

PFAS CAP Questions – Webinar hosted on May 15, 2019

On May 15, the Washington state departments of Ecology and Health hosted a webinar to review per- and poly-fluorinated alkyl substances (PFAS) work by the two agencies, hear questions about updated chapters, and take comments on the preliminary chemical action plan (CAP) recommendations.

We ask interested parties to review the preliminary recommendations and provide feedback by June 3, 2019. We will accept comments on the updated chapters, but be unable to provide responses to comments until after the public comment period (scheduled for this summer). All interested parties are welcome to submit comments [online](#).

Participant questions and comments are listed in this document. Agency answers are not provided for all questions. Questions from the food packaging portion of the webinar will be posted separately.

PFAS CAP Contact: Kara.steward@ecy.wa.gov or 360-407-6250

Webinar general

Q: Will we get a copy of the Presentation?

A: Here are links

PFAS CAP website: <https://www.ezview.wa.gov/?alias=1962&pageid=37105>

CAP slides: https://www.ezview.wa.gov/Portals/_1962/Documents/PFAS/PFAS051519Slides.pdf

Food packaging slides:

https://www.ezview.wa.gov/Portals/_1962/Documents/PFAS/PFAS%20AA%20Webinar_05152019.pdf

DOH Actions – Drinking water rulemaking and water testing

Q: Can you provide the list of PFAS you'll be testing for in public drinking water systems?

Q: Is UW-Tacoma planning on running the new 537.1 method?

Q: Which PFAS compounds would be included in the drinking water standard proposal? And at what concentration?

A: Our contract with UW Tacoma, set in early 2018, specifies EPA method 537.1 test. They must certify on 14 compounds in drinking water:

Analyte Name	Required Reporting Limit (RL) (ng/L)
Perfluorobutane sulfonic acid (PFBS)	90
Perfluoroheptanoic acid (PFHpA)	10
Perfluorohexane sulfonic acid (PFHxS)	10
Perfluorononanoic acid (PFNA)	10
Perfluorooctane sulfonate (PFOS)	10
Perfluorooctanoic acid (PFOA)	10
Perfluorohexanoic acid (PFHxA)	10
Perfluorodecanoic acid (PFDA)	10
Perfluoroundecanoic acid (PFUDA)	10
Perfluorododecanoic acid (PFDoA)	10
Perfluorotridecanoic acid (PFTRIA)	10
Perfluorotetradecanoic acid (PFTDA)	10

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Analyte Name	Required Reporting Limit (RL) (ng/L)
N-Ethylperfluorooctane sulfonamido acetic acid	10
N-Methylperfluorooctane sulfonamido acetic acid	10

Q: Will the drinking water standards be a sum of 5 PFAS compounds or individually determined?

A: We are likely to propose individual limits on PFAS with sufficient data to set a standard.

Q: In this rule making process what PFAS compounds will make it to the regulation. Five chemicals or stick with the two chemical with EPA LHA.

A: We are likely to propose action levels for 5 PFAS initially. The PFAS in the final rule will depend on stakeholder input and the State Board of Health in a process expected to run from July 2019- early 2020.

Q: Is the CAP or DOH going to require PFAS-free components for water supply well equipment and infrastructure?

A: This hasn't been considered yet

Ecology actions - Firefighting foam

Q: Do WSDOT ferries have PFAS-containing foam?

A: We are working to confirm this with WSDOT.

Q: For groundwater contamination, for example from firefighting foam, would the responsible party be considered the party that used the foam, the manufacturer of the foam, both, or something else?

A: That would be determined based on the individual site situation.

Q: Does ECY believe fluorine-free foams meet all the necessary performance standards to put out Class B fires.

A: Ecology does not determine performance standards for firefighting foams. The organizations that set standards have found that some fluorine free foams meet their standards. Some users purchase fluorine free foams for class B fires, such as the Seattle Fire Dept, and Ecology provides grants for the purchase of fluorine free foams that are used on class B fires. Ecology participated in a project with the Interstate Chemicals Clearinghouse (IC2) that includes a description of performance standards.

http://theic2.org/article/download-pdf/file_name/2018-12_Per%20and%20Polyfluorinated%20Substances%20in%20Firefighting%20Foam.pdf

Q: Any discussions with airports about AFFF use?

A: Ecology has been part of discussions with airports around the feasibility of moving to fluorine free foams when the FAA allows it.

Senate Bill 5135

Q: Do you plan to include Plan for Senate Bill 5135 in CAP?

A: Implementation of SB5135 will go forward on its own schedule. The CAP will summarize those activities where appropriate.

Q: How will Ecology enforce the provisions in SB5135?

A: We are still working out the plan to implement SB5135, enforcement will occur as appropriate.

Q: Do you plan to convene a stakeholder group for the initial priority chemicals outlined in the bill?

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A: Yes, we are still working out the plan to implement SB5135, but stakeholders will be involved early in the process.

Q: Did DOE [Ecology] get money to do work on SB 5135?

A: Yes, those details are in the agency budget.

PFAS CAP Chapters

Q: Are all PFAS PBT?

A: No.

Q: Are all short chain PFAS toxic?

A: Insufficient data available to make that determination.

Q: What specific toxicology studies does WA [ECY] need for short chain PFAS of relevance that are not in the 100+ tox studies required by global regulators in approving these products?

A. We need tox data on a wider range of PFAS ingredients and their environmental degradates that are showing up in drinking water, waterways and food supply e.g., PFBA, PFPeA, 5:3 acid, PFHpA, 6:2 FTS. Inhalation toxicokinetics and toxicity studies for volatile PFAS other than 6:2 FTOH. PFHxA has the most data but is missing immune testing.

Q: Has Washington state [ECY] reviewed the 100+ toxicological studies on short chain PFAS degradants of relevance to AFFF & food packaging provided by FluoroCouncil?

A. DOH staff have reviewed those relevant to human health. Ecology has reviewed relevant studies.

Q: Has the toxicity of the of the replacement products been assessed?

Q: Are the chapters available to the public? If so where can I see them?

A: Yes, the updated chapters are on the PFAS CAP website:

<https://www.ezview.wa.gov/?alias=1962&pageid=37105>

Q: Will you update chapters based on comments you receive from interested parties

A: We will update the recommendations in response to comments by the planned publication date (currently July). Updates to chapters may be incorporated or may be deferred to be incorporated after the public comment period (planned for this summer).

Q: It would be nice if chapters that have complementary information could have more cohesive integration that leads to recommendations e.g. analytical methods, chemistry, human health. We can talk more.

A: The chapters were written by different authors, we don't have the resources to make them cohesive. We appreciate the request and will do what we can.

Q: Are you going to continue to include updated data into the cap draft? New info on packaging, for example.

A: Yes, as best we can, we plan to incorporate new data, please share any new data you have with us.

Q: Also, we have more detail on the compost sampling.

A: Please share those references.

Q: Are comments on the Regulations chapter being reviewed?

A: All of the comments received on the first round of draft documents were reviewed in the process of developing the updates.

Recommendations:

Q: Is the state planning on a large-scale surface water and groundwater sampling program like Michigan?

A: No, our legislature did not provide funding that Michigan has.

Q: The Issaquah problem was a 20 year time of travel.

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A: We are not able to speak specifics about the PFAS issue in Issaquah. We can get you in touch with our Northwest office if you have specific questions.

Q: Has Ecology considered working with the Dept. of Defense on PFAS similar to California given the high concentrations at military sites?

A: Ecology works with the EPA for the military sites in our state. We are involved at those sites.

Q: I heard that other states were considering following a TEF (toxicity equivalency factor) approach (like dioxins) to develop a screening limit. Is Ecology considering that approach?

A: Not at this time.

Q: Has Ecology reviewed the recent laws passed in Virginia, Kentucky and Georgia which provide the greatest balance of responsible & best performance AFFF use and absolute minimization of environmental exposure?

A: We had not, please share the links to that information.

Q: Have you considered requiring sewage treatment plants to do a one-time sampling for PFAS? Like was done for mercury?

A: No, we are proposing that the agency investigate first. At this time we have no funding to do this work.

Q: It would be paid for by each WWTP (wastewater treatment plant), not ECY

A: At this time there is no PFAS testing requirement for WWTP.

Q: Is this voluntary or required testing for WWTPs, landfills, or biosolids?

A: The proposed testing would be conducted by Ecology to gather more information and data.

Q: Do you anticipate there be upstream pollution prevention or pretreatment requirements for dischargers to POTWs (publically owned treatment works)?

A: We are in the early stages of planning to look at PFAS in wastestreams. At this point we have not considered upstream sources, although that could be part of the conversation after we look at wastewater treatment plants. Source control will be an important part of the approach to limiting PFAS in POTW discharges. But, the agency needs to develop more information related to significant PFAS sources within sewersheds prior to implementing specific regulatory controls.

Q: Some great studies done on Canadian WWTPs and how treatment technologies create more concentrated PFAS effluent. I can send the refs.

A: Yes, please share those references.

Q: Just a comment: Minnesota may be a good source of information regarding pretreatment, though they are requiring GAC which won't address shorter chain PFAS well.

Q: Is Ecology considering actions similar to that taken recently in California with the issuance of investigation orders to airports and landfills?

A: Not at this time.

Comments on Recommendations are due June 3

Q: If we send comments on recommendations after June 3rd, will they not be considered? This is a very quick timeline.

Q: We have the same issue with approval of our comments. Can you consider extending the timeline please?

A: The June 3 deadline is flexible, let Kara know that you need more time – email or phone call.

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This list of webinar attendees includes everyone who participated, some may have only participated in the CAP portion (from 9-11) or the Food Packaging portion (from 11-noon).

Webinar Attendees – May 15, 2019		
First Name	Last Name	Company
Frank	Adamsky	Daikin America, Inc.
Bob	Altkorn	Intertek
Brooke	Anderson	Eco-Products
Linda	Anderson-Carnahan	U.S. EPA Region 10
Simona	Balan	California Dept of Toxic Substances Control
Layne	Baroldi	Synagro
Andy	Bary	Washington State University
David	Batts	King County
Ned	Beecher	Northeast Biosolids and Residuals Association
Anthony	Bollasina	New York Dept of Environmental Conservation
Doug	Brune	U.S. EPA Region 7
Evan	Bruning	Serlin Haley LLP
Tom	Bruton	Green Science Policy Institute
Greg	Burgess	AECOM
Paul	Butkus	Packaging Corporation of America
Perry	Cabot	Multnomah County Health Department
Cole	Carter	Department of Ecology
Alison	Conroy	Georgia-Pacific LLC
Alissa	Cordner	Whitman College
Amber	Corfman	WA State Dept of Ecology
Chad	Cross	Washington State Patrol
Holly	Davies	WA State Dept of Health
Jonnel	Deacon	Bonneville Power Administration
Damon	Delistraty	WA State Dept of Ecology
Lauren	Dempsey	U.S. Air Force
Monica	Dodson	Orange Water and Sewer Authority
Katie	Doyle	Washington Hospitality Association
Lynn	Dyer	Foodservice Packaging Institute
Aaron	Edgington	Windward Environmental
Brian	Einsla	DOW Chemical
Jason	Eisenhuth	Sevee & Maher Engineers, Inc.
Mark	Erickson	Appvion
Karin	Feddersen	U.S. EPA
David	Fridland	Eco-Products, PBC
Rebecca	Garner	Koch Industries
Chris	Geiger	San Francisco Dept of the Environment
Philip	Gerhardt	Sevee & Maher Engineers, Inc.

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First Name	Last Name	Company
Meseret	Ghebreslassie	Joint Base Lewis McChord
Steven	Gilbert	Institute of Neurotoxicology and Neurological Disorders
Peter	Godlewski	Association of Washington Business
Mario	Green	Georgia-Pacific LLC
Shawnte	Greenway	WA State Dept of Ecology
Michael	Grigat	Crypton LLC
Joseph	Grogan	Town of Coupeville
Kelly	Hale	New York Dept of Environmental Conservation
Rhea	Hale	WestRock
Reed	Haney	U.S. Army Corps of Engineers
Courtney	Hard	SRC, Inc.
Katie	Harrold	Orange Water and Sewer Authority
Megann	Head	Georgia-Pacific LLC
Beth	Hodgson	Spring Environmental, Inc.
Kelsey	Holbrook	WA State Dept of Ecology
Stewart	Holm	American forest and paper association
Peggy	Horst	W.L. Gore & Associates, Inc.
Howard	Hunter	Domtar
Aneta	Hupfauer	Island County Public Health
Wayne	Huttle	West Rock
Al	Innes	Minnesota Dept of Environmental Conservation
Jen	Jackson	San Francisco Dept of the Environment
Gary	Jones	Specialty Graphic Imaging Association
Danille	Jorgensen	Landau Associates
Heather	Kibbey	Washington Association of Sewer & Water Districts
Garlyn	Kligora	Green Bay Packaging
Joseph	Kon	Edelman
Stephen	Korzeniowski	BEC and FluoroCouncil
Cassandra	Kuball	Edelman
Evan	Laganis	AGC Chemicals Americas, Inc.
Wil	Lawson	Orange Water and Sewer Authority
Warren	Lehrenbaum	Crowell & Moring LLP
Kendra	Leibman	Navy
Jacob	Lipson	WA House of Representatives
Lynn	Long	
Maile	Lono-Batura	Northwest Biosolids
John	Lovie	Whidbey Island Water Systems Association
Jim	Lu	
Maricel	Maffini	

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First Name	Last Name	Company
Dana	Maikels	New York Dept of Environmental Conservation
Craig	Manahan	WA State Dept of Ecology
Sarah	Martinez	Eco-Products
Kevin	Masterson	Oregon Department of Environmental Quality
Alissa	Meyers	City of Tallahassee
Paul	Miller	Everpack
Bryan	Mirick	WaferTech, LLC
Minal	Mistry	Oregon Department of Environmental Quality
Aaron	Moldver	City of Redmond
Thatcher	Montgomery	WA State Dept of Ecology
Mark	Moore	Packaging Corporation of America
Grant	Nelson	True North Public Affairs
Michael	Oettinger	New York Dept of Environmental Conservation
Rory	O'Rourke	Public Health - Seattle & King County
Lynne	Palmer	Sappi
Anthony	Palmieri	AECOM
Meeta	Pannu	WA State Dept of Ecology
Cheri	Peele	Clean Production Action
Derek	Pell	WA State Dept of Health
Ryan	Pessah	Western Wood Preservers Institute
Elsa	Pond	WA State Dept of Transportation
Chan	Pongkhamsing	U.S. EPA
John	Prins	Johnson Controls
Jennifer	Rhoades	SRC, Inc.
Sarah	Riley	Georgia-Pacific LLC
Tamara	Risser	Sevee & Maher Engineers, Inc.
Don	Robbins	Port of Seattle-SeaTac Airport
Catherine	Rudisill	SRC, Inc.
Conner	Schultz	Integral Consulting Inc.
Brian	Sernulka	Foodservice Packaging Institute
Sanford	Severtson	WA State Dept of Ecology
Raj	Sharma	Georgia-Pacific LLC
Tim	Shestek	American Chemistry Council
Molly	Taptich	Geosyntec
Ronald	Taylor	Sonoco
Addie	Teeters	Ahlstrom-Munksjo North America
Craig	Theidwall	U.S. Navy
Susan	Thoman	Compost Manufacturing Alliance
Cindy	Thompson	Georgia-Pacific LLC

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First Name	Last Name	Company
Beverley	Thorpe	Clean Production Action
Taylor	Tidwell	U.S. Air Force
Stephen	Timko	Kennedy Jenks Consultants
Priscilla	Tomlinson	WA State Dept of Ecology
Scott	Torpie	WA State Dept of Health
Dorothy	Trainer	Wash Dept of Corrections
Heather	Trim	Zero Waste Washington
Heather	Trim	Zero Waste Washington
Kari	Trumbull	WA State Dept of Ecology
Gregg	Ublacker	Johnson Controls
Saskia	van Bergen	WA State Dept of Ecology
Kathryn	Vannatta	NW Pulp and Paper Association
Lanita	Walker	City of Tallahassee
Kevin	Ward	U.S. Army Corps of Engineers
Carina	Wells	Toxic Free Future
Sarah	Wightman	Marten Law
James	Wilhelm	Integral Consulting Inc.
Katryn	Williams	New York Dept of Environmental Conservation
Nicole	Wright	New York Dept of Environmental Conservation
Huqiu	Zhang	Intertek

Washington State Department of Ecology and Health attendees in the room:

First Name	Last Name	Agency
Maria	Blackshear	WA State Dept of Ecology
Holly	Davies	WA State Dept of Health
Elmer	Diaz	WA State Dept of Health
Mark	Gordon	WA State Dept of Ecology
Callie	Mathieu	WA State Dept of Ecology
Mike	Means	WA State Dept of Health
Barbara	Morrissey	WA State Dept of Health
Cheryl	Niemi	WA State Dept of Ecology
Ellie	Ott	WA State Dept of Ecology
Kasia	Patora	WA State Dept of Ecology
Brian	Penttila	WA State Dept of Ecology
Marissa	Smith	WA State Dept of Ecology
Kara	Steward	WA State Dept of Ecology
Sam	Wilson	WA State Dept of Ecology
Ken	Zarker	WA State Dept of Ecology