# TECHNICAL CONSULTANT SUPPORT TO SPOKANE RIVER REGIONAL TOXICS TASK FORCE MONTHLY WATER QUALITY SAMPLING

# SCOPE OF WORK

# January 13, 2016 DRAFT

This document describes the activities to be conducted by LimnoTech and Gravity Consulting in support of monthly water quality sampling on the Spokane River for the Spokane River Regional Toxics Task Force (SRRTTF). The work plan is divided into sections corresponding to: 1) Technical Scope and Deliverables, 2) Budget, and 3) Schedule.

# **TECHNICAL SCOPE AND DELIVERABLES**

Work will be conducted through four tasks:

- 1. Revise Quality Assurance Project Plan (QAPP)
- 2. Conduct Monthly Water Quality Sampling on the Spokane River
- 3. Monitoring Coordination
- 4. Data validation
- 5. Report

Each task is described below.

#### Task 1: Revise QAPP

The original QAPP for SRRTTF field monitoring was prepared in 2014 to address field studies conducted that year. The QAPP was revised in 2015 to cover additional sampling conducted in August 2015. A second revision will be prepared to address the monthly water quality sampling to be conducted in 2016. This revision will define the specific objectives of the 2016 monitoring program, and describe the quality of data need to satisfy these objectives. The revised QAPP will also contain a Sampling and Analysis Plan detailing how these data will be collected.

Deliverables:

Revised QAPP

# Task 2: Conduct Monthly Water Quality Sampling on the Spokane River

The objective of the monthly water quality sampling is to determine the seasonal variability in PCB concentrations in the Spokane River. The field monitoring program will consist of six monthly sampling events as described in the revised QAPP. Samples will be collected according to the requirements of the Sampling and Analysis Plan as well as the revised QAPP. Sampling will be conducted at the following locations:

- 1. Lake Coeur d'Alene Outlet
- 2. Spokane River Below Trent Bridge
- 3. Spokane River Below Greene Street
- 4. Spokane River USGS Gage at Spokane, WA
- 5. Latah Creek Mouth
- 6. Spokane River Below Nine Mile Dam

All samples will be stored properly and delivered/shipped to the laboratory for analysis under the required chain of custody. Regular progress reports will be prepared and submitted over the course of the field monitoring.

Deliverables:

• Progress reports

#### **Task 3: Monitoring Coordination**

This task will cover all required coordination with SRRTTF, Gravity and AXYS/SVL for the 2016 field work. Also, during the first three months of monitoring, LimnoTech will review current information on snow pack, river flows, and weather forecasts, and make a determination of whether sampling in June of 2016 will be worthwhile in terms of capturing the effects of snowmelt. If June 2016 sampling is conducted, two monthly monitoring events will be conducted in the fall of 2016. If June 2016 sampling is not conducted, three additional monthly monitoring events will be conducted in the fall of 2016.

#### Task 4: Data Validation

LimnoTech will obtain all laboratory results, perform data validation of the results in accordance with the revised QAPP, and enter the data into a database in a format suitable to SRRTTF and Ecology. The sampling results will also be evaluated to determine seasonal variation in PCB concentration.

Deliverables:

- Data Validation Memo
- Project Database

#### Task 5: Report

All sampling activities and results will be documented in a report which will include a description of sampling methods, problems encountered, analytical results, data validation methods and results and data interpretation.

Deliverables:

• Report

#### BUDGET

The total budget for this work is currently estimated as \$206,500, divided by task as follows:

1.	Revise QAPP (LimnoTech):	\$2,000
2.	Conduct Monthly Water Quality Sampling (6 events):	\$182,400
	a. Field Sampling (Gravity):	\$113,400
	b. Laboratory Analysis (AXYS/SVL):	\$69,000
3.	Monitoring Coordination (LimnoTech):	\$10,600
4.	Data Validation (LimnoTech):	\$6,000
5.	Report (LimnoTech):	\$5,500

This budget estimate assumes that one Department of Ecology staff will be available to accompany Gravity for each monitoring event. It is recognized that Task 2 will be conducted by parties other than

LimnoTech, and that the Task Force may choose to contract directly with Gravity Consulting and AXYS/SVL for their respective sub-tasks.

#### SCHEDULE

Assuming that Notice to Proceed is given by January 31, work will be conducted under the schedule listed below. The specific dates for Sampling Events #4-#6 will be determined based upon the results of Task 3.

Task: Deliverable	Completion Date
1: Revise QAPP	February 15, 2016
2: Conduct Monthly Water Quality Sampling	
Sampling Event #1.	March 15, 2016
Sampling Event #2	April 15, 2016
Sampling Event #3	May 15, 2016
Sampling Event #4	To Be Determined
Sampling Events #5 and #6	Fall, 2016
3: Monitoring Coordination	Ongoing
4: Data Validation	January 30, 2017
5: Report	February 15, 2017