Spokane Regional Toxics Task Force
TSCA Workgroup
Proposed Plan of Activities
March 6, 2019 Meeting Summary

**Conference Call Attendees:**
- Doug Krapas (Inland Empire Paper Company)
- Lisa Dally Wilson (Dally Environmental)
- Joel Breems (Avista) @ 10:40
- Mike Peterson (The Lands Council)
- Adriane Borgias (Ecology)
- Karl Rains (Ecology)
- Ben Floyd (White Bluffs Consulting)
- Jay West (American Chemistry Council)
- Tom Agnew (Liberty Lake Sewer & Water District)
- Lucy Edmondson (EPA)
- Lauren Heine (NW Green Chemistry)
- Doug Greenlund (City of Spokane)
- Raleigh Davis (ACA)
- Michael Ober (TDSC)

**Members Not in Attendance:**
- Cadie Olson (City of Spokane)
- Michelle Mullin (EPA)
- Tammie Williams (WA DOT)
- David Darling (ACA)
- Elsa Pond (WA DOT)
- Jeff Donovan (City of Spokane)

**Meeting Notes (General):**
- Meeting notes for this month’s meeting are shown in **Blue** (note that all verbiage shown in black is archived information from previous meetings).
- Action Items are shown in **Red**.
- **Items Highlighted are the Agenda Topics for the next TSCA Workgroup meeting.**
- **Michael Ober, Chair of the Titanium Dioxide Stewardship Council (TDSC) joined our meeting and will be added to the distribution list for future communications.**
- Jay West from the American Chemistry Council joined the December, 2018 meeting and will likely continue participation. Jay’s has experience as an Ecologist, in toxicology, as a TiO2 liaison and with TSCA policy.
- Greg Lahtig (WA DOT) removed from the TSCA Workgroup Distribution List.
- Michelle Mullin is to participate as a member of the TSCA Workgroup and provide updates regarding EPA’s National workgroup addressing inadvertently generated PCBs.
During the November, 2018 meeting, the TSCA Workgroup focused only on the Task #3 Letter from EPA Region 10 Director Chris Hladick, and the Task #7 Workshop.

Elsa confirmed keeping Tammie Williams on the TSCA Dist. List, but followed up with Greg who requested to be removed.

Lauren Heine joined the TSCA workgroup due to her work in Green Chemistry and relationships developed in reaching out to ink suppliers and users.

David Darling (VP, Health, Safety and Environmental Affairs) of the American Coatings Association (ACA) and Joel Breems of Avista joined the October meeting. David and Joel plan to participate in future meetings when available.

1. **Task #1 – Yellow Road Paint Pilot**
   a. Description – complete work started with the American Coatings Association (ACA) to eliminate the use of diarylide yellow pigments in road paints in WA State and perhaps across the U.S. WA DOT needs to follow-up and incorporate into their purchasing specification, along with the City of Spokane and Spokane County. Also need to work on a national level to and consolidate the number of paint formulations from the current 38 down to approximately 8 (cost reduction).
   b. David mentioned his concerns that other coatings will be much more challenging given performance and broad spectrum color challenges.
   c. Responsible Parties – Doug Krapas, Lisa Dally Wilson, Mike Peterson, WA DOT, City of Spokane, Spokane County, EPA

**Meeting Notes for Task #1:**

- Doug Greenlund confirmed that the City of Spokane followed DOT’s new specification last year (2018) for purchasing non-diarylide yellow road paint.
- The City has hired a new Streets Director that will ultimately appoint a leader to address this issue for the City. In the interim, Doug Greenlund and Jeff Donovan have responsibility for evaluating. Doug Greenlund mentioned that the City buys off of the State contract and will fall back onto non-chlorinated alternatives.
- Doug K followed up with all recipients of the SRRTTF letter to see if they intend to adopt similar provisions for the use of non-chlorinated road paints. The following municipalities/organizations intend to use non diarylide yellow road paints:
  
  City of Spokane  
  Spokane County  
  City of Liberty Lake  
  City of Post Falls

**Action Item:** Doug K continues to follow-up with the balance of recipients on the letter (Idaho and Spokane Valley).
• Elsa provided the following clarification via a follow-up email regarding the DES and WA DOT contracts for WA State’s new PCB Purchasing Policy:

