

# PCB Source Assessment Next Steps

- Post presentation online
- Consider limitations
  - Bias from available congener data
- Consider recommendations
  - For modeling
  - For future data collection
- Consider results
- Consider input from today
- Finalize report (June 2017)



# Finding and Fixing PCB Sources

Green-Duwamish Pollutant Loading Assessment  
Interested Parties Meeting  
March 15, 2017

Rachel McCrea, Water Quality Program



How do we find it?

How do we fix it?

How can we work together?

Examples:

Source Tracing Compendium

Detection Dog Pilot Project

Private Facility: Building Materials

Product Testing

Spokane River Regional Toxics Task Force

# PCB Source Tracing Programs

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## A Review of Select PCB Source Tracing Programs

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July 2016



King County

Department of Natural Resources and Parks  
Water and Land Resources Division  
**Science and Technical Support Section**  
King Street Center, KSC-NR-0600  
201 South Jackson Street, Suite 600  
Seattle, WA 98104  
206-477-4800 TTY Relay: 711  
[www.kingcounty.gov/environmentalscience](http://www.kingcounty.gov/environmentalscience)

Alternate Formats Available

- Summary of source tracing programs
  - San Francisco
  - Delaware River Basin
  - Seattle
  - Spokane
  - Tacoma
  - Portland
- NEP grant-funded

[http://www.ecy.wa.gov/puget\\_sound/docs/PCBSourceTracingProgramsReport.pdf](http://www.ecy.wa.gov/puget_sound/docs/PCBSourceTracingProgramsReport.pdf)



# Common Source Tracing Tools

- Long term monitoring
- Records review & visual surveys
- Track down sampling (solids, water)
- Business inspections ( $\pm$  sampling)
- Pipe cleaning w/ sampling
- Street level soils sampling
- Influent & effluent sampling
- Material & product testing

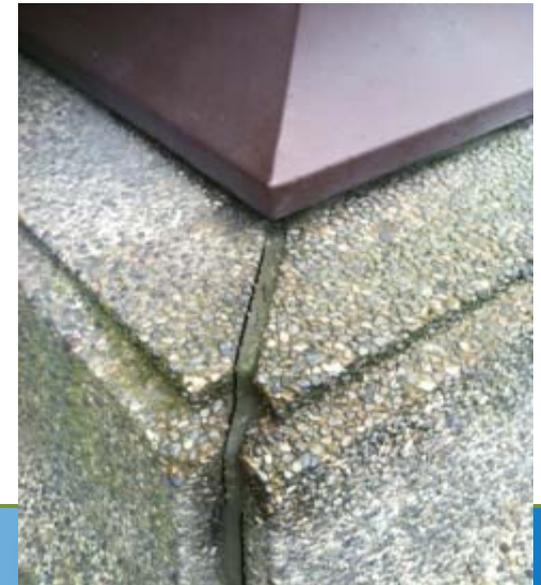


# Common PCB Sources Found

- Building/construction materials
- Former cleanup sites
- Metal shredders/recyclers
- Utilities or transformer recyclers



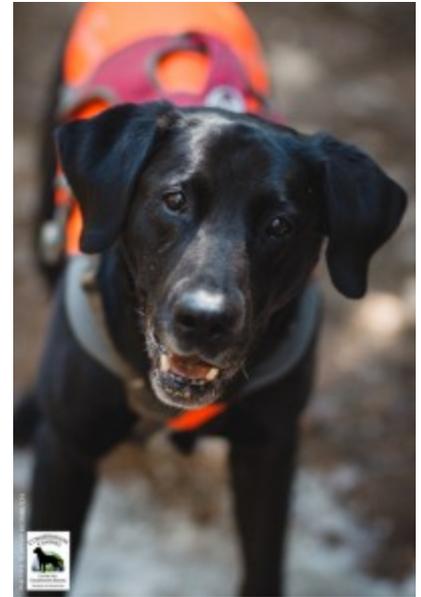
Peeling paint –  
San Francisco



Building caulk -  
Tacoma

# PCB Detection Dog Pilot Project

- Seattle Public Utilities & UW Conservation Canines
- Dog trained to detect PCB odors
  - Aroclors 1254 and 1260
  - 1.0 mg/kg and 0.1 mg/kg
- WA Stormwater grant-funded



