

## Spokane River Regional Toxics Task Force Technical Track Work Group (TTWG)

Wednesday | July 12, 2017 | 9:30 a.m. – 12:30 p.m.

Department of Ecology | N. 4601 Monroe St. | Spokane, WA 99205

Meeting Documents: <http://srrttf.org/?p=8144>

### Attendees:

Karin Baldwin –WA Department of Ecology  
Dave Dilks (Phone) –LimnoTech  
Jeff Donovan –City of Spokane  
Mike Hermanson –Spokane County  
Kris Holm (Phone) –City of Coeur d’Alene  
Sarah Hubbard-Gray (Phone) –Spokane River  
Doug Krapas –Inland Empire Paper

Bud Leber –Kaiser Aluminum  
Dave Moss –Spokane County  
Monica Ott –City of Post Falls  
Chris Page (Video) –Ruckelshaus Center  
Bryce Robbert –Avista  
Jeremy Schmidt –WA Department of Ecology  
Sandy Trecanni –WA Department of Ecology  
Kara Whitman –Ruckelshaus Center

### Introductions and Agenda Review

After a round of introductions, no changes were made to the agenda.

### Database Contractor

Mike Hermanson described the detailed CDM Smith (CDM) memo for Tasks 1&2, noting the suggestion of consistent electronic data deliverables (EDDs). Each data-owning entity should coordinate with CDM Smith to submit data for the pilot project. CDM received comments from Adriane Borgias and Kris Holm (on Ecology’s Environmental Information Management (EIM) system data needs, blank correction, and quality assurance data). The question arose of how to move data back and forth between Task Force database and EIM. It would be good to also get a list or template of the different fields the labs should report for uploading to the database.

- **Q.** Did (or will) CDM talk with Dr. Rodenburg about how the database could interface with analysis she would do? **A.** They could; this may be part of Task 3.
- **Q.** Will CDM talk about next steps at the July Task Force meeting? **A.** Yes. They found that the Delaware River Basin Coalition (DRBC) database format will work well for Task Force needs. The 7/26/17 SRRTTF discussion will be a hands-on process to help CDM understand how the Task Force wants to utilize the database.
- **Q.** For dischargers submitting data for the database, what does CDM want? **A.** Mike provided the Task Force data unaltered (AXYS raw data sheets) and sample datasets from the County and Ecology (some from EIM database). The City provided sample datasets too. CDM said these don’t always match up (i.e. coelutions of different congeners). The electronic file from the lab contains the fields requested by the customer. This is not consistent across the data collected by different entities. CDM will scrub it, but needs contacts at the level of those who collected and received data. The Task Force will need to provide CDM with: where the data was collected, who sampled, time collected, etc. As they load the data, there will be iterations going back and forth, so having someone involved with collecting the data in contact with CDM Smith, will be useful. (QA info etc.)
- Standardized format for submitting samples to AXYS (via template that rolls into the database) will be part of CDM’s recommendations.

### Funding Items:

- EPA Source Reduction Grant Opportunity: \$25-90,000 for outreach and some technical activities.
- State Funding for SRRTTF of \$310,000: agenda item for next Task Force meeting? Expenditures must follow the letter of the law.

### **EAP Study Presentation Timing:**

Rob Lindsay spoke with Andy Dunau about including at the River Forum four presentations by Brandee Era-Miller on Environmental Assessment Program (EAP) Spokane River-related PCB studies. Andy is considering it and will speak with Brandee and Rob as they move forward.

### **Homolog Mass Balance: Memo**

Dave Dilks distributed a draft of the Memo prior to the TTWG meeting. Dave seeks feedback on the memo and wants to distribute a draft for SRRTTF consideration at its July 26<sup>th</sup> meeting. Dave requests comments/questions from the TTWG by Friday July 14<sup>th</sup>, 2017.

