

Washington State Departments of Ecology and Health
PFAS Chemical Action Plan Advisory Committee Meeting #1
Meeting Notes - January 7, 2016

Committee Members

WebEx/Phone: Jessica Bowman & Rob Simon, Chad Cross, Joyce Dinglasan-Panlilio, Larry Dunn, Rory O'Rourke, Melissa Malakos

In person: Brandon Housekeeper, Cheri Peele, Heather Trim, Erika Schreder

Interested Parties

WebEx/Phone: Jessica Speigel

In person: Melissa Gombosky, Pete Hildebrandt, Lincoln Loehr, Grant Nelson, Laurie Valeriano

Staff

In person: Dave Byers, Chris Chapman, Beth Gill, Holly Davies, Elmer Diaz, Barbara Morrissey, Gary Palcisko, Darin Rice, Sara Sekerak, Kara Steward, Chrissy Wiseman

Purpose: Provide information, share perspectives and identify solutions to develop findings and recommendations.

Darin Rice welcomed the committee and gave an introduction to CAPs.

CAPs span the range of many activities that the Hazardous Waste & Toxics Reduction Program oversees, such as corrective action on cleanup sites, safely managing hazardous waste, toxics reduction and pollution prevention. The CAP process provides an opportunity to take systematic look at the most problematic chemicals. Ecology has been doing CAPs since 2003 and makes recommendations to eliminate or reduce chemicals. Implementation is sometimes difficult and may require additional funds or authority by the legislature to carry out recommendations. CAPs are widely supported amongst stakeholders due to the transparent process.

Chris Chapman reviewed process guidelines as the facilitator for the meeting and asked members to introduce themselves.

Holly Davies gave an overview of the PBT Initiative, what PBTs are and why they are important. See slides.

The presentation included how the use of CAPs to phase out PBTs fits into the agency's Toxics Reduction Strategy, why PBTs are a priority, CAP development process, and examples of recommendations and implementation from completed CAPs (Mercury, PBDE flame retardants, Lead, PAHs, and PCBs).

Kara Steward gave an overview of the update to the CAP rule (WAC 173-333). See slides.

http://www.ecy.wa.gov/programs/hwtr/laws_rules/PBT/1512ov.html
kara.steward@ecy.wa.gov

Kara presented the timeline, public process, and explained that the definitions, criteria, list of chemicals, and process would be considered for updating. Five CAPs have been completed since the rule was promulgated in 2006, and more science has become available that can be incorporated. Ecology is the beginning of the process. The CR101 was published in October 2015. Committee members are encouraged to join the listserv. Info and links will be sent as a follow-up.

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Holly Davies presented preliminary information on PFAS. See slides.

PFAS stands for per- and poly-fluorinated alkyl substances. The presentation went over initial information on nomenclature, chemistry, uses, exposure, health effects, and regulations.

Discussion & questions:

- Where is it coming from? Products and large fire-fighting foam releases from bases.
- We should consider Columbia River tribal members and fish consumption, since they eat the same fish.
- Recent study said PFAS effects estrogen production at levels below limit of detection. Barbara Morrissey will look at human biomonitoring studies.
- There was an interesting article about DuPont in New York Times Magazine.
- Issaquah tested at really high levels, but DOH thinks there was a typo because they didn't find high levels.
- The superfund sites in the slides are national (none found in Washington).
- What has been the impact of firefighting foam at SeaTac? Ecology reached out to the Port and they have not returned calls.
- California EPA did a study of firefighters. A biomonitoring study is posted online that breaks down chemicals and studies.
- Holly will post papers and info on SharePoint site.

Committee member statements on knowledge and perspective on PFAS (up to 5 minutes each).

Heather Trim, Futurewise: interested in source control – environmental impacts on sediment cleanup sites, airborne impacts, and possible equity issues with used clothing.

Steve Gilbert, Institute of Neurotoxicology and Neurological Disorders: interested in child health (lead and mercury), doing a better job of catching it, avoiding making the same mistakes over and over again. Will post info on Toxipedia and “Facts On” series.

Brandon Houskeeper, Association of Washington Business: represents the regulated community (those producing products). AWB has over 8,100 members and is the chamber of commerce for the Manufacturing Association. His job is to learn what is going on and facilitate conversations with AWB members.

Erika Schreder, Washington Toxics Coalition: WTC has participated in the CAP process over the years and found it to be helpful in addressing some of the biggest toxic concerns in the state. WTC did a PFAS study in 2005 called “Pollution in People” with 10 test subjects. Would like to see critical areas of exposure to move to safer alternatives and areas where we can move the market and take action.

Cheri Peele, Clean Production Action: started as the lead writer on a Massachusetts Mercury plan in 2001, then Mercury and PBDE CAPs in WA. Programs include Green Screen – assesses hazards and enables safer alternatives, BizNGO - NGOs working with downstream users toward safer chemicals in products and processes, Policy Workgroup - focuses on state level legislation and a new Chemical Footprint Project that assesses manufacturer brands (loosely based on the Carbon Footprint Project). They are in process of scoring and have signatories. There is a lot of investor interest (they manage 2.1 trillion in assets). Looking forward to bringing knowledge from BizNGO to this committee.

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Joyce Dinglasan-Panlilio, University of Washington Tacoma: At University of Toronto, looked at environmental concentrations of PFAS. Focus of work is looking at precursors of PFOA and PFAS, environmental fate and sources. Compounds have very intriguing properties that make analysis challenging. Quite a bit more data is needed in Washington. Funding has been challenging - there are three years' worth of samples to get through and funding is needed to finish. Interested to see how this committee will handle the large scope of up to 3,000 chemicals. Industry has taken advantage of changing a little bit of the functional group, which has created a lot of growth.