Sampson - UW Conservation Canines

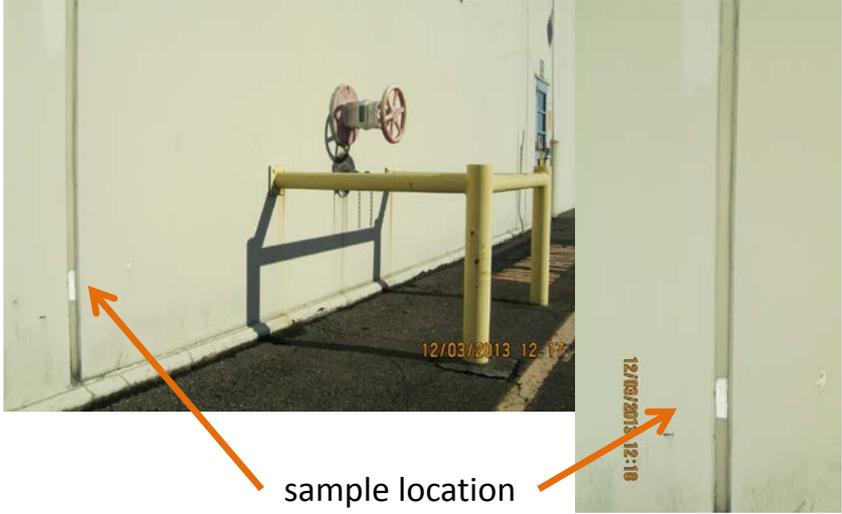


# Finding & Fixing: Building/Construction Materials

- Storm drain solids sampling
- Material testing
  - Concrete joint compound
  - Building paints & caulks



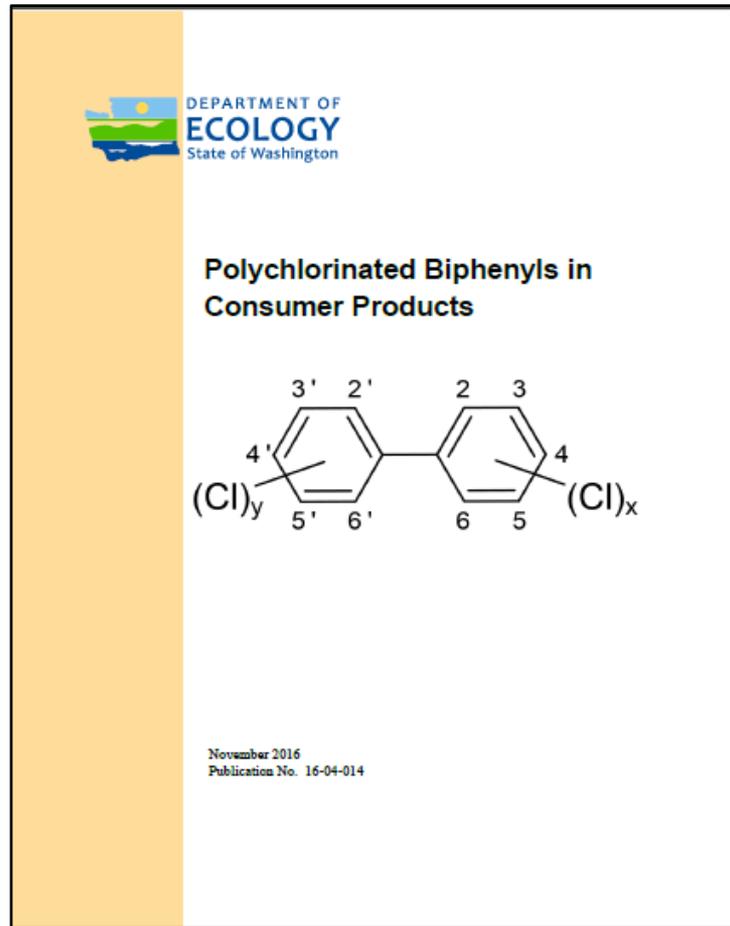
**The Boeing Company has removed over 23 miles of concrete joint compound at their Duwamish properties**



sample location

# Product Testing: PCBs in Consumer Products

- 201 products tested
- Inadvertent PCB emphasis
  - pigments & dyes
- Results:
  - 72% above 1 ppb
  - 10 samples above 100 ppb
  - 3 samples above 1 ppm
- <https://fortress.wa.gov/ecy/ptdbpublicreporting/>



DEPARTMENT OF  
**ECOLOGY**  
State of Washington

**Polychlorinated Biphenyls in  
Consumer Products**

Clc1ccc(cc1)-c2cc(Cl)ccc2

November 2016  
Publication No. 16-04-014



# Spokane River Regional Toxics Task Force (SRRTTF)

**Created to develop a Comprehensive Plan to bring the Spokane River into compliance with applicable water quality standards for PCBs**

- 2011 permit requirement
- 2012 Memorandum of Agreement
  - 5 Permittees
  - 3 Environmental Groups
  - 3 Agencies
- Characterize sources
- Identify and implement source reduction actions
- Make measurable progress



# SRRTTF Comprehensive Plan

## Actions to Control PCBs

### Maintain Current Efforts

- Wastewater Treatment
- Remediate Known Contaminated Sites
- Stormwater Controls
- Low Impact Development Ordinance
- Street Sweeping
- Purchasing Standards

### Improve Existing Efforts

- Support Green Chemistry
- PCB Product Testing
- Waste Disposal Assistance
- Regulatory Rulemaking
- Compliance with PCB Regulations
- Emerging End of Pipe Stormwater Technologies



We can find it.

We can fix it.

We can work together.

THANK YOU