
From: Lara, Rhina
Sent: Tuesday, March 30, 2021 5:32 PM
To: Giles-Parker, Cynthia <Giles-Parker.Cynthia@epa.gov>; Saunders, Jennifer <Saunders.Jennifer@epa.gov>; Leifer, Kerry <Leifer.Kerry@epa.gov>; Aubee, Catherine <Aubee.Catherine@epa.gov>
Cc: Laws, Meredith <Laws.Meredith@epa.gov>; Johnson, Marion <Johnson.Marion@epa.gov>
Subject: RE: PFAS in Pesticide Packaging Inquiry: MN Dept of Ag, DDL 3/30 1 PM
Importance: High

Perfect, thank you!

So here is where we have landed with the response. Let me know if we all agree and this is okay to submit for OPP IO approval.

Note: I got a definition for PFAS from OPPT and added it to question 2.

1. *Given that EPA has maintained that no PFAS chemicals are registered as pesticide active ingredients, why are some pesticide active ingredients included in this master list?*

Each pesticide product submitted for registration is evaluated considering all the ingredients in the product, including both active and inert ingredients. The pesticide active ingredients included in the PFAS Master List are included due to their fluorinated structures. However, currently registered pesticides do not contain ingredients that have structures or properties comparable to prominent PFAS.

2. *Is the EPA's conclusion that no pesticide active ingredients are PFAS based on a different definition? If so, what definition is being used.*

EPA's Office of Pollution Prevention and Toxics applies the following "working definition" when identifying PFAS on the TSCA Inventory: a structure that contains the unit R-CF₂-CF(R')(R''), where R, R', and R'' do not equal "H" and the carbon-carbon bond is saturated (note: branching, heteroatoms, and cyclic structures are included).

In March of 2021, the MN Dept of Agriculture wrote to EPA asking "Is the EPA's conclusion that no pesticide active ingredients are PFAS based on a different definition? If so, what definition is being used."

From: Dunton, Cheryl <Dunton.Cheryl@epa.gov>
Sent: Friday, April 9, 2021 2:16 PM
To: Messina, Edward <Messina.Edward@epa.gov>
Subject: ED Questions: Responses to states on PFAS in containers issue

Hi Ed – folks sent me the attached PFAS in containers responses to states. Rick and Michal asked me to check with you on the following issues with this response. Let me know what you think. Thanks.

ED_006319_00000084-00001

From Rick and Michal on the Minnesota inquiry:

- See response to question #2 from Minnesota. There is some new PFAS definition issue you should raise with Ed.
- I think the Minnesota inquiry might merit a call with MDA first. The nuance in our answers may need some additional explanation.

From: Freedhoff, Michal <Freedhoff.Michal@epa.gov>
Sent: Friday, April 9, 2021 2:08 PM
To: Dunton, Cheryl <Dunton.Cheryl@epa.gov>; Keigwin, Richard <Keigwin.Richard@epa.gov>
Cc: Richmond, Jonah <Richmond.Jonah@epa.gov>
Subject: RE: Michal/Rick: Responses to states on PFAS in containers issue

There is some new PFAS definition issue you should raise with Ed.

Michal Freedhoff, Ph.D.
Acting Assistant Administrator
Office of Chemical Safety and Pollution Prevention
U.S. Environmental Protection Agency
Freedhoff.michal@epa.gov

From: Dunton, Cheryl <Dunton.Cheryl@epa.gov>
Sent: Friday, April 9, 2021 1:59 PM
To: Keigwin, Richard <Keigwin.Richard@epa.gov>; Freedhoff, Michal <Freedhoff.Michal@epa.gov>
Cc: Richmond, Jonah <Richmond.Jonah@epa.gov>
Subject: RE: Michal/Rick: Responses to states on PFAS in containers issue

Regarding the definition of PFAS, this is something I worked w/ folks on recently (last week I think). Tala provided this info on how OPPT defines PFAS and confirmed we're using the same definition in this case as well.

I can do some more work on the FL one.

Thanks.

From: Keigwin, Richard <Keigwin.Richard@epa.gov>
Sent: Friday, April 9, 2021 1:56 PM
To: Dunton, Cheryl <Dunton.Cheryl@epa.gov>; Freedhoff, Michal <Freedhoff.Michal@epa.gov>
Cc: Richmond, Jonah <Richmond.Jonah@epa.gov>
Subject: RE: Michal/Rick: Responses to states on PFAS in containers issue

Thanks Cheryl.

Ex. 5 Deliberative Process (DP)

Message

From: Messina, Edward [Messina.Edward@epa.gov]
Sent: 2/24/2021 7:18:01 PM
To: Leifer, Kerry [Leifer.Kerry@epa.gov]; Goodis, Michael [Goodis.Michael@epa.gov]; Ozmen, Shamus [Ozmen.Shamus@epa.gov]; Layne, Arnold [Layne.Arnold@epa.gov]; Echeverria, Marietta [Echeverria.Marietta@epa.gov]; Aubee, Catherine [Aubee.Catherine@epa.gov]
CC: Siedschlag, Gregory [Siedschlag.Gregory@epa.gov]; Dinkins, Darlene [Dinkins.Darlene@epa.gov]; Lara, Rhina [Lara.Rhina@epa.gov]; Nesci, Kimberly [Nesci.Kimberly@epa.gov]
Subject: RE: For OPP IO Review: E&E News - PFAS inquiry; DDL 2/24

Hmm. Interesting, this is different from what I had heard and what we have been telling people. We definitely need to refine our message on this.

Ed

Ed Messina, Esq.
Acting Office Director
Office of Pesticide Programs
Office of Chemical Safety & Pollution Prevention
U.S. Environmental Protection Agency
Washington, D.C.
p: (703) 347-0209

From: Leifer, Kerry <Leifer.Kerry@epa.gov>
Sent: Wednesday, February 24, 2021 2:16 PM
To: Goodis, Michael <Goodis.Michael@epa.gov>; Ozmen, Shamus <Ozmen.Shamus@epa.gov>; Messina, Edward <Messina.Edward@epa.gov>; Layne, Arnold <Layne.Arnold@epa.gov>; Echeverria, Marietta <Echeverria.Marietta@epa.gov>; Aubee, Catherine <Aubee.Catherine@epa.gov>
Cc: Siedschlag, Gregory <Siedschlag.Gregory@epa.gov>; Dinkins, Darlene <Dinkins.Darlene@epa.gov>; Lara, Rhina <Lara.Rhina@epa.gov>
Subject: RE: For OPP IO Review: E&E News - PFAS inquiry; DDL 2/24

One big communication issue here is the definition of PFAS. Under the broadest possible definition (which basically includes any chemical with a carbon-fluorine bond in its structure), there are some active ingredient and inert ingredient PFAS, including some inert ingredients listed in InertFinder.

If the discussion is on the types of PFAS that migrated from the fluorinated HDPE containers in question, and that are of known risk concerns, they are not used as inert ingredient or listed in InertFinder. My understanding is Ex. 5 Deliberative Process (DP)

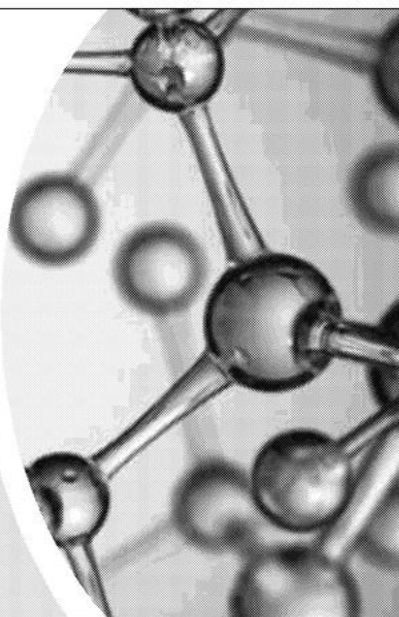
Ex. 5 Attorney Client (AC)

Kerry Leifer, Chief
Chemistry, Inerts and Toxicology Assessment Branch
Registration Division (7505P)
Office of Pesticide Programs
U.S. Environmental Protection Agency
1200 Pennsylvania Ave. NW
Washington, DC 20460
tel: (703) 308-8811

ED_006319_00000205-00001

New PFAS Chemicals: Approaches and Path Forward

New Chemicals Division
February 22, 2021



This one is completely redacted.

Message

From: Nesci, Kimberly [Nesci.Kimberly@epa.gov]
Sent: 4/9/2021 9:32:02 PM
To: Messina, Edward [Messina.Edward@epa.gov]; Dunton, Cheryl [Dunton.Cheryl@epa.gov]
CC: Aubee, Catherine [Aubee.Catherine@epa.gov]; Nguyen, Thuy [Nguyen.Thuy@epa.gov]; Goodis, Michael [Goodis.Michael@epa.gov]; Dinkins, Darlene [Dinkins.Darlene@epa.gov]; Ozmen, Shamus [Ozmen.Shamus@epa.gov]
Subject: RE: ED Questions: Responses to states on PFAS in containers issue

On the definition issue, I think that Catherine has the latest language.

From: Messina, Edward <Messina.Edward@epa.gov>
Sent: Friday, April 9, 2021 4:23 PM
To: Dunton, Cheryl <Dunton.Cheryl@epa.gov>
Cc: Nesci, Kimberly <Nesci.Kimberly@epa.gov>; Aubee, Catherine <Aubee.Catherine@epa.gov>; Nguyen, Thuy <Nguyen.Thuy@epa.gov>; Goodis, Michael <Goodis.Michael@epa.gov>; Dinkins, Darlene <Dinkins.Darlene@epa.gov>; Ozmen, Shamus <Ozmen.Shamus@epa.gov>
Subject: RE: ED Questions: Responses to states on PFAS in containers issue

Thanks. Yes I made a similar point on some other coms materials related to PFAS this week. Catherine might have the latest on the PFAS definition working with OPPT. Kimberly can you help Cheryl with some language?

