

**STATEMENT OF WORK
CONTRACT FOR SERVICES
BETWEEN
STATE OF WASHINGTON
AND
SRRTTF Administrative and Contracting Entity**

{DATE}1/22/2014

The Spokane River Regional Toxics Task Force (SRRTTF) works collaboratively to characterize the sources of toxics in the Spokane River and identify and implement appropriate actions needed to make measurable progress towards meeting applicable water quality standards for the State of Washington, State of Idaho, and The Spokane Tribe of Indians.

Legislative Proviso "302 (5)/Water Quality/Spokane River PCBs Cleanup" provides \$350,000 of the state toxics control account solely for the SRRTTF to support their efforts to address elevated levels of polychlorinated biphenyls in the Spokane River. The proviso specifies that funding be used to 1) determine the extent of the cleanup required, 2) implement cleanup actions to meet applicable water quality standards, and 3) prevent recontamination.

The SRRTTF Administrative and Contracting Entity (ACE) is the appropriate entity to administer the funding. This Statement of Work (SOW) describes the planned SRRTTF ACE activities through December 2016. Work on these activities can be performed in increments, subject to the availability of funds.

The activities that can be funded by ECOLOGY under this contract are listed below and delineated in the Project Budget in Appendix B to this contract.

The Scope of Work is divided into sections corresponding to: 1) Scope and Deliverables, 2) Budget, and 3) Schedule.

SCOPE AND DELIVERABLES

1) Studies Needed to Determine the Extent of the Cleanup Required

The studies needed to determine the extent of the cleanup required are being conducted through a series of four Phases, as recommended by the SRRTTF Technical Consultant, LimnoTech. Phase 1 of the studies has been completed or is underway and expected to be complete by February 2014.

The remaining Phases of the studies needed to determine the extent of the cleanup (Phases 2-4), are:

PHASE 2: Implementation of Sampling and Analysis Plan

Task 2-1. Preparation for Field Activities

Conduct the necessary preparatory activities to allow sampling to occur in accordance with the Sampling and Analysis Plan. This includes training of sampling personnel, preparation of sampling equipment as well as and sampling logs and forms for documentation of these activities. Make arrangements with the laboratory(ies) for sample delivery and to receive sample bottles prior to the beginning of field activities. In addition, evaluate and request access to sampling locations, if required.

Deliverables by June 30, 2015 Budget: ~~\$1015,000~~

- Documentation of activities and associated costs.
- This task may be invoiced to Ecology and paid to ACE up to once a month for activities and costs incurred during the previous invoicing period.

Task 2-2. Field Monitoring

The objective of the field monitoring is to collect data necessary to identify potential sources of PCB and dioxins. The field monitoring program will consist of implementing the sampling events described in the Sampling and Analysis Plan. Samples will be collected according to the requirements of the Sampling and Analysis Plan as well as the Quality Assurance Project Plan. 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 by June 30, 2015 Budget: ~~\$80,000-90,000~~

- Documentation of activities and associated costs.
- This task may be invoiced to Ecology and paid to ACE up to once a month for activities and costs incurred during the previous invoicing period.

Task 2-3. Laboratory Analysis

This task covers the laboratory analysis of the field samples obtained in Task 2-2.

Deliverables by June 30, 2015 Budget: ~~\$250,000-215,000-~~

- Documentation of activities and associated costs.
- This task may be ~~invoiced~~ invoiced to Ecology and paid to ACE up to once a month for activities and costs incurred during the previous invoicing period.

Task 2-4. Data Processing

LimnoTech will perform data validation of the results, and enter the data into a database in a format suitable to SRRTTF and Ecology. The sampling results will also be evaluated to identify potential sources of PCB and dioxin. 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 by TBD

Budget: TBD

- Project Database
- Field Monitoring Report
- This task may be invoiced to Ecology and paid to ACE up to once a month for activities and costs incurred during the previous invoicing period.

