

On October 23, 2020, the Washington State Departments of Ecology and Health hosted a webinar to provide an update on the per- and polyfluoroalkyl substances (PFAS) Chemical Action Plan work conducted by the two agencies. Following the presentation, Ecology and Health took questions from members of the Advisory Committee and the public.

See below for the following information:

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Webinar presentation materials

The presentation slides are available on the PFAS CAP EZ View page:

https://www.ezview.wa.gov/Portals/_1962/Documents/PFAS/AC%20Webinar%2010-23-2020%20Slides.pdf

Webinar topics outline

The presentation covered the following topics:

- Introductions:
 - We introduced agency staff participating in the presentation.
 - Ken Zarker, Ecology, welcomed Advisory Committee members and the public to the webinar, and thanked them for attending.
 - Advisory Committee members attending the webinar introduced themselves.
 - We reviewed the focus on the Draft PFAS CAP in the context of other agency PFAS work and legislation.
- CAP process and public comment:
 - Irina Makarow, Ecology, recapped the PFAS CAP development stages leading to the issuance of the Draft PFAS CAP for public comment.
 - Irina Makarow described the elements of the public comment process.
 - The public comment period is open until December 7, 2020. The Departments of Ecology and Health will consider requests for extension of the comment period.
- CAP changes since 2019:
 - Irina Makarow reviewed organization of the Draft PFAS CAP, including content of the main body of the CAP and revisions to the appendices.
 - The 2019 recommendations were summarized, and changes to the recommendations in the Draft PFAS CAP were identified.
 - Questions on the recommendations were taken from the Advisory committee.
 - Major changes to the content of each of the appendices (formerly “chapters”) were identified.

- Barbara Morrissey, Department of Health, described that we received a number of comments about health equity. A number of the recommended changes were incorporated.
- Next Steps:
 - Comments received on the CAP would be reviewed in late 2020/early 2021 and the Final CAP would be issued in Spring 2021.
 - Additional Advisory Committee meetings would be conducted during finalization of the CAP.
- The webinar concluded with Advisory Committee and public questions.

Advisory Committee questions and answers

Q: Why doesn't the Plan address all textiles?

A: As indicated in the Draft PFAS CAP, the Safer Products for Washington program is currently addressing carpet and upholstery products. We have received previous comments that waterproofed textiles are products of concern. These are addressed in Recommendation 3.2 and could be considered in future cycles of the Safer Products for Washington program.

Q: What is the status of biosolids monitoring?

A: Appendix 8 of the Draft CAP, and recommendation 4.3, address PFAS in biosolids. Our recommendations to address PFAS in biosolids have not changed. Currently, there are no validated methods for analyzing PFAS in biosolids. The CAP recommends ongoing tracking of changes in the availability of validated biosolids testing methods. Further, future funding would be required to conduct biosolids studies. A limited study of biosolids is included as part of a wastewater treatment plant study currently being planned.

Q: The CAP addresses wastewater treatment and management—what about non-point source discharge events such as groundwater, leachate, stormwater discharge, etc. Non-point sources to Puget Sound need to be assessed to better understand PFAS in fish.

A: Contaminated groundwater is addressed in multiple locations in the CAP, although the focus is on protecting drinking water. Stormwater falls under environmental monitoring. Ecology received funding to begin implementation of certain recommendations. As part of this, Ecology is planning a study to assess the contribution of PFAS to certain fresh water bodies, including their tributaries and stormwater sources, since these sources are believed to relate to PFAS in fish. The CAP includes several recommendations for future monitoring of groundwater.

Q: Regarding sludge/biosolids monitoring, I understood there was a specific budget request you got last year to test sludge. The state of Maine has tested sludge, and also sets limits.

A: If there is additional information you want included in the CAP related to biosolids, make those comments formally to us. We acknowledge the CAP is a snapshot in time and may not include all work done in an area. We are tracking information regarding biosolids work happening elsewhere, and so is our subject matter expert who wrote the biosolids chapter. Any information you provide will be reviewed and we will consider revising the biosolids appendix as appropriate.

Q: Thank you for your work on this, it is important to get full picture of PFAS. In terms of the equity piece, I know we had early conversations about who should be paying for this, in terms of contamination and burden on taxpayers and water purveyors and low-income communities. We had conversations about having strong polluter pay recommendations and different approaches so the onus was on the chemical companies to pay for what we're dealing with now in terms of PFAS, not only legacy but the ones that continue to be used. Did that make it into this CAP?

A: That was already in the 2019 version and is still included in the CAP here. Recommendation 1.1 identifies the funding sources that are potentially available to support affected public water supplies and communities. The designation of PFAS as a hazardous substance under the Model Toxics Control Act would be a step moving forward to get responsible parties involved in paying for those costs.

Q: Looking at the analytical methods, in relation to dangerous waste regulations. One of the methods for categorizing halogenated organic compounds under the dangerous waste methods is Method 9023, but Ecology mentions that fluorine-containing species aren't detected via this method. Are there going to be updates to the analytical methods as part of the dangerous waste guidance in order to have more types of PFAS designated as hazardous waste?

A: Irina Makarow could not answer this question for lack of expertise in the area. She requested that question be provided as a comment to the Draft CAP.

Public questions and answers

Q: How can the CAP recommendations be applied to Mason County's solid waste program which manages a landfill?

A: Irina Makarow can connect the commenter with Ecology's Solid Waste Management program for a more detailed discussion about the specific situation. However, site-specific questions are a good example of information that could be considered in the CAP, so we recommend you submit as a comment.

Q: It is difficult to access the Webex webinars. Does Webex only function using the Chrome browser? It doesn't work in Firefox or Safari.