Ed

Ed Messina, Esq.
Acting Office Director
Office of Pesticide Programs
Office of Chemical Safety & Pollution Prevention
U.S. Environmental Protection Agency
Washington, D.C.
p: (703) 347-0209

From: Dunton, Cheryl <Dunton.Cheryl@epa.gov>
Sent: Friday, April 9, 2021 2:16 PM
To: Messina, Edward <Messina.Edward@epa.gov>
Subject: ED Questions: Responses to states on PFAS in containers issue

Hi Ed – folks sent me the attached PFAS in containers responses to states. Rick and Michal asked me to check with you on the following issues with this response. Let me know what you think. Thanks.

From Rick and Michal on the Minnesota inquiry:

- -
 -
- ## Ex. 5 Deliberative Process (DP)

ED_006319_00000366-00001

Really?

May 12, 2021, during her confirmation hearing, Michal parrots PFAS working definition.

From: Dunton, Cheryl <Dunton.Cheryl@epa.gov>

Sent: Tuesday, March 30, 2021 12:32 PM

To: Conger, Nick <Conger.Nick@epa.gov>

Cc: Ozmen, Shamus <Ozmen.Shamus@epa.gov>; Drinkard, Andrea <Drinkard.Andrea@epa.gov>

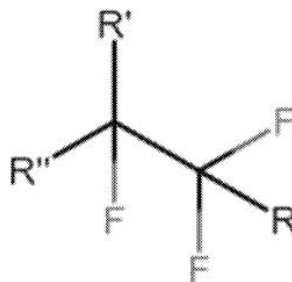
Subject: Follow-up from Pat R. interview last week: Definition of PFAS

Hi Nick – as a follow-up to the interview we did with Pat R. on PFAS and containers last week, we told Pat we'd get her our working definition of PFAS. Here's our working definition. Let me know if you need anything else. Thanks.

RESPONSE: There is currently no universally accepted definition for PFAS, but there is an ongoing international effort via OECD and WHO to create one. EPA's Office of Pollution Prevention and Toxics applies the following "working definition" when identifying PFAS on the TSCA Inventory: a structure that contains the unit $R-CF_2-CF(R')(R'')$, where R, R', and R'' do not equal "H" and the carbon-carbon bond is saturated (note: branching, heteroatoms, and cyclic structures are included).

PFAS "Working" Definition

- Per- and polyfluoroalkyl substances (PFAS) is a broad category that includes perfluoro polymers, PFOA, PFOS, GenX and many other chemical substances
- There is no universally accepted definition.
- OPPT applies the following "working" definition when identifying PFAS on the TSCA Inventory.
 - Structure that contains the unit $R-CF_2-CF(R')(R'')$ where R, R', and R'' do not equal "H"
 - Carbon-carbon bond is saturated
 - Branching, heteroatoms, and cyclic structures are included



From: Nesci, Kimberly

Sent: Tuesday, March 30, 2021 4:46 PM

ED_006319_00004911-00002

From: Ozmen, Shamus

Sent: Tuesday, June 22, 2021 2:28 PM

To: Goodis, Michael ; Dinkins, Darlene **Subject:**

FW: OCSPP/Regional Division Directors Summer National Meeting-June 29-30: Draft Agenda+ Teams

- PFAS Definition
 - One area that has been a challenge was harmonizing our definition of what constitutes a PFAS across the agency.
 - We worked together with our sister offices to come to a consensus about what the definition of a PFAS compound is in the context of pesticides.
 - As you know, pesticides undergo a rigorous scientific assessment process prior to registration, and we evaluate chemical-specific data to ensure that pesticides can be used safely without unreasonable adverse effects to human health and the environment.
 - We were confident in our determination that there were no pesticide active or inert ingredients with structures similar to prominent PFAS such as PFOS, GenX, and PFOA.
 - The emergence of the issue of PFAS in pesticides has caused us to further evaluate structures using the latest working definition from the Office of Pollution Prevention and Toxics or OPPT.
 - OPPT's working definition when identifying PFAS on the TSCA Inventory is a structure that contains the unit $R-CF_2-CF(R')(R'')$, where R, R', and R'' do not equal "H" and the carbon-carbon bond is saturated (note: branching, heteroatoms, and cyclic structures are included).
 - Under FIFRA Section 6(a)(2), pesticide registrants should report to EPA additional factual information on unreasonable adverse effects, including metabolites, degradates, and impurities (such as PFAS).
 - EPA considers any level of PFAS to be potentially toxicologically significant and may trigger 159.179(b) in the Code of Federal Regulations (CFR).
-

75 Records:

Message

From: Libelo, Laurence [Libelo.Laurence@epa.gov]
Sent: 4/14/2021 7:02:56 PM
To: Gaines, Linda [Gaines.Linda@epa.gov]; Stalcup, Dana [Stalcup.Dana@epa.gov]; Douchand, Larry [Douchand.Larry@epa.gov]; Schutz, Michelle [Schutz.Michelle@epa.gov]; Fitz-James, Schatzi [Fitz-James.Schatzi@epa.gov]; Ammon, Doug [Ammon.Doug@epa.gov]; Lowery, Brigid [Lowery.Brigid@epa.gov]; Barr, Pamela [Barr.Pamela@epa.gov]; Gilbert, Edward [Gilbert.Edward@epa.gov]; Pachon, Carlos [Pachon.Carlos@epa.gov]
Subject: PFAS definition question

Hi Dana,

We talked about the NDAA PFAS definitions in 2019 when it was being drafted. Here is an email trail with our (OLEM's) thoughts on the HEC definition while it was under consideration back in 2019.

Ex. 5 Deliberative Process (DP)

Laurence

2019 question:

HEC TA Question:

Is the proposed definition of PFAS below too broad to include pharmaceuticals? Does EPA have any suggested clarifications to the definitions?

(2) FULLY FLUORINATED CARBON ATOM.—The term “fully fluorinated carbon atom” means a carbon atom on which all the hydrogen substituents have been replaced by fluorine.

(3) PFAS.—The term “PFAS” means perfluoroalkyl and polyfluoroalkyl substances that are man-made chemicals with at least one fully fluorinated carbon atom.

Laurence Libelo, Chief
Science Policy Branch
ARD/OSRTI/OLEM
(703) 603-8815
Cell (571) 447- 3986

From: Libelo, Laurence
Sent: Thursday, June 27, 2019 12:17 PM

To: Woolford, James <Woolford.James@epa.gov>; Lowery, Brigid <Lowery.Brigid@epa.gov>
Subject: FW: follow up TA question-- PFAS destruction/disposal-definitions

FYI-

Ex. 5 Deliberative Process (DP)

Laurence

From: Manges, Ellen
Sent: Thursday, June 27, 2019 12:04 PM
To: Levine, Carolyn <Levine.Carolyn@epa.gov>
Cc: Keller, Melanie <Keller.Melanie@epa.gov>; Harwood, Jackie <Harwood.Jackie@epa.gov>; Benjamin, Kent <Benjamin.Kent@epa.gov>; Birchfield, Norman <Birchfield.Norman@epa.gov>; Johnson, Barnes <Johnson.Barnes@epa.gov>; Salyer, Kathleen <Salyer.Kathleen@epa.gov>; Radtke, Meghan <Radtke.Meghan@epa.gov>; Devlin, Betsy <Devlin.Betsy@epa.gov>; Elliott, Ross <Elliott.Ross@epa.gov>; Colon, Lilybeth <Colon.Lilybeth@epa.gov>; Strock, Troy <strock.troy@epa.gov>; Libelo, Laurence <Libelo.Laurence@epa.gov>
Subject: FW: follow up TA question-- PFAS destruction/disposal-definitions

Hi Carolyn – Per your request to clarify that the definition we offered on Tuesday was the best one in the opinion of the program - you can see below that with more time, Norm Birchfield from ORCR consulted with more of his colleagues and suggests the following:

Ex. 5 Deliberative Process (DP)

This has been cleared by the OLEM IO. I hope this helps. - Ellen

Ellen Manges
Acting Deputy Director
Office of Communications, Partnerships and Analysis
Office of Land and Emergency Response / U.S. EPA
202-566-0195

From: Birchfield, Norman
Sent: Thursday, June 27, 2019 11:20 AM
To: Manges, Ellen <Manges.Ellen@epa.gov>
Cc: Harwood, Jackie <Harwood.Jackie@epa.gov>; Benjamin, Kent <Benjamin.Kent@epa.gov>; Johnson, Barnes <Johnson.Barnes@epa.gov>; Salyer, Kathleen <Salyer.Kathleen@epa.gov>; Radtke, Meghan <Radtke.Meghan@epa.gov>; Devlin, Betsy <Devlin.Betsy@epa.gov>; Elliott, Ross <Elliott.Ross@epa.gov>; Colon, Lilybeth <Colon.Lilybeth@epa.gov>; Keller, Melanie <Keller.Melanie@epa.gov>; ORCR IO <ORCR_IO@epa.gov>; Strock, Troy <strock.troy@epa.gov>; Libelo, Laurence <Libelo.Laurence@epa.gov>
Subject: RE: follow up TA question-- PFAS destruction/disposal-definitions

Hi Ellen

Ex. 5 Deliberative Process (DP)

Thanks

Norm

Norman Birchfield, Ph.D.
Economic & Risk Analysis Staff, Chief
Office of Resource Conservation and Recovery
U.S. EPA
1200 Pennsylvania Ave., NW, MC 5305P
Washington, DC 20460
Phone: (703) 347-0174

From: Manges, Ellen

Sent: Wednesday, June 26, 2019 1:16 PM

To: Birchfield, Norman <Birchfield.Norman@epa.gov>

Cc: Harwood, Jackie <Harwood.Jackie@epa.gov>; Benjamin, Kent <Benjamin.Kent@epa.gov>; Johnson, Barnes <Johnson.Barnes@epa.gov>; Salyer, Kathleen <Salyer.Kathleen@epa.gov>; Radtke, Meghan <Radtke.Meghan@epa.gov>; Devlin, Betsy <Devlin.Betsy@epa.gov>; Elliott, Ross <Elliott.Ross@epa.gov>; Colon, Lilybeth <Colon.Lilybeth@epa.gov>; Keller, Melanie <Keller.Melanie@epa.gov>

Subject: FW: follow up TA question-- PFAS destruction/disposal-definitions

Hi Norm – Per Carolyn in OCIR, the HEC staff found your definition to be extremely helpful. Can you double check with your contacts per our discussion and confirm that this is the best way to describe them? Please get back to us by noon tomorrow – then we can get the final response in front of Peter/Steven/Barry/Nigel and the get it to Carolyn/OCIR. Thanks Norm for the great input on this. – Ellen

Ellen Manges

Acting Deputy Director

Office of Communications, Partnerships and Analysis

Office of Land and Emergency Response / U.S. EPA

202-566-0195

From: Levine, Carolyn

Sent: Wednesday, June 26, 2019 12:02 PM

To: Manges, Ellen <Manges.Ellen@epa.gov>; Harwood, Jackie <Harwood.Jackie@epa.gov>

Cc: Keller, Melanie <Keller.Melanie@epa.gov>

Subject: follow up TA question-- PFAS destruction/disposal-definitions

Hi Ellen/Jackie-

The TA from ORCR was extremely helpful for House E&C staff. Can we take Norm up on his offer to check with others? Tomorrow afternoon for any updated TA, would be helpful.