### **Q&A/COMMENTS:**

- **C.** It is a bit unclear which synoptic samples got used for the averages. **A.** LimnoTech remained consistent with how outliers were handled in previous reports.
- **Q.** Page 12: inconsistency – how much PCB is dissolved vs. solid? Review solids – is this because of the lack of suspended solids and organic carbon in the water? **A.** Yes, to both. Dave will provide a clarification explaining this. **Q.** All solids concentrations were reported as <5 mg/l, even though the Quality Assurance Project Plan (QAPP) goal was to get down to 1 mg/l. Are we missing something in our estimate of percent dissolved because of this? **A.** LimnoTech’s analysis treated non-detects as one half the detection limit (i.e. 2.5 mg/l) and will make this clear in the report.
- **C.** Page 5 and last page, re: uncertainty in the analysis. The measured values have the uncertainty (in measurements of flow); memo needs clarification on where the uncertainty comes from.
- **Q.** How useful is it to use Greene Street flow levels in any mass balance, as it seems to be a highly speculative value? **A.** We can take this out if the Task Force wants to, since it is speculative. It gives the 2015 value more uncertainty than is there.
- **C.** Last paragraph, last page: “semi-quantitative” does not mean it has no value, it gives an idea of what some sources look like. Can treat it as “we have some idea” instead of “we know.” Matching a back-calculated fingerprint to observed data. (smudged fingerprint).

**ACTION ITEM:** TTWG members send comments/questions on the “Draft: Homolog Specific PCB Mass Balance for the Spokane River” memo by Friday 7/14/17 so Dave can provide a draft on Wednesday July 19th for Task Force consideration at the next Task Force meeting on July 26, 2017. (COMPLETE)

### **Options and Costs for Future Monitoring (see presentation slides):**

Dave Dilks presented some options and considerations for long-term monitoring as noted in the Comp Plan, which states that monitoring will be conducted to assess trends in PCB loads and concentrations. Monitoring options range from \$18K-225K/yr. Scoping assumes water column monitoring only.

The plan specifies a 5-year assessment looking at the PCB loads to the river and changes in loading over the evaluation period. Some monitoring can be addressed with existing programs. Also need to look at in-river PCB concentrations, and changes in those over time. Statistical tests can determine if significant reductions have occurred. The objectives and budget will dictate monitoring details (or vice versa). There are also spatial, temporal, and seasonal possibilities to consider. Based on noisy river samples, Dave is not optimistic that a statistical trend will be detected in the short term, based on existing research. It may be possible after 10 years (but this depends on the % annual decrease).

### **Q&A/DISCUSSION**

- **Q.** Why can we not draw a statistical conclusion of decreases? Is it due to lack of number of samples? Would increasing number of samples decrease the length of time to draw such a conclusion? **A.** This may help, but

may not be economically viable. LimnoTech looked at monthly studies; Task Force could improve a bit by doing twice a month, but Dave feels that unless doing weekly sampling, then it would still take ten years.

- **C.** Point source reductions will be calculable, so we could wait until new treatment systems are complete and measure—this would show a reduction from known sources. If you don't have a lot of data, the distribution of the data will have a lot of "fuzz."
- **C.** How might we capture improvements in nonpoint sources? Summer low-flow sampling gives the best odds of seeing a signal. An alternative for some river segments would be groundwater monitoring, both onsite and upgradient (at least on Kaiser site).
- **C.** EPA plan to the court has dates set for determining central tendencies, which are biased towards the highest concentration period.
- **C.** Since fish tissue data is a surrogate for water quality, should the Task Force monitor fish tissue? In the short term, we won't see trends in river concentrations but will see changes in point sources. **C.** We need to better define how fish tissue sampling gets done (EAP Study? Work with Chris Donley?)
- **Q.** Analytical methods/capabilities may need to catch up to show the change. What level of sampling will it take to get discrete values? Could ascertain how long it will take to see a trend, or even if we would see one.
- **C.** Monitoring now: still quite a bit of fuzz on current understanding of in-river concentrations. The more monitoring prior to load reductions the better.
- **C.** There is no use chasing the unknown factors. The Task Force needs to prioritize and agree on the scope, temporal, and spatial scale of sampling.
- **Q.** Are the proposed sampling options one-time events? If they are, would it be better to do synoptic style sampling? **A.** Yes, they are discrete events as laid out. We could add another layer, with multiple samples and multiple events to get synopses.
- **C.** In the Comp Plan, it appears as if there are a lot of PCBs from stormwater. Wet weather makes sense to see these changes. Needs to be an event (not necessarily a season). Better off sampling the outfalls.
- Suggestion for next steps: write up the elements of long-term monitoring for discussion, and ideas on who would implement those monitoring measures—Task Force funded or other entity/funding source?
  - Types of monitoring to consider for long-term monitoring plan
  - Who is sampling now and Where is it occurring?
  - Suggestions for data sources
  - Objectives and driving forces?
  - Biggest bang for the buck?
  - Use this to design the long-term monitoring?
  - Cross program/agency/entity coordination of data collection to support objectives?