DES used WSDOT’s master contract for paint materials as a pilot for the new procurement policy required under RCW 39.26.280-290. DES’s draft policy (at the time the contract was developed) included using a minimum of five percent preference to each Bid submitted…that includes a certification meeting the requirements of the Policy. One of the requirements to receive the 5% preference is to submit independent, third party lab test results (method 1668c) – only one of the four vendors who bid on the paint contract provided tests to receive the 5% preference. After vendor outreach to ensure feasibility, WSDOT included a contract specification (see exhibit B1 in the contract documents) prohibiting Pigment 83 and diarylide yellow specifically. Three vendors were awarded under the contract; one vendor submitted test results (and received the 5% preference), and two vendors met the bid price and contract specifications (did not receive preference but certified their products do not contain prohibited pigments). The paint contract is administered by DES and can be used by other jurisdictions around the state. Paint material purchased under this master contract is used for WSDOT’s maintenance painting (the majority of paint purchased). Paint material used during construction is specified in WSDOT’s Standard Specification Division 9-34, Pavement Marking Material. Specification 9.34.2 is scheduled to be amended in January 2019 to prohibit diarylide pigments. Once published these amendments (‘pink sheets’) are used in new construction project contracts. WSDOT’s Qualified Product list (QPL) will be updated after the January amendments to represent qualifying vendor materials.

Action Item: It would be helpful to have a Fact Sheet with a list of Approved Products for Road Paints (Manufacturer’s, Paint Type/Products, Quality Products List (QPL), etc.). Elsa and Doug K will begin to develop based on what has currently been identified. This will be a living document as more products are identified.

• Discussed the action item to investigate national level standardization of road striping paints to both reduce the number of formulations and eliminate diarylide yellow based paints:
  ➢ Elsa stated that conversations within WA DOT have identified two Federal agencies that were likely to have jurisdiction over such decisions: AASHTO – The American Association of State Highway Transportation Officials (AASHTO) and the Federal Highway Administration (FHWA)
  ➢ Doug K had conversations with the American Coatings Association (ACA) and they suggested that we keep our powder dry until we have some time to evaluate how this works in WA State first.
  ➢ The TSCA workgroup was in agreement that we should take some time to evaluate the effects in WA State before developing strategies to extend on
a national basis. This task will remain on our Task List for future evaluation.

➢ David mentioned that before contacting other states (beyond Idaho) that it would be helpful to evaluate any issues related to the use of non-chlorinated yellow road paint.

**Action Item:** The TSCA Workgroup needs to solicit progress reports from WA DOT, City of Spokane, Spokane County and other involved parties to evaluate how the use of non-chlorinated road paints is working. Need to develop bullet points for this evaluation (products, multiple bidders, durability, application, cost, etc.) Schedule check-ins every six months, beginning in January, 2019. Doug will take the lead at drafting a one page survey with a standard list of questions. Elsa, Doug Greenlund and others that use road paints will assist in reviewing and revising the draft.

2. **Task #2 – Printing Inks (Packaging/Newsprint)/Pigments/Inadvertent Products**

   a. Description – similar to Task #1 above, continue working with the Color Pigment Manufacturers Association (CPMA) and Mark Vincent of Dominion Colour towards the development of non-chlorinated pigment based inks used in the publishing of newspaper, magazines and advertisements. Perhaps run trials with select publishers to assess the characteristics of alternative non-chlorinated products.

   b. Suggest using purchasing power, contracts and marketing strategies to educate the purchasers of TSCA containing PCB products (examples: Amazon, HP, Apple, publishers). A caution that we need to get our facts straight before pursuing.

   c. Responsible Parties – Doug Krapas, Lauren Heine, Doug Greenlund, Adriane Borgias (TSCA concerns), Mike Peterson, David Wawer (CPMA), Mark Vincent (Dominion Colour), Publishers

**Meeting Notes for Task #2:**

- The TSCA Workgroup appears to support testing of TiO₂ sources and products to conclude whether this needs to be a continued focus of concern.
- Mike P. supported and suggested the use of 3rd party labs
- Lauren H. suggested not only products, but also wastes and requested that the TiO₂ experts provide a detail on the various sources of products and wastes. Doug K. suggested to Michael O. that they provide a presentation to the TSCA workgroup (added to Actions below)
- Michael O. offered to approach the TDSC membership to see if they would be interested in conducting this study in cooperation with the SRRTTF (added to Actions below)
• Raleigh D. asked if this testing would include congeners or if this was future work. Doug K. explained that EPA Method 1668 is a congener based analysis, so the congeners would be a result of this study.

