Introductions and Agenda Review
After introductions, the Task Force made no agenda changes. After review of July 26, 2017 draft meeting notes, the SRRTTF accepted them with minor edits (page: remove “agree,” and page 3 “change 20 to 200”)

**DECISION:** July 26th, 2017 Task Force meeting notes accepted with the above edits.

**ACTION ITEM:** Kara Whitman to make the edits and post them notes to the Task Force website. (COMPLETE)

**SRRTTF Administrative & Contracting Entity (ACE) Commitment Report**
$46,482 in uncommitted funds. ACE board met to discuss scope for the $310,000 funds from legislature.

**Update on Data Gathering for CDM Smith:**
Mike Hermanson sent a template for data gathering to the data-owning entities that need to provide more information to CDM Smith (CDM). Bud Leber contacted AXYS about getting data into a format CDM needs. AXYS has been getting calls from Task Force members and would like clarity on Task Force needs. Bud explained the CDM pilot project to AXYS, and followed up with CDM. AXYS said information on data only two years old, or newer, is easy to retrieve. Info for any older data will require money to acquire. ACE would need to update a contract with AXYS to get additional work done. AXYS needs to sort out the different types of samples, data fields, and what they mean. ACE has extended the CDM contract until the end of the year.

**ACTION ITEM:** Mike Hermanson to schedule a meeting with data-owning folks about the Electronic Data Deliverable (EDD) template to discuss how chain of custody, location information, etc. will be addressed in the database/reporting. (COMPLETE)
Long-Term Monitoring
The Spokane River Stewardship Partnership (SRSP) refined a potential approach to long-term monitoring. Bud said the Technical Track Work Group (TTWG) had several ideas that need refinement, so he took input from Sandy Trecanni of Ecology’s Toxic Cleanup Program (TCP) to the SRSP for refinement to bring back to the TTWG on September 6, 2017. Any proposal will come before the full Task Force for consideration.

Ecology Central Tendency Study (to gauge if in-river PCB levels will meet 200 pg/L by 2020, per EPA court filing): Jim Ross said Ecology feels they have an obligation to measure the annual central tendency of PCB concentrations in the river, per the EPA court document. The agency is still deciding how to do this: how many samples, where to sample, frequency of sampling, etc. to best measure annual central tendency. They also must consider data normalization, statistical methods, (standard, geomeans etc.). Will the data set be normal or not normal; can Ecology use standard statistics or will they have to use geomeans? Jim Ross contacted Brian Nickel to discuss the expectations in the court document (i.e. their expectation of number of samples needed and frequency of sampling). Brian is working on a response to Jim’s questions. EPA used the term “annual central tendency” on purpose to address outliers, and other problems with statistical methods (some are greatly impacted by outliers). They wanted to use a statistic that is appropriate and addresses these issues they might encounter.

Q&A/COMMENTS:
• Q. Jim Ross asked if LimnoTech could be tasked to assess how many samples would be needed to get a 95% confidence on central tendency; the SRRTTF referred this question to the TTWG.
• C. Jerry White expressed that this must be clearly defined: does the Task Force break the sampling universe into groups, or do they look at the whole river via one point? What time of year should they sample? The Task Force should not lose spots that might be problem areas by overgeneralizing.
• C. Karin Baldwin explained that Ecology needs to put in a request for fall to address this. It would help if the Task Force could provide boundaries for this proposal in September/October (no later).

ACTION ITEM: TTWG to consider this issue of central tendency study at the Sept. 6, 2017 meeting.

Proposed Study: LimnoTech - Analysis of Fish and Water Column Data.
Dave Dilks provided a brief overview of a proposal to do a quick review of available data to test the hypothesis: “fish tissue levels are roughly where we would expect them to be, once all site-specific factors are considered.” He explained that the study would cost approximately $2000. Four steps to the study:
1. Calculate the concentration of PCBs in sediment expected to occur, given currently observed water column concentrations, using available organic carbon data and partition coefficients.
2. Calculate site-specific bioaccumulation factors.
3. Examine congeners in fish (certain samples had certain congener groups).
Deliverables: presentation of findings, summary of takeaways, assessment of data gaps, copies of data sheets.

