Spokane River Regional Toxics Task Force Meeting

Meeting Notes

Facilitated by White Bluffs Consulting (Ben and Lara Floyd)

Wednesday, June 26, 2019 | 8:30 a.m. – 12:00 pm

Spokane County Water Resource Center | 1004 North Freya Street, Spokane, WA

Meeting Documents: http://srrttf.org/?p=10448

Attendees:

Voting Members and Alternates (*Denotes Voting Member)

Tom Agnew*, BiJay Adams – Liberty Lake Sewer and Water District

Mike Anderson* – City of Coeur d'Alene (CDA)

Galen Buterbaugh*(phone) – Lake Spokane Association

Doug Krapas*, Ben Carleton – Inland Empire Paper

Vikki Barthels - Spokane Regional Health District

Bud Leber*, Brent Downey - Kaiser

Rob Lindsay* - Spokane County

Jeff Donovan – City of Spokane

Amanda Parrish - Lands Council

Mike Zagar* - Kootenai Environmental Alliance

Advisors

Bill Fees, Jeremy Schmidt, Sandy Treccani and Brandee Era Miller, Adriane Borgias (phone) –

Washington State Department of Ecology (Ecology)

Brian Nickel, Lucy Edmondson (phone) – Environmental Protection Agency (EPA)

Joel Breems -Avista

Interested Parties

Lisa Dally Wilson – Dally Environmental and Spokane River Stewardship Partners (SRSP)

Dave Dilks (phone) - LimnoTech

Ken Windram – Hayden Area Regional Sewer Board

Craig Borrenpohl, Alyssa Gersdorf – City of Post Falls

Elsa Pond (phone) – WSDOT

Amelia Nester (phone) – Northwest Green Chemistry

David Darling, Raleigh Davis (phone) – American Coatings Association (ACA)

Jay West (phone) – American Chemistry Council

Kris Holm (phone)

Elizabeth Garrett – Liberty Lake Sewer & Water District

David Demers, Emma Arman - Inland Empire Paper

Dave Wilson - Dave Wilson Consulting

Ginny Darrell

Alycia Bean (phone) – Idaho Water Resources Research Institute

Introductions and Agenda Review: After introductions, Ben Floyd reviewed the agenda.

Meeting Summary Action: The Task Force (TF) approved the April 24 meeting summary and Lara Floyd will post the final notes to the website.

Project Management Update and Work Group Reports:

ACE Commitment Report: Bud Leber gave an update. Through end of May ACE has \$227,000 in the bank and the balance of committed funds is \$149,000. This leaves \$78,000 in uncommitted funding available for other uses.

Database Management: Spokane County is managing the database. There was quite a bit of access to the database in support of the Ecology variance process and preparations for the Data Synthesis Workshop (DSW).

Education and Outreach: Vikki Barthels shared that the PCB flyer will be going out with utility billings for several utilities soon. Tonilee and Andy from the Spokane River Forum will be presenting results from the spring media campaign at the August TF meeting. There were a lot of hits to the Waste Directory during the campaign.

Fish Sampling: See if Chris Donley can make the Tech Track meeting on July 31

Funding (MOA committee): There will be a meeting on July 8 at 10:30 am at Spokane City Hall Conference room 2B. WBC will put together a summary of suggestions for modifying the MOA before the meeting.

Green Chemistry: Covered later in the meeting

Groundwater PCB Upgradient of Kaiser: No activity pending follow up from the DSW.

Mass Balance: No activity, pending follow up from the DSW.

PMF: Lisa Rodenburg has incorporated the comments received and the report is ready to be approved. Mike H. is working with Dr. Rodenburg on scoping the Phase 2 analysis and it may be ready in August. Additional discussion on this topic occurred later in the meeting.