Task 2-5. Meetings and Coordination

This task covers all meetings and other project coordination, and is divided into the following subtasks and deliverables:

Sub-task 2-5-1: Field coordination

LimnoTech will provide field coordination with the local contractor who will be conducting the field monitoring to ensure that the monitoring is conducted according to the Sampling and Analysis Plan and the Quality Assurance Project Plan. LimnoTech will also have a staff person on site to provide oversight for all sampling activities.

Deliverables by TBD

Budget: TBD

- Documentation of activities and associated costs.
- This task may be invoiced to Ecology and paid to ACE up to once a month for activities and costs incurred during the previous invoicing period.

Sub-task 2-5-2: Progress meeting

LimnoTech will present interim field results at one meeting with the SRRTTF and Ecology.

Deliverables by TBD

Budget: TBD

- Documentation of activities and associated costs.
- This task may be invoiced to Ecology and paid to ACE up to once a month for activities and costs incurred during the previous invoicing period.

Sub-task 2-5-3: Project management and coordination

This task consists of project management activities, including preparation of monthly project status reports and phone participation in up to eight SRRTTF meetings.

Deliverables by TBD

Budget: TBD

- Documentation of activities and associated costs.
- This task may be invoiced to Ecology and paid to ACE up to once a month for activities and costs incurred during the previous invoicing period.

PHASE 3: Detailed Inventory of Sources and Sinks

Task 3-1. Analysis of Field Data

LimnoTech will process all field monitoring data collected in Phase 2 into the format necessary to support their direct use in the Task 2 model application.

Deliverables by TBD

Budget: TBD

- Technical memorandum summarizing model inputs
- This task may be invoiced to Ecology and paid to ACE up to once a month for activities and costs incurred during the previous invoicing period.

Task 3-2. Application of Model

LimnoTech will calibrate and apply the model(s) selected in Phase 1 to generate information on sources and sinks of PCBs and dioxins throughout the watershed and Spokane River.

Deliverables by TBD

Budget: TBD

- Draft model application report
- Final model application report
- This task may be invoiced to Ecology and paid to ACE up to once a month for activities and costs incurred during the previous invoicing period.

Task 3-3. Development of Inventory

LimnoTech will process the model results generated in Task 2 into 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.

Deliverables by TBD

Budget: TBD

- Draft inventory report
- Final inventory report
- This task may be invoiced to Ecology and paid to ACE up to once a month for activities and costs incurred during the previous invoicing period.

Task 3-4. Meetings and Coordination

This task covers all meetings and other project coordination, and is divided into the following subtasks:

Sub-task 3-4-1: Project meetings

LimnoTech will participate in three meetings with the SRRTTF and Ecology staff to present results of each of the Phase 3 tasks.

Deliverables by TBD

Budget: TBD

- Documentation of activities and associated costs.
- This task may be invoiced to Ecology and paid to ACE up to once a month for activities and costs incurred during the previous invoicing period.

Sub-task 3-4-2: Project management and coordination

This task consists of project management activities, including preparation of monthly project status reports and phone participation in up to eight SRRTTF meetings.

Deliverables by TBD

Budget: TBD

- Documentation of activities and associated costs.
- This task may be invoiced to Ecology and paid to ACE up to once a month for activities and costs incurred during the previous invoicing period.

PHASE 4: Comprehensive Plan

Task 4-1. Evaluation of Individual Best Management Practices

LimnoTech will review the scientific literature to define the range of BMPs available for remediating PCBs and dioxins from the primary sources identified in Phase 3. Each BMP will be summarized to define the cost of implementation and expected pollutant removal efficiency.

Deliverables by TBD

Budget: TBD

- Technical memorandum summarizing range of BMPs available, cost of implementation and expected pollutant removal efficiency.
- This task may be invoiced to Ecology and paid to ACE up to once a month for activities and costs incurred during the previous invoicing period.

Task 4-2. Assessment of Optimal Mix of Best Management Practices

Based on Task 1 findings, LimnoTech will work with the SRRTTF and Ecology staff to determine the specific BMPs to be considered in the comprehensive plan. LimnoTech will apply the model developed in Phase 3 to simulate a range of combinations of BMPs, and determine which specific mix of BMPs are required to meet pollutant targets.