Q&A/COMMENTS
• Q. is there a reason to consider PCBs in hatchery fish and operations—how this does or does not contribute? A. The study does this indirectly – if it shows another apparent source besides sediment and water column.
• Q. Additional Q for study: To what degree are congeners in water, storm, etc. conserved in fish tissue? A. The study is for the group’s internal understanding, With more understanding, the Task Force can then ask those types of Qs; Lisa Rodenburg can do this kind of work in a subsequent process.
• C. This seems like an inexpensive study to know a bit more. The Task Force needs to keep in mind the goal of reducing PCB sources and PCBs in water and fish tissue. Understanding this link to fish tissue can help reduce sources, this should be the end focus of any study. Dave Dilks sees this going in one of two ways: 1) yes, the water column matches the fish, or 2) no, the fish are higher than expected, and we need to look for more sources. That would help the goal: bring levels in the fish down.
• Q. The study would inform long-term monitoring; does this delay the long-term monitoring discussion?
  A. The fish/water column one is a special study, not just to inform long-term monitoring, but a part of it.
• Q. Process Q: if a decision is made on what long term monitoring will look like, can it be adapted when new information comes to light (i.e. from this study)? Consider an “If/then” clause in the budget.
  Consider this with the long-term monitoring work plan?
• C. Brandee Era-Miller said this study would be a good jumping-off point to help guide where monitoring goes. In 2018, Ecology will do a periphyton study that could also help.

Chris Page noted many moving parts right now for potential Task Force funding allocation: SRSP long-term monitoring plan, Comprehensive (Comp) Plan Action work groups, source reduction activities, and funding. This discussion will continue at the September TTWG and Task Force meetings.

**ACTION ITEM:** TTWG to consider the proposed study with the long-term monitoring plan at 9/6/17 meeting.

**Homolog Mass Balance memo: DECISION**
Dave Dilks reviewed the one outstanding comment from the SRRTTF, which asked him to address the disaggregation of data (which did not show much). Also added: discussion of the need for another monitoring station below Upriver Dam. Added a sentence to pages 12 and 13 to address this. No further discussion on the memo. **DECISION:** SRRTTF approved the Homolog Mass Balance Memo with the edits Dave Dilks discussed.

**How to implement PCB Control Actions to fulfill State Budget Allocation Requirements**
Karin Baldwin pointed out that the $310,000 SRRTTF state budget proviso is “one-time money” for PCB reductions. To that end, Karin and Adriane Borgias compiled “action ideas” for SRRTTF discussion, based on its Comp Plan “PCB Control Actions.” She said the Task Force could include Administration costs (ACE has not requested reimbursement for administration of state funds before). Technical Consultant fees and facilitation costs could be wrapped into a PCB reduction subtask. Insurance and other such things may need to be considered as part of this budget. The database is not in the Comp Plan, so this would have to be negotiated (data input, etc.). The contract needs to include a list of deliverables. At least 1/3 of the budget needs to go to PCB reductions (~$100,000). (The action item for studying groundwater upstream of Kaiser is not considered monitoring, but source identification.) ACE needs to specify deliverables and due dates for tasks in the contract. Karin described ideas for PCB control actions:
• Promote Low-Impact Development (LID): Task Force could present to other municipalities and help them draft ordinances. City of Spokane gives a permit discount for including LID. Who has enough impervious surface draining to the River that they could benefit from this, besides City of Spokane? Is this Education and Outreach? Could hire a contractor. How does it interface with WA stormwater laws?
• Support Green Chemistry Alternatives. The Green Chemistry Work group could coordinate with Ecology’s Hazardous Waste and Toxics Reduction Program (HWTRP) to make presentations, e.g. to the Greener Solutions program at UC Berkeley, and help develop a program around this. SRRTTF could also contribute funding, work on curricula, and engage Washington State University (WSU), University of Idaho (UI), and others. Task Force could issue an Innovation Challenge: put out money to get creative ideas. Lucy Edmondson: Michelle Mullin of EPA has been working on this – coordinate with her. Could also connect with the WSU-UI Center for Research, Education, and Outreach (CEREO).
• Product Testing: SRRTTF could provide $ to test products for compliance with the Toxic Substances Control Act (TSCA), provide results to EPA, and coordinate with Spokane Solid Waste Directory (River
Forum and Health District) to identify products to test. The group asked what day-to-day use products have sizable PCB levels. Can the U.S. Food & Drug Administration do another “market basket” study?

- Surveying Schools and Public Buildings: Ecology’s demolition-of-buildings study is meant to start this. The Task Force could provide funds to test schools slated for demolition (Linwood Elementary), meet with public schools to understand the fate of demolition materials, and potentially promote demolition Best Management Practices (BMPs). Brian Nickel saw an article in *Environmental Science and Technology* of a study of Airborne PCBs in schools that reinforces the fact that schools constructed during the prime PCB era have a lot of PCBs in the air and other media. Mike LaScuola explained that BMPs have always focused on airborne releases or water impacts. School districts can make small course corrections on smaller facilities, but don’t want to raise costs (hence BMPs over regulatory measures).

