

Spokane River Regional Toxics Task Force (SRRTTF)

First Draft Work Plan

REVISED October 5, 2012

Discussion Draft

for SRRTTF Work Group meeting of 10-10-2012

INTRODUCTION/BACKGROUND

The Spokane River Regional Toxics Task Force (SRRTTF) has been formed through the execution of a Memorandum of Agreement (MOA), as required by permit conditions in the NPDES permits for the Washington Spokane River wastewater dischargers. The overarching goal for the SRRTTF is to develop a comprehensive plan to bring the Spokane River into compliance with applicable water quality standards for PCBs. The MOA identifies a goal of developing a work plan for the years 2012 through 2016 by the end of December 2012. The MOA indicates that the work plan should address the following six work elements:

1. Approach for and analysis of existing data on PCB and other toxics on the Washington 2008, Category 5, § 303(d) list to (1) understand what is known, (2) identify data gaps, and (3) determine where additional characterization of amounts, sources and locations is needed.
2. Development and implementation of a Monitoring Plan for the Spokane River that, (1) establishes the baseline conditions for PCBs and the other identified toxics, (2) monitors and assesses the effectiveness of toxic reduction measures, and (3) can be adapted to take into account newly generated data and sampling techniques.
3. Identification or establishment of a publicly accessible clearinghouse for storing data, reports, Task Force meeting minutes or summaries, and other information gathered or developed by the Task Force and its members.
4. Review of proposed Toxic Management Plans, Source Management Plans, and BMPs.
5. Approach for preparing recommendations to control and reduce point and nonpoint sources of PCBs and other toxics, on the Washington 2008, Category 5, 303 (d) list, to the Spokane River.
6. Public education needs and approach, including pollution prevention and public and environmental health determinations.

This document, once approved by the SRRTTF members, will constitute the First Draft Work Plan for the Spokane River Regional Toxics Task Force.

WORK PLAN DEVELOPMENT PROCESS

The work plan is meant to be a dynamic living document, which will be an effective management tool to be used by the SRRTTF toward accomplishing the goals of the SRRTTF. As such, the work plan will evolve and become more detailed and specific as the task force learns more about PCBs in the Spokane River. There will be at least three levels of work plan development adopted by the SRRTTF:

- **First Draft Work Plan**—This document is the first draft of the work plan, and is a high level description of the work element activities that are anticipated for the SRRTTF. It does not have the benefit of input from the yet-to-be hired SRRTTF technical consultant (referred to as a technical advisor in the MOA) regarding the specific approaches to the work elements.
- **Technical Consultant Work Plan**—The Technical Consultant Work Plan will be developed by the technical consultant after they have been hired, and when a Phase 1 detailed scope of work has been negotiated with the technical consultant. The Technical Consultant Work Plan will be specific and detailed regarding the review of existing data and analysis, the approach to identifying data gaps, and the approach to collecting additional data necessary to characterize and quantify PCBs in the Spokane River.
- **Annual Work Plan Update**—The Technical Consultant Work Plan will be formally revised and adopted annually by the SRRTTF, based on new information gained during the previous year. Ultimately, after PCBs have been characterized and quantified, the annual updated work plans will provide details related to assessing Best Management Practices (BMPs), development of plans for implementation of reduction measures, effectiveness monitoring, and other appropriate implementation tracking measures.

DEFINITIONS AND MEANINGS

For purposes of this document, the following definitions and meanings shall apply:

Analytical Models or Analytical Modeling means tools used for the scientific analysis of data, such as Excel spreadsheets, computer modeling software, or other similar tools for processing data sets.

Comprehensive Plan for purposes of this document means a report that will be prepared near the end of Work Plan Element 1 that describes the data, describes the analytical modeling process including key assumptions, describes the outcome of the analytical process, identifies available BMPs, assesses the potential effectiveness of

BMPs, recommends a plan for implementation of BMPs that are potentially suitable toward toxic reduction in the Spokane River Watershed, and recommends an implementation plan.

First Draft Work Plan, Technical Consultant Work Plan, and Annual Work Plan means this document and all of its subsequent revised versions.

Monitoring Plan for purposes of this document means a document that describes how a baseline condition for the Spokane River will be established, and then how sampling in the Spokane River will be conducted in the long term to assess the effectiveness of the toxic reduction measures.

Sampling and Analysis Plan is a document that describes where samples will be taken, frequency of sampling, sampling protocols, laboratory protocols, and other detailed procedures for obtaining data. The Sampling and Analysis Plan is often included in, or is synonymous with **Quality Assurance Project Plan**.

Whenever this document references **PCBs, toxics, other toxics, or other identified toxics** it shall mean that the intention is to consider both PCBs and Dioxins, as listed on the Washington 2008, Category 5, § 303(d) list.