• Lauren Heine provided a summary of her recently published whitepaper on TiO$_2$ for the SRRTTF funded ($5k$) project:
  ➢ Two manufacturing processes, sulfate & chloride
  ➢ U.S. manufacturers almost exclusively use the chlorinated process
  ➢ China and other foreign manufacturers use the sulfate process that generates hazardous waste materials and is not as pure.
  ➢ The chlorinated process needs a higher grade ore and has pickling, hydrolysis or oxidation steps that exceed 500°C. Because of these high temperatures, manufacturers claim that PCBs are destroyed.
  ➢ One pigment manufacturer cited in the whitepaper claims to have tested TiO$_2$ received in pure powder form using 1668C with reported total PCB levels of 85 ppb.
  ➢ Provided a very rough estimate of global production (6 million metric tons) and potential PCB association (assuming ½ of production is chlorinated or 3 million metric tons @ 85 ppb = 576 pounds).
  ➢ Mike P. pointed out that his lip balm contains 7.5% TiO$_2$
  ➢ Conclusion is that there is some evidence that inadvertent PCBs may be present in TiO$_2$ and that further testing should be considered to verify.

Action Item:

1. Michael Ober is to approach the TDSC membership to see if they would be interested in conducting a PCB EPA Method 1668 study of TiO$_2$ products and wastes in cooperation with the SRRTTF.

2. Michael Ober is to provide the SRRTTF TSCA Workgroup with a presentation on the sources, products and wastes of TiO$_2$ production for further education.

• Lauren H. stated that the evidence of PCBs in silicone was derived from a draft paper from Lisa Rodenburg that discusses method blank contamination from aromatic silicone sources. The Draft Report is an attachment to this meeting’s distribution of minutes.

• Adriane stated that Ecology confirmed due to sources found in the body of CLAM samplers. Adriane suggested following up with Brandy Era-Miller for additional information.

• Doug K. stated that Kaiser confirmed in their study of various sampling methods for PCBs, including, composite, CLAM, and SPMD’s.
• Raleigh D. was going to ask their technical committee about the prevalence of silicone in their coating products (added to Actions below).

• During Lauren’s investigation of TiO2, there was an indication that silicone may also contain inadvertent PCBs. Doug K was aware of this from prior references that warned of silicone tubing used for composite sampling contaminating water samples. Joel mentioned a PMF Blank study draft document by Dr. Rodenburg in which she identifies congeners thought to be associated with silicone products (attached).

**Action Items:**

1. Raleigh D. to ask the ACA technical committee about the prevalence of silicone in their coating products

2. SRRTTF request to EPA to perform research on PCBs in silicone and silicone products (i.e.: do they exist, are they inadvertent, processes that produce, which products, congener profiles, etc.) Lucy E.

3. SRRTTF request to Ecology and EPA to add the analysis of silicone/silicone products to product testing studies. Lucy E. & A. Borgias/K. Rains

• Lauren & Doug provided a summary of the presentation given to the Sustainable Packaging Coalition/GreenBlue leadership (presentation attached to this month’s meeting minute distribution): about 8 to 10 participants including their Director Nina Goodrich. SPC represents 250 members, including some of the largest in the industry (WalMart, Amazon, Target and Dow to name a few). They were not aware of this issue. We discussed the following strategies from the presentation:

   ➢ Eliminate Diarylide yellow dyes and replace with non-PCB alternative products (WS DOT and road paint)
   ➢ Establish new threshold for Dialryide yellow dyes at 1 ppm – CPMA Domestic
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They intend to meet with their membership to discuss strategies, and then come back to us with some suggestions.
Lisa suggested reaching out to them and their membership for possible sponsorship/co-sponsorship of the TSCA Workshop (added to Actions under Task #7 Workshop)