Deliverables by TBD

Budget: TBD

- Technical memorandum providing a range of BMP implementation options necessary to meet pollutant targets.
- This task may be invoiced to Ecology and paid to ACE up to once a month for activities and costs incurred during the previous invoicing period.

Task 4-3. Development of Comprehensive Plan

LimnoTech will work with the SRRTTF and Ecology staff to select the specific mix of BMPs that will be desired to be included in the comprehensive plan. The plan will summarize 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.

Deliverables by TBD Budget: TBD

- Draft Comprehensive Plan
- Final Comprehensive Plan

Draft 1-10-2014: For discussion at SRRTTF meeting 1/22/2014

- This task may be invoiced to Ecology and paid to ACE up to once a month for activities and costs incurred during the previous invoicing period.

Task 4-4. Meetings and Coordination

Sub-task 4-4-1: Project meetings

LimnoTech will participate in three meetings with the SRRTTF and Ecology staff to present results of each of the Phase 3 tasks, and will participate in one public meeting presenting results. Three meetings are expected.

Deliverables by TBD

Budget: TBD

- Documentation of activities and associated costs.
- This task may be invoiced to Ecology and paid to ACE up to once a month for activities and costs incurred during the previous invoicing period.

Sub-task 4-4-2: Project management and coordination

This task consists of project management activities, including preparation of monthly project status reports and phone participation in up to eight SRRTTF meetings.

Deliverables by TBD

Budget: TBD

- Documentation of activities and associated costs.
- This task may be invoiced to Ecology and paid to ACE up to once a month for activities and costs incurred during the previous invoicing period.

2) Implement Cleanup Actions to Meet Applicable Water Quality Standards

This task will include one of the following: identification of PCB hotspots, determination of ambient concentrations of PCBs (eg., in atmospheric deposition, groundwater, snowfall, rainfall), identification of PCB inputs from Lake Coeur d'Alene and tributaries, and product analysis (eg., yellow lines on the road, paint, oil, caulk, clothing). Budget for this task could also be used for an intern to conduct research (literature search) on products and sources (eg., Great Lakes and Delaware River Studies). The ultimate goal resulting from this phase of work is to develop actions to reduce or remove these sources from entering the Spokane River watershed.

Deliverables by June 30, 2015

Budget: ~~TBD~~ \$5,000.

- Documentation of activities and associated costs.
- This task may be invoiced to Ecology and paid to ACE up to once a month for activities and costs incurred during the previous invoicing period.

Comment [LDW1]: Note, the writeup includes a number of activities. Only some of these will be conducted under this budget.

3) Prevent Recontamination

Draft 1-10-2014: For discussion at SRRTTF meeting 1/22/2014

In 40 Code of Federal Regulations (CFR), Part 761.3, the toxics substances control act (TSCA) regulation states that "inadvertently produced" PCBs may be present in a manufacture process at an average concentration of 25 ppm up to 50 ppm maximum. This amount is 781,250,000 times greater than EPA's Human Health Water Quality Criteria (HHWQC) of 64 pg/L (parts per quadrillion). A 1983 publication by USEPA cites a report from Versar, Inc. stating that there are more than 200 chemical processes that can result in the production of "inadvertently produced" PCBs. Consumer products and other sources containing these allowable inadvertently produced PCBs are entering the environment through many different mechanisms (municipal wastewater, stormwater, paper recycling, ambient distribution and deposition). TSCA regulatory reform is needed to eliminate the production of products that are likely contributing PCBs to the environment and preventing attainment of the water quality standards in the Spokane River watershed.

Budget for this task will assist SRRTTF in providing technical support and economic analysis to address revision of current regulations and legislation that allow PCBs in products. Funding may be used to cover technical research and analyses, economic studies, and participation in stakeholder groups and coalitions.

Deliverables by ~~TBD~~ June 30, 2015 Budget: ~~TBD~~ \$5,000.