Larry Dunn, Lower Elwha Klallam Tribe: Works with EPA on the National Tribal Toxics Council, served on the MTCA review board, and SMS review board. Involved with water quality fish consumption rate studies. Background is in chemistry and physics. Interested in issues related to tribal members because they are at higher risk.

Rory O'Rourke, Port Gamble S'Klallam Tribe: Also works with EPA's National Tribal Council. Involved in Port Gamble Bay cleanup and impacts to shellfish, regional and national toxics issues in tribal resources and food, and Port Angeles Harbor cleanup. Want to learn more and make a difference in impact.

Melissa Malakos, Joint Base Lewis McChord: Pollution prevention lead at JBLM and interested in opportunities to potentially implement this CAP.

Jessica Bowman, FluoroCouncil: represents major manufacturers of PFAS. All members have participated in a stewardship program and are transitioning to shorter chains. There is a lot of data on alternatives and would like to bring info to this committee. There are a number of other companies not part of the stewardship program, so there is continued use on a global perspective. The council is generally supportive of regulatory measures. It is important to recognize that chemistry is important to industries. Non-fluorinated substances often can't meet same performance requirements. There is a distinct difference between long and short chain substances – not all substances in the same class cause the same health effects. Previously worked in airport industry and has contacts at SeaTac.

Chad Cross, Washington State Patrol Fire Training Academy: stakeholders are fire service. Foam is used for fire suppression.

Beth Jensen, Outdoor Equipment Association: unable to attend due to trade association meeting.

The committee discussed the proposed scope of the PFAS CAP.

Holly Davies presented "Long chain perfluoroalkyls, precursors, related substances, and intended substitutes" to initiate discussion.

- Is biomonitoring included? The Human Health section will include that info.
- How does it translate into function (types of products)? For example, carpets are a large use and high exposure to children.
- First list compounds, then uses.
- Exposure is difficult to quantify.
- Cosmetics could be critically related to exposure.

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- Has high throughput sampling been done to predict basic environmental behaviors to determine more persistent and bioaccumulative or human pathways? Some has been done. Toxicity is harder to model.
- Focus on substances of most concern (long-chain) substances, action in Canada, Europe, etc. before figuring out uses. Carpet industry has transitioned out of long chain. Several members agreed.
- Should start with long-chain, but also look at alternatives and whether they are reasonable substitutes.
- What is the timeline for providing feedback on scope after today's meeting? There will be time for feedback.
- Volume should be looked at. Some data is available, but some is confidential business info.
- Language of putting intended substitutes is good, but many are shorter chains that should not be ignored. Language should be kept as is and not be narrowed down to longer chains.
- Keep in mind that sulfonate chemistry is 6 carbons or greater, carbonate chemistry is 8 or greater.
- Need to discuss scope with association members before agreeing to anything.
- Can the word "intended" be removed? Do short chains off-gas more quickly? Fate is issue. Fate and transport should be added.
- There is significant short chain data that FluoroCouncil is willing to present. Please send them info on what is requested and they will see what can be provided. There are substitutes that are considered non-fluorinated. Concern about making the scope broader. Ecology generally looks at a broad range of alternatives, including non-chemical alternatives.
- What are "related" substances? That means they are closely related substances.
- Interactions of families of chemicals should be considered, not just individual chemicals.
- Should include lessons learned (historical) of how we got here and how to avoid this in the future. How can we modify PBT rule to make it work in the future? Another member agreed. Environmental Working Group (EWG) and FluoroCouncil have timelines.
- Investigate non-stick coatings and do homework upfront to determine important uses and focus recommendations around certain things.
- Work on changing BMPs with firefighting teams to cordon off areas and avoid storm drains, especially during practice.

The committee discussed the appropriate composition of this advisory committee.

The discussion also included additional comments on scope.

- Carpet manufacturers – Cheri Peele has contacts
- Carpet & rug institute – Jessica Bowman has contacts
- Environmental & Occupational Health, U.W. – Steve Gilbert is Adjunct Professor
- Paper coatings and food wrappers – useful for human exposure point of view. EWG has worked with them and Erika will follow-up.
- Furniture - upholstery, fabric
- WA State Department of Corrections - furniture
- People that disassemble or remove products
- Pesticides (as an additive to prevent clogging). How does application or use translate into exposure. Multiple exposures can cause a big problem. Due to nature of government agencies, representatives from

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all agencies are needed. Pesticides are dealt with in a completely different agency and someone from that agency needs to address the issue.

- Ports – there is no control over import. US customs is never involved.
- Department of Labor – occupational exposure issues. Holly will contact L&I.
- Office of Pollution Prevention & Toxics (OPPT), EPA. Larry Dunn has contacts.
- NW Green Chemistry – coordinate efforts with them to survey and see what alternatives are available that may not be on the market.

Final Discussion & Next Steps

Holly mentioned XRF equipment, like Ecology owns, does not work on fluorine, but we have been collaborating with Graham F. Peaslee at Hope College in Michigan who developed a new technique called Particle Induced Gamma-ray Emission (PIGE) spectroscopy that can quantify fluorine.

Can FluoroCouncil provide production volume data? Most data is confidential, so the council is limited on what they can provide.

Holly will send more info on upcoming environmental studies:

- Product study for paper and fabric (will be sent once data is available)
- Environmental study- in process of planning
- Product testing – in process of planning

Next meeting will be scheduled in April or May after the end of legislative session.