Tech Track: Update coming later in the meeting

TSCA: Doug Krapas gave an update. They are developing a white paper that summarizes the development of a road paint pilot with DOT. Freelance journalist, Sonia Elmquist, is developing it. The TSCA work group hopes to see a draft soon and the group will provide comments. They are also working with the Titanium Dioxide Stewardship Council to evaluate the PCB content of Tio2 and have it narrowed down to four groups of sampling of high-volume products — paints and coatings, plastics, paper products and personal care products. Jay West is working with the group in developing a Quality Assurance Project Plan (QAPP) for it. The work group is also working on developing a PCB products database but it is slow going as the group tries to figure out who would manage it. This will be discussed at the inadvertent PCBs workshop this fall.

Technical Work Action – PMF Blank Study Phase 1 Final Report:

Lisa Dally Wilson commented about having clarification of what the purpose of the blank influence analysis is in the report. Ecology mentioned that the report needed to be approved today if possible. Lisa suggested she would craft the sentence during the meeting and the TF could still approve it today and others agreed. Here is what was suggested to be added: The blank correction factors used in this analysis relate only to the use of blank correction to enable

a viable PMF analysis. The factors are not intended to influence blank correction approaches for other SRRTTF data analysis or regulatory efforts.

Action: The Task Force approved the PMF Blank Study Phase 1 Final Report with two changes to a couple of the sentences in the report to reflect the concerns given at the TF meeting. Lisa Rodenburg agreed via email after the meeting to the proposed changes with one minor clarification.

Technical Work Action – Pigments and inadvertent polychlorinated biphenyls (iPCBs) presentation and report: Adriane Borgias said the report needs to be approved today if possible. The project addressed inadvertently generated PCBs (iPCBs) that are released into waterways, with a focus on iPCBs from pigments used in newsprint, and in paper and paperboard packaging materials. Dr. Amelia Nestler with Northwest Green Chemistry (NWGC) was on the phone to go over the report.

Comments:

- CVS pharmacy is testing their fish oil for iPCBs and if it has them, they will not allow it on their shelf
- At what level would they test it, method 8082? You will probably not see iPCBs at those levels. Jeff D. said you may see it at parts/billion with 8082.
- Someone asked about pigments being the target but pigment manufacturers have no control of their end products and potentially other mechanisms that may have PCB input as well, such as additives, and did they look at those? No, we did not. We considered pigments as source of iPCBs. There are other processes that make iPCBs but we know with pigments and printing inks there is clear contamination with diarylide yellows and blues and greens, coming in with part/billion levels.
- Elsa Pond wanted to make sure that DES (Department of Enterprise Services) was interviewed? Dr. Nestler said they did interview staff at DES.
- There is a lot in this report, and it may need more time for review.
- David Wawer from CPMA also provided comments that should be reflected in the white paper, and he indicated there are others within his industry group still reviewing it and he may provide more comments in the future.
- Adriane said as time goes on it can be revised but in terms of scope and content the TF needs to accept this as a work product that meets intent.
- The TF agreed changes can still be made after today to the document, if necessary.
- Amelia will address the comments made by David Wawer about federal PCB standard being included in the report, including drinking water quality standards.
- WBC will get the final document from Dr. Nestler and put it on the TF website.

Action: The Task Force approved the report as presented, noting it can be revised in the future as necessary.

Stakeholder Workshop on Inadvertently Produced PCBs in Pigments Manufacturers Workshop Proposal Technical Work Action: Doug provided an overview of the workshop purpose and said

it is a good opportunity to launch discussion of iPCBs and build good relationships with different associations. It should help those involved understand supply chain issues and where the hurdles are to discuss solutions going forward. It will focus on printing inks and implications to our watershed.

Lisa added they had discussed adding dyes which goes into wastewater treatment plants but decided to just go with inks, newsprint, packaging, printer material and everything just addressed by Dr. Nestler in her presentation. The co-sponsorship has changed and they have commitments from Ecology's Ken Zarker, who is also helping with event planning. NWGC is also sponsoring the workshop and has grants they are using to support their sponsorship. The TSCA work group is requesting an estimated \$20-\$25,000 for food, venue and other support items. The work group is planning on 50 attendees total and having a WebEx available.

