

**PCB CAP Advisory Committee Meeting Notes
December 16, 2013**

Attendance

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Advisory Committee	
In room	Diane Barton, Patricia (Pat) Cirone, Jenee Colton, Brandon Housekeeper, Nancy Johns, Ken Johnson, Sandie O’Neill, Rosalind Schoof, Dirk Wassink
On phone	Ken Johnson, Doug Krapas, Michelle Mullin, Rick Eichstaedt, Sandy Phillips, Heather Trim, Kevin Booth
Ecy and DOH	Holly Davies, Beth Gill, Joshua Grice, Carol Kraege, Callie Mathieu, David McBride, Barbara Morrissey, Cheryl Niemi, Dale Norton, Gary Palcisko, Alex Stone, James White
Interested Parties	Pete Hildebrandt, Lincoln Loehr
Introductions- Each member of the advisory committee introduced him or herself and explained their interest in PCBs.	
General Discussion after presentations on Environment and Human Health	Suggested Actions
New national PCB biomonitoring data from the CDC became available September 2013. Suggest that we add these to the draft. Are the exposures still decreasing in the US population or is there a plateau effect? The 2013 CDC data release probably included 2007-08 survey samples.	Add new CDC biomonitoring data.
Consider adding to the discussion of PCB body burden and age. The higher body burden in older people is a function of cumulative exposure but also a function of the higher exposures sustained prior to banning PCBs in the 1970’s.	
Changes and how they related to arorclors versus congeners, etc. should be made known. Homolog/congener/aroclor is confusing. Suggest drilling down to show how toxicity screening values relate. Uncertainty may result in reluctance to move forward.	Include more detail on exposure factors.
ATSDR was easier to reference than primary literature. Other papers didn’t make it into the references. Some of the data is old, so data quality should reflect how it is relevant now.	Explain use of review report vs. primary literature.
PCBs in bottom feeding fish are higher in urban areas. Resident Chinook salmon are fairly contaminated due to their longer residence in a more contaminated area. Herring in central sound are also quite contaminated.	Clarify proximity to source.

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<p>Sample size from 2008 FDA total diet study was expanded. Questions included: How well are levels between fresh water and marine fish understood? Do fish in rivers have more contact than ocean fish, and are food items they eat much higher? How does it tie into the food web? There is no good matching of fish tissue and sediment data. Speculation is that it exists with the sediments. The affect of sources on critical exposure pathways needs to be understood.</p>	<p>Recommended actions should be effective.</p>
<p>The estimate of inadvertent generation in Table 16 was from EPA and given by industry and environmental group consensus. The report included an estimate of inadvertent generation of PCBs. The original report could not be located.</p>	
<p>Manufacturers or importers of PCBs must report to EPA. EPA has information from those who self report generation of inadvertent PCBs. Mono and di-chlorinated PCBs are discounted. There were approximately 80 notices from 28 companies that reported, going back to 1994.</p>	
<p>Fish tissue concentration graph has fillet data, not whole body concentrations. If a person eats a whole fish, the screening value is still the same. Fish are listed several times because the data is from multiple studies and water bodies.</p>	<p>Urban and non-urban data should be reflected.</p>
<p>There is no estimate of how much the half life of congeners and degradation. Sediment concentrations in San Francisco had a half life of 20 years. Fish vary depending on the location, proximity to sources and physical characteristics of water bodies. It is difficult to generalize half life because it varies. An estimate would be made in a cleanup situation with a specific site, which is difficult to do statewide. Levels were historically high and there are sharp declines from bans, but the data is on the flat part of a curve now. For source control and regulations, levels are much lower than they used to be, so it's incrementally harder to make reductions. We are now moving up the pipe. Meeting low regulations becomes increasingly harder.</p>	
<p>It would be helpful to post references on SharePoint or similar site.</p>	<p>Holly will ask about setting up a permanent FTP site.</p>
<p>Body burden estimates are higher the longer you live. Blood lead levels by cohort for PCBs was discussed. Some papers looked at dioxin-like PCBs and weren't included, but could be.</p>	

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Sources- General discussion included how the estimates can be revised or improved.	Suggested Actions
<p>The difference between an open and closed source was discussed.</p>	
<p>Transformers: The database on transformers over 500 ppm comes from EPA. The data is old and the hope to narrow the estimate with the help of the utilities. Anything over 50 ppm is incinerated. The byproduct is captured and destroyed in a combustion chamber, so it does not go into environment. Avista removed registered transformers and were not near the 60% that is mentioned. EPA doesn't remove items from the database. Tom Simmons from EPA said on a national call that anyone could de-register and would be removed from the database. Companies have only registered their products if they knew it was contaminated. Weyerhaeuser over-registered, but the assumption is that others did not. EPA assumes they are underestimating in general due to few being registered. There is a rumor of a plan to phase out all PCB transformers in other utilities, as well as other private utilities. Avista has a plan to be PCB free by 2014 - how is that accounted for in this report? The estimate should be made smaller. Not everything is quantifiable and the narrative effects options. Larger manufacturers were required to put in their own infrastructure. A question was asked about data in appendix F, which was not edited because it came from the EPA registry. There seem to be a lot of registries with 0 transformers. It is most likely because PUD reclassified or removed them. Avista shows a high # because they over registered.</p>	<p>Estimate should be refined. Brandon will reach out to the other utilities to determine if there are better estimates for removal plans.</p>
<p>Large Capacitors: Estimate is from the Puget Sound Toxics Loading Study methodology. There is no registry. It is important to know the environmental impact of associated releases. If expected lifetime is 20 years, why are they out there and where are they? It depends on where leak is. Data is primarily universal as opposed to location based. Specific locations should be included. Data could be obtained from industry or EPA. Adverse affects to fish & wildlife is not universal. Need to drill down further. Industries or manufacturers of old capacitors could be identified. Ecology doesn't have authority to require identification, but could get data with new authority. Ecology must be informed at 2 ppm by law for waste. There is not any good data on collection of PCB at disposal companies. Ecology has state PCB dangerous waste data reports with some info, but it is uncertain how much more can be obtained. Using EPA estimates on leakage doesn't include how much is leaking onto something that is contained and not cleaned up. A leakage rate should be included, even without a precise estimate.</p>	<p>Add more information on where they are.</p>

