

TSCA/iPCB/Green Chemistry Workgroup Meeting Summary
July 7, 2021

TSCA Members in Attendance

Scott Braithwaite (ACA)	Robert Mott (Mott Consulting, LLC)
Joel Breems (Rep. The Lands Council)	Michelle Mullin (EPA)
David Darling (ACA)	Amelia Nestler (NGC)
Jeff Donovan (City of Spokane)	Cheryl Niemi (Ecology)
Ben Floyd (White Bluffs Consulting)	Cadie Olson (City of Spokane)
Lauren Heine (NW Green Chemistry)	Amanda Parrish (the Lands Council)
Gary Jones (Printing United Alliance)	Elsa Pond (WA DOT)
Doug Krapas (IEP)	Karl Rains (Ecology)
Anna Montgomery (NWGC)	

Guests:

Lindsay Box (The Lands Council)
Vikki Barthels (SRHD)
Christine Warnock (WA DES)

WA Department of Enterprise Services (DES) Presentation

Christine Warnock, Enterprise Procurement Policy & Training Manager for the Washington State Department of Enterprise Services (DES), made a special presentation to the workgroup on DES's implementation of WA PCB Purchasing Policy (RCW 39.26.280). The presentation was distributed to the workgroup on July 7th (also attached to these minutes). Highlights of the presentation and subsequent Q & A are summarized below:

- a. Assessment of the need for a PCB preference is demonstrated by DES's PCB Risk calculator
- b. A 5% preference is provided to Suppliers for demonstrating "no or low" PCBs
- c. 2,745 employees have been trained on the policy, risk calculator and PCB desk aid (step-by-step guide), including all DES Master Contract personnel
- d. No bidder has qualified for this preference or requested the preference when one was offered. This statement caused some confusion, as the workgroup members were under the impression that yellow road paint purchased by the DOT under their revised specification had a bidder/supplier qualified under this policy. Christine clarified that this was a pilot project used to demonstrate implementation of the policy and that one out of the four vendors received the preference.
- e. DES believes that the lack of interest in this preference may be due to the requirement for using EPA Method 1668 and the exorbitant cost of the analysis, especially when more than one product is included or the associated packaging. Also, a lot of the contracts predated the policy, so new contracts may participate.
- f. D. Krapas suggested the DES consider using a lower cost test method (Methods 608 or 8082 depending upon the material with a detectable limit in the ppt range) as a screening tool for determining the presence of PCBs.
- g. G. Jones asked if EPA Method 1668 was required by the legislature and Christine confirmed that no test method was specified in the final rule.
- h. Christine stated that the policy review is due next year and that the effectiveness will be evaluated. DES will interface with the SRRTTF to solicit any ideas for improvement.

iPCB/TSCA Agenda Items Discussed: Note that the prior annual historical discussions for this workgroup can be found in the May, 2021 meeting minutes

1. WA HHWQC Lawsuits: Action: D. Krapas and others (i.e.: Ecology) to provide any updates on the following lawsuits

- a. The Department of Justice advised counsel in early June that EPA intends to engage in rulemaking to reinstitute federal human health water quality criteria for the state of WA
- b. Based on that information the parties filed joint motions in the two pending federal cases to stay the federal litigation pending additional EPA rulemaking with a deadline for a draft EPA rule in nine months and final EPA rule nine months thereafter
- c. The pending litigation will be dismissed once EPA adopts a final rule and could be reactivated if EPA fails to meet the agreed deadlines
- d. The estimated schedule for rulemaking:
 - April, 2022 for Draft Rule
 - June, 2022 for Public Comment
 - January 2023 for Final Rule
- e. D. Krapas also provided an update on the Sierra Club/CELP vs. EPA lawsuit. On July 2, 2021 the Sierra Club/CELP filed a motion for summary judgment (**attached**) in the federal lawsuit to compel a PCB TMDL for the Spokane River.
- f. K. Rains emphasized that all of the above legal activities and EPA's rulemaking process simply continues the level of uncertainty regarding PCBs for WA State, and that Ecology is committed to reissuing the WA Spokane River NPDES permits in early to mid-2022.