- Doug & Lauren met with the following representatives from the supplier industries:
  - Phone-con with James Ewell of the Sustainable Packaging Coalition (SPC) on November 8, and have tentatively set up a Brown Bag Lunch meeting with the SPC in January, 2019.
  - Phone-con with Romesh Kumar of Clariant and Northwest Green Chemistry (NGC) on November 21. Discussed alternatives for yellow pigments and limitations for blues. Romesh expressed interest in participating in the SRRTTF TSCA/Pigments workshop.
  - Phone-con with Michael Ober of The Chemours Company on November 27 regarding TiO2. U.S. manufacturers use primarily the chlorinated process in lieu of the sulfonated process (used primarily in Asia) due to lower generation of hazardous waste. Process is heated to 2000°C, so no opportunity for formation of PCBs.
  - Phone-con with James Ewell of the SPC on November 8, and have tentatively set up a Brown Bag Lunch meeting with the SPC in January, 2019.
  - Lauren Heine had a phone-con with Mark Vincent of Dominion Colour on December 13.

- Doug & Lauren Heine spoke with a representative from HP that produces inks for a variety of uses, including printing and packaging. They are aware to the issue and appear to be willing to work with us. We will continue these discussions with HP and others to encourage development of non-chlorinated alternatives.

- HP & Apple intend to modify their purchasing and product specifications to be a few orders of magnitude below the TSCA allowance of 50 ppm (currently confidential). Suppliers feel that this is achievable, however they need a number to shoot for as zero PCBs is not possible.

- Since the last meeting HP adopted a new PCB threshold of 0.1 ppm in their purchasing policy for all products produced or procured by HP. The updated HP Standard 011 General Specification for the Environment has been published and the external version is available here on page 10: http://h20195.www2.hp.com/V2/GetDocument.aspx?docname=c04932490

Action Items: Work with WA State to adopt a lower threshold limit for PCBs similar to HP & Apple. Doug to work with Adriane and Ken Zarker

3. Task #3 – Investigate Technical, Legal and Policy Solutions
   a. Description – continue investigation of the Technical, Legal and Policy Solutions document (attached) to determine what, if any, may be worth pursuing. This includes ranking the solution list according to feasibility, resources and timing, then pursuing any feasible options.
   b. Responsible Parties – Doug Krapas, Lucy Edmondson (EPA), Lisa Dally Wilson, Adriane Borgias

Meeting Notes for Task #3:

➢ Adriane and Lucy to meet to discuss available options for closing the regulatory gap between TSCA and the CWA and report back their conclusions to the TSCA workgroup at our April meeting.

• Adriane provided the following summary of 40CFR761 regarding the 1978 determination of the environmental impact of PCBs:
  ➢ The original analysis of impacts was performed more than 40 years ago. The situation today is very different.
  ➢ Any release to the environment is considered “significant” and over the years the regulations have defined what that means (i.e. 1 ppm, originally)
  ➢ EPA has the authority to regulate PCBs under other statutes, which TSCA does not preempt. (This is where the disconnect occurs: the Clean Water Act uses a different risk assessment process to set standards than TSCA.)
  ➢ From the original analysis: “EPA recognizes that you can’t control the background concentrations, but you can control the PCB activities associated with manufacture and distribution in commerce.”
  ➢ Today’s TSCA states that the intent of Congress is to carry out TSCA in a “reasonable and prudent manner,” which means consideration of the environmental, economic, and social impact.
  ➢ Please see the attached “TSCA Quick Summary” for additional details.

Action Item: The SRRTTF should explore options to demonstrate that concentrations of inadvertently generated PCBs present an unreasonable risk to health or the environment. TSCA differs from the CWA, so the economic part may be more important than the health part. The TSCA limit of 50 ppm economic piece in 1979 was based on disposal of electrical equipment. It may be timely for this renewed review considering the more stringent WQS standards that have been imposed by EPA and the economic impact of compliance. The SRRTTF could submit a request to EPA to perform this economic impact analysis since the record/analysis in 1979 is not relevant to current conditions/WQS (WWTS
improvements, regulatory processes, variances, stormwater, etc.). Lucy and Adriane are to explore the regulatory potentials for this option.

➢ A robust discussion occurred around opportunities offered by EPA in the response letter from EPA R10 Administration Chris Hladick, including product testing, data clearinghouse and research subjects.