A: The recommended browsers are Edge Chromium and Google Chrome. Another participant indicated Firefox works if the browser is refreshed.

Q: When do you expect to complete the landfill leachate study?

A: Specifics of the study are described briefly in the CAP. It was in the planning process this summer. Many of our studies requiring field work face uncertain timelines due to the COVID situation, so we don't have an update to share today, but can check in with agency staff leading the study.¹

Q: Somewhere in the CAP, you talk about working proactively with grocery stores, restaurants and other businesses related to carry-out containers. Do you have some kind of process if they aren't cooperating to institute a ban if they are using these containers?

A: Laurie Valeriano, a member of the advisory committee provided the answer to this question. There is a ban in place, provided that Ecology identifies safer alternatives. Ecology aims to finish the report in December. The ban would take place two years later after safer alternatives are identified.

Q: How is your research coming for remediation technologies in groundwater? Will you be conducting studies into the efficacy of treatment methods for drinking water?

A: Irina Makarow responded that a brief section regarding remediation of PFAS released to the environment, including contaminated groundwater, was added to the CAP. The discussion in the CAP did not go into detail, because it is a large body of information undergoing a lot of development right now. The appropriate method depends on site-specific factors for the location where there was a release. Ecology doesn't have any active work studying remediation methods themselves, but Ecology staff are involved in working with municipalities where there have been releases and sharing information with them.

Q: Does the CAP refer to potential updates to WAC 173-350, specifically litter collection from roadways and homeless encampments, and the need to test for PFAS.

A: Irina Makarow responded that to her recollection, it does not address litter collection specifically, so that's a comment we would like you to submit.

Webinar attendees

Advisory committee

First Name	Last Name	Organization
Alissa	Cordner	Whitman College
Don	Robbins	Port of Seattle
Doug	Kelly	Island County
Greg	Keith	City of Issaquah
Heather	Trim	Zero Waste Washington
John	Lovie	Whidbey Island Water Systems Association
Joyce	Dinglasan-Panlilio	University of Washington
Kendra	Clubb	U.S. Navy

¹ On October 26, 2020, Irina Makarow confirmed with agency staff that sampling was completed summer 2020.

First Name	Last Name	Organization
Laurie	Valeriano	Toxic-Free Future
Peter	Godlewski	Association of Washington Business
Rhonda	Kaetzel	Agency for Toxic Substances and Disease Registry
Rory	O'Rourke	Public Health - Seattle & King County

Agency project staff

First Name	Last Name	Organization
Barbara	Morrissey	Department of Health
Erich	Ebel	Department of Ecology
Irina	Makarow	Department of Ecology
Ken	Zarker	Department of Ecology
Kimberly	Goetz	Department of Ecology
Lauren	Tamboer	Department of Ecology
Maria	Blackshear	Department of Ecology
Megan	Smith	Department of Ecology

Attendees

First Name	Last Name	Organization (if provided)
Alba	Miro	Arlr
Allen	Jud	Law Office
Andrew	Kenefik	Waste Management Inc.
Angela	Bruck	Law Office
Anthony	Palmieri	AECOM
Arne	Euler	Grantco
Barry	Ashenfelter	Wisconsin Department of Natural Resources
Britt	Weldon	Boeing
Colleen	Christensen	King County
Corinne	Milton	Conglom Inc.
David	Bell	USAF
Debra	Williston	King County
Doris	Cellarius	
Evalyn	Lococo	Law Office
Evan	Bruning	Serlin Haley LLP
Frank	Dick	City of Vancouver
Grant	Nelson	
Heather	Kibbey	
Helen	Cruz	USAF
Huqiu	Zhang	SME Engineers
Jessica	Zimmerle	Earth Ministry
Jessica	Pfundt	City of Redmond
Joan	Kenton	King County, Solid Waste Division

First Name	Last Name	Organization (if provided)
Jody	Snyder	Waste Connections
John	Gilkeson	MN Pollution Control Agency
John	Ivan	
Joseph	Zabel	Ecolab
Joseph	Grogan	Town of Coupeville
Josie	Cummings	BIAW
Kasie	Auger	City of Vancouver
Katie	Fellows	King County
Ken	Waldo	City of Redmond
Ken	Johnson	Cygnit Health Recruiters LLC.
Kevin	Ward	U.S. Army Corps of Engineers
Luciano	Torres	
Lynne	Palmer	Sappi North America
Maddie	Smith	Earth Ministry
Matt	Cox	Washington State Department of Transportation
Megan	Ricobono	AFCEC
Melinda	Borgens	AECOM
Michael	Grigat	
Paul	Capano	Kuraray
Peggy	Horst	W.L. Gore & Associates, Inc.
Phil	Gerhart	
Rae	Eaton	Department of Ecology
Robert	Mott	Mott Consulting
Rod	Whittaker	WRRRA
Romeo	Sagisag	Law Office
Ronnie	Cole	AWDAWD
Ryan	Carra	Beveridge & Diamond
Santina	Alves	Law Office
Scott	Thor	All Weather Wood
Sean	Gormley	Wood PLC
Simona	Balan	California Department of Toxic Substances
Sophie	Greene	MPCA
Stephanie	Ogle	Department of Ecology
Steve	Risotto	American Chemistry Council
Tim	Shestek	American Chemistry Council
Trevor	Peckham	King County Hazardous Waste Management Program
Walter	Pizzin	Vvh
Wendy	Mathews	Mason County Public Health
Wes	Blanding	Daikin America
Will	Enoch	Beveridge & Diamond
Yen	Patchen	Law Office