PREVIOUSLY SUBMITTED AND NOT ACCEPTED FOR FY 2014

Work request summary

ID: 4162

Requesting staff: Borgias, Adriane

Requesting client: Water Quality Program, Eastern Regional Office
Work request title: Assessment of PCB Concentrations in Spokane Valley Groundwater

For Fiscal Year FY 14

Work request description:
The Spokane River Regional Toxics Task Force is in the process of assessing the contributions of PCB to the river load. More than half of the PCB loading to the river is unaccounted for. A better understanding of the affect of groundwater on PCB loadings to the river is needed. Monitoring wells are already in place in the Spokane aquifer that could be used to sample and evaluate levels of PCB in groundwater. This project would consist of two parts:

I) Planning phase (year 1): Identify and evaluate existing data and data resources; coordinate with the recommendations from the SRRTTF Technical Consultant regarding PCB model inputs and data availability from other monitoring efforts (i.e., USGS NAWQA) and data gaps/needs; define the scope and SOP's (i.e., coordinate with the SRRTTF on methodologies); so data can be used to identify/estimate PCB inputs and loads to the Spokane River from ground water. II) Implementation phase: This phase would be best completed beginning year two in order to coordinate with the recommendations of the SRRTTF Technical consultant regarding data gaps and modeling of the PCB inputs to the river. Focus initial efforts on monitoring/sampling locations that are the most relevant for estimating PCB loading (i.e., gaining reaches). Funding will be needed for project design, sampling, chemical analysis, and characterization of the PCB in the groundwater.

Work objectives:

Preferred time period or any deadlines for when the work should be conducted:
Planning phase can occur at any time. Data collection and field work time frame to be determined as part of planning activity. Initial planning is best done immediately in order to coincide with the work that is being performed by the SRRTTF Technical Consultant (TC). The TC is charged with identifying data gaps, preparing a conceptual model for evaluating PCB/Toxics loading to the Spokane River, and making recommendations for a Toxics Reduction Work Plan.

Reviewer comments

Responses specific to the work type(s)

Comment:
A good understanding of the dynamics of PCB as it relates to its interaction with surface water is needed to assess and do a mass balance of PCB loading to the river. The river/aquifer interface has been extensively studied and characterized. Preliminary research is needed to determine if there is existing groundwater data for low level PCB. Sampling and analysis to be conducted as needed to fill in the data gaps. This project is of high interest to the Spokane River Regional Toxics Tast Force (SRRTTF), a collaborative effort focused on making measurable progress towards meeting applicable water quality standards.

Applicable geographic areas: ER

Work types: Toxics Studies, Groundwater

Expected products: data set, technical report

Client
Water Quality Program, Eastern Regional Office
Borgias, Adriane Exec - Agency Ops - WQ - OPS - ERO - TMDL/WU
Snouwaert, Elaine Exec - Agency Ops - WQ - OPS - ERO - TMDL/WU
Knight, David Exec - Agency Ops - WQ - OPS - ERO - TMDL/WU