Session Focus:

The impact of aerial deposition of PCB on a watershed either directly or indirectly (wet deposition / dry deposition / snow pack content).

Session Specifics:

General

How are PCBs transported throughout the world through aerial resuspension and deposition?

What are potential sources both locally and globally? What are the mechanisms associated with aerial deposition? How much does aerial deposition contribute to soil and water body contamination?

How significant a source is this? What are the main pathways? Is there any trend analysis from anywhere?

Spokane Specific

Can PCB from aerial deposition, both wet and dry, be taken up in snow pack and become a significant source in runoff in our watershed? How are aerial deposition levels measured and quantified? How do you translate deposition concentrations of PCB into what runs off in snow melt and/or stormwater? What studies have been done in other areas that could be used as a model to quantify this and might be applicable to the Spokane watershed?

How would you characterize aerial deposition in a watershed similar to the Spokane River watershed, and how would you determine the impacts of aerial deposition on water quality?

What would need to be done in terms of measurements (and how would it be measured) in our watershed to quantify PCB levels in snow melt and/or stormwater especially considering snow melt that enters Lake Coeur d’Alene feeds the river?

How are others collecting and using aerial deposition data to identify sources and determine “urban background” levels?
A test by the city indicated motor oil had PCBs. If gas and diesel have PCBs what level might be in the air and later deposited?

Session Presenters:

Dr. Lisa Rodenburg
Associate Professor Organic Chemistry
Rutgers University
(Evaluating atmospheric deposition of persistent organic pollutants (POPs) to aquatic systems. Source apportionment, mass balances, and identification of sources in aquatic systems.)

Dr. Bruce Hope
Principal Technologist
CH2M HILL
(Aerial deposition related to PCBs in Willamette River watershed and Portland Harbor)