

December 5, 2014

Joel Bird – Ecology MEL

Adrian Hanley – EPA Headquarters

Rachel McCrae - Ecology

Beth Schmoyer – City of Seattle

Stephanie Hampton - CEREO

Jeff Louch - NCASI

Dale Norton – Ecology EAP

John Starks – WA Stormwater Center

Dear Invitees:

The Spokane River Regional Toxics Task Force (SRRTTF) is holding a PCB Workshop on January 13 and 14, 2015 and formally invites you to attend. Attached are the current agenda and workshop session documents. The workshop is divided into four sessions. The first two sessions cover analytical and sampling details for field work conducted in 2014. The third session covers the analysis of the data collected and the mass balance work which focuses on source identification and quantification. The final session is a planning session for “where do we go from here”.

With respect to workshop logistics, the Task Force has reserved a block of rooms at the Oxford Suites (Spokane Valley) which is located near the workshop venue. Ask for the “Kaiser/PCB Workshop” group rate. Information for the hotel and workshop venue is provided below.

Hotel

Oxford Suites
15015 E Indiana Ave
Spokane Valley, WA
(866) 668-7848

Meeting Venue

Center Place Regional Event Center
2426 N Discovery Place
Spokane Valley, WA
(509) 688-0300

If you are flying into Spokane, transportation (hotel shuttle van) from the airport to the hotel is available. If you need a ride to and from the hotel to the meeting please let me (bud.leber@kaisertwd.com) know and arrangements will be made with a member of the Task Force.

P.O. Box 3965 | Spokane, WA 99220-3965

In the near future will be having an on-line registration set up. This will be used for headcount and lunch ordering purposes (lunch is being provided to facilitate the workshop schedule). We will advise you when the registration system is available.

If you are unable to attend the workshop in person, arrangements are being made for a webinar link-up so please register as an off-site participant. Please check the SRRTTF's web site (srrttf.org) for connection details as the workshop date approaches.

We will also be having a "no host" dinner the evening of the first day of the workshop. More details will be provided as the workshop date approaches.

We look forward to seeing you at the workshop. If you have any questions in the interim, please don't hesitate to call me at (509) 927-6554.

Sincerely,



Bud Leber
SRRTTF Technical Work Group Chair

Spokane River Regional Toxics Task Force Workshop Agenda

Tues-Wed, Jan. 13-14, 2015 | Day 1: 8:30 am – 4:30 pm; | Day 2: 8:00 am – 3:00 pm
CenterPlace Regional Event Center
2426 N. Discovery Place | Spokane Valley, WA 99216

Purpose: *To provide a forum for the open exchange of information on the results of the 2014 confidence and synoptic sampling events and to develop a common understanding of the next steps needed to both further identify sources contributing to the PCB levels in the Spokane River and identify appropriate near term source reduction efforts.*

Day One

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|--------------|---|--|
| 8:30 | Introductions & Agenda Review | Chris Page
<i>(Ruckelshaus Center)</i> |
| 8:40 | Briefing Session #1: SRRRTF – Background, Issues, Goals, Past Workshops, State of the Science <ul style="list-style-type: none">• Q&A with guest experts | Tom Eaton
<i>(EPA)</i>
Dave Dilks
<i>(LimnoTech)</i>
Richard Grace
<i>(AXYS)</i> |
| 9:20 | Work Session #1: Analytical <ul style="list-style-type: none">• Overview of the processing of collected samples for analysis with respect to method blank determinations and other quality related data• How clear are the environmental sample signals relative to method and other blanks?• For source identification, how confident can we be in the data? How much better will we need to get if confidence is low?• Input from guest experts on implications of what they heard• General discussion by attendees• Review takeaways: decisions/action items, next steps | |
| 11:00 | Work Session #2: Sampling <ul style="list-style-type: none">• Overview of May and August sampling efforts• Demonstration, discussion, comparison of various sampling tools (grab, CLAM, PUF, XAD-2)• Input from guest experts on implications• General discussion by attendees• Review takeaways | Shawn Hinz
<i>(Gravity)</i>
Brent Hepner
<i>(C I Agent)</i> |
| 12:30 | Lunch Break – Lunch Provided (if pre-registered) <ul style="list-style-type: none">• Presentation from Dr. Lisa Rodenburg | Lisa Rodenburg
<i>(Rutgers)</i> |
| 2:00 | Work Session #3: Statistical Results & Mass Balance <ul style="list-style-type: none">• The basics of relevant statistical analysis• Mass balance analysis results | Dave Dilks
<i>(LimnoTech)</i> |
| 3:00 | Break | |
| 3:15 | Work Session #3 continued <ul style="list-style-type: none">• Implications and recommendations• General discussion by attendees• Review takeaways | Dave Dilks
<i>(LimnoTech)</i> |
| 4:30 | Adjourn | Chris Page
<i>(Ruckelshaus Center)</i> |

Day Two

8:00

Work Session #4: Where Do We Go from Here?