WORK PLAN ELEMENTS

The MOA identifies six work plan elements, which will be addressed in this First Draft Work Plan. Subsequent revisions to the work plan may result in the addition of work plan elements, or the consolidation of work plan elements, as appropriate.

Work Plan Element 1.—Data review, data gap evaluation, analysis, and implementation plan

It is anticipated that Work Plan Element 1 will be accomplished in four discreet phases:

- Phase 1—Review of existing data and reports, development of a data gaps assessment with recommendations for additional sampling, preparation of a Quality Assurance Project Plan for collection of additional data, and recommendation of analytical modeling tools to be used in Phase 3. Phase 1 will also include development of the Technical Consultant Work Plan referenced above
- Phase 2—Collection of additional data
- Phase 3—Analysis of data to characterize and quantify PCB sources
- Phase 4—Assessment of potential BMPs and development of a BMP implementation Plan

PHASE 1

Initially, all existing PCB data for the Spokane River watershed will be collected and reviewed by the SRRTTF technical consultant for quality, accuracy, applicability, and for use in future PCB analytical models.

After reviewing existing data and other available information on PCBs in the Spokane River, the technical consultant will develop recommendations for analytical modeling that will be used in Phase 3 to characterize and quantify PCBs in the Spokane River watershed. The Phase 3 analytical model will be used to characterize and quantify sources and sinks of PCBs in the watershed, and shall accommodate the seasonal variability in watershed runoff conditions. The analytical model will be capable of being refined over time as new information becomes available. The analytical model shall also complement and be compatible with the monitoring plan that is defined under Work Element 2 below.

Based on the review of data, and on the recommended analytical modeling approach, the technical consultant will provide an assessment of data gaps, and will address the adequacy of the existing data for performing the analytical work to characterize and quantify PCBs in the Spokane River. The assessment of data gaps will include recommendations for additional sampling necessary for the analytical modeling to characterize and quantify PCBs.

The recommended analytical modeling approach and proposal for additional data collection will be reviewed and approved by the SRRTTF members prior to execution of the following work elements.

Based on the Data Gaps Analysis, the technical consultant will prepare a recommended sampling and analysis plan for quantification and characterization of PCBs throughout the Spokane River watershed, including results by specific appropriate Spokane River segments. The outcome will lead to an inventory of sources and sinks by source category, by watershed geographic areas, and by river segments starting at the outlet of Lake Coeur d'Alene, and progressing downstream to the initial boundary of the jurisdiction of The Spokane Tribe of Indians.

The technical consultant will prepare a Quality Assurance Project Plan (QAPP) that documents the sampling and analysis plan for data collection, sample collection methods, analytical protocols, and data management, to ensure that all resulting data is of adequate and consistent quality for use in the analytical modeling efforts. The QAPP will be submitted to the SRRTTF for review and approval, and then to Ecology for review and approval.

The Sampling and Analysis Plan, and the QAPP, will identify who will perform specific sampling and analysis. For example, the sampling could be jointly performed by staff from Ecology, staff from Tribes, staff from wastewater management agencies, and staff from the technical consultant.

PHASE 2

Then the sampling and analysis plan will be undertaken and completed by the parties that have been identified in the plan. The result of Phase 2 will be a sufficient data set to characterize and quantify PCB's using the analytical model selected for Phase 3.

PHASE 3

Following the collection of a sufficient data set to perform a scientifically defensible analysis to quantify and characterize PCBs in the Spokane River watershed, the technical consultant will perform the analysis in accordance with the previously approved analytical methodology.

The outcome of the analysis will be a detailed inventory of sources and sinks by source category, by watershed geographic areas, and by river segments starting at the outlet of Lake Coeur d'Alene, and progressing downstream to the terminus of the Spokane River.

PHASE 4

Following completion of the analysis, a comprehensive plan will be prepared that summarizes the sources of PCBs in the Spokane River, identifies potential BMPs, and recommends an implementation plan for measures (BMPs) to reduce PCBs in the Spokane River watershed.

Work Plan Element 2.—Development and implementation of a Monitoring Plan

Work Plan Element 2 should be done in conjunction with Phase 1 of Work Plan Element 1 described above.

The Technical Consultant, working with Ecology and the SRRTTF, will prepare a recommended monitoring plan for establishing (1) a baseline for PCBs; and (2) a system for monitoring of PCBs over time to assess the effectiveness of source reduction efforts in the Spokane River watershed, and (3) can be adapted to take into account newly generated data. The baseline condition in the Spokane River watershed will be determined based on a combination of existing data and additional data collected to fill in the data gaps. The monitoring plan will recommend how to divide the watershed into regions, how to divide the Spokane River into segments, and frequency of monitoring for purposes of long term tracking.

Routine PCB monitoring conducted by agencies, wastewater dischargers and The Spokane Tribe of Indians will be considered when developing the Monitoring Plan. It is assumed that multiple parties will assume responsibility for implementing elements of the monitoring plan.

