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Brandee Era-Miller and Melissa McCall  
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Washington State Department of Ecology  
Olympia, Washington 98504-7710

**RE: Avista Comments on the Draft Spokane River PCBs and Other Toxics at the  
Spokane Tribal Boundary: Recommendations for Development of a Long-Term  
Monitoring Plan**

Dear Mss. Era-Miller and McCall:

Avista appreciates the opportunity to provide comments on the *Draft Spokane River PCBs and Other Toxics at the Spokane Tribal Boundary: Recommendations for Development of a Long-Term Monitoring Plan* (Long-Term Monitoring Plan, River, dated October 31, 2017). We have the following comments.

### **General Comments**

We appreciate that the draft document is generally clear and easy to follow. However, some of the more important technical analyses are inconsistent with recent Spokane River Regional Toxics Task Force (SRRTTF) findings. There are also unsupported references to “impacts” that should be removed to make the document more accurate. More detailed comments are provided below.

### **Analytical Methods**

The water column PCB data included in the document are highly uncertain due to the significant transfer blank contamination observed. While the document notes this important issue, the discussion should be revised to be more consistent with SRRTTF and Ecology Quality Assurance Project Plans (QAPPs). For example, the current SRRTTF QAPP recognizes that sample detections within 3 to 10 times of the blank concentration are only suitable for limited semi-quantitative analysis such as general source evaluations, but should not be relied on for definitive comparisons with water quality standards. Additional caveats should be added to the document to clarify these uncertainties in the recent water column PCB data.

Since blank contamination using the water column PCB method used to date limits the utility of these “baseline” data for long-term trend analyses or other water quality comparisons, we recommend that Ecology consider switching to the most up-to-date passive sampling methods, which are both more precise (including being less prone to blank contamination) and less costly. Passive sampling methods (e.g., using polyethylene [PE], solid phase microextraction (SPME), polyoxymethylene [POM], and other similar methods) are increasingly being used by regulatory

agencies and academics for surface water PCB monitoring in situations that require rigorous quality control at low-level concentrations (e.g., <https://www.serdp-estcp.org/News-and-Events/Blog/National-Guidance-Documents-on-Use-and-Application-of-Passive-Samplers>). Further consideration should be given to employing these more up-to-date and more cost-effective analytical methods. Conversely, sediment traps deployed as part of the baseline sampling provided much higher quality data. We agree with the recommendation to continue sediment trap monitoring to evaluate longer-term trends, particularly for PCBs and PDBEs.

## Discussion

All sediment trap PCB concentrations were well below Washington State freshwater sediment quality standards. This result should be highlighted further in the text, as it is a key finding. Moreover, when all data are combined (i.e., looking at all seasonal data appropriately), there is no statistically significant trend in sediment trap PCB concentrations between 2013 and 2016. The unsupported “trend” discussions included in the document as well as speculations as to causes should be deleted.

Statements made in the document that are unsupported or inconsistent with SRRTTF evaluations should be removed. For example, the draft report states that “*groundwater sources of PCBs upstream of Upriver Dam are a significant ongoing source of PCBs to the Spokane River*” (page 34; 1<sup>st</sup> paragraph). This statement is inconsistent with prior statements made by SRRTTF. For example, the SRRTTF 2016 Monthly Monitoring Report prepared by LimnoTech (draft dated May 24, 2017, approved by SRRTTF at its May 31, 2017 meeting) discusses that stormwater and combined sewer overflow inputs are a far larger source of PCB loading to the river compared to potential groundwater inputs. Moreover, the LimnoTech report concluded that river PCB mass balance assessments that infer groundwater loads are “speculative at best” due to the limited amount of data available as well as analytical method uncertainties. LimnoTech further concluded that additional evaluation is needed to characterize lower-level groundwater inputs.

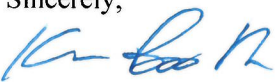
As another example, on Page 12, 3<sup>rd</sup> paragraph, the document states: “*The Spokane River is impacted by seven major dams and the reservoirs created by them*”. The nature of the alleged “impacts” is not discussed, and in any case, is not relevant to the development of the Long-Term Monitoring Plan for PCBs and other toxics. Unsupported statements such as these should be removed from the document.

Finally, to clarify where State and Tribal water quality criteria apply, we suggest that the first sentence under “Assessment Criteria” on Page 20 of the draft plan be revised to read as follows:

Table 5 shows the relevant Washington State and Spokane Tribal water quality and sediment criteria. The State criteria apply to the surface water and suspended sediment above the confluence of Chamokane Creek with the Spokane River, and the Tribal criteria apply below the confluence.

Please feel free to contact me at (509) 495-4738 if you have any questions or wish to discuss our comments.

Sincerely,



Kevin Booth  
Sr. Environmental Scientist