- Documentation of activities and associated costs.
- This task may be invoiced to Ecology and paid to ACE up to once a month for activities and costs incurred during the previous invoicing period.

4) ACE Administration

This task includes costs associated with staffing the SRRTTF Administrative and Contracting Entity. Activities will include preparing requests for proposals for contracting laboratories, quality assurance and quality control activities, and sampling and analysis activities; grant writing; and contract management.

Deliverables by June 30, 2015 Budget: \$20,000.

- Documentation of activities and associated costs.
- This task may be invoiced to Ecology and paid to ACE up to once a month for activities and costs incurred during the previous invoicing period.

Budget

The total contribution by the Department of Ecology for is \$350,000. An itemized breakdown of Ecology costs by task and sub-task are provided in Appendix B.

Schedule

The period of performance will begin on the effective date of this contract and ends on June 30, 2015. The completion dates associated with each task and deliverable are indicated herein¹.

Phase-Task/Deliverables	Completion Date
2-1: Preparation for Field Activities <ul style="list-style-type: none">Documentation of activities and associated costs	June, 2015
2-2: Field Monitoring <ul style="list-style-type: none">Documentation of activities and associated costs	June, 2015
2-3: Laboratory Analysis <ul style="list-style-type: none">Documentation of activities and associated costs	June, 2015
2-4: Data Processing <ul style="list-style-type: none">Project DatabaseField Monitoring Report	TBD
2-5: Meetings and Coordination <ul style="list-style-type: none">Documentation of activities and associated costs	TBD
3-1: Analysis of Field Data <ul style="list-style-type: none">Technical memorandum summarizing model inputs	TBD
3-2: Application of Model <ul style="list-style-type: none">Draft model application reportFinal model application report	TBD
3-3: Development of Inventory <ul style="list-style-type: none">Draft inventory reportFinal inventory report	TBD
3-4: Meetings and Coordination <ul style="list-style-type: none">Documentation of activities and	TBD

¹ Note – completion date is June 2015. Each task will be billed (and paid) on a monthly basis in advance of project completion.

associated costs	
4-1: Evaluation of Individual BMPs <ul style="list-style-type: none">• Technical memorandum	TBD
4-2: Assessment of Optimal Mix of BMPs <ul style="list-style-type: none">• Technical memorandum	TBD
4-3: Development of Comprehensive Plan <ul style="list-style-type: none">• Draft Comprehensive Plan• Final Comprehensive Plan	TBD
4-4: Meetings and Coordination <ul style="list-style-type: none">• Documentation of activities and associated costs	TBD

State of Washington [contract number]			
APPENDIX B			
BUDGET SUMMARY			
Phase 2			
Task No.	Task Description	Task Budget	Ecology Funding
2-1	2-1: Preparation for Field Activities	\$10,000 15,000	\$10,000-15,000
2-2	2-2: Field Monitoring	\$80,000 90,000-	\$80,000-90,000-
2-3	2-3: Laboratory Analysis	\$250,000 215,000-	\$250,000-215,000
2-4	2-4: Data Processing	TBD	TBD
2-5	2-5: Meetings and Coordination	TBD	TBD
Phase 3			
3-1	3-1: Analysis of Field Data	TBD	TBD
3-2	3-2: Application of Model	TBD	TBD
3-3	3-3: Development of Inventory	TBD	TBD
3-4	3-4: Meetings and Coordination	TBD	TBD
Phase 4			
4-1	4-1: Evaluation of Individual BMPs	TBD	TBD
4-2	4-2: Assessment of Optimal Mix of BMPs	TBD	TBD
4-3	4-3: Development of Comprehensive Plan	TBD	TBD
4-4	4-4: Meetings and Coordination	TBD	TBD
Other			
	Implement Cleanup Actions to Meet Applicable Water Quality Standards	\$5,000- 5,000.	\$5,000- 5,000.
	Prevent Recontamination	\$5,000- 5,000.	\$5,000- 5,000.
	ACE Administration	\$20,000.	\$20,000.