Work Plan Element 3.—Establish a publicly accessible information clearing house

Work Plan Element 3 should commence immediately, and continue for the duration of the SRRTTF activities.

The following scope of work is included in the Ecology contract with the Ruckelshaus Center, who has been retained to perform facilitation for the SRRTTF.

“Facilitate the development of standards for maintenance of the Task Force web page. Set up an independent web page on behalf of the Task Force that is transferable. Manage and update the web page in accordance with the standards. Ensure that the web page is an effective public communications tool, and is a timely representation of Task Force activities.”

For purposes of this First Draft Work Plan, it is assumed that this scope of work will satisfy Work Plan Element 3, and that the Ruckelshaus Center will conduct this effort so long as they are contracted with the SRRTTF to provide facilitation.

Work Plan Element 4.—Review of Toxic Management Plans, Source Management Plans, and BMPs

Work Plan Element 4 is expected to occur so long as the SRRTTF is active, provided that NPDES permits include conditions related to Toxics Source Control Action Plans.

Each Washington NPDES permittee with a discharge into the Spokane River has a permit condition requiring the permittee to prepare a Toxics Source Control Action Plan. The goals of the plans are to (1) reduce toxicant loadings, including PCBs, to the Spokane River to the maximum extent practicable realizing statistically significant reductions in the influent concentration of toxicants to the treatment facility of the next 10-years, and (2) reduction of PCBs in the treatment facility effluent to the maximum extent practicable so that in time the effluent does not contribute to PCBs in the Spokane River exceeding applicable water quality standards.

To meet these permit conditions, each discharger will undertake certain measures to quantify PCBs and PCB sources in their collection system, and will identify Best Management Practices (BMPs) to reduce or eliminate PCB sources. An annual Toxics Management Report will be prepared by each discharger and submitted to the Washington State Department of Ecology.

The SRRTTF and their technical consultant will review these activities and annual reports in the context of the work that the SRRTTF is performing in the Spokane River

watershed, and provide feedback. The goal will be to achieve the highest possible level of consistency and coordination between the efforts of the task force and the permittees to maximize the effectiveness of the PCB reduction programs. The SRRTTF will not oversee or dictate the NPDES compliance efforts by the permittees, but may offer suggestions in the spirit of regional collaboration.

Work Plan Element 5.—Develop strategy for reduction of point sources and non-point sources of PCBs

Work Plan Element 5 is expected to occur for the duration of the SRRTTF activities.

PCBs were banned from production in 1979 under the Toxic Substance Control Act (TSCA). It was widely believed that TSCA would end the production or presence of new PCBs. However, the fact is that under TSCA, new products may contain concentrations of PCBs, including inadvertently generated PCBs, that are less than an average of 25 parts per million (PPM), with a 50 ppm maximum. There are believed to be more than 200 products in use today containing PCBs approaching these allowable limits.

The SRRTTF will develop a strategy and take measures to encourage the United States Environmental Protection Agency (EPA) to amend the TSCA regulations to fully eliminate PCBs from products manufactured in the United States and from products imported into the United States. As an initial measure, SRRTTF members have brought this to the attention of The Environmental Council of the States (ECOS), who have adopted a resolution that will be sent to EPA. Other organizations that should be targeted for adoption of similar resolutions include the Water Environment Federation, the Association of American Metropolitan Sewerage Associations, and the National Association of Clean Water Agencies.

In addition, a strategy for bringing this to the attention of federal congressional delegates will be developed and implemented.

Reduction of point sources and nonpoint sources of PCB will also be identified by Washington NPDES permittees, as part of their individual permit requirements, within their wastewater systems. The SRRTTF and its technical consultant will be able to review the reduction strategies developed by the permittees.

Considering the PCB sources and sinks identified from implementation of Work Plan Element 1, and the PCB reduction efforts by various parties in the Spokane River watershed, the SRRTTF technical consultant will develop a strategy for reducing point and non-point source PCBs in the Spokane River through improvements to regulations.

Work Plan Element 6.—Develop strategy and measures for public education

Work Plan Element 6 is expected to occur for the duration of the SRRTTF activities.

The SRRTTF, with the assistance of the technical consultant, will undertake a program to identify commonly used products that may contain PCBs, which could be released into our environment. Then, a public education campaign will be developed to utilize broadcast media, print media, direct mailings, and other public education opportunities to inform our citizens about the effects of PCBs on public health, and on measures that the average citizen can adopt to reduce the amount of PCBs in our environment. The public education materials will include public service announcements as well as printed materials. All public education materials will be approved by the SRRTTF prior to their use.

After BMPs have been identified to reduce PCB sources in the Spokane River watershed, and a BMP implementation plan has been prepared and adopted by the SRRTTF, a public education campaign will be developed to inform the public about the PCB loadings in the watershed, and on the implementation measures that are proposed.

WORK PLAN MILESTONE GOALS

Work plan milestones are shown on the attached figure.