



**SRRTTF**  
**Tech Track Work Group Meeting**  
Tuesday, February 16, 2021  
1:00 – 2:30 PM PST  
ZOOM

**Meeting Materials–**

- Powerpoint Presentation – SPMD Preliminary Sampling Results, Dry well conceptual model (Dave Dilks) – posted on SRRTTF website
- Draft Scope of Work for PCB-11 Sources and Pathways Phase I Assessment – posted on SRRTTF website
- Spokane County online hydrogeologic data portal (Mike Hermanson) – <https://spokanecounty.maps.arcgis.com/apps/webappviewer/index.html?id=b0e5f9f28a6d4f48b3108b49f9a36950>
- List of Projects from Data Synthesis Workshop and TTWG followup Discussions, and status – see notes below.

Attendees

Doug Austin, Chesapeake Bay Program  
Jeff Donovan, City of Spokane  
Doug Krapas, IEP  
Jeremy Schmidt, WA Department of Ecology  
Ken Windram, HARSB  
Karl Rains, WA Department of Ecology  
Lisa Dally Wilson, Dally Environmental, SRSP  
Dave Dilks, LimnoTech  
Alyssa Gersdorff, City of Post Falls  
Ben Floyd  
Vikki Barthels, Health District  
Robert Mott  
Brandee Era-Miller, WA Dept of Ecology

Sandy Treccani, WA Department of Ecology  
Brent Downey, Kaiser  
Logan Callen, City of Spokane  
Tom Agnew, LLSWD  
Mike Peterson, The Lands Council  
Mike Anderson, City of Coeur d’Alene  
Rob Lindsay, Spokane County  
Mike Hermanson, Spokane County  
Gary Jones  
Bill Fees, WA Department of Ecology  
Caroline Hammett, IEP  
Brian Owen, IEP  
Kris Holm

Note – action items in red

Purpose of Meeting, Expected Outcomes –

- Presentation of preliminary SPMD results - FYI
- Presentation of drywell concepts and TTWG discussion of (1) approach to assess drywell contributions of PCBs to Spokane River, and (2) whether this is a worthwhile data collection effort for the TF to pursue?
- Presentation of TSCA Workgroup proposed Scope of Work on Phased Study of Sources and Pathways of PCB-11 into the environment and TTWG discussion regarding interest to pursue.

- Overview cumulative project list of TTWG sponsored projects, status and next steps including informal straw poll.

## Summary Notes

### Preliminary Overview of SPMD Water Column Results and Discussion (Dave Dilks, All)

Dave Dilks provided a preliminary overview of results from the fall 2020, low flow SPMD sampling effort. He also provided a description of the complex process used to calculate total PCB concentrations in the water column from dissolved PCBs collected over time in the SPMD sampler. Concentrations in the Mission Reach appear to be highest. Because the SPMD was located in the vicinity of where peak biofilm PCB concentrations occurred, it was suggested that additional water column sampling in the Mission Reach (either via synoptic sampling methods or SPMD methods) may be warranted to better define the spatial extent of the elevated concentrations.

**PARKING:** Adaptive management. Complexity in calculating total PCBs from SPMD results leads to some uncertainty and may not be adequate to assess small changes and long term trends. This suggests the potential need to discuss additional sampling procedures (eg., additional organic carbon monitoring, more SPMD samples, refined performance reference compounds) (see ppt). No modifications to the sampling program are recommended now, but we will continue to evaluate as more data come in.

**Action:** Add “Additional water column sampling in Mission Reach” to potential projects list

### Potential Study of Drywell Impacts

TTWG presentation and discussion of a conceptual model showing how stormwater entering a drywell could potentially reach the SVRP Aquifer and the Spokane River. Discussion of how difficult it might be to evaluate a ‘plug’ of stormwater through the transport process. Jeremy mentioned there are two dominant types of drywells: those elevated through a grassy swale (208 design) and “old school” drywells which are essentially a pipe through impervious surface that collects stormwater. TF would want to focus on the “old school” drywells. Consider a phased approach to evaluating the potential for drywells to contribute PCBs to the Spokane River. Investigate the concentrations of PCB congeners in stormwater entering an “old school” drywell. Conceptually model a range of potential concentrations entering the River during and after a storm event and determine whether the contribution is significant.

Jeff mentioned that stormwater concentrations of PCBs are generally around 10,000 pg/l with hotspots in the 40,000 to 100,000 pg/l range. Brandee mentioned that Brian Nickel’s EPA intern is working on a correlation between homolog profiles of stormwater and biofilm. The results may provide additional information relative to the importance of drywell impacts to the River.

**Action:** Add Phase I evaluation of current stormwater runoff concentrations and conceptual transport pathways through ‘old school’ drywells to the river. Also estimate the number of ‘old school’ drywells in the vicinity of the Spokane River where possible. Consider results from cosine theta correlation work by EPA Intern.