2. Update on PCB EPA Method 1668 study of TiO₂ Pigments: Action: J. West & M. Ober to continue providing updates on the TDSC project

- a. No representatives were present from the TDSC or the ACC, but J. West provided the following update via email on May 3rd, 2021: *I want to follow up on my message from last week. The data are complete and have gone through all of the quality assurance checks. The reporting phase has encountered legal issues associated with the confidentiality and antitrust practices we're required to observe. If I remember correctly, we had predicted a report in May. As much as we would like to wrap this project, I'm not confident that we'll be able to do that. Depending on the progress we make in the next few weeks, we'll be able to provide a clearer prediction.*
- b. Jay west of the American Chemistry Council also provided the following email message to Laura Floyd (Whitebluff Consulting) on May 24th, 2021 in regards to a presentation of the TiO₂ study results to the SRRTTF: *We have a TDSC conference call tomorrow to continue working out matters related to the antitrust and competition policies by which we must abide. I'm not going to place a bet on June. The TF meeting in August is a safer guess.*

3. Education/Outreach: Action: The Lands Council is to provide updates on the iPCB National Outreach Campaign project:

- a. A. Parrish summarized that no a lot of progress has been made since the presentation to this workgroup in June, due to commercial liability insurance concerns for subcontractors (J. Breems)
- b. The contract with ACE will also require amendment due to SRRTTF approval of the full contract at the June meeting and the balance of work that will be required to complete the contract due to the delays with subcontracting.
- c. D. Krapas inquired about the process for development, review and approval of the scope of work and whether this should be performed under the E & O or iPCB/TSCA workgroups. **Action: D. Krapas, V. Barthels and A. Parrish to arrange for a follow-up meeting to discuss and decide on future process**
- d. D. Krapas was tasked at the June meeting to follow-up on the following comment made by G. Jones in regards to the iPCB National Campaign draft website review: request that page 7 indicate “that iPCBs only represents 0.19% of the contribution of total loading of PCBs to the Spokane River. {based on the 2016 Comprehensive Plan}. D. Krapas followed with with Dave Dilks of LimnoTech and received the following response:
 - *The Table on Page 22 doesn't represent contribution of PCBs to the Spokane River, it represents mass in each source category. A given source category (e.g. deep sediments) may possess large quantities of mass that never get delivered to the river.*
 - *The numbers in on page 22 for Inadvertently Produced PCBs were derived from the Ecology and DOH (2015) PCB Chemical Action Plan, as described on page 20 of the Comp Plan.*
 - *Estimated loading rates delivered to the Spokane River are provided in Table 5 on Page 25 and don't include a category for Inadvertently Produced PCBs.*

This information was forwarded to the workgroup in an email dated July 7th (the date of this meeting), so G. Jones asked for additional time to review.

Previous Meeting Notes:

- e. The workgroup reviewed the comments received and compiled by The Lands Council (attached) regarding the National Outreach Campaign iPCB Draft Website
- f. There was robust discussion regarding bioaccumulation and toxicity of iPCBs.
- g. C. Manahan pointed out that PCB-11 does indeed bioaccumulate and that each congener will have variable bioaccumulation rates.
- h. C. Niemi provided the following link and reference material regarding PCB bioaccumulation and toxicity in a follow-up email on June 2nd:

https://www.atsdr.cdc.gov/csem/polychlorinated-biphenyls/biologic_fate.html

Environmental Alteration of PCB Mixtures

Environmental PCBs occur as mixtures whose compositions differ from the commercial mixtures. This is because after release into the environment, PCB

mixture composition changes over time through chemical transformation and preferential bioaccumulation [Cogliano 1998].

Chemical transformation can occur through biodegradation of PCB mixtures in the environment. PCBs with higher chlorine content are extremely resistant to oxidation and hydrolysis.

Preferential bioaccumulation occurs in living organisms. Bioaccumulation through the food chain tends to concentrate congeners of higher chlorine content. In humans, bioaccumulated PCBs also appear to be more persistent in the body [Hovinga et al. 1992]. This is significant because bioaccumulated PCBs appear to be more toxic than original Aroclors in animals [Aulerich et al. 1986; Cogliano 1998].