- Addressing Non-Point Sources: Study groundwater upstream of Kaiser, in collaboration with the Ecology Toxics Control Program. SRRTTF could provide money to install groundwater monitoring wells at the industrial park and Flora Road toward determining potential sources within the Industrial Park.

**ACTION ITEM:** Mike LaScuola contact the FDA to ask if they can do another PCB market basket study.

**PCB Control Action Work Groups**

*Identify Sites of Concern for Contaminated Groundwater: Bud Leber lead.* Ted Hamlin provided data from groundwater testing near GE site to LimnoTech. Some wells showed higher PCB levels than others.

**ACTION ITEM:** Karin will check the status of groundwater study Ted Hamlin was working on before retiring.

*Green Chemistry: Karin Baldwin lead.* See previous discussion on potential projects.

**ACTION ITEM:** Karin to convene Green Chemistry work group (Doug Greenland, Mike Petersen, Saskia Vanbergen, Kara Whitman, and include Michelle Mullin from EPA)

*Regulatory Rulemaking (Doug Krapas and Greg Lahti leads):* No update on the WA Department of Transportation (WSDOT) State “color box” rules, which define acceptable pigment characteristics for road and sign paint (this can influence PCB levels). TSCA Reform:

- The Task Force met April 26, 2017 with representatives from both EPA Region 10 and EPA Headquarters in D.C. about the conflict between TSCA and water quality standards. Significant silos exist between the EPA Toxics and Water Quality groups, as they work under different regulatory frameworks. Doug talked with Lucy Edmondson, the main contact for EPA Region 10 on this effort. In May, the Task Force issued a letter asking EPA to create an internal task force to address this discrepancy.

- On May 9th, SRRTTF members met with the Color Pigment Manufacturers Association to share concerns regarding PCBs in pigment production. Manufacturers are not doing much research to develop low-PCB alternatives. Doug talked with them about the WSDOT color box issue regarding lower PCBs for road paint, and has a conference call with WSDOT scheduled for 8/30/17 to discuss potential opportunities to change color box rules.

**ACTION ITEM:** Lucy Edmondson to follow up with Sara Reese about the Task Force letter to EPA in May and on the status of the PCB 11 toxicity screening.

- C. At the 4/26/17 meeting, an EPA Headquarters representative noted the “gargantuan costs associated with correcting the discrepancy;” however, the cost (of dealing with inadvertently-generated PCBs) to wastewater treatment plant operators and ratepayers (rate increases for water treatment) dwarfs the costs to manufacturers.

- C. Cadie Olsen expressed that the Task Force can improve its science. She said the “one-off” studies are not providing the Task Force the data it needs. Perhaps academic partners that have objectivity and expertise would help the Task Force work. She expressed the need for the Task Force keep focused on the Clean Water Act.
• C. Jerry White: expressed support for involving academic expertise to provide and/or review studies, and give input on the actions and studies the Task Force is considering.

**Building Demo and Renovation (Cadie Olsen, Jim Ross lead):** Jim received some data from Ecology’s building demolition PCB study. They sampled 12 sites/parcels, before and after demolition. Vicki Barthels (Spokane Regional Health District), who assisted with the study, said they took samples all around the house and produced a composite sample. Five spots showed quantities of PCBs, but below the Model Toxics Control Act (MTCA) level for unrestricted use. A little cluster of houses had low levels of PCBs, but high levels of other chemicals that may have caused problems with the PCB analysis. Bottom line: some PCBs appeared pre-demo, but only two sites had PCBs post-demo. A few sites show no PCBs before demo, and some after. After demo: there were fewer PCBs, less distributed; one site had more after than before. The sites were chewed up and regraded, so it was hard to find an in-situ location for the post demo sampling. Most demolitions sites are disturbed during this process.

Cadie Olsen interviewed the State Water Quality Control Board from the San Francisco Bay Area and the nonprofit lead for their demolition work. They have not moved forward with demolition standards for PCBs in the Bay Area, as demolition was not found to be a significant PCB source.

**ACTION ITEM:** Jim Ross to send the final report on the demolition study (when complete) and the data to Ruckelshaus Center for Task Force distribution.

