

## Spokane River Regional Toxics Task Force - Technical Track Work Group Meeting

April 6, 2016 | 10:00 a.m. – 12:00 p.m.

Department of Ecology | 4601 Monroe | Spokane, WA

### Attendees:

Adriane Borgias—Department of Ecology  
Lisa Dally Wilson (Video) —Dally Environmental  
Dave Dilks (phone) —LimnoTech  
Jeff Donovan—City of Spokane  
Joyce Duncan (phone) —LimnoTech  
Ted Hamlin—Department of Ecology  
Mike Hermanson—Spokane County  
Kris Holm (phone)—City of Coeur d’Alene

Doug Krapas—Inland Empire Paper  
Bud Leber—Kaiser Aluminum  
Dave McBride (phone)—Department of Health  
Dave Moss—Spokane County  
Chris Page (video)—Ruckelshaus Center  
Sandy Phillips—Spokane Regional Health District  
Jeremy Schmidt—Department of Ecology  
Kara Whitman—Ruckelshaus Center

### Announcements and Updates:

- Bud Leber: The Ninth Circuit denied the appeal – it will go back to the district court

**ACTION ITEM:** The Ruckelshaus center to send out a reminder of the request for review and comment on the “Magnitude of Sources and Pathways” memo the week before (Monday April 18<sup>th</sup>). (COMPLETE)

**“Magnitude of Sources and Pathways” memo:** Dave Dilks informed the group that LimnoTech generated estimates of the magnitudes of PCB loading (from various sources) from a combination of site-specific data and available literature. The findings at this point are uncertain but still useful. Legacy PCBs in buildings and surface soils are dominant sources, while the sum of all Waste Water Treatment Plants (WWTPs), tributaries, groundwater, and MS4s appear as the dominant delivery mechanisms. It is difficult to quantify intermediate transport mechanisms. There is also conflicting information on tributary loads for the Little Spokane and Latah/Hangman Creek. Many values are based on literature values and/or assumptions. Dave is openly accepting more site-specific data and/or better assumptions.

**ACTION ITEM:** *Magnitude of Sources and Pathways* is available for review; comments to Dave Dilks by April 26<sup>th</sup>.

### Q&A/Comments:

- **C.** Avista contribution will be near zero (using 8082 method) by end of 2016 in overhead transformers. You could put in a detection limit, and use quantity of oil with 8082 methods as an upper bound.
  - Other electrical companies? Adriane Borgias to send contact information to Dave Dilks.
- **C.** Chemical Action Plan (CAP) provides a method for detecting PCBs in transformers; however, Avista states that this method will not be appropriate for Avista transformers. (Bryce Robbert)
- **Q.** Does Avista have an estimation of volume of transformer oil in watershed? **A.** Yes.
- **C.** A table with all the data (estimates) would be helpful.
- **C.** Lisa Dally Wilson suggested presenting the info two ways, based on 8082 and 1668. Dave Dilks will have a follow up call with Lisa.
- **Q.** What about inadvertent production? **A.** Estimate based on total mass of consumer products (CAP or Puget Sound data). Adriane to send Dave another study.
- **C.** Change “delivery pathways” to “delivery pathways to the water column” to clarify.

### Data Used to Calculate Kaiser Portion of Groundwater Loading (Bud Leber)

- All 8082 data is posted on the Toxics Cleanup Program (TCP) website; 1668 data is available in Ecology's files (though not all in Environmental Management System, or EIM).
- Kaiser collects PCB data as part of required groundwater monitoring, and collected 1668 data on five background wells on the east side of facility. Kaiser sent 17 semiannual or quarterly datasets to LimoTech (homolog, total PCBs, and blank correction method for wells both directly in the PCB plume and up-gradient from it. Data collected as early as 2010-2011, end date October 2014.
  - **Q.** Are there any 8082 data in river wells with detections? Yes, it is in the presentation, not sure if this data has been sent to LimnoTech.

Dave Dilks and Joyce Duncan: How Kaiser Data was used

- Three loading calculations (see June 2015 presentation):
  - How much load from the plume? 52 mg/day.
  - What might be coming from the plume farther down: 2.8 ng/l, plume of 57 mg/day
  - Up-gradient data (MW9s): concentration of 1.4 ng/l; plume estimate of 90 mg/day.
  - Sum: 143-148 mg/day. Very significant chance that there is an up-gradient source.
  - Well #9s is northeast and up-gradient from the center of the plume. 1.4 is a substantially higher concentration of PCBs than what TCP sees in the background wells.
  - The "Delivery Pathways memo" uses data from the Task Force's synoptic survey, and estimates the total groundwater load at 149 mg/day. This matches Joyce's data.