- i. C. Niemi suggested that a statement be included that the scope of this E & O campaign is centric to work in the Spokane River watershed.
- j. K. Rains suggested that a statement regarding iPCBs be included that iPCBs in general are complex, numerous and don't all act the same way, and that each congener will have differing and variable bioaccumulation rates.
- k. G. Jones comments included a request that page 7 indicate "that iPCBs only represents 0.19% of the contribution of total loading of PCBs to the Spokane River. {based on the 2016 Comprehensive Plan}. Action: D. Krapas to confirm the accuracy of this statement with David Dilks of LimnoTech
- l. There was additional robust discussion regarding E. Pond's comment questioning the inclusion of road paints contributing to municipal storm water. Other members of the workgroup believed that this was an important issue for inclusion in the iPCB campaign effort due to the WA Procurement Policy and the DOT specification for preferential treatment of yellow road paints prohibiting paints containing Diarylide yellow pigments.
- m. E. Pond's comment also included a reference that the PCBs in roadway runoff is largely from cars and atmospheric deposition. Other workgroup members requested evidence to support this statement. E. Pond followed-up with the following references in an email to D. Krapas on June 4th :

<https://link.springer.com/article/10.1007/s00244-019-00640-x>

<https://apps.ecology.wa.gov/publications/documents/1903003.pdf>

<https://www.spokanecounty.org/DocumentCenter/View/3407/Study---PCBs-in-Municipal-Products-PDF?bidId=>

[Background on PCBs and their impacts - Polychlorinated Biphenyl \(PCB\) Wastes - LibGuides at University of Illinois at Urbana-Champaign](#)

Lower Duwamish Waterway Air Deposition Scoping Study, Data Gaps Report, Leidos and NewFields, December 2013 (attached)

Air Deposition Leidos Database, Excel Spreadsheet (attached)

- n. E. Ponds email to D. Krapas on June 4th also included the following salient points:

- *Basically I just want to make sure we don't present wet paint data as conclusive evidence about the level of PCBs being contributed from cured roadway paint.*
- *The other point I was trying to make is that the website list seems very incomplete for such a complex challenge, listing only roadway paint gives the appearance it is a significant source – which is what I doubt. I have begun reaching out to contacts in the various other PCB efforts I am involved in on the west side. Attached are some data sources the Duwamish Pollutant Loading Assessment is using to model PCB loading from atmospheric deposition. As I mentioned previously, it sounds like this pathway may be a main source (and may well include PCBs from cured paint per the chemical process Cheryl N was describing?). Atmospheric deposition is obviously a very hard pathway to address since it's literally "all up the air", but it is an important part of the challenge for surface runoff (stormwater) issues that I think should be accounted for.*

Lower Duwamish Waterway Air Deposition Scoping Study, Data Gaps Report, Leidos and NewFields, December 2013 (attached)

Air Deposition Leidos Database, Excel Spreadsheet (attached)

- o. D. Darling questioned the designation of primary and secondary sources of iPCBs since there is no basis for such designations. Other members agreed that there is some work that needs to be done here to provide better clarity regarding potential pathways.
4. **2021 Proposed Projects:**
- a. D. Krapas is to develop and submit RFP's (request for proposal) for the projects approved by the SRRTTF: *Develop Industry List of Pigments: Chlorinated vs. Non-Chlorinated and Lower Procurement Limits Campaign, Phase 1: 3rd Part Research*. **Action: D. Krapas to compile and submit RFP's.**
 - b. iPCB/TSCA workgroup members should provide contact information for any parties that might be interested in bidding on these scopes of work. **Action: iPCB/TSCA workgroup members to provide bidder contact information.**

Previous Meeting Notes:

- c. The scopes of two iPCB/TSCA workgroup projects (*Develop Industry List of Pigments: Chlorinated vs. Non-Chlorinated and Lower Procurement Limits Campaign, Phase 1: 3rd Part Research*) were approved by the SRRTTF at the May meeting.
- d. The next step is to submit the projects for RFP (request for proposal).
- e. The potential bidders list thus far includes the following:
 - Gonzaga University
 - Rutgers University
 - Northwest Green Chemistry
 - Chemforward (Pigment Project only)

- f. L. D. Wilson has an \$8k placeholder in the TTWG budget for the Phase 1, Sources & Pathways of PCB-11 project (iPCB/TTWG Project #4). Approval will need to go through the process for approval and execution of projects.