### Phased Study of Sources and Pathways of PCB-11 into the Environment

Doug presented a draft Scope of Work for the first phase of a study addressing the Sources and Pathways of PCB-11 into Spokane River water column and fish. The work was initially developed by the TSCA workgroup, but was referred to the TTWG based on the technical nature of the study. This first phase would include evaluation of pre-existing data for fish, biofilm, water column, stormwater and wastewater effluent to better understand sources and transport pathways for PCB-11. This work would likely be done by LimnoTech as they are familiar with data collected for the Task Force. Dave Dilks mentioned that much of this information is available and this first phase may not be too much effort. It is possible it could be covered by his existing technical support contract. This would include a homolog mass balance (dichloro homologs) on water column data. A request was made for LimnoTech to submit a scope of work for Phase I. This work was supported by a number of members of the TTWG.

**Action Item: Dave Dilks to prepare a scope of work for Phase I - PCB-11 Sources and Pathways Assessment for review by the TTWG.**

### Overview of TTWG Projects to date that have yet to be funded by the SRRTTF

- Projects Identified at Data Synthesis Workshop
- Studies Identified as part of Hot Spot Task (near-term and long-term)
- Other projects

The TTWG walked through all the projects that have been discussed, scoped, etc. by the group over the last two years in order to track progress and determine next steps. As part of the discussion of further defining and evaluating hot spots in Mission Reach, Mike Hermanson showed maps of the SVRP Aquifer/Basalt interface in the vicinity of these hotspots. Although this reach is generally referred to as a losing reach, it is very possible that, at some times of the year, the groundwater flow direction alternates and groundwater is discharging to the river. A suggestion was made to monitor groundwater levels in a well near the river (Hamilton Street Bridge Site/Old Browns Building Material property) to determine whether groundwater inflow to the Spokane River could be a source of PCBs in this section of the Mission Reach. It was also suggested to include sampling of the artesian well/spring observed during the stormwater reconnaissance at the same time.

**Action Item: Add water level monitoring of groundwater and surface water levels in Mission Reach and sampling of artesian well to project list.**

After walking through the project list and discussing each project, project status, and other considerations, the following project list (Table 1) was developed. An informal straw poll was taken with TTWG attendees on the ZOOM meeting and the results are shown. It was noted that the results from the poll are not a direct prioritization list, and that opportunities for specific types of projects will come up at different times.

	Task	Status	Straw Poll
1	Long-term Effectiveness Monitoring – future years	Underway – needs funding in future years	4
	Hot Spot Source Identification (See below)	See Options Below	
	<ul style="list-style-type: none"> <li>• Sampling of Artificial Bottom Fill Material</li> </ul>	Underway	
2	<ul style="list-style-type: none"> <li>• Sub-Bottom Object Detection Survey</li> </ul>	Pending future prioritization	1
3	<ul style="list-style-type: none"> <li>• Analysis of Existing Bottom Sediment Samples from Trent Bridge, other</li> </ul>	Pending future prioritization	0
4	<ul style="list-style-type: none"> <li>• Additional Stormwater Reconnaissance</li> </ul>	Pending future prioritization	0
	<ul style="list-style-type: none"> <li>• Near-bank Temperature Monitoring</li> </ul>	Completed	
5	<ul style="list-style-type: none"> <li>• Groundwater elevation monitoring to determine periods of groundwater inflow , Monitor Artesian Well – Mission Reach near Basalt – SVRPA interface</li> </ul>	Pending future prioritization	9
	<ul style="list-style-type: none"> <li>• Deeper dive into the origin of fill material</li> </ul>	Project already measuring PCB concentrations in brick and rock, wait on this	
6	<ul style="list-style-type: none"> <li>• Additional biofilm sampling</li> </ul>	Pending future prioritization	0
7	Sampling to Define Non-point Load during High River Flows	Pending future prioritization (SPMDs at high flow may cover)	1
8	PMF Phase 2B	Partially funded. Need additional funding	5
9	Selective Low-flow Water Column Synoptic Sampling (including USGS Gage to 9-Mile Reach for Mass Balance)	Pending future prioritization	0
10	Sources and Pathways of PCB-11: Phase I	Referred from TSCA workgroup	8
11	Additional (Cross Section) water column monitoring near hot spot (grabs?) – Mission Reach	Pending future prioritization	3
12	Old School drywell, stormwater concentrations potential for transport – Phase I Assessment	Pending future prioritization	3
	Significance of Groundwater Sources Upgradient of Kaiser	Completed	

## Table 1 – TTWG Project Status

Action – Consider more formal survey of TTWG members as funding becomes available.