**Waste Disposal Assistance (Mike LaScuola lead):**
Mike gave a presentation of the Spokane Regional Health District Mock-up PCB page. He explained that the focus of the site is on residential areas through and interactive “model house”. The interface utilizes known information about PCBs in products. i.e. “kids at Play” discusses the testing of sidewalk chalk. Link this to many sites – SRRTTF, waste directory, river forum, etc. suggestions for how to deal with waste (better as a solid). The more information they have, the more support there will be for legislation (i.e. product testing). Mike will present this website to the SRRTTF Education and Outreach (E&O) work group on September 6th and ask for the feedback. This site is still a work in progress, and they are still working with the communications team on the visuals of the website. Will get input from E&O, then may do a soft rollout.

• Q. How much traffic does the Health District get on these types of sites? A. Mike can report back: the waste directory site measures the traffic and which links visitors click. (google analytics). SRHD.org (can see a functioning site for public outreach- “summer pests” is the most recent). Wastewater treatment plants needs to be on here - pathway from homes to the river. Ambient deposition- volatilization

• C. The site could include sources of ingesting PCBs. Farmed fish, fish oil, supplements, etc. Should help the public understand the relative risk of exposure. How about a market basket study? Keep it generic (butter, eggs, cheese, etc.). Is it in food and is it connected to inadvertent PCB production? (how connected is this to PCBs in the river?) FDA did a previous market basket study, can they do this?

**ACTION ITEMS:** Mike LaScuola provide web traffic numbers for a sample Health District web page; Mike also to request FDA conduct market basket PCB study.

**Events & Outreach, Funding**

• Spokane River Forum: SRRTTF presentation on Comp Plan? Brandi Era-Miller will be presenting 4 studies at the Forum. Andy Dunau has reserved the timeslot directly after this presentation for the Task Force if they would like to use it. Topic areas? Thursday Nov. 16th 3 pm. The Task Force agreed that presenting would be a good idea, to tell the story, get the information on the Comp Plan out there, and explain what has been accomplished and where the Task Force is going. Adriane Borgias and Grant Pfeifer are presenting earlier in the day about the outcome of listening sessions on permits

DRAFT 8.23.17
**ACTION ITEM:** Rob Lindsay, Karin Baldwin, Jerry White (or other environmental representative) volunteered to form a panel discussion/presentation for the Forum. The panel to present what has the Task Force done over the past few years. Small presentation and panel discussion?

**ACTION ITEM:** Kara Whitman and the E&O Work group to update Task Force posters and add a new panel for display at the River Forum.

**ACTION ITEM:** Kara Whitman to pull together the Year-in Review for 2016 and 2017 to assist with the “implementation review summary” and for the Forum presentation.

- Data management contractor will be presenting the Task Force database as it stands to show some of the features and report on what he has done and what he will be doing, at the September 6th, 2017 Technical Track Work Group meeting.
- 1668A versus C: differences in the designation of congeners 107/108/109. This needs to be sorted out when loading data into the Task Force database. Also, quality control acceptance criteria a bit different. C has a wider range of acceptance values with A. There are also procedural/technique differences between the two. EPA says 1668 is still a good method for evaluation, but it will not be used for regulatory compliance purposes.
- Should the Task Force invite small communities such as Tekoe to participate in the Task Force? Such communities are very small and don’t have a lot of bandwidth, nor funding. Jerry recommends letting them know that this conversation is happening and invite them to participate, at some point. It might be a service to those communities to loop them in to the conversation. Knowledge may help them plan, and may inform their decision making. Any communication should be carefully considered as this type of outreach can go straight from the small community to the County commissioners, which can boomerang back and impact staff at the County.

**ACTION ITEM:** Kara Whitman to request that the Education and Outreach work group potentially draft a carefully worded and diplomatic letter to send to these communities with information about what the Task Force is doing and why.

- Jim Kimball explained that the Walla Walla discharge permit expired last June, College Place permit (2022)– Permit limits based on 170 pg/L in Walla Walla a food processor was testing at 25,000 pg/L (using a biphenyl approved by FDA). Pullman, permit to expire in 2019.
- Announcement: EPA has a virtual intern, a student who is not at EPA, doing a research project to better synthesize the available research on inadvertent PCBs. No Public Comment
- Note: extending the Sept. 6, 2017 TTWG meeting to 9:30 to 12:30.

No Public Comment

The next full Task Force meeting is September 27th, 2017 from 9:00 am to 12:30 pm at Spokane County Water Resource Center.

The next Technical Track Work Group meeting is September 6th, 2017 from 9:30 am to 12:30 pm at WA Department of Ecology in Spokane WA.