5. Safer Products WA: Action Ecology, C. Niemi and C. Manahan to continue updates

- a. C. Niemi stated that the Q & A from the webinar addressing iPCBs in paints on June 1st have been uploaded to Ecology's EZ View website:
https://www.ezview.wa.gov/site/alias_1962/37555/safer_products_for_washington.aspx

Previous Meeting Notes:

- b. Ecology conducted a webinar addressing iPCBs in paints on June 1st from 09:30 to 11:30 PST that included a technical evaluation on the Safer, Feasible, Available Analysis, and also solicited ideas and discussion.
- c. Based on Ecology's findings, they have enough evidence to demonstrate that some paints have lower levels of PCBs than others. Next steps will be to evaluate if restrictions should be proposed. Any resulting draft regulations will be published in November, 2021 with any final regulations due for submittal to the legislature by June, 2022.

6. TTWG and Funding Groups: Action L. Dally Wilson & K. Rains to provide updates

- a. L. Daly Wilson summarized that the TTWG completed scoping of additional projects (appx. \$700k) and that they were approved at the June SRRTTF meeting

Previous Meeting Notes:

- b. K. Rains met with A. Parrish on the spreadsheet of listed grant opportunities. Over the next month the Lands Council will locate and review Mike Peterson's files for any opportunities that he may have been pursuing.
- c. The funding group still needs to finalize the grant finding boilerplate

7. EPA research opportunities: Action EPA updates by M. Mullin & L. Edmondson

- a. M. Mullin provided an update to the relevant EPA projects (see Items b. thru d. below)

b. iPCB Key words for Scholarly Articles:

M. Mullin needs to review prior to submitting to this workgroup for consideration

Previous Meeting Notes:

M. Mullin stated during our February, 2020 call that EPA is resource limited and is focused on higher priority projects such as site clean-ups and iPCB product testing (see below Children's Product Testing), so this particular project has been assigned a lower priority and is currently on the back burner.

c. Children's Product Testing:

M. Mullin stated that this is currently not an agency priority, but provided the following new iPCB webpage:

EPA iPCB webpage: <https://www.epa.gov/pcbs/inadvertent-pcbs>

Previous Meeting Notes:

M. Mullin stated during our February, 2020 call that this remains a work in progress, as EPA attempts to understand the variability of the results and other environmental influences (air emissions, dust adsorption, etc.).

d. **NTP risk study of various Congeners and Aroclors:**

- NTP is supposedly evaluating toxicity of PCB congeners 11, 95, 126, 153 and Aroclors 1016 and 1254 due to a commitment to the SRRTTF made by EPA (ref. Letter from EPA Region 10 Director Chris Hladick to the SRRTTF c/o Adriane Borgias, dated September 24, 2018)
- Many members of the workgroup have attempted to reach out to NTP for a status update with no success
- B. Floyd suggested that the SRRTTF send a new letter to EPA (new or acting EPA Region 10 Director) requesting an update.

Action D. Krapas to find and distribute letters from the SRRTTF and EPA regarding this commitment

Action D. Krapas and B. Floyd to develop a draft for SRRTTF consideration

- M. Mullin provided the following links to other iPCB work by EPA:
Link to the PCB IRIS Assessment:
https://iris.epa.gov/ChemicalLanding/&substance_nmbr=294

EPA iPCB webpage: <https://www.epa.gov/pcbs/inadvertent-pcbs>

- e. M. Mullin mentioned that EPA currently has a proposal out to study water, sediment and fish for iPCBs and is seeking locations (that includes recycle paper mills) and tribal partners. The Spokane River watershed should consider applying since it meets many of the criteria.

Other Prior EPA Meeting Minutes:

- f. D. Krapas received an email message update from Michelle Mullin on June 1st regarding 2021-2022 Small Business Innovation Research (SBIR) Phase I Solicitation that includes research funding for small businesses developing PCB-free coloration. D. Krapas forwarded this information to the iPCB/TSCA Workgroup members via email on July 1st.