The Lands Council will be helping again, and they have a \$1,000 contract with ACE to develop the workshop webpage and event registration. There will be a \$100 per person charge for the workshop to cover food and venue. The Workshop Planning group is looking at different venues right now. The Ecology Pollution Prevention Group headed by Ken Zarker will cover travel expenses for academic and some other speakers. The ACA and CPMA (Color Pigments Manufacturers Association, Inc.) will cover the cost of travel for their speakers and attendees. NWGC staff are identifying college students to take notes. Lisa will cover the facilitation and the overall workshop planning with help from NWGC and Ken Zarker. The workshop dates are October 8 and 9, 2019.

Comments:

- Adriane suggested making sure everything is transparent since meetings are open to the public.
- Amanda said if there are more than fifty, she felt the registration fee would help cover the additional catering costs that would be incurred.

Action: The Task Force approved the workshop proposal and budget.

Data Synthesis Workshop Update: (see presentation)

The workshop was held on May 30 and 31 in Spokane at the EWU Riverpoint campus. It was an opportunity for Task Force members and associated entities to become more familiar with the Spokane River PCB data collected by the Task Force and WA Department of Ecology, and analyses of those data by the Task Force's Technical Advisor. Task Force members then had the opportunity to discuss results and collaboratively chart next steps. The workshop was intended to provide a clearer understanding of what can (and cannot) be concluded from the available data to support Task Force objectives.

Bud Leber shared that Ecology's EAP (Environmental Assessment Program) did a lot of sampling last year and with all of the other data, it was a good time to stop and look at what has been learned from all the data collected. Lisa said it can help set the course for what to do

additionally as far as scoping, additional studies and actions to reducing PCBs in the river. She gave some background from the workshop about the intent and expected outcomes.

Dave Dilks talked about what we currently know and don't know, and he went over the pie chart of PCB contributions to the river by source types prepared in follow up to the workshop. It is an update to a 2011 Ecology-prepared pie chart. The TF pie chart goes down to Nine Mile dam and the Ecology pie chart goes below Nine Mile to Long Lake dam. The most recent pie chart was based on summer low flow monitoring where Ecology's was based on monitoring across seasons. There were different spatial scales and different seasonal focuses, making these charts an apple to orange comparison in some respects. The pie is 38% smaller than the 2011 estimate by Ecology. Ecology had stormwater at a much higher percentage but the best estimate is that it is smaller now. Three quarters of groundwater is coming in from the Kaiser area but we do not know what is upgradient versus that coming from Kaiser. One third of the total load for the river is coming out of Lake CDA.

Comments:

- We may know it is coming from groundwater but don't know ultimate sources contributing to them.
- A significant percentage is still unknown and should help focus our work and identifying true sources. The pie is 38% smaller now than the estimate from 2011, and also includes sources coming in from below Nine Mile dam. Did we make a mistake about not looking at this area? We know 90% of delivery mechanisms and where PCBs are entering river. Our data is telling us the magnitude at the delivery mechanism. The large load below Nine Mile is based on concentration measurements at Long Lake and Nine Mile dam and flow of river or lake at those 2 points, and Ecology saw more at Long Lake than at Nine Mile. It was more an anomaly of the sampling. Other data from Long Lake would not imply a massive load coming in from there.
- Brandee was curious why there was a large number at Long Lake SPMD site. It may be worth seeing if still getting similar measurements or not.
- We have made 62% reduction in watershed and couldn't SPMDs be a part of the problem with their sampling accuracy? A large part of the 62% is between Nine Mile and Long Lake and SPMDs are inaccurate or concentrations are higher at high flow? Maybe more monitoring at high flow conditions needs to be done?
- Brandee said the original pie chart represents the entire year which is important to note.
- Should the TF do high flow monitoring in these areas?
- Does it make sense spending time and money downstream of Nine Mile and Long Lake or not? The takeaway is we now know where the contributions are occurring in the river but we do not know sources.
- Could the Lake CDA value of 33% be due to atmospheric deposition? It depends on definition of background, but it could be a reasonable assumption. It is a lot of water at a low concentration of PCBs.
- A large portion of the 27% groundwater value is from the Kaiser plume. It may be helpful to break out the different groundwater sources. Dave Dilks provided this information in the workshop materials.

