and compliance with the DO TMDL requirements. While additional PCB removal may be achieved through this system, it is not verified and PCB removal was not a design consideration.

  The City suggests changing or removing this item.

- **S13. Page 44. List Item 3.** Rather than being required to operate NLT year-round to control PCBs beginning in 2026, the City intends to pilot (or prepare to pilot) NLT to determine the efficacy of PCB removal during this permit term (2016-2021).

The City shares Ecology's interest in year-round NLT operation for PCB removal. Taking this step must be done carefully. Piloting and design are specifically geared for nutrient removal and NLT must be optimized commensurately to achieve the intended Net Environmental Benefit. Although NLT appears capable of further reducing PCBs, the minimal data collected during piloting may not represent the Non-Critical season and, in any case, is too limited to provide statistical significance. Scaling-up in wastewater treatment is inherently risky because untested parameters can cause significant unpredictable problems. Our concerns regarding unpiloted operation of NLT for PCB removal during the Non-Critical season fall into four broad categories: (1) operations and maintenance; (2) membrane performance during the following Critical Season; (3) impacts to other plant processes; and (4) the unknown unit cost of PCB removal in the Non-Critical season relative to other BMPs. Consequently, the City requests that it be allowed to conduct a PCB Pilot using a separate membrane treatment unit concurrent with Optimization of the NLT System and subsequently phase in year-round operation for PCB removal, rather than risk damaging a portion of the membrane system. If such damage occurred, it could impact nutrient removal, affect other plant processes and/or pollutant removals, and be prohibitively expensive to repair.

- **S15.F. Page 50. Table Item 7.** The City would prefer to use the CSO Reduction Plan Amendment process to set specific timeframes to complete the remaining CSO projects. These projects can be very complex to site, permit, design and construct, and as a result there is a wide range of project-specific factors that affect our ability to complete construction. Each of these factors defines "the earliest possible date" that the City can achieve compliance with WAC 173-245 at its remaining CSO outfalls. The City will be required under Condition S15.D. to submit any necessary CSO Reduction Plan amendments to Ecology on an annual basis, including schedule adjustments based on project-specific factors. The City requests that Item 7 in the Compliance Schedule Table read: "December 31, 2017, or as required in a CSO Reduction Plan Amendment."

- **S15. Page 48. List item 9.d.** Please further define: "Water quality data for receiving water bodies." Which data would this include?

- **G1. Page 56. Item 1.** Recommend clarifying as: "All applications, reports, or information submitted to Ecology must be signed and certified **or as otherwise required by this Permit.**" so that the City's transmission of other "information" to Ecology is not bound by this requirement.

Draft Fact Sheet

- **Section III. G. Page 38. List Items 3 and 4.** See comments in permit section regarding PCB tech memo and year round NLT.

- **Section V.J. Page 62. ¶2.** Suggest rewording sentence: "The City of Spokane must provide ~~viable quantitative~~ **supporting** data used in assessing BMP effectiveness in a

report that will accompany the permit application." What is viable quantitative data? The City has concern that certain BMP implementation actions, while possibly effective at reducing PCBs in the collection system, may not be statistically significant given the highly variable results that can be seen in past influent and collection system PCB monitoring.

Department of Ecology
Attn: Permit Coordinator
4601 N. Monroe Street
Spokane, WA 99205

The Association of Washington Cities and the Washington State Association of Counties collectively represent the 281 Cities and Towns and 39 Counties of the State of Washington. We write today on behalf of our members that own and operate municipal wastewater collection systems and publicly operated treatment works (POTWs) in the state that are regulated under National Pollutant Discharge Elimination System (NPDES) discharge permits by the Department of Ecology (Ecology). One of our roles is to facilitate collaboration with Ecology on water quality protection and regulatory issues in the state that are of common interest to our members. Regulatory and water quality protection policies, and NPDES permitting and compliance requirements for the wastewater dischargers is of particular concern to our members as a result of the large influence such regulations have on the health of our residents, and the capital infrastructure planning, development, operations and maintenance, and financial health of municipal systems. Our organizations do not usually comment on specific permits, but in this case we think the potential precedential value of the decisions embedded in this permit make it necessary. In that regard, we would appreciate Ecology's consideration of the following comments regarding some of the permitting approaches proposed to address the discharge of polychlorinated biphenyl compounds (PCBs) in wastewater effluent in the June 30, 2016 draft NPDES permit issued to the City of Spokane (*Riverside Park Water Reclamation Facility and Combined Sewer Overflows [CSOs]*, Permit No. WA0024473) that is currently being circulated for public review.

We would like to point out two concerns regarding the regulatory approach and terms with respect to PCBs in the City of Spokane's draft NPDES permit that may have procedural implications for our member POTW dischargers, as follows:

1) Reasonable Potential for PCB Effluent Limitations: The reasonable potential calculation table (Fact Sheet, p. 83) indicates that the City's discharge does not exhibit reasonable potential for PCBs based on available assimilative capacity and dilution in the river. However, the permit contains a narrative finding that there is reasonable potential based the river being listed as impaired under Section 303(d) and the detection of PCBs in the effluent (Fact Sheet, p. 37). The narrative finding of reasonable potential is inconsistent with the evidence presented in the reasonable potential calculation with the effluent and receiving water conditions. We believe it is important for the reasonable potential analysis to accurately reflect the science of the discharger's specific conditions in a watershed, and not be subject to stringent numerical water quality based effluent limitations when not warranted.

2) Maximum Daily Effluent Limitations for PCBs: The final effluent limitations for PCBs is set equal to the National Toxics Rule human health water quality standard of 0.000170 ug/L without the consideration of dilution identified in the Fact Sheet (p. 83 described above). Notwithstanding the concern for the reasonable potential finding and need for effluent limitations identified above, effluent limitations (should they be required) should appropriately recognize the dilution and a mixing zone when there is evidence to support the authorization. The reasonable potential analysis calculation table (Fact Sheet, p. 83) indicates that dilution is available;

however, the footnote “e” to the table of effluent limitations in the permit (p. 7-9) indicates that effluent limitations shall apply end-of-pipe. We believe it is important that the effluent limitations should accurately reflect the discharger’s demonstrated receiving water conditions. We have had a long-running conversation with Ecology about the need to preserve mixing zones and dilution as one tool in the arsenal to provide opportunities to comply with increasingly difficult criteria.

The maximum daily effluent limitation is overly restrictive and inconsistent with the water quality criteria for PCBs that are established for human health protection over a 70-year exposure period of consuming water and organisms. The final effluent limitations (should they be required) should not be established on a more restrictive basis than specified in the procedures of the Ecology’s “Water Quality Program Permit Writer’s Manual”. Moreover, feasible effluent limitations (should they be required) should be based on an appropriate long term averaging period consistent with the basis for the water quality criteria and not as a short-term maximum daily limit.