➢ Karl was supportive of having EPA develop a clearinghouse due to their work and knowledge of PCB work all across the nation. Perhaps a partnership with Ecology due to their work and database and the work of the SRRTTF.

➢ Ben mentioned that this database would be helpful for the Education & Outreach Workgroup that is running the Spring Campaign for the SRRTTF and is always seeking information for PCB messaging on what consumers can do to help.

➢ Lucy stated that no such database exists and that it would be a very heavy lift, but suggested that the Task Force go ahead and request (added to the Action items below).

➢ Karl was interested in other work that EPA HQ may have on product testing.

➢ Doug G. noted that the City of Spokane tested their most significant products of use (such as Deicer), and that they currently do not have a list of products of interest beyond these. Doug K. suggested looking at consumer products that affect their wastewater and stormwater concerns (shampoos, soaps, laundry detergent, etc.).

- The response letter from EPA’s Chris Hladick to the SRRTTF was reviewed during the TSCA meeting;
  ➢ The letter acknowledged the petition for reconsideration.
  ➢ Additional rulemaking requires a finding that existing concentrations of inadvertently generated PCBs present an unreasonable risk to health or the environment (see Action Item #2 below).
  ➢ The National Toxicology Program (NTP) is evaluating potential toxicity of PCB-11, 95, 126, 153 and Aroclors 1016 & 1254.
  ➢ EPA R10 is leading a national workgroup focusing on inadvertently generated PCBs. Michelle Mullin is to participate as a member of the TSCA Workgroup (upon her return from maternity leave) and provide updates regarding EPA’s National workgroup addressing inadvertently generated PCBs.
  ➢ EPA has funding next summer devoted to a product testing study.
  ➢ Request suggestions for additional research that would be most helpful to the SRRTTF (see Action Item #4 below):
  ➢ Acknowledgement of industries taking charge to adopt lower PCB limits HP (see Action Item #5 below).
➢ Doug and Lucy provided a summary of the Hladick letter to the SRRTTF Full Group during the December meeting.
➢ See additional Action Items below:

**Action Items:**

1. Lucy E. is to pursue a request by the Task Force for EPA to develop a PCB in products data base for information that has been collected on products from across the U.S.

2. Lucy E. is to pursue a request by the Task Force for EPA to perform additional research on the following potential subjects:
   a. Identify processes that produce inadvertent PCBs
   b. Information on specific pigments known to contain inadvertent PCBs
   c. Summary of other actions going on across the country so we don’t duplicate efforts

3. How do we access who else is adopting lower PCB limits (Sustainable Packaging Coalition, etc.)? Doug & Lauren

4. Doug, Lucy, Lisa and Adriane need to arrange for a meeting to have a high level review of the Solution Document to prioritize feasibility of the various options for further consideration.

4. **Task #4 – PCB-11 Risk Assessment**
   a. Description – EPA in a letter of response to the SRRTTF dated February 24, 2015 (attached), EPA requested that toxicity testing be conducted on PCB-11 by the National Toxicology Program at the National Institute of Environmental Health Sciences. This promise was made 3 years ago in 2015 and we have not had any feedback from EPA on the results of this study. Need a champion within EPA to follow-up on the status of this project.
   b. Responsible Parties – Doug Krapas, Lucy Edmondson, Ecology

**Meeting Notes for Task #4:**

➢ Lucy has not received any updates regarding these toxicity tests.

- Lucy obtained additional information that the National Toxicology Program at the National Institute of Environmental Health Sciences is currently working on this request. There is currently no scheduled date for completion.
- Further information regarding this assessment was provided in the EPA letter of response received prior to the TSCA meeting. The NTP is actually evaluating toxicity of PCB congeners 11, 95, 126, 153 and Aroclors 1016 and 1254.
Action Item: Lucy to continue follow-up on when we might expect results.

5. Task #5 – Public Relations Campaign
   a. Description – continue work on educating regulating agencies, legislators, end users (publishers, packaging, consumers, etc.), environmental interests, tribes, and the general public on the TSCA concern, its implications and potential remedies.
   b. Responsible Parties – Doug Krapas, Education Workgroup, Green Chemistry Workgroup, Dr. Lauren Heine and Charlotte Trebilcock (NW green Chemistry), Tony Kingsbury and many others.