- Given the test method used has issues at low concentration, with Lake CDA, what is the confidence in this? The Lake CDA range may have been a factor of 10 and it could be much bigger or smaller. This is one snapshot and just a reasonable guess but not necessarily the correct magnitude of each slice.
- Brandee mentioned an increased load from the original source assessment in 2011. There
 was a major increase affecting load in the October 2013 deployment. Being 24 miles long
 and a reservoir, it acts different from a river or lake; there is a lot going on and it is worthy
 of additional research. All the work that Serdar did cuts off at Nine Mile dam where Ecology
 picks up at end of Long reservoir. There may or may not be significant things happening at
 Long Lake.

Lisa went over data gaps/questions most important to address. After the DSW some are wanting to look at anomalies and why there are higher concentrations in certain areas. 1) Additional biofilm and sediment sampling was suggested in identifying problematic areas and a 2) focus on drilling deeper into contaminated areas or areas suspected to be source of PCBs based on recent sample results or historic land use using biofilm/sediment sampling and parallel water column sampling. 3) Also, high flows was noted as a topic of interest. Are we mobilizing PCBs in the water column at high water levels? 4) Research/Literature Objective – search historical information to identify potential hot spots or contaminated sites and understanding industrial site dry wells to guide location of future sampling efforts.

New actions or adjustments to current actions to reduce PCB load:

- 1) Education and Outreach
- 2) Conduct additional research and development on emerging technologies
- 3) Focus on identifying and removing unknow sources

Other studies or actions:

- 1. Establish a long-term monitoring program/network to set baseline and track concentrations in fish and water.
- 2. Metrics
 - Identify number of identified contaminated sites
 - Calculate the amount of PCBs removed via treatment technology
 - Track number of outreach events

Follow up items/parking lot to do items:

- Dave already developed the pie chart
- WBC help determine who will develop the worksheet and sample location naming protocol that standardizes the name of each sample location and identifies river mile.
- Add layer showing DOH advisories to the Ecology generated Google earth map
- Provide samples to include in DR. Rodenburg phase 2 PMF analysis
- Brian with EPA to check on the PCB 11 risk assessment and looking at hydroxylated forms

Lucy said they have a call set up with DC next week with ORD (Office of Research and Development) with EPA and NTP (National Toxicology Program) to learn where they are on their research and will ask about hydroxylated forms. WBC will follow up on this.

Jeremy asked about allocation of loading upgradient of Kaiser. For the topic of which data gaps were important to address, a priority from the workshop seemed to be identifying the magnitude of the load upgradient of Kaiser to prioritize for further investigation.

Ben Floyd went over the survey results from the participants of the DSW and next steps. A Tech Track work group meeting will take place on July 31 for further discussion to review workshop findings. The group will identify recommended actions and bring back to the TF at the August and October meetings.

Doug asked about planning and what to do to make planning for the iPCB workshop more effective? Having a venue that will allow WebEx was mentioned. What level of detail has to be vetted through how many groups within the TF? Ben said there was a lot of coordination early on with the core group guiding the workshop design, but there could have been more communications with the core group on how the workshop preparations were shaping up/agenda approaches as we got closer to the workshop date.

2019 Field Sampling Plan – Recommended Supplemental Biofilm, Sediment and Water Column Sampling in August: Dave Dilks went over the recommended plan (see presentation) and he and Brandee Era-Miller answered questions.