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<p>Small Capacitors/Ballasts: A ballast is a type of small capacitor. Materials are collected that are potentially reusable. There were a large number of PCB ballasts 15 years ago, but now there are about only 1 per year. If they don't say "no PCBs", it is assumed they did contain as eligible pool. Light ballasts don't last much more than 10 years, and are likely on the tail end of the curve (anecdotally). There is no data in Seattle, but they are aggregated. Ecology receives data being reported. The location of events should be included, if the amount can't be quantified. Annual releases vs. what is measured as a load coming in are quite substantial, which means the data is bad or not everything is being accounted for. It seems there is a huge discrepancy and uncertainty between release and loads. We know that urban centers have more and there is ongoing load. The study that was done didn't look at the worst case scenario (Duwamish PCB hot spot). It is a good idea to state that these are guesses. Historically, half of PCBs went into capacitors. The leakage rate doesn't take into account how much is disposed.</p>	<p>Break range down by ballasts, small appliances, etc. Add a column for uncertainty of data and drill down further. Order of magnitude is close enough, with the goal of refining to magnitude within range.</p>
<p>Shredder fluff (metal recycling and upholstery - often used as daily landfill cover): EPA decided if facilities are following voluntary removal, it is excluded from the rule. Verification sampling is not very thorough. As long as prevention guidelines are followed, the entire product is removed from being regulated and can be distributed in commerce without ramifications. There are 4 shredder facilities in the state. It is uncertain if there are any contamination issues to be concerned about. When the facilities were sampled, there was a single issue at one facility (elevated levels above 50 ppm detected in fluff). Voluntary procedure seems to be working, but may be interesting for the CAP. CA estimates but would be helpful include. They are listed as a waste, not a source.</p>	<p>Holly will find out from Haz Waste which facility had an issue.</p>
<p>Used oil: There are excellent rules and municipalities are on board with collecting and recycling used oil. It is a very valuable program for the environment. Programs are good at collecting, but some oil is contaminated with PCBs that municipalities can't always effectively manage. There is a high cost for dealing with PCB contaminated uses oil which is problematic for small municipalities and is beyond their financial means. It would help if there was funding to help pay for cleanup and disposal. It is best to manage waste at the front end appropriately so that no contamination occurs. Finding the source and refining the data would be helpful in order to fix the problem. There is evidence that motor oil is coming from contaminated recycling (both domestic and international). Restriction on selling used oil could be a solution. Spokane has data on this. It is suspected that cars may be air scrubbers, causing PCBs to glom onto oil and deposit onto roadways. This is a different concept to consider about how oil can be contaminated.</p>	

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<p>Caulk: There is a universal assumption about trusting concrete masonry, but there were questions about residential. How much is in post war concrete block houses and how prevalent is it around the state? Are releases only from industrial or others? There was only one residential building in one study, so it was not included in the estimate. In Seattle, there is a ban on discarding concrete, brick and asphalt. What is done with PCB caulk contamination? Caulk seems underestimated. There were significant amounts at the Boeing plants and airport that were not included. Tacoma found contaminated sealants between the road and curb. A characterization study is being done and is not conclusive yet. Caulk is a big problem with source control from cleanup sites. How should PCB paint and carbonless copy paper be estimated? A grant was received from Ecology to test products such as road paint (striping). Are products containing PCBs in Appendix E reported to EPA? They are old products, not inadvertent generation. A range would be useful rather than just maximum concentration.</p>	<p>Heather will send Holly asphalt and gutter caulk data.</p> <p>Heather will find out the timeline of the study (likely in the next 6 months)</p> <p>Holly will research electrical cable from Appendix E for insulation and old wiring.</p>
<p>Residential burning: There is not any good data on atmospheric deposition and cross border contribution. Levels in rural versus urban were looked at, but there is no data in Washington state. We don't know how much is coming from other areas or being globally transported, but we can assume. This is why the Stockholm convention was formed. The figure on page 72 about herring shows the PCBs are not coming from China.</p>	<p>Holly will add narrative around air deposition.</p>
<p>Miscellaneous: E-cycling of old TVs - there are still a lot out there. Oil from old heaters was being sold and the heaters had to be cleaned out. Submersible well pump in Wisconsin with PCBs. TMDL section - it is expensive to sample PCBs and only certain areas have been tested. Biosolids – in house data should be included. Dust in homes and buildings – indoor/outdoor exchange of dust should be mentioned as a pathway.</p>	<p>Heather will get biosolid data.</p>

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Next Steps	Actions
<p>The committee will meet in early January during the first week of legislative session to discuss pathways and options. Other loading studies will also be on the agenda. Revisions will be made to the extent possible within the short timeframe, and comments will continue to be accepted.</p> <p>The next opportunity to continue discussion of refining estimates is in March. The economic analysis will be ready for review prior to that meeting.</p>	<p>A poll will be sent out with proposed dates for the next meeting. Reps from Spokane and King County will be invited to present their loading studies.</p>