Kaiser is a Model Toxics Control Act (MTCA) site, so the toxics are being addressed. The issue is: what level of PCBs, if any, is coming from up-gradient of Kaiser. Conclusion? More data mining? One of the wells used as "background" does not appear to be a background well. This needs to be looked into further. A groundwater model could potentially be used to determine where it is coming from. Dave Dilks needs to consider how this will be used in the Comprehensive Plan

#### **Q&A/Comments:**

- **Q.** Is the up-gradient data around Kaiser site fingerprint comparably to Liberty Lake, though these are drinking water wells? **A.** Concentration similar (anecdotally), not looked at fingerprints. The data is not comparable due to differences in sampling methods. The County/Ecology sampling of groundwater wells is much more representative of the aquifer concentration.
- **C.** MTCA requires cleanup to a certain concentration (not a flux). When cleanup levels are set for the Kaiser site, they will look at up-gradient numbers (they don't calculate load, but use the up-gradient data to calculate cleanup level). Have not completed the Remedial Investigation/Feasibility Study (RI/FS) phase.
  - Note: TCP can set a cleanup level to groundwater standards, which are lower than surface water standards, but cannot set a cleanup level below a regional background level.
- **C.** Identify up-gradient groundwater as a potential source in the Comprehensive Plan, unless the Task Force wants to explore this site further. Could be identified as "potential future work" in the comprehensive plan. This could be an approach for the whole plan, without specific load allocations.
- **C.** Adriane: LimnoTech did these calculations as a screening exercise. This presentation should not be used to assess loading from the Kaiser site. If it is used for decision-making, it needs rigorous peer review.
- **C.** County will have data from sewer collection system (in 10 days or so).

#### **PCB Data Analysis for SRRTF and Related Data Sets (Lisa Dally Wilson)**

Lisa summarized the outcomes from the meeting with Dave Dilks and Lisa Rodenburg at the "Our Gem" Symposium on March 22<sup>nd</sup>, 2016. The meeting discussed analyses that existing PCB data could allow (e.g. fingerprinting, Positive Matrix Factorization, etc). Enough data exists to conduct a broad characterization that

could be compared to location specific data. The work would be targeted to Task Force needs and goals. The group agreed that, based on the discussions with Lisa Rodenburg and Dave Dilks, it would be useful to pull data together and then provide a summary of the available data (and data quality) to Lisa Rodenburg, who could then let the Task Force know what she can do with the available data.

**Next Steps:**

- Inventory of available datasets with location (Ecology, Task Force, dischargers): focus on water column only (stormwater and river), as far back as they can go, looking only for 1668 data, grab samples.
- Adriane will compile the Ecology data.
- Dave Dilks will compile Task Force data and round up discharger data.
- Lisa R. will let the Task Force know what she can do with it to better understand unknown sources, then the Task Force could make a decision on whether to move forward with the recommendations.

**Dave Dilks updates:**

- Dave Dilks will follow up with Avista to get the report done by Golder Associates on Coeur d’Alene river sediment assessment (it’s on the Federal Energy Regulatory Commission website, done for relicensing).

**Data Management:**

Adriane Borgias gave a brief overview of the outcomes of the recent data management work group meetings.

**Q&A/Comments:**

- **C.** No single entity is in a position to take on the database management as a long-term host at this point; the Task Force may need to hire someone to do this as an insider or outsider asset or not do it all.
- **C.** For scope, schedule and budget, there are four options: don’t do it, Task Force member takes on the task, hire someone internally, or hire someone external to the Task Force.
- **C.** Hire a local firm that can take the Delaware River Basin Commission (DRBC) database as a starting point.
- **C.** Make it so all datasets come in a specific format, compatible with EIM so contractor could submit to EIM.
- **C.** Ecology is moving towards requiring organizations to put data into EIM.

**ACTION ITEM:** The Data Management Work Group to work through the DRBC protocols and create packets to go out to bid for managing the data. Need to specify the scope of work (boundaries around what data would be included, e.g. water column 1668, etc. Templates for fish, water, sediment, etc., can start with water column.

Addressing the DRBC protocols may need more Task Force member involvement. Perhaps, only use raw data in the database (blank correction can be applied by those using the data based on questions). Next steps: parallel process, database management consultants located in Spokane? What about University options?

**ACTION ITEM:** Task Force to look for local firms to manage data and Ruckelshaus Center to reach out to University resources for data management.

**July workshop for Comprehensive Plan:** BMP workgroup start planning? Need Task Force and LimnoTech direction—others can join planning. Dave Dilks can help inform the needs for this workshop.

**Action Item:** Ruckelshaus Center send out a Doodle poll for workshop in July (excluding the 4<sup>th</sup>). (COMPLETE)

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The next SRRTTF Meeting is April 27<sup>th</sup>, 2016 from 9am -12:30 pm at the Liberty Lake Sewer and Water District  
The next meeting of the TTWG is May 4, 2016 from 10am-12pm at the Department of Ecology