Comments:

- What about the downstream Nine Mile additional sampling sites? Are these in locations we have or have not sampled before? There are two locations, one being at Nine Mile dam, where we monitored in 2014 and 2018 and an intermediate site between the USGS Gage and Nine Mile, where we have not monitored previously.
- Jeremy got the impression from the workshop that participants want to include synoptic sampling on an annual basis and this does not do that. Given other work being done, being able to track positive progress in river on an annual basis would be beneficial. It should be discussed at the Tech Track level for a long-term systematic plan to track progress.
- Ben mentioned time limitations with August being here soon for sampling and what we could get done this year with longer term actions coming later.
- What is the difference between tasks 2 and 3? Task 2 is biofilm samples and Task 3 is water quality samples consistent with biofilm.
- Brandee mentioned Siana had completed the draft addendum and wondered if the TF wants time to comment on it. Yes, they should provide it for review and input. They will put it on their easy view site and are planning to do reconnaissance on Tuesday July 30 with floating the Mission Reach section. The following week will be other sampling Aug 5-9 if anyone wants to help. They could use 2-3 people for 2-3 of the days. WBC will email the schedule out on constant contact when received.

- Will it include the expanded scope? *No, it will just be biofilm sites (core and supplemental sites)*
- Dave presumed the QAPP will be consistent with last year's QAPP? Yes, and additional information on why we want to focus on those sites.

Bud Leber went over the budget recommendation. ACE cannot write a contract for money they do not have. Right now they have \$78,000 and would need the Ecology contract before they can write a contract to do this. They need to figure out a mechanism to make this happen and need to consider \$25,000 for the iPCB workshop.

Ben said if the TF approves this it would be on condition with the Ecology agreement and having a scope within the next couple of weeks to cover it all. Bud said a critical task is Dave's Task 1 QAPP. Analyzing EAP samples they want to collect or Task 2 could be agreed to now and they could pick and choose up to \$78,000.

Comments:

- At a minimum have task 2 approved with EAP's work.
- Commit to the project with a contingency on receiving Ecology funding?
- If we do not have funding from the Ecology contract then other work does not get done because we need the QAPP.
- Tasks 3-7 are tied to the Task 1 QAPP.
- It is a process issue with the paperwork and we have the money commitment from the state.
- We could find out if Ecology is willing to do an additional amendment later or rush to try and have it done all together.
- It was suggested to fund task 2 out of unrestricted funds in SRSP account and fund the rest from the contract with Ecology.
- Would contingency demonstrate commitment and shift burden to Ecology to accept it and get it done? The balance of tasks should be contingent on Ecology contract with ACE and others agreed.
- It was suggested that Dave start working on QAPP or task 1 but there is a risk of not getting permission to get the agreement in place.
- Rob made a motion to approve task 1 and 2 out of SRSP funds and include an approval of remaining tasks 3-7 from the Ecology grant contingent on getting agreement in place in time to do the work. The TF agreed on this.

Action: The Task Force approved the entire recommendation contingent upon getting the agreement with Ecology in place in time to do the work.

SRRTTF 2019 – 2021 Preliminary Actions - Purpose: Receive update on 2019 Work Plan: Discussed already as part of budget discussion from above.

Upcoming Task Force Meetings: August 28, 2019 and October 23, 2019

Future meeting topics: Discussed changing December 11 TF meeting to first week in December at WRC. WBC will send out a doodle poll. Bud said need to add facilitation contract renewal for

discussion in August and follow up in October. Change the pigments workshop to iPCB workshop and have a recap at the TF meeting in October.

Other announcements: The TF discussed the Spokane Riverkeeper withdrawal from the TF and many mentioned disappointment over it and wish they were still involved. Looking back at the beginning of the TF, Rick E. was one of the original organizers and at the time he said the regulatory things would not get in their way, but in the end it did.

Idaho Water Resources Research Institute sent the TF an email about doing a crowdsourcing data collection activity in the Spokane River, and they will have a longer-term data collection effort following this year's effort, and they wish to be involved with the TF. If anyone has suggestions on how they can get tied in that would be great. WBC will follow up on what their mission is and report this information back to the TF.

The next SRRTTF meeting is August 27, 2019 at Liberty Lake Sewer & Water district, 1:30 pm – 5:00 pm