

## Help us address Polychlorinated Biphenyls (PCBs) in the Spokane River!

The Spokane River Regional Toxics Task Force (SRRTTF) is a collaborative group of governmental agencies, private industry and environmental organizations from Idaho and Washington formed in 2012 to reduce toxics in the Spokane River. These toxics accumulate in fish, and can impact the health of humans that consume the fish. The goal of the SRRTTF is to characterize sources of toxics in the River and identify and implement appropriate actions to make measurable progress towards meeting applicable water quality standards.

#### The Task Force and its members have:

- Made measurable progress toward identifying, reducing, and controlling PCBs in the Spokane River, as determined by Ecology progress review—preventing 283 pounds of cancer-causing PCBs from entering the River
- Supported policies that encourage purchasing of PCB-free products, if available (adopted by the State of Washington, City of Spokane and Spokane County)
- Encouraged EPA regulation reform (Toxic Substances Control Act or TSCA) to reduce or preferably eliminate
   PCBs from new products
- o Identified a previously-unknown contribution of PCBs to the River from groundwater
- Held regular workshops to determine the path forward and consult with experts from universities and other areas with PCB contaminated water bodies (Delaware River Basin, San Francisco Bay, Duwamish River)
- o Conducted PCB sampling during dry weather along the river from Lake Coeur d'Alene to Lake Spokane to identify PCB loading to the river
- Initiated a ground water sampling study with Ecology
- Conducted and supported studies that sampled commercial and consumer products for PCB content
- Studied PCB levels in sediments and effluents removed from catch basins in Spokane
- Contracted with independent third party advisors the William D. Ruckelshaus Center, facilitator for meetings and workshops, and LimnoTech of Ann Arbor, Michigan, environmental engineering consultant to guide sampling, identification of PCB sources and development of a Comprehensive Plan of Action
- Worked cooperatively with Ecology's Environmental Assessment Program (EAP) and Urban Waters program (UW) to support and comment on PCB studies impacting the Spokane River (Little Spokane River Listing Verification, and Lake Spokane Long-term PCB Monitoring studies)

# **Background on Polychlorinated Biphenyls (PCBs)**

## Spokane River Work Currently in Progress for 2016

- Continued Ecology Urban Waters Ground Water sampling study
- Ecology Atmospheric PCB Deposition study in Spokane
- Ecology Little Spokane River Fish Hatchery Case Study sampling PCBs in effluents and sediments
- SRRTTF Spokane River Monthly Monitoring study (up to 6 months) to determine seasonal variation of PCB loading to the Spokane River
- A SRRTTF Comprehensive Plan with toxics control strategies to reduce PCB loading to the River
- Task Force member projects addressing PCBs: stormwater and wastewater advanced treatment projects,
   PCB contaminated soil remediation research, and product testing and outreach work.

## What are PCBs and Why are they a Concern?

- Manufactured organic chemicals produced from 1935 to 1979
- Currently are "inadvertently" produced in the manufacture of pigments used in industrial and consumer products
- Do not break down in the environment (persistent) and bioaccumulative (build up) in fish, animals and humans
- PCBs can have serious health effects on the immune, reproductive, nervous and endocrine (hormonal) systems in humans and animals. PCBs are considered probable carcinogens in humans
- Can be in the form of 209 different PCB molecules (congeners). Historically these were mixed together to form compounds called "Aroclors"
- Were historically used in an array of industrial, commercial and household products, including transformers, light ballasts, hydraulic fluids, paints and caulks
- Today PCBs may be found in consumer products such as the color pigments in cereal boxes, in deicers and in hydroseeds used in landscaping

### Weren't PCBs Banned by EPA in 1979?

- Intentional production was banned by EPA under the Toxic Substances Control Act (TSCA) of 1976
- Continued "inadvertent" production of PCBs during the manufacturing process is permitted in many products, allowing levels up to 50 parts per million
- · PCBs are found today in new products such inks and dyes used in some food packaging, paper products, clothing, and paints

### How do PCBs Impact Human Health and the Spokane River?

- PCBs are pervasive in the environment and are found in air, soil, fish and water
- PCBs accumulate in the food chain and build up in fish that people catch and eat
- PCBs enter the River through inflow of sediments, storm water, waste water, and ground water along with atmospheric deposition directly to the surface of the River
- Segments of the Spokane River exceed federal, state and tribal water quality standards for PCBs (and Dioxins)
   Many of the species of fish in the River exceed the standards for human consumption. As a result, the Spokane Regional Health District placed a fish consumption advisory on the river in 1995, which continues today.

#### What Can You Do to Reduce PCB Exposure and Releases to the Environment?

- Purchase and be a consumer advocate for dye-free products when possible (PCBs can be in pigments and dyes, especially yellows, greens and blues)
- Use all-natural products with the least amount of chemical ingredients
- <u>Do not</u> dispose of oils, pesticides, paints, solvents or other chemicals by flushing down the drain or dumping in a storm drain. Check the on-line directory <u>www.SpokaneWasteDirectory.org</u> for proper disposal options
- Do not burn printed paper materials in the fireplace or campfire
- Contain all solid waste in closed bags and garbage cans prevent contact with stormwater
- Follow fish consumption advisories and allow fatty tissue to drip away when grilling/cooking fish

#### Where Can You Learn More About PCBs?

SRRTTF Website <a href="www.srrttf.org">www.srrttf.org</a> EPA <a href="www.epa.gov/PCBs">www.epa.gov/PCBs</a> Washington Department of Ecology <a href="www.ecy.wa.gov">www.ecy.wa.gov</a> Idaho Department of Environmental Quality <a href="www.deq.idaho.gov/water-quality/surface-water/water-quality-criteria">www.leg.idaho.gov/water-quality/surface-water/water-quality-criteria</a>
The Lands Council <a href="www.landscouncil.org">www.landscouncil.org</a> City of Spokane <a href="https://my.spokanecity.org/publicworks/wastewater/">https://my.spokanecity.org/publicworks/wastewater/</a>
Spokane County <a href="www.spokanecounty.org/water">www.spokanecounty.org/water</a> (Locate the "PCB" page under "Rivers, Lakes and Streams")

### **SRRTTF Participants:**

City of Coeur d'Alene • City of Post Falls • City of Spokane • City of Spokane Valley • Coeur d'Alene Tribe • Hayden Area Regional Sewer Board • Idaho Department of Environmental Quality • Inland Empire Paper Company • Kaiser Aluminum • Kootenai Environmental Alliance • Lake Spokane Association • Liberty Lake Sewer and Water District • Spokane County • Spokane Regional Health District • Spokane Riverkeeper • The Lands Council • US Environmental Protection Agency • Washington State Department of Health • Washington State Department of Ecology • Washington State Department of Transportation