Meeting Notes for Task #5:

➢ The TSCA workgroup discussed the development of a clearinghouse for product testing data (Ecology (Alex Stone work), City, County, EPA, other jurisdictions), for both educational purposes (identification of products of concern and to guide proper disposal practices) and to help guide the SRRTTF for future work, and the DES for product purchasing (Training & Video). Please see the notes and associated Action Items on Task #3 above

   • The group felt that there was not an immediate need to coordinate with the Education and Public Outreach group until we have further developed our own strategies. We will keep this task as a placeholder for future efforts.

Action Item:

1. Doug, Joel and other SRRTTF members to participate in the Spokane River Forum public relations effort.

6. Task #6 – SRRTTF to submit Issues Letter to Chris Hladick (EPA Director):

   • This task has been completed

7. New Task #7 – Workshop:

   a. Description – Lisa proposed the idea for a future stakeholder workshop that includes participation by business, industry, and regulators to discuss and develop solutions to pigment related TSCA issues, including working with industry (HP, CPMA, ACA, etc.) to investigate inks and dyes alternatives, investigate various elements of the Solutions Document, etc.
   b. Responsible Parties – Lisa to take a leadership role in development of this concept
Meeting Notes for Task #7:

➢ During the February SRRTTF meeting, request for funding in the amount of $3,000 for planning and development of the workshop was put on the backburner due to current budget concerns.

➢ The workgroup was in support of exploring additional sources of funding and resources to help with planning and execution (Ecology, EPA, CPMA, HP, Apple, etc.). Tom stated that messaging should include that these companies endorse and embrace efforts to reduce PCBs in their products which can be a marketing advantage opportunity. Members were assigned to pursue various entities and are detailed below under the Action Items.

➢ Ben mentioned the Public Participation grant opportunities that were discussed at the SRRTTF meeting. Adriane emphasized that it was up to the ENGO’s (Lands Council, Riverkeepers, etc.) to explore these opportunities and make them happen. It was pointed out that this would be for the Synthesis Workshop and not necessarily the TSCA workshop. Mike P. was discussing in-house with the Lands Council and believes this is something that they can make happen.

  o Adriane pointed out that pigments and dyes are different classes of chemicals and that it may not be appropriate to structure the workshop around both. Dyes have not been identified as containing PCBs.
  o Doug met with David Wawer of CPMA on January 29 in Olympia to further discussions on collaborative work. During these discussions, David pointed out that the workshop should focus on one supply chain due to complexities and differences.
  o Ben questioned the timing of the workshop and suggested the end of 2019 to not overlap with the Synthesis workshop.
  o Explored this idea with David Darling in regards to supplier participation. Concept would be better as long as it is not threatening. Recommend a brief description of workshop to present to the ACA workgroup (location, audience, length, topics, etc.), and ACA will provide feedback. Location should be in Spokane for SRRTTF benefit and keep WA centric.
  o Potential coordination and funding with Ken Zarker and the Ecology led workgroup.
  o Need additional information on the supply stream (inks, dyes & pigments).
  o Suggestion to spend half of the workshop on challenges and the other half on potential solutions.
  o Elsa discussed WA DOT’s challenge in evaluating batch products as a potential workshop subject. For example similar products can have different PCB levels.
(examples include Hydroseed, Fish Feed and Blue Dyes). Expectations are infeasible by manufacturers.

- Lisa developed a more detailed description of the workshop (scope/goals) for presentation to the SRRTTF for approval on December 12.
- We had two conference calls with Ken Zarker on 11/13 and 11/29 to further develop the relationship between the SRRTTF TSCA Workgroup and Ken’s Green Chemistry Group, and to determine workshop goals. We will continue these meetings to formalize both of the above.

**Action Items:**

1. The following assignments were made to pursue various entities to explore potential workshop participation, resource and funding:
   a. Lisa will continue discussions with Ken Zarker
   b. Lauren will contact HP and Apple
   c. Lauren H. to contact SPC GreenBlue
   d. Doug K. will continue discussions with David Wawer of CPMA
   e. Mike P. to explore the use of Public Participation Grant funding to support the SRRTTF workshops
   f. Lucy E. to follow up on a request from the Task Force to determine if there is EPA funding available to support SRRTTF workshops

2. Organize a planning committee to plan and develop workshop. Lisa, Lauren, Doug K. & Adriane