Draft Workshop Purpose and Desired Outcomes

(February 22, 2019)

Background

The Spokane River Regional Toxics Task Force (Task Force) collectively, and by individual members including Washington State Department of Ecology (Ecology) have collected much PCB data over recent years. These data describe the concentration of PCBs in Spokane River water, sediment, biofilm and fish, as well as how much PCB is being discharged from various sources.

The data have not been analyzed in a holistic manner, however, to address higher-level questions of interest to the Task Force, such as:

- What are the sources of PCBs to the Spokane River, and how much does each source contribute?
- What are the primary source(s) from which fish are obtaining PCBs?
- Where should control efforts be focused to most effectively reduce PCBs in fish?

Workshop Purpose

The purpose of this workshop will be to take an over-arching look at all available data in order to:

- Provide an overall summary of the data available
- Determine the extent to which these data may be able to address key management questions. This will be accomplished via analyses such as:
    - Evaluation of the variability observed in the atmospheric deposition data to determine suitability of comparing the congener profile to the Lake Cd'A outlet data and up-gradient Kaiser groundwater data.
    - Examination of reach-by-reach differences in the relationships between fingerprints of PCBs in the water column, sediment, biofilm, and fish
    - Application of basic PCB fate and transport equations to determine the extent to which water column sources of PCBs contribute to sediment and biofilm contamination, as well as the extent to which sediment sources of PCBs contribute to the water column.
    - Application of screening-level bioaccumulation procedures to determine whether fish get the majority of their PCBs from water column- or sediment-based contamination.

- Use the results from the above step to either:
    - Answer some portions of the higher-level management questions, and identify sources worthy of additional control efforts; and/or
    - Identify the key data gaps that prevent us from answering the higher-level management questions with sufficient accuracy, as well as specific field studies to fill these data gaps.

The outcome of the workshop will be recommendations to the TTWG regarding monitoring activities to be supported in 2019 (and potentially beyond) that are specifically targeted to allow the Task Force to best manage PCBs in the Spokane River watershed. Recommendations for specific sources to be considered for additional control actions may also result.

Finally, the results of this workshop will provide a first step towards addressing key longer-term questions such as "What level of effort should be invested in monitoring for future years?" and "At what point do we expect to see diminishing returns?"

Timeline and Steps for Synthesis Workshop

- Feb 27 - TTWG present recommendation for preparing for and holding data synthesis workshop
- March - Organize core group of technical experts to plan for workshop - this core group would make recommendations to the Tech Track WG
- March - LimnoTech prepare scope for preparing for, planning and supporting workshop; and work with core Group to finalize recommended approach
- April 24 – Present recommendation for workshop with budget to Task Force for approval (*LimnoTech has budget in their existing contract that can cover their time in March and April, with a proposed amendment for Task Force approval to be requested at the April Task Force meeting to carry them through the rest of the workshop planning, participation and follow up activities*)
- April/May - LimnoTech work with Core Group to:
    - identify existing studies, data sets and reports that would be reviewed/information synthesized in preparing for workshop
    - identify key data questions to answer/workshop outcomes
    - conduct data analysis, synthesis and screening level bioaccumulation assessment
    - coordinate with Dr. Rodenburg on PMF Phase 1 analysis info to incorporate into data synthesis, and also input to PMF Phase 2 analysis scope
    - plan workshop elements
- Late May/early June (date TBD) – hold data synthesis workshop
- June - LimnoTech work with core group to recommend next steps from workshop results
    - Recommendations for 2019 summer low flows field work
    - Update QAPPs/design summer 2019 field work (June/July)
    - Additional input as applicable to PMF Phase 2 analysis
    - Conduct field work (late August/low flow conditions)
- Fall 2019 - Integrate synthesis workshop findings with PMF phase 2 analysis findings (work to be completed during summer) in core team/Tech Track meetings (prep work by the Core Team to develop recommendations) for 2020 (and beyond) technical work/data gaps/follow up field work planning
- Provide planning updates/workshop recommendations/findings/next steps, respectively, at April, June, August and October Task Force meetings

Tech Track Work Group Recommendation to Task Force

Support recommended workshop concept and general timeline, and authorize preparation activities:

1) Support use of up to $10K of existing 2019 LimnoTech budget to begin preparing for workshop and work with suggested core team
2) Amend PMF Phase 1 analysis budget to add $5K to map surface water data by location, be available for LimnoTech coordination on data synthesis and conduct data usability review

A more specific recommendation on the scope and description of the workshop and expected outcomes to be provided at the April 24, 2019 Task Force meeting.