GOAL: Identify and agree on next steps for additional source contribution investigations, remaining data gaps, approaches for resolving data gaps, and potential near-term source reduction activities. Communicate next steps to the Independent Community Advisor (LimnoTech) such that they can develop the Phase III scope of work for the next year.

- What questions remain about the data collected?
- What additional analyses are needed?
- What data-related questions remain to be answered?
- What data would make sense to collect next?

Next Steps for:

- Sampling
- Lab analyses
- SAP/QAPP update
- Data analyses and mass balance understanding
- Data mining (positive matrix factorization?)
- Identification of nonpoint source contributions
- Source identification
- Source reduction
- Phase III Sampling Plan
- Areas for research or additional data analysis

10:00

Break

10:30

Work Session #4 continued

*Lisa Dally Wilson
(Dally Environmental)*

*Lisa Dally Wilson
(Dally Environmental)*

12:00

Lunch Break – Lunch Provided (if pre-registered)

- Conversation with SRRTF and Guest Experts
Initial thoughts on comparing fish tissue sampling & in-water sampling (toward tentative half-day session in mid-2015)

All Attendees

1:00

LimnoTech / Task Force Check-in

- LimnoTech summarize findings from workshop and any additional direction and what it means for the scope of work for Phase III; Task Force clarify and add to it; Prioritize next steps

All Attendees

3:00

Adjourn

Workshop Analytical Session

Session Focus:

This session focuses on improving the understanding of workshop attendees relative to PCB analytical details and the quality and usability of the laboratory data generated during the May 2014 and August 2014 sampling events.

Session Presentation Specifics (Presenter: Richard Grace – AXYS):

- What purposes do method blanks serve?
- How are method blanks determined for Method 1668C?
- What are the criteria for acceptable method blank levels?
- How does field sample size impact method blank levels?
- What do the various data “flags” mean? What SOPs are used to interpret laboratory data?
- How are calibration curves used relative to the reporting of results below the lowest calibration point?

Session Discussion Topics (Invited Guests and Attendees)

- How or does “flagged” data impact the usability of the data?
- How should analytical results be “censored” for blank contamination levels?
- From a data storage and retrieval perspective, what and how should “censoring” judgments be noted or carried forward into future calculations and data analyses?
- How did our method blank levels compare with other studies elsewhere?
- How does the “separation” between our samples and method blanks compare with other studies elsewhere?

Workshop Sampling Session

Session Focus:

This session focuses on improving the understanding of workshop attendees relative to the details of the synoptic sampling event of August 2014. The session will address lessons learned related to sample collection in both riverine settings and at point sources and the potential impact of higher flow conditions on sample collection methods.

Session Presentation Specifics:

August 2014 Sampling Event (Presenter: Shawn Hinz – Gravity)

- How was the field sample collection performed with respect to both riverine locations and point source locations?
- Were there deviations from the SAP/QAPP required during field sample collection efforts?
- Were flow data able to be collected for all sampling events for both river gaging stations and at point sources?

August 2014 Sampling Event Analysis (Presenter: Dave Dilks – LimnoTech)

- What levels of contamination were seen in trip, field, equipment, and /or transfer blanks?
- If needed, what might be done differently to reduce these levels?

Alternative (Non-Grab) Sample Collection Methods

Alternative sample collection methods may be needed to achieve a clearer separation between the environmental sample signal and method blanks under higher river flow conditions or if lower concentrations are expected.

Polyurethane Foam Plug (PUF) Sampler (Presenter: Shawn Hinz – Gravity)

- How does the sampler work?
- What are its components?
- How is sample recovery performed?
- What is the range of sample volume collection limitations?
- What is the range of sample collection time intervals?
- Has this method been used before for low level (pg/L) PCB work?
- Usability in the field?

Continuous Low-level Aquatic Monitoring (CLAM) (Presenter: Brent Hepner – CI-Agent)

- How does the sampler work?
- What are its components?
- How is sample recovery performed?
- What is the range of sample volume collection limitations?
- What is the range of sample collection time intervals?
- Has this method been used before for low level (pg/L) PCB work?
- Usability in the field?

XAD-2 Resin Sampler (Presenters: Shawn Hinz – Gravity; Richard Grace – AXYS)

- How does the sampler work?
- What are its components?
- How is sample recovery performed?
- What is the range of sample volume collection limitations?
- What is the range of sample collection time intervals?
- Has this method been used before for low level (pg/L) PCB work?
- Usability in the field?

Session Discussion Topics (Invited Guests and Attendees)

- Based on the field experiences in August, are updates to the SAP/QAPP needed at this time for the high flow spring run-off period sampling event?
- Is there any sample collection development work needed for the alternative methods discussed in order to have them available/acceptable for future sampling efforts?
- What are the cost comparisons between the various alternative methods?

Workshop Mass Balance and Statistical Results Session

Session Focus:

This session focuses on providing a detailed analysis and breakdown for workshop attendees of the August 2014 data collection effort results. The session will also include a basic “Statistics 101” overview in order to provide a better understanding of the methodologies used in the data analysis work.

Session Presentation Specifics (Presenter: Dave Dilks – LimnoTech)

- What types of statistical analyses are being performed for processing the data collected from the sampling events?
- What quality of data is needed to achieve the QAPP objectives and was it achieved?
- Where the environmental sample signals sufficiently separated from the method blank and other sampling related blanks?
- How does this contamination (method and other blanks) impact the usability of the analytical data?
- What is the statistical meaning of “confidence limits” and how was it applied to the synoptic sampling event analytical results?
- What were the results of the river section by river section mass balance analyses?
- Statistically, how confident can we be in using the sampling event results to perform river section by river section mass balances and/or source identification work?

Session Discussion Topics (Invited Guests and Attendees)

- Are there criteria for determining the acceptance/usability of data relative to the method blank levels?
- Was the sampling plan design adequate for gathering the information that we set out to acquire?
- In hindsight, is there other information that should have been collected during the synoptic sampling event?
- If the impact of source reduction efforts were to be tracked over time, is the synoptic sampling plan the right approach?
- Beyond the mass balance results, what other observations should be considered as a part of the “where do we go from here” discussions?

Workshop “Where Do We Go From Here” Session

Session Focus:

This session focuses on obtaining perspectives and input from invited guests on the body of work performed (analytical, sampling, and data analysis) and any insights they may have about additional data collection and analysis that would assist with future source identification and reduction efforts. In addition, the session focuses on identifying potential next steps for the SRRTTF to take regarding the analysis of data generated during the August 2014 sampling event, the collection and analysis of additional field samples, and source identification and reduction actions.

Session Specifics:

Input from Invited Guests (Roundtable Discussion)

- What is your overall opinion of the technical soundness of the data collection efforts (sampling, analytical, and data analysis) that have been undertaken?
- Can you share relevant lessons learned from the watersheds in which you work as it applies to our efforts to understand PCB sources, their contribution, and pathways such as groundwater recharge, stormwater or snowmelt? Have you developed any specific sampling plans for quantify contribution from these types of sources?
- Are we missing anything that you feel should be included in our efforts?
- We will likely generate large volumes of data. How does your organization store data and share it?

Session Discussion Topics (Invited Guests and Attendees)

- Based on what has been learned from the May 2014 and August 2014 sampling events, how should we carry out the two remaining seasonal sampling events?
- Based on what has been learned from the August 2014 sampling event, how, when, and where should sampling be conducted to quantify stormwater loadings?
- Based on the sampling results from August 2014, have we missed any source types that need to be addressed in future sampling plans?
- Are there any recommended upgrades to the Sampling and Analysis Plan or Quality Assurance Project Plan?
- What are the next steps related to source identification that should be taken in river sections where groundwater contribution is indicated to be an important source?
- Are there other parallel activities (data generation or analysis) that should be undertaken:

- Measurement of wet and dry deposition?
- Use of other data analysis methods such as Positive Matrix Factorization (PMF) that would help with source identification?
- Data mining for specific information such as regional groundwater data or dioxin levels?
- Are there any direct actions that can/should be taken relative to sources based on the August 2014 sampling event results?
- Is there value at this point to see if fish tissue data (2005 / 2012) aligns with the riverine PCB concentrations measured in the 2014 water column?
- Should regional protocols be developed and followed for sampling and other data generation or analysis?

Input from Task Force Members (Roundtable Discussion)

- What are the next steps that you would recommend the Task Force take in our efforts?
- What two or three next steps would be your highest priority?