**ACTION ITEM:** The Spokane River Stewardship Partnership (SRSP) to draft a "strawman" to begin the conversation at the work session. (COMPLETE)

**ACTION ITEM:** The TTWG to have a monitoring work session at August 2<sup>nd</sup> meeting. Develop a strategy to move forward (to bring to the Task Force). This will be an iterative process over the next months. Try to get Chris Donley and Brandee Era-Miller to 8/2 TTWG meeting and invite Task Force members (announce at 7/26/17 Task Force meeting. Determine next steps at work session.

**ACTION ITEM:** Dave Dilks to put together a by-location list of values from previous studies, to help the group think through the temporal and spatial options.

**ACTION ITEM:** TTWG to update Task Force on this process at July 2017 meeting. (COMPLETE)

**ACTION ITEM:** SRSP to put together a list of planned treatment upgrades and their expected load reductions. (NOT COMPLETE)

**Duwamish River PCB Cleanup Components: The TTWG** prioritized the list of topics that were presented by Rachel McCrae at the June 2017 Task Force Meeting.

**ACTION ITEM:** Kara Whitman to add questions from the TTWG for each requested topic, send to TTWG group to edit the questions, then provide to the Task Force. Any topics that will inform long term monitoring should be front-loaded in the sequence of presentations. (COMPLETE, see below)

***As discussed at the 7/12/17 TTWG meeting, prioritized with questions:***

1. PCB Congener Sampling in Groundwater (in Lower Duwamish): covers sampling in groundwater wells at contaminated sites with existing orders; report not available as of early July 2017 (about a month away) but could preview this.
  - Do not want to hear about what they found, but would like to hear about how they have been using data to track down sources (sites of concern). **Q.** Do they have a process to get sites evaluated by Ecology via the Toxics Cleanup Program (TCP)? How has this been addressed in this watershed?
2. Green-Duwamish Watershed Pollutant Loading Assessment: analysis of cross-media behavior of PCBs and modeling of this behavior.
  - Would like to learn how they looked at different media. Have they looked at how different PCBs make their way into fish? Can they provide recommendations/context on how the Task Force might approach monitoring?
  - What have they done to look at the moving parts in the system (cross-media movement of PCBs)?
3. Stormwater Action Monitoring: overview of ongoing monitoring and effectiveness studies. Could include a current study that may be of interest to the Task Force, a PCB mass balance assessment in bioretention, retrofitting effectiveness study, etc.
  - How are they defining and monitoring the accomplishments of the effectiveness studies?
4. Finding and Fixing PCB Sources: assessment of program gaps and opportunities, with opportunity to brainstorm shared needs between Duwamish and Spokane watersheds. Ideas: TSCA regulations, PCB detection dogs, demolition waste disposal and management topics, PCB sources to air, statewide PCB education, etc.
  - Are there cross opportunities the Task Force and the Duwamish cleanup group can take advantage of?
  - What synergies could exist across the watersheds? Brainstorming session?
  - Addressing disconnect of TSCA regulations and water quality standards

Other questions not necessarily related to one of the listed topics:

- Have they done groundwater sampling? If so, who has done this?
- Do they have sites under a Model Toxics Control Act order?
- How do they define accomplishment?

**ACTION ITEM:** Next TTWG meeting to be a work session, extended to go from 9:30 to 12:30. (COMPLETE)

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The next Task Force meeting is 9:00 a.m. to 12:30 p.m., July 26<sup>th</sup>, 2017 at Spokane County Water Resource Center  
The next TTWG meeting is 9:30 a.m. to 12:30 p.m., August 2<sup>nd</sup>, 2017 at Department of Ecology