Thanks, and let me know any questions.

Carolyn

*Carolyn Levine
Office of Congressional and
Intergovernmental Relations
U.S. EPA
(202) 564-1859
levine.carolyn@epa.gov*

From: Manges, Ellen

Sent: Tuesday, June 25, 2019 9:32 AM

To: Levine, Carolyn <Levine.Carolyn@epa.gov>

Cc: Wright, Peter <wright.peter@epa.gov>; Cook, Steven <cook.steven@epa.gov>; Breen, Barry <Breen.Barry@epa.gov>; Johnson, Barnes <Johnson.Barnes@epa.gov>; Salyer, Kathleen <Salyer.Kathleen@epa.gov>;

ED_006319A_00001803-00004

From: Manges, Ellen
Sent: Tuesday, June 25, 2019 9:32 AM
To: Levine, Carolyn <Levine.Carolyn@epa.gov>
Cc: Wright, Peter <wright.peter@epa.gov>; Cook, Steven <cook.steven@epa.gov>; Breen, Barry <Breen.Barry@epa.gov>; Johnson, Barnes <Johnson.Barnes@epa.gov>; Salyer, Kathleen <Salyer.Kathleen@epa.gov>;

ED_006319A_00001803-00004

Birchfield, Norman <Birchfield.Norman@epa.gov>; Radtke, Meghan <Radtke.Meghan@epa.gov>; Devlin, Betsy <Devlin.Betsy@epa.gov>; Elliott, Ross <Elliott.Ross@epa.gov>; Colon, Lilybeth <Colon.Lilybeth@epa.gov>; Keller, Melanie <Keller.Melanie@epa.gov>; Harwood, Jackie <Harwood.Jackie@epa.gov>; Benjamin, Kent <Benjamin.Kent@epa.gov>

Subject: RE: Time Sensitive FW: follow up TA question-- PFAS destruction/disposal-definitions

Hi Carolyn – See Norm’s response below. I discussed with Peter and he agrees with Norm on this. Per Norm, their definition doesn’t seem like it changed from the original proposal. I’ve pulled out the following definition from Norm’s note (Norm – please correct if wrong):

Ex. 5 Deliberative Process (DP)

Ellen Manges
Acting Deputy Director
Office of Communications, Partnerships and Analysis
Office of Land and Emergency Response / U.S. EPA
202-566-0195

From: Birchfield, Norman

Sent: Tuesday, June 25, 2019 8:24 AM

To: Manges, Ellen <Manges.Ellen@epa.gov>; Radtke, Meghan <Radtke.Meghan@epa.gov>; Johnson, Barnes <Johnson.Barnes@epa.gov>; Salyer, Kathleen <Salyer.Kathleen@epa.gov>; Devlin, Betsy <Devlin.Betsy@epa.gov>; Elliott, Ross <Elliott.Ross@epa.gov>; Colon, Lilybeth <Colon.Lilybeth@epa.gov>

Cc: Keller, Melanie <Keller.Melanie@epa.gov>; Harwood, Jackie <Harwood.Jackie@epa.gov>; Benjamin, Kent <Benjamin.Kent@epa.gov>

Subject: RE: Time Sensitive FW: follow up TA question-- PFAS destruction/disposal-definitions

Hi Ellen

The definition below doesn't seem like it changed from the original proposal. As it stands I think there are many pesticides and pharmaceuticals that would be included in the definition. Prozac and cipro both have a fully fluorinated carbon atom. Many pesticides also have one fully fluorinated carbon atom.

Ex. 5 Deliberative Process (DP)

Ex. 5 Deliberative Process (DP)

Ex. 5 Deliberative Process (DP)

Ex. 5 Deliberative Process (DP)

Ex. 5 Deliberative Process (DP)

Ex. 5 Deliberative Process (DP). These are a couple of quick answers. With some more time, it would be great to check with a few others to see if there is a better way of describing them. Let me know if spending any more time on this would be helpful.

Thanks!

Norm

From: Manges, Ellen

Sent: Monday, June 24, 2019 5:28 PM

To: Radtke, Meghan <Radtke.Meghan@epa.gov>; Johnson, Barnes <Johnson.Barnes@epa.gov>; Salyer, Kathleen <Salyer.Kathleen@epa.gov>; Devlin, Betsy <Devlin.Betsy@epa.gov>; Elliott, Ross <Elliott.Ross@epa.gov>; Colon, Lilybeth <Colon.Lilybeth@epa.gov>; Birchfield, Norman <Birchfield.Norman@epa.gov>

Cc: Keller, Melanie <Keller.Melanie@epa.gov>; Harwood, Jackie <Harwood.Jackie@epa.gov>; Benjamin, Kent

ED_006319A_00001803-00005

From: Levine, Carolyn
Sent: Monday, June 24, 2019 5:07 PM
To: Manges, Ellen <Manges.Ellen@epa.gov>; Benjamin, Kent <Benjamin.Kent@epa.gov>
Cc: Keller, Melanie <Keller.Melanie@epa.gov>; Harwood, Jackie <Harwood.Jackie@epa.gov>
Subject: follow up TA question-- PFAS destruction/disposal-definitions

Hi Ellen-

House E&C has a time-sensitive question, following up on the ORCR comment #2 in the email below that Melanie had worked with ORCR on. Staff were looking for an answer today, but I know that might be tough given the hour, so let me know what you hear...thanks!

HEC TA Question:

Is the proposed definition of PFAS below too broad to include pharmaceuticals? Does EPA have any suggested clarifications to the definitions?

(2) FULLY FLUORINATED CARBON ATOM.—The term “fully fluorinated carbon atom” means a carbon atom on which all the hydrogen substituents have been replaced by fluorine.

(3) PFAS.—The term “PFAS” means perfluoroalkyl and polyfluoroalkyl substances that are man-made chemicals with at least one fully fluorinated carbon atom.

Carolyn

Carolyn Levine
Office of Congressional and
Intergovernmental Relations
U.S. EPA
(202) 564-1859

ED_006319A_00001803-00006

From: Keller, Melanie
Sent: Tuesday, June 11, 2019 2:26 PM
To: Johnson, Barnes <Johnson.Barnes@epa.gov>; Salyer, Kathleen <Salyer.Kathleen@epa.gov>
Cc: Devlin, Betsy <Devlin.Betsy@epa.gov>; Elliott, Ross <Elliott.Ross@epa.gov>; Colon, Lilybeth <Colon.Lilybeth@epa.gov>; Radtke, Meghan <Radtke.Meghan@epa.gov>
Subject: URGENT TA Request -- PFAS destruction/disposal
Importance: High

Good afternoon,

OCIR sent me this **urgent** request from Senate EPW (majority).

I am seeking TA comments on the following draft language by **4:30 today, to me, please**. I will run it by the OLEM IO for a quick check after I receive it from you.

OCIR and I also included OGC (Jen Lewis)

Thank you for your time and consideration,
Melanie

SECTION 1. GUIDANCE.

(a) IN GENERAL.—

- (1) Not later than one year after the date of enactment of this Act, the Administrator of the Environmental Protection Agency shall propose public guidance for other federal agencies on the destruction and disposal of PFAS and PFAS-containing materials, including but not limited to: aqueous film-forming foam; PFAS-contaminated soil and biosolids; PFAS-treated textiles; and spent filters, membranes, and other waste from PFAS-contaminated water treatment.
- (2) Such guidance shall take into consideration the potential for PFAS releases during destruction or disposal, including through volatilization, air dispersion, or leachate, and provide guidance on testing and monitoring air, effluent, and soil near potential destruction or disposal sites for such releases.
- (3) Such guidance shall take into consideration of potentially vulnerable populations living near likely destruction or disposal sites.
- (4) Not later than 18 months after the date of enactment of this Act, the Administrator shall finalize such guidance and make it available to the public.

(b) DEFINITION.—In this Act, the term “PFAS” means a perfluoroalkyl or polyfluoroalkyl substance with at least one fully fluorinated carbon atom.

Melanie C. Keller

Congressional Liaison
United States Environmental Protection Agency
Office of Land and Emergency Management (OLEM)

Message

From: Libelo, Laurence [Libelo.Laurence@epa.gov]
Sent: 4/23/2021 2:46:37 PM
To: Fitz-James, Schatzi [Fitz-James.Schatzi@epa.gov]; Birchfield, Norman [Birchfield.Norman@epa.gov]; Kirk, Andrea [Kirk.Andrea@epa.gov]; Craig, Evisabel [Craig.Evisabel@epa.gov]; Burgess, Michele [Burgess.Michele@epa.gov]; Kapuscinski, Rich [Kapuscinski.Rich@epa.gov]; Gaines, Linda [Gaines.Linda@epa.gov]
Subject: PFAS definition for n med monitoring bill

<https://www.gillibrand.senate.gov/imo/media/doc/PFAS%20Accountability%20Act%20-%20Bill%20Text.pdf>

Last weeks med monitoring bill had this definition of PFAS.

“(a) DEFINITION OF PFAS.—In this section, the
4 term ‘PFAS’ means a perfluoroalkyl or polyfluoroalkyl
5 substance with at least 1 fully fluorinated carbon atom.

Sent from my iPhone

From: Cuthbertson, Becky <Cuthbertson.Bekky@epa.gov>

Sent: Monday, June 28, 2021 9:51 AM

To: Crincoli, Klara <Crincoli.Klara@epa.gov>; Mooney, Charlotte <Mooney.Charlotte@epa.gov>; Foster, Barbara <Foster.Barbara@epa.gov>; Helms, Greg <Helms.Greg@epa.gov>; Chaudhari, Narendra <Chaudhari.Narendra@epa.gov>; Kirkland, Kim <Kirkland.Kim@epa.gov>; Strock, Troy <strock.troy@epa.gov>; Birchfield, Norman <Birchfield.Norman@epa.gov>; Hodes, Colette <Hodes.Colette@epa.gov>; Taylor, Timothy <Taylor.Timothy@epa.gov>; Elliott, Ross <Elliott.Ross@epa.gov>; Crossland, Andy <Crossland.Andy@epa.gov>; Sasseville, Sonya <Sasseville.Sonya@epa.gov>

Cc: Grant, Brian <Grant.Brian@epa.gov>; Freed, Elisabeth <Freed.Elisabeth@epa.gov>

Subject: In case helpful: TSCA definition of PFAS for purposes of a June 28 2021 proposed TSCA reporting rule

Hi,

Today there was a proposed rule published in the Federal Register for reporting on manufacturing and use of certain PFAS under TSCA authority. The preamble description of what falls into the definition of PFAS at 86 FR 33929 describes it as:

Reportable chemicals substances.

Under TSCA section 8(a)(7), EPA must collect information on chemical substances that are “perfluoroalkyl or polyfluoroalkyl” substances or PFAS. EPA has determined that any PFAS that fall within the structural definition, described below, are the PFAS referred to in TSCA section 8(a)(7). For this proposed rule, EPA has identified at least 1,364 chemical substances and mixtures that are PFAS and would potentially be subject to reporting under the final rule, if they have been manufactured in any year since January 1, 2011. For the purposes of this proposed action, the structural definition of PFAS includes per- and polyfluorinated substances that structurally contain the unit R-(CF₂)-C(F)(R')R''. Both the CF₂ and CF moieties are saturated carbons and none of the R groups (R, R' or R'') can be hydrogen. It should be noted that this structural definition of PFAS is a working definition which has been used by EPA's Office of Pollution Prevention and Toxics when identifying PFAS on the TSCA Inventory. This definition may not be identical to other definitions of PFAS used within EPA and/or other organizations. To assist potential reporters with determining whether certain substances may be covered under this structural definition, EPA has identified specific PFAS covered by this proposed rule. These will be included as non-exhaustive examples in the rule where it is possible to do so without divulging information claimed as CBI.....

the proposed rule text for 40 CFR 705.3 reads:

Per- and polyfluoroalkyl substances or PFAS, for the purpose of this part, means any chemical substance or mixture that structurally contains the unit R-(CF₂)-C(F)(R')R''. Both the CF₂ and CF moieties are saturated carbons. None of the R groups (R, R' or R'') can be hydrogen.

Full proposal is attached.

Message

From: Libelo, Laurence [Libelo.Laurence@epa.gov]
Sent: 6/28/2021 6:06:45 PM
To: Taylor, Timothy [Taylor.Timothy@epa.gov]; Gaines, Linda [Gaines.Linda@epa.gov]
CC: Birchfield, Norman [Birchfield.Norman@epa.gov]
Subject: RE: In case helpful: TSCA definition of PFAS for purposes of a June 28 2021 proposed TSCA reporting rule

Thanks Tim,

"R-(CF₂)-C(F)(R')R". Both the CF₂ and CF moieties are saturated carbons and none of the R groups (R, R' or R") can be hydrogen.

is similar but more inclusive then the definition we worked out for the OPPT rules starting in about 2005. Most of the OPPT rules say something similar with

"...R=any chemical moiety..." to include the salts/precursors/other chemicals that may not have CAS#s but we know form the acid ions the same as COO- or SO₂-. Rather then try to identify each specific chemical and then play whack-a-mole as industry changed the R groups to avoid the rules we went with a broad definition.

This definition is about the same as what Norm suggested last year. Anything with one fully fluorinated carbon and another carbon with one or more F attached.

It avoid drugs and pesticides as they mostly have only a CF₃ attached. It will include 10,000++ other chemicals.

Laurence Libelo, Chief
Science Policy Branch
ARD/OSRTI/OLEM
(703) 603-8815
Cell (571) 447- 3986

From: Taylor, Timothy <Taylor.Timothy@epa.gov>
Sent: Monday, June 28, 2021 1:10 PM
To: Gaines, Linda <Gaines.Linda@epa.gov>; Libelo, Laurence <Libelo.Laurence@epa.gov>
Cc: Birchfield, Norman <Birchfield.Norman@epa.gov>
Subject: FW: In case helpful: TSCA definition of PFAS for purposes of a June 28 2021 proposed TSCA reporting rule

Linda/Lawrence:

This definition isn't likely news to either of you, but figured I'd make sure.

More of a reminder that OLEM needs to make sure our definition is well-considered.

-Tim

From: Cuthbertson, Becky <Cuthbertson.Becky@epa.gov>
Sent: Monday, June 28, 2021 9:51 AM
To: Crincoli, Klara <Crincoli.Klara@epa.gov>; Mooney, Charlotte <Mooney.Charlotte@epa.gov>; Foster, Barbara <Foster.Barbara@epa.gov>; Helms, Greg <Helms.Greg@epa.gov>; Chaudhari, Narendra <Chaudhari.Narendra@epa.gov>; Kirkland, Kim <Kirkland.Kim@epa.gov>; Strock, Troy <strock.troy@epa.gov>; Birchfield, Norman <Birchfield.Norman@epa.gov>; Hodes, Colette <Hodes.Colette@epa.gov>; Taylor, Timothy <Taylor.Timothy@epa.gov>; Elliott, Ross <Elliott.Ross@epa.gov>; Crossland, Andy <Crossland.Andy@epa.gov>;

From: Taylor, Timothy <Taylor.Timothy@epa.gov>
Sent: Monday, June 28, 2021 1:10 PM
To: Gaines, Linda <Gaines.Linda@epa.gov>; Libelo, Laurence <Libelo.Laurence@epa.gov>
Cc: Birchfield, Norman <Birchfield.Norman@epa.gov>
Subject: FW: In case helpful: TSCA definition of PFAS for purposes of a June 28 2021 proposed TSCA reporting rule

Linda/Lawrence:

This definition isn't likely news to either of you, but figured I'd make sure.

More of a reminder that OLEM needs to make sure our definition is well-considered.

-Tim

From: Cuthbertson, Becky <Cuthbertson.Becky@epa.gov>
Sent: Monday, June 28, 2021 9:51 AM
To: Crincoli, Klara <Crincoli.Klara@epa.gov>; Mooney, Charlotte <Mooney.Charlotte@epa.gov>; Foster, Barbara <Foster.Barbara@epa.gov>; Helms, Greg <Helms.Greg@epa.gov>; Chaudhari, Narendra <Chaudhari.Narendra@epa.gov>; Kirkland, Kim <Kirkland.Kim@epa.gov>; Strock, Troy <strock.troy@epa.gov>; Birchfield, Norman <Birchfield.Norman@epa.gov>; Hodes, Colette <Hodes.Colette@epa.gov>; Taylor, Timothy <Taylor.Timothy@epa.gov>; Elliott, Ross <Elliott.Ross@epa.gov>; Crossland, Andy <Crossland.Andy@epa.gov>;

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Message

From: Birchfield, Norman [Birchfield.Norman@epa.gov]
Sent: 6/27/2019 1:11:33 PM
To: Strock, Troy [strock.troy@epa.gov]; Libelo, Laurence [Libelo.Laurence@epa.gov]; Fitz-James, Schatzi [Fitz-James.Schatzi@epa.gov]; Helms, Greg [Helms.Greg@epa.gov]; Fagnant, Daniel [fagnant.daniel@epa.gov]; Kirkland, Kim [Kirkland.Kim@epa.gov]; Gaines, Linda [Gaines.Linda@epa.gov]; Chaudhari, Narendra [Chaudhari.Narendra@epa.gov]
CC: Radtke, Meghan [Radtke.Meghan@epa.gov]; ORCR IO [ORCR_IO@epa.gov]; Elliott, Ross [Elliott.Ross@epa.gov]
Subject: RE: Definition of PFAS for legislation

Ex. 5 Deliberative Process (DP)

From: Strock, Troy
Sent: Thursday, June 27, 2019 8:46 AM
To: Birchfield, Norman <Birchfield.Norman@epa.gov>; Libelo, Laurence <Libelo.Laurence@epa.gov>; Fitz-James, Schatzi <Fitz-James.Schatzi@epa.gov>; Helms, Greg <Helms.Greg@epa.gov>; Fagnant, Daniel <fagnant.daniel@epa.gov>; Kirkland, Kim <Kirkland.Kim@epa.gov>; Gaines, Linda <Gaines.Linda@epa.gov>; Chaudhari, Narendra <Chaudhari.Narendra@epa.gov>
Cc: Radtke, Meghan <Radtke.Meghan@epa.gov>; ORCR IO <ORCR_IO@epa.gov>; Elliott, Ross <Elliott.Ross@epa.gov>
Subject: RE: Definition of PFAS for legislation

Norm-

Laurence and I discussed briefly yesterday afternoon, and the definition you sent has merit, but it's hard to cover all the chemicals that might be of interest and keep the definition simple (he pointed out this definition would not include HFPO).

This may be too late to be helpful, but the following definitions were in a recent congressional bill related to USGS.

4 (iv) PERFLUOROALKYL SUBSTANCE.—
5 The term “perfluoroalkyl substance”
6 means a manmade chemical of which all of
7 the carbon atoms are fully fluorinated car
8 bon atoms.
9 (v) POLYFLUOROALKYL SUB
10 STANCE.—The term “polyfluoroalkyl sub
11 stance” means a manmade chemical con
12 taining a mix of fully fluorinated carbon

13 atoms, partially fluorinated carbon atoms,
14 and nonfluorinated carbon atoms.

Ex. 5 Deliberative Process (DP)

"In this Act, PFAS means a manmade chemical of which two or more carbon atoms are fully fluorinated and potentially including one or more carbon atoms that are partially fluorinated or non-fluorinated."

Troy Strock, chemist
US Environmental Protection Agency
Office of Land and Environmental Management
Office of Superfund Remediation and Technology Innovation
Technology Innovation and Field Services Division
Analytical Services Branch
Phone: 703.603.8801
e-mail: strock.troy@epa.gov

From: Birchfield, Norman
Sent: Wednesday, June 26, 2019 1:40 PM
To: Libelo, Laurence <Libelo.Laurence@epa.gov>; Fitz-James, Schatzi <Fitz-James.Schatzi@epa.gov>; Helms, Greg <Helms.Greg@epa.gov>; Fagnant, Daniel <fagnant.daniel@epa.gov>; Kirkland, Kim <Kirkland.Kim@epa.gov>; Gaines, Linda <Gaines.Linda@epa.gov>; Strock, Troy <strock.troy@epa.gov>; Chaudhari, Narendra <Chaudhari.Narendra@epa.gov>
Cc: Radtke, Meghan <Radtke.Meghan@epa.gov>; ORCR IO <ORCR_IO@epa.gov>; Elliott, Ross <Elliott.Ross@epa.gov>
Subject: Definition of PFAS for legislation

Hi all

We have had a some exchange with the House E&C committee staff regarding a definition for PFAS in draft legislation that they are crafting. I'll save you the blow-by-blow discussion and cut to the current question.... Do you think the definition below is adequate for describing PFAS as we currently understand them?

Ex. 5 Deliberative Process (DP)

A response by COB today would be helpful. Thanks!

NB

From: Manges, Ellen
Sent: Wednesday, June 26, 2019 1:16 PM
To: Birchfield, Norman <Norman@epa.gov>
Cc: Harwood, Jackie <Harwood.Jackie@epa.gov>; Benjamin, Kent <Benjamin.Kent@epa.gov>; Johnson, Barnes <Johnson.Barnes@epa.gov>; Salyer, Kathleen <Salyer.Kathleen@epa.gov>; Radtke, Meghan <Radtke.Meghan@epa.gov>; Devlin, Betsy <Devlin.Betsy@epa.gov>; Elliott, Ross <Elliott.Ross@epa.gov>; Colon, Lilybeth <Colon.Lilybeth@epa.gov>; Keller, Melanie <Keller.Melanie@epa.gov>
Subject: FW: follow up TA question-- PFAS destruction/disposal-definitions

Hi Norm – Per Carolyn in OCIR, the HEC staff found your definition to be extremely helpful. Can you double check with your contacts per our discussion and confirm that this is the best way to describe them? Please get back to us by noon

From: Burneson, Eric <Burneson.Eric@epa.gov>
Sent: Wednesday, May 19, 2021 2:53 PM
To: Henry, Tala <Henry.Tala@epa.gov>
Cc: Behl, Betsy <Behl.Betsy@epa.gov>; Flaherty, Colleen <Flaherty.Colleen@epa.gov>; Wang, Lili <Wang.Lili@epa.gov>; Euling, Susan <Euling.Susan@epa.gov>
Subject: RE: Listing PFAS on the Contaminant Candidate List

The magic formula is that we can write "The Draft Contaminant Candidate List 5 (CCL 5) and the Final CCL 5, when published, will not impose any requirements on regulated entities."
Let us know who to contact/how to reference the OPPT working definition of PFAS.

From: Henry, Tala <Henry.Tala@epa.gov>
Sent: Wednesday, May 19, 2021 2:49 PM
To: Burneson, Eric <Burneson.Eric@epa.gov>
Cc: Behl, Betsy <Behl.Betsy@epa.gov>; Flaherty, Colleen <Flaherty.Colleen@epa.gov>; Wang, Lili <Wang.Lili@epa.gov>; Euling, Susan <Euling.Susan@epa.gov>
Subject: RE: Listing PFAS on the Contaminant Candidate List

Wow, what is the magic formula for that?

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Tala R. Henry, Ph.D.
Deputy Director
Office of Pollution Prevention & Toxics

T: 202-564-2959
E: henry.tala@epa.gov

From: Burneson, Eric <Burneson.Eric@epa.gov>
Sent: Wednesday, May 19, 2021 2:24 PM
To: Henry, Tala <Henry.Tala@epa.gov>
Cc: Behl, Betsy <Behl.Betsy@epa.gov>; Flaherty, Colleen <Flaherty.Colleen@epa.gov>; Wang, Lili <Wang.Lili@epa.gov>; Euling, Susan <Euling.Susan@epa.gov>
Subject: RE: Listing PFAS on the Contaminant Candidate List

One other point Tala. I was mistaken when I wrote we were transmitting draft CCL5 to OMB. They waived review. We are preparing the notice for signature/publication.

Message

From: Burneson, Eric [Burneson.Eric@epa.gov]
Sent: 5/19/2021 8:28:52 PM
To: Henry, Tala [Henry.Tala@epa.gov]
Subject: RE: Listing PFAS on the Contaminant Candidate List

Thanks Tala

From: Henry, Tala <Henry.Tala@epa.gov>
Sent: Wednesday, May 19, 2021 4:16 PM
To: Burneson, Eric <Burneson.Eric@epa.gov>
Cc: Behl, Betsy <Behl.Betsy@epa.gov>; Flaherty, Colleen <Flaherty.Colleen@epa.gov>; Wang, Lili <Wang.Lili@epa.gov>; Euling, Susan <Euling.Susan@epa.gov>
Subject: RE: Listing PFAS on the Contaminant Candidate List

Below is the language we have in the TSCA section 8 rule to collect a wide variety of data on PFAS, that is currently at OMB and we will publish hopefully by end of the month:

For the purposes of this proposed action, the structural definition of PFAS includes per- and polyfluorinated substances that structurally contain the unit $R-(CF_2)-C(F)(R')R''$. Both the CF_2 and CF moieties are saturated carbons and none of the R groups (R , R' or R'') can be hydrogen.

Tala R. Henry, Ph.D.
Deputy Director
Office of Pollution Prevention & Toxics

T: 202-564-2959
E: henry.tala@epa.gov

From: Henry, Tala <Henry.Tala@epa.gov>
Sent: Thursday, June 10, 2021 3:58 PM
To: Pierce, Alison <Pierce.Alison@epa.gov>
Cc: Schmit, Ryan <schmit.ryan@epa.gov>
Subject: USE THIS VERSION FW: DUE COB FW: Last call - due COB 6/10 - Consolidated TA doc for Sen. Shaheen Emerging Contaminants/PFAS bill

Talked to Michal – here is what to send up (simplified)

- ## Ex. 5 Deliberative Process (DP)
-

From: Spraul, Greg <Spraul.Greg@epa.gov>
Sent: Wednesday, June 9, 2021 10:34 AM
To: Corr, Elizabeth <Corr.Elizabeth@epa.gov>; Anderson, William <Anderson.William@epa.gov>; Keller, Melanie <Keller.Melanie@epa.gov>; Foster, Stiven <Foster.Stiven@epa.gov>; Linkins, Samantha <Linkins.Samantha@epa.gov>; Hanley, Mary <Hanley.Mary@epa.gov>; Richmond, Jonah <Richmond.Jonah@epa.gov>
Cc: Klasen, Matthew <Klasen.Matthew@epa.gov>; Kaiser, Sven-Erik <Kaiser.Sven-Erik@epa.gov>
Subject: Last call - due COB 6/10 - Consolidated TA doc for Sen. Shaheen Emerging Contaminants/PFAS bill

All,

Thank you for all of your hard work on this TA! This is the last call before I send this TA to OW's DAA for approval. Please provide any additional edits to the shared file by COB tomorrow.

OCSPP - I am adding you to this group because of your work on PFAS definition provisions in other TA work products. Please look at how PFAS are defined on page 3 and let us know if you have any TA input on the drafter's construct.

OLEM – please double check that you are ok with ORD's comment on Page 3 in turquoise highlight.

Message

From: Le, Madison [Le.Madison@epa.gov]
Sent: 6/10/2021 10:48:56 AM
To: Williamson, Tracy [Williamson.Tracy@epa.gov]
CC: Henry, Tala [Henry.Tala@epa.gov]; Pierce, Alison [Pierce.Alison@epa.gov]; Schmit, Ryan [schmit.ryan@epa.gov]; Edelstein, Rebecca [Edelstein.Rebecca@epa.gov]; Alwood, Jim [Alwood.Jim@epa.gov]; Passe, Loraine [Passe.Loraine@epa.gov]; Fehrenbacher, Cathy [Fehrenbacher.Cathy@epa.gov]; Butler, Tristan [Butler.Tristan@epa.gov]
Subject: Re: Firedrill: Consolidated TA doc for Sen. Shaheen Emerging Contaminants/PFAS bill

Thanks Tracy!

Alison/Tala - Are Tracy's comments enough to be responsive to the request? Or is the an ask to provide recommended edits to the actual document language to align the definition (based on differences identified)?

Sent from my iPhone

On Jun 9, 2021, at 9:47 PM, Williamson, Tracy <Williamson.Tracy@epa.gov> wrote:

[Request: advise how the PFAS definition on page 3 of the TA doc is the same or different than the OPPT and OECD definitions]

Ex. 5 Deliberative Process (DP)

From: Burneson, Eric <Burneson.Eric@epa.gov>
Sent: Wednesday, May 19, 2021 10:27 AM
To: Henry, Tala <Henry.Tala@epa.gov>
Cc: Behl, Betsy <Behl.Betsy@epa.gov>; Flaherty, Colleen <Flaherty.Colleen@epa.gov>; Wang, Lili <Wang.Lili@epa.gov>; Euling, Susan <Euling.Susan@epa.gov>
Subject: Listing PFAS on the Contaminant Candidate List

Tala:

We are in the final stages of developing a draft fifth Contaminant Candidate List (CCL 5) for public comment and are working to transmit this draft to OMB in the coming weeks. Because of the high priority of PFAs the following language is in our notice:

Ex. 5 Deliberative Process (DP)

The notice also clarifies that listing contaminants as groups does not mean that the agency will regulate the contaminants as groups:

Ex. 5 Deliberative Process (DP)

I am writing to you because we do not have an OPPT participant on our Workgroup for this action and we wanted to be certain that this proposed CCL5 grouping does not have unforeseen implications for OPPT. Can you or someone from your organization let us know if you have concerns with this approach?

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As you know, ORD and OPPT do not believe ALL PFAS are a single group – not from chemical structure/class, pchem property, or biological effects perspective, i.e., it is not best available science to consider all one class or group for assessment purposes.

Ex. 5 Deliberative Process (DP)

Ex. 5 Deliberative Process (DP)

Another issue occurs to me: Given there is not a consensus definition of PFAS (within EPA nor internationally...yet) how are you defining what will be on the CCL? OPPT has a “working definition”, i.e., a chemical structure definition we have used in several rulemakings.

Ex. 5 Deliberative Process (DP)

Ex. 5 Deliberative Process (DP)

Eric G. Burneson
Director, Standards and Risk Management
Office of Ground Water and Drinking Water
U.S. Environmental Protection Agency
202 564 5250 (Office)

From: Freedhoff, Michal
Sent: Friday, March 26, 2021 6:32 PM
To: Smith, Peterj <Smith.Peterj@epa.gov>; Le, Madison <Le.Madison@epa.gov>; Henry, Tala <Henry.Tala@epa.gov>
Cc: Collazo Reyes, Yvette <CollazoReyes.Yvette@epa.gov>; Hofmann, Angela <Hofmann.Angela@epa.gov>
Subject: RE: Letter re: EPA approval of new PFAS under TSCA

Thanks

I think next week sometime or the following week would be fine. I'm guessing we will continue to get inquiries.

As to your concern on policy, what we are talking about re PFAS fits squarely within additional changes to the new chemicals approach we have all concluded is not guidance. I think it's fine. 😊

Michal Freedhoff, Ph.D.
Acting Assistant Administrator
Office of Chemical Safety and Pollution Prevention
U.S. Environmental Protection Agency
Freedhoff.michal@epa.gov

From: Smith, Peterj <Smith.Peterj@epa.gov>
Sent: Friday, March 26, 2021 5:38 PM
To: Freedhoff, Michal <Freedhoff.Michal@epa.gov>; Le, Madison <Le.Madison@epa.gov>; Henry, Tala <Henry.Tala@epa.gov>
Cc: Collazo Reyes, Yvette <CollazoReyes.Yvette@epa.gov>; Hofmann, Angela <Hofmann.Angela@epa.gov>
Subject: RE: Letter re: EPA approval of new PFAS under TSCA

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Thanks Michal!

We'll be happy work the backlog ask. We're a little short on staff next week because of spring break (Angela will also be out). Do you have an ETA in mind for this so that I can focus the team's time and resources to meet your request?

I also need to chime in with some policy development considerations. Policy statements qualify as "guidance documents" under the EPA guidance rule and, even if the guidance rule goes away tomorrow, may be "significant regulatory actions" under EO 12866. If EPA finds that the policy would meet definitional criteria for "significance" in EO 12866, the policy statement would need to be developed under the Action Development Process. (The ADP specifically sets forth expectations significant guidance documents, including cross-agency participation in the development effort, the establishment of a docket, and a public comment opportunity.) OP would also notify OMB that the policy statement is significant and subject to interagency review.

I am not suggesting whether the policy statement would need extra process. However, given recent IG attention on ADP adherence, I just want to make sure that (1) the OCSPP leadership team approaches this with eyes open, and (2) RSB has sufficient information to support the leadership team's determination if our counterparts across EPA as well as at OMB, SBA/Office of Advocacy, and other agencies start asking questions and raising any process concerns.

Best,
Peter

Message

From: Williamson, Tracy [Williamson.Tracy@epa.gov]
Sent: 4/5/2021 11:20:46 PM
To: Henry, Tala [Henry.Tala@epa.gov]
CC: Butler, Tristan [Butler.Tristan@epa.gov]
Subject: PFAS meeting today

Hi Tala,

We do not have much to report out from our 3 PM PFAS meeting today with OPP.

- OPP had some basic questions for us, for example, new versus existing chemical PFAS (e.g., which have been assessed) and where the PFAS added to TRI came from.
- We provided our non-CBI TSCA Inventory PFAS spreadsheet to OPP which might be helpful in their effort to revisit pesticide ingredients, especially since they are using the OPPT working PFAS definition.
- We'll stay coordinated on definitions, including what the impacts might be for TSCA and FIFRA programs if we were to switch to the OECD definition.

From: Henry, Tala <Henry.Tala@epa.gov>
Sent: Friday, October 25, 2019 12:02 PM
To: Williamson, Tracy <Williamson.Tracy@epa.gov>; Christian, Myrta <Christian.Myrta@epa.gov>; Schechter, Kathryn <Schechter.Kathryn@epa.gov>
Cc: Widawsky, David <Widawsky.David@epa.gov>; Tillman, Thomas <Tillman.Thomas@epa.gov>
Subject: Need a Chemist...
Importance: High

is the below definition consistent with how we define PFAS...or much broader???

a perfluoroalkyl or polyfluoroalkyl substance with at least one fully fluorinated carbon atom

Tala R. Henry, Ph.D.
Deputy Director
Office of Pollution Prevention and Toxics
U.S. Environmental Protection Agency

ED_006319A_00007289-00002

T: 202-564-2959
E: henry.tala@epa.gov

Message

From: Henry, Tala [/O=EXCHANGELABS/OU=EXCHANGE ADMINISTRATIVE GROUP (FYDIBOHF23SPDLT)/CN=RECIPIENTS/CN=8BFC0A617A4A43BAA8856541C70622BE-THENRY02]
Sent: 6/15/2021 12:37:29 PM
To: Schmit, Ryan [schmit.ryan@epa.gov]; Pierce, Alison [Pierce.Alison@epa.gov]
Subject: RE: UPDATE for TH REVIEW/CONSIDERATION: Consolidated TA doc for Sen. Shaheen Emerging Contaminants/PFAS bill

FYI, Michal is the source of

Ex. 5 Deliberative Process (DP)

Ex. 5 Deliberative Process (DP)

Tala R. Henry, Ph.D.
Deputy Director
Office of Pollution Prevention & Toxics

T: 202-564-2959
E: henry.tala@epa.gov

From: Schmit, Ryan <schmit.ryan@epa.gov>
Sent: Tuesday, June 15, 2021 8:28 AM
To: Pierce, Alison <Pierce.Alison@epa.gov>; Henry, Tala <Henry.Tala@epa.gov>
Subject: RE: UPDATE for TH REVIEW/CONSIDERATION: Consolidated TA doc for Sen. Shaheen Emerging Contaminants/PFAS bill

FYI, I'm trying to resolve with Mary. There doesn't appear to be an issue for OPPT – the question is how to package up the TA for transmittal and resolve conflicting comments across offices.

From: Pierce, Alison <Pierce.Alison@epa.gov>
Sent: Tuesday, June 15, 2021 8:20 AM
To: Henry, Tala <Henry.Tala@epa.gov>
Cc: Schmit, Ryan <schmit.ryan@epa.gov>
Subject: FW: UPDATE for TH REVIEW/CONSIDERATION: Consolidated TA doc for Sen. Shaheen Emerging Contaminants/PFAS bill
Importance: High

Tala – Another Shaheen volley back from OCSPF IO below. I don't believe that we (read: staff) are being very value added in this process – might be worth a quick discussion with Michal on the sidelines of the general...?

Alison Pierce
202.564.2437 (office) | pierce.alison@epa.gov

From: Hanley, Mary <Hanley.Mary@epa.gov>
Sent: Tuesday, June 15, 2021 7:42 AM
To: Pierce, Alison <Pierce.Alison@epa.gov>; Schmit, Ryan <schmit.ryan@epa.gov>
Subject: FW: UPDATE for TH REVIEW/CONSIDERATION: Consolidated TA doc for Sen. Shaheen Emerging Contaminants/PFAS bill
Importance: High

Hi. I copied Michal's feedback below.

Ex. 5 Deliberative Process (DP)

Ex. 5 Deliberative Process (DP)

Please take a look at the comments in light of Michal's comments and make any needed changes. I

From: Hanley, Mary <Hanley.Mary@epa.gov>
Sent: Thursday, June 10, 2021 2:49 PM
To: Freedhoff, Michal <Freedhoff.Michal@epa.gov>
Subject: RE: DUE COB FW: Last call - due COB 6/10 - Consolidated TA doc for Sen. Shaheen Emerging Contaminants/PFAS bill

OW is asking whether OCSPP has a preferred PFAS definition. I understand that OECD's may still be in flux and the suggestion is to have them check back going forward. Do you have a preference. Maybe say: **Ex. 5 Deliberative Process (DP)**

Ex. 5 Deliberative Process (DP)

From: Freedhoff, Michal <Freedhoff.Michal@epa.gov>
Sent: Thursday, June 10, 2021 1:58 PM
To: Hanley, Mary <Hanley.Mary@epa.gov>
Subject: RE: DUE COB FW: Last call - due COB 6/10 - Consolidated TA doc for Sen. Shaheen Emerging Contaminants/PFAS bill

- 1.
- 2.
- 3.

Ex. 5 Deliberative Process (DP)

Michal Freedhoff, Ph.D.
Principal Deputy Assistant Administrator
Office of Chemical Safety and Pollution Prevention
U.S. Environmental Protection Agency
Freedhoff.michal@epa.gov

From: Hanley, Mary <Hanley.Mary@epa.gov>
Sent: Thursday, June 10, 2021 1:49 PM
To: Freedhoff, Michal <Freedhoff.Michal@epa.gov>
Subject: DUE COB FW: Last call - due COB 6/10 - Consolidated TA doc for Sen. Shaheen Emerging Contaminants/PFAS bill

Hi. OCSPP was enlisted yesterday afternoon to review this TA with a focus on the PFAS definition on page 3. This is due to OW by COB today to send to their DAA. The bill amends the SDWA and the Water Pollution Control Act to provide financial assistance to states for PFAS testing and to provide for remediation. OPPT's response below indicates that the: **Ex. 5 Deliberative Process (DP)**

Ex. 5 Deliberative Process (DP)

From: Hanley, Mary
Sent: Thursday, June 10, 2021 4:40 PM
To: Spraul, Greg <Spraul.Greg@epa.gov>
Subject: RE: Due Noon tomorrow - Consolidated TA doc for Sen. Shaheen Emerging Contaminants/PFAS bill

ED_006319A_00007157-00002

Hi. There is a discussion on the definition happening. I should have more for you later. Folks are in meetings right now.

From: Hanley, Mary
Sent: Thursday, June 10, 2021 2:56 PM
To: Spraul, Greg <Spraul.Greg@epa.gov>
Subject: RE: Due Noon tomorrow - Consolidated TA doc for Sen. Shaheen Emerging Contaminants/PFAS bill

Hi. In addition to the OPPT comments I shared earlier below is additional input from Michal who has more insight on the drafters intent— some of there refer to others' comments. I will get back on your question on whether there is a preferred definition.

1.
2.
3.

Ex. 5 Deliberative Process (DP)

From: Spraul, Greg <Spraul.Greg@epa.gov>
Sent: Thursday, June 10, 2021 2:20 PM
To: Hanley, Mary <Hanley.Mary@epa.gov>
Subject: RE: Due Noon tomorrow - Consolidated TA doc for Sen. Shaheen Emerging Contaminants/PFAS bill

Thanks. Does OCSPP have a preferred way of expressing PFAS definitions in bills?

From: Hanley, Mary <Hanley.Mary@epa.gov>
Sent: Thursday, June 10, 2021 2:49 PM
To: Freedhoff, Michal <Freedhoff.Michal@epa.gov>
Subject: RE: DUE COB FW: Last call - due COB 6/10 - Consolidated TA doc for Sen. Shaheen Emerging Contaminants/PFAS bill

OW is asking whether OCSPP has a preferred PFAS definition. I understand that OECD's may still be in flux and the suggestion is to have them check back going forward. Do you have a preference. Maybe say: **Ex. 5 Deliberative Process (DP)**

Ex. 5 Deliberative Process (DP)

From: Freedhoff, Michal <Freedhoff.Michal@epa.gov>
Sent: Thursday, June 10, 2021 1:58 PM
To: Hanley, Mary <Hanley.Mary@epa.gov>
Subject: RE: DUE COB FW: Last call - due COB 6/10 - Consolidated TA doc for Sen. Shaheen Emerging Contaminants/PFAS bill

- 1.
- 2.
- 3.

Ex. 5 Deliberative Process (DP)

Michal Freedhoff, Ph.D.
Principal Deputy Assistant Administrator
Office of Chemical Safety and Pollution Prevention
U.S. Environmental Protection Agency
Freedhoff.michal@epa.gov

From: Hanley, Mary <Hanley.Mary@epa.gov>
Sent: Thursday, June 10, 2021 1:49 PM
To: Freedhoff, Michal <Freedhoff.Michal@epa.gov>
Subject: DUE COB FW: Last call - due COB 6/10 - Consolidated TA doc for Sen. Shaheen Emerging Contaminants/PFAS bill

Hi. OCSPP was enlisted yesterday afternoon to review this TA with a focus on the PFAS definition on page 3. This is due to OW by COB today to send to their DAA. The bill amends the SDWA and the Water Pollution Control Act to provide financial assistance to states for PFAS testing and to provide for remediation. OPPT's response below indicates that the: **Ex. 5 Deliberative Process (DP)**

Ex. 5 Deliberative Process (DP)

From: Henry, Tala <Henry.Tala@epa.gov>
Sent: Friday, February 26, 2021 1:21 PM
To: Turk, David <Turk.David@epa.gov>; Lloyd, Tyler <Lloyd.Tyler@epa.gov>; Wolf, Joel <Wolf.Joel@epa.gov>
Cc: Williamson, Tracy <Williamson.Tracy@epa.gov>
Subject: RE: 3 PFAS adds to CFR
Importance: High

In some TA that OCIR is revisiting it says:

(5) PERFLUOROALKYL OR POLYFLUOROALKYL SUBSTANCE.—The term “perfluoroalkyl or polyfluoroalkyl substance” means a perfluoroalkyl substance or a polyfluoroalkyl substance that is—
(A) manmade; and
(B) has at least 1 fully fluorinated carbon atom.

And OPPT previously commented:

Note: (B) is consistent with sec. 7321(b)(1)(E) and (C)(1)(a)(i) from the TRI provisions in the FY 2020 NDAA

I thought the OPPT “working definition” was that had to have at least TWO fully fluorinated carbons???

Tala R. Henry, Ph.D.
Deputy Director
Office of Pollution Prevention & Toxics

ED_006319A_00007083-00002

Message

From: Henry, Tala [/O=EXCHANGELABS/OU=EXCHANGE ADMINISTRATIVE GROUP (FYDIBOHF23SPDLT)/CN=RECIPIENTS/CN=8BFC0A617A4A43BAA8856541C70622BE-THENRY02]
Sent: 1/29/2020 9:45:16 PM
To: Jeff Morris (Morris.Jeff@epa.gov) [Morris.Jeff@epa.gov]; Mark Hartman (Hartman.Mark@epa.gov) [Hartman.Mark@epa.gov]
Subject: FW: PFAS List Issues

Amazing how this is not working.

I am of the mind that the Industrial Chemistry Branch should be the final arbiter/definer of the list [an 'illustrative list' that went out with the SNUR is just that, illustrative, and can be explained as such]. It is increasingly important that OPPT **define** PFAS for at least our Program's purposes.

I had already planned to speak to David W about the 'errors' that were identified by industry and impress upon him the importance of CESSD/ICB ensuring quality work for the office; he is out all this week and Im out next week so will need to email him next week.

Concur? Or other ideas?

Tala R. Henry, Ph.D.
Deputy Director
Office of Pollution Prevention and Toxics
U.S. Environmental Protection Agency

T: 202-564-2959
E: henry.tala@epa.gov

From: Reisman, Larry <Reisman.Larry@epa.gov>
Sent: Wednesday, January 29, 2020 3:58 PM
To: Henry, Tala <Henry.Tala@epa.gov>
Cc: Hartman, Mark <Hartman.Mark@epa.gov>; Pierce, Alison <Pierce.Alison@epa.gov>; Turk, David <Turk.David@epa.gov>; Bushman, Daniel <Bushman.Daniel@epa.gov>
Subject: FW: PFAS List Issues

Hi Tala,

As follow-up to the meeting we had on Monday, 01/27, about the TRI PFAS list, below please find the description of 4 issues that are preventing us from arriving at a final initial list of PFAS subject to TRI reporting for calendar year 2020 (reports due to EPA by July 1, 2021). Accordingly, we do not plan to issue a revision to the initial posting of 160 PFAS by tomorrow as discussed on Monday. Further, because there is still so much uncertainty regarding this list, we would like to wait until after the ANPRM comment period closes on February 3 to see if there are any comments related to the 160 PFAS already posted. As I'm sure you will agree, we do not want to revise the 160 PFAS listing more than once if possible. Of course, that concern needs to be balanced against posting a corrected list relatively soon as facilities are required to consider this year's activities for the TRI reports due in July 2021.

ED_006319A_00006938-00001

From: Henry, Tala <Henry.Tala@epa.gov>
Sent: Monday, October 21, 2019 12:46 PM
To: Frithsen, Jeff <Frithsen.Jeff@epa.gov>; Gillespie, Andrew <Gillespie.Andrew@epa.gov>; Thomas, Russell <Thomas.Russell@epa.gov>; Lambert, Jason <Lambert.Jason@epa.gov>
Cc: Morris, Jeff <Morris.Jeff@epa.gov>; Henry, Tala <Henry.Tala@epa.gov>; Williamson, Tracy <Williamson.Tracy@epa.gov>; Widawsky, David <Widawsky.David@epa.gov>
Subject: FW: PFAS - By the numbers
Importance: High

Attached are the PFAS in Excel.

See below email from Tracy Williamson regarding chemicals OPPT would not define as PFAS and rationale (this is not necessarily comprehensive review of your list of 6000). For more discussion on this point, please work with **Tracy Williamson** in OPPT.

ED_006319A_00006895-00001

Also note, in the Bill I saw last week, there were 'definitions' of PFAS...some much broader than ours; so, it that passes, we may all be re-defining.

Tala R. Henry, Ph.D.
Deputy Director
Office of Pollution Prevention and Toxics
U.S. Environmental Protection Agency

T: 202-564-2959
E: henry.tala@epa.gov

From: Lowe, Charles [lowe.charles@epa.gov]
Sent: 11/3/2020 8:33:23 PM
To: Chang, Daniel [chang.daniel@epa.gov]; Boyce, Matthew [Boyce.Matthew@epa.gov]; East, Alexander [East.Alexander@epa.gov]; Lougee, Ryan [lougee.ryan@epa.gov]; Richard, Ann [Richard.Ann@epa.gov]; Vallero, Dan [Vallero.Daniel@epa.gov]; Grulke, Chris [Grulke.Chris@epa.gov]; Patlewicz, Grace [Patlewicz.Grace@epa.gov]; Williams, Antony [Williams.Antony@epa.gov]; Tate, Tia [Tate.Tia@epa.gov]; Vegosen, Leora [vegosen.leora@epa.gov]; Fisher, Hunter [Fisher.Hunter@epa.gov]; Noel, James [Noel.James@epa.gov]; Kolmar, Scott [Kolmar.Scott@epa.gov]; Daniels, Rebecca [Daniels.Rebecca@epa.gov]; Kenneke, John [Kenneke.John@epa.gov]; Shobair, Mahmoud A. [shobair.mahmoud@epa.gov]; Swank, Adam [Swank.Adam@epa.gov]; Brady, Sydney [Brady.Sydney@epa.gov]; Sinclair, Gabriel [Sinclair.Gabriel@epa.gov]; Martin, Todd [Martin.Todd@epa.gov]; Harten, Paul [Harten.Paul@epa.gov]

Let everyone create their own PFAS definition, then a paper can be written comparing/contrasting what fits in each definition.....

Message

From: Turk, David [Turk.David@epa.gov]
Sent: 10/16/2020 8:03:25 PM
To: Griffin, Stephanie [griffin.stephanie@epa.gov]

Maybe I'm misunderstanding something. What I meant is that there are various ways to define what constitutes PFAS and we're selecting a given definition that isn't the broadest definition available to us.

Message

From: Griffin, Stephanie [griffin.stephanie@epa.gov]
Sent: 10/16/2020 7:55:29 PM
To: Turk, David [Turk.David@epa.gov]

I'm sorry, what do you mean we're pushing back against the broad PFAS definition?

Appointment

To: Sharkey, Susan [Sharkey.Susan@epa.gov]; Smith, ThomasA [smith.thomasa@epa.gov]; Griffin, Stephanie [griffin.stephanie@epa.gov]; Ruedy, Daniel [Ruedy.Daniel@epa.gov]; Booth, Joshua [Booth.Joshua@epa.gov]
CC: Turk, David [Turk.David@epa.gov]; Devito, Steve [Devito.Steve@epa.gov]; Snyder, Charlotte [snyder.charlotte@epa.gov]; Gaona, Sandra [Gaona.Sandra@epa.gov]; Guthrie, Christina [Guthrie.Christina@epa.gov]; Sumner, Mitchell [sumner.mitchell@epa.gov]; Briere, Caitlin [briere.caitlin@epa.gov]; Senthil, Velu [Senthil.Velu@epa.gov]; Roach, Amanda [Roach.Amanda@epa.gov]; Muneer, Alie [muneer.alie@epa.gov]

Start: 11/2/2022 2:30:00 PM
End: 11/2/2022 3:00:00 PM

Recurrence: (none)

Required Attendees: Smith, ThomasA; Griffin, Stephanie; Ruedy, Daniel; Booth, Joshua

Draft agenda:

1. National Report – PFAS

Question: Does OCSPP/OPPT actually have its own working list of PFAS, or is it that we (OPPT) have our own working definition (based on chemical structure) as to what a PFAS is according to OPPT?

Draft text for report:

As for PFAS analyses were based on the PFAS for which CDR reports were received and that appear on OPPT's working list of PFAS. This list is subject to changes based on new PFAS submitted to the agency as pre-manufacture notices, updates to OPPT's definition of PFAS (e.g., those resulting from new regulations and regulations in progress), and/or identifying additional PFAS through other means. The list of PFAS, based on OPPT's working definition, are included in this table. To learn more, see the links below.

[TSCA risk evaluation webpage](#)

[Agency PFAS webpage](#)

2. Data Quality Alert update

3. Other?

This is the weekly CDR program team meeting. Discussion topics will be added prior to each meeting. Please forward to others as needed.

Note: There is a separate CDR interpretive guidance meeting scheduled on Tuesdays.

Join Microsoft Teams Meeting

Ex. 6 Personal Privacy (PP) United States, Washington DC (Toll)

Conference ID: **Ex. 6 Personal Privacy (PP)**

[Local numbers](#) | [Reset PIN](#) | [Learn more about Teams](#) | [Meeting options](#)

Appointment

To: Lan, Alexis [lan.alexis@epa.gov]; Shortt, Veronica [Shortt.Veronica@epa.gov]
CC: Hummel, Natalie [Hummel.Natalie@epa.gov]

Start: 4/6/2022 6:00:00 PM
End: 4/6/2022 7:00:00 PM

Recurrence: (none)

Required Attendees: Lan, Alexis; Bushman, Daniel; Sharkey, Susan; Cooperstein, Sharon; Butler, Tristan; Raffaele, Kathleen; Lee, Virginia; Smith, ThomasA; Schechter, Kathryn; Callahan, Leigh; Dean, Rachel; Gorder, Chris; Shortt, Veronica; Foster, Stiven; Schwarz, Stephanie; Cybulski, Walter; Barkas, Jessica; Milton, Philip; Franklyn, Valarie; Jacob, Annie; Raccor, Brianne
Optional Attendees: Turk, David; Fisher, Bethany; Booth, Joshua; Rodman, Sonja; Rebersak, Shannon; Hummel, Natalie; Stanley, Cora

4/6 meeting agenda:

- SBAR Panel updates?
- Other updates:
 - Met with Michal yesterday to go over options related to reporting threshold and certain reporting exemptions (de minimis, impurities, byproducts, and R&D substances)
 - Thanks to those who've reviewed the FRN outline! I'll start adding information to the background section
 - PFAS definition: received feedback from Tala last week on viable rationales for modifying the proposed definition. It may be in the workgroup's best interest to move this discussion to a separate standing meeting among the workgroup members with equities and/or interest in this outcome until we've figured out the scope for the final rule. – if this works for others, I'd like to send an invite for a Tuesday or Thursday meeting on this topic
- Next RTCs to discuss (before end of April): tiered reporting; articles/article importers; small business exemptions
 - Workgroup poll on tiered reporting options—aim for next week if the workgroup isn't ready to vote today?
 - Begin discussion on public comments on including articles (generally) – see questions for the workgroup within the comment summary of the RTC file [05e Including Articles \(General\) comment-response-document.docx](#)
 - If time, start reviewing comments related to article importers specifically [05eii Article Importers comment-response-document.docx](#)

Putting standing weekly meetings on the calendar; we'll cancel if there's no need for a meeting.

Microsoft Teams meeting

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[Click here to join the meeting](#)

Or call in (audio only)

Ex. 6 Personal Privacy (PP) United States, Washington DC

Phone Conference ID: **Ex. 6 Personal Privacy (PP)**

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ED_006319A_00003965-00001

To: Griffin, Stephanie [griffin.stephanie@epa.gov]; Bushman, Daniel [Bushman.Daniel@epa.gov]; Sharkey, Susan [Sharkey.Susan@epa.gov]; Cooperstein, Sharon [Cooperstein.Sharon@epa.gov]; Lan, Alexis [lan.alexis@epa.gov]; Butler, Tristan [Butler.Tristan@epa.gov]; Raffaele, Kathleen [raffaele.kathleen@epa.gov]; Lee, Virginia [Lee.Virginia@epa.gov]; Smith, ThomasA [smith.thomasa@epa.gov]; Schechter, Kathryn [Schechter.Kathryn@epa.gov]; Callahan, Leigh [Callahan.Leigh@epa.gov]; Dean, Rachel [Dean.Rachel@epa.gov]; Gorder, Chris [Gorder.Chris@epa.gov]; Shortt, Veronica [Shortt.Veronica@epa.gov]; Foster, Stiven [Foster.Stiven@epa.gov]; Schwarz, Stephanie [Schwarz.Stephanie@epa.gov]; Cybulski, Walter [Cybulski.Walter@epa.gov]; Barkas, Jessica [barkas.jessica@epa.gov]; Milton, Philip [Milton.Philip@epa.gov]; Franklyn, Valarie [Franklyn.Valarie@epa.gov]; Jacob, Annie [Jacob.Annie@epa.gov]; Raccor, Brianne [Raccor.Brianne@epa.gov]

CC: Turk, David [Turk.David@epa.gov]; Fisher, Bethany [fisher.bethany@epa.gov]; Booth, Joshua [Booth.Joshua@epa.gov]; Rodman, Sonja [Rodman.Sonja@epa.gov]; Rebersak, Shannon [rebersak.shannon@epa.gov]; Hummel, Natalie [Hummel.Natalie@epa.gov]; Stanley, Cora [stanley.cora@epa.gov]


Start: 2/9/2022 7:00:00 PM
End: 2/9/2022 8:00:00 PM
Show Time As: Busy

Recurrence: (none)

Required Attendees: Bushman, Daniel; Sharkey, Susan; Cooperstein, Sharon; Lan, Alexis; Butler, Tristan; Raffaele, Kathleen; Lee, Virginia; Smith, ThomasA; Schechter, Kathryn; Callahan, Leigh; Dean, Rachel; Gorder, Chris; Shortt, Veronica; Foster, Stiven; Schwarz, Stephanie; Cybulski, Walter; Barkas, Jessica; Milton, Philip; Franklyn, Valarie; Jacob, Annie; Raccor, Brianne

Optional Attendees: Turk, David; Fisher, Bethany; Booth, Joshua; Rodman, Sonja; Rebersak, Shannon; Hummel, Natalie; Stanley, Cora

2/9 meeting agenda:

- Updates on topics discussed last week:
 - Confirming we will not cover processors in this rule
 - Definition of PFAS – continuing to meet with other offices to confirm whether the proposed definition
- ### Ex. 5 Deliberative Process (DP)
- All comment topics have now been summarized and are in Teams
 - Reminders:
 - Please continue to review the comment summaries and provide thoughts on comments as needed in Teams
 - For everyone in the workgroup—please provide any feedback on the proposed PFAS definition, especially with respect to substances of interest which may be out of scope
 - Provide any details related to the benefits of the rule to different programs/offices/activities to Leigh – the more specificity (e.g., which data elements exactly will be of use), the better
 - Continue discussion on possible reporting thresholds:  [Options Selection list 1-5-22.docx](#)

Putting standing weekly meetings on the calendar; we'll cancel if there's no need for a meeting.

Moving the meeting series to my calendar.

Microsoft Teams meeting

ED_006319A_00003953-00001

Appointment

To: Griffin, Stephanie [griffin.stephanie@epa.gov]; Bushman, Daniel [Bushman.Daniel@epa.gov]; Sharkey, Susan [Sharkey.Susan@epa.gov]; Cooperstein, Sharon [Cooperstein.Sharon@epa.gov]; Lan, Alexis [lan.alexis@epa.gov]; Butler, Tristan [Butler.Tristan@epa.gov]; Raffaele, Kathleen [raffaele.kathleen@epa.gov]; Lee, Virginia [Lee.Virginia@epa.gov]; Smith, ThomasA [smith.thomasa@epa.gov]; Schechter, Kathryn [Schechter.Kathryn@epa.gov]; Callahan, Leigh [Callahan.Leigh@epa.gov]; Dean, Rachel [Dean.Rachel@epa.gov]; Gorder, Chris [Gorder.Chris@epa.gov]; Shortt, Veronica [Shortt.Veronica@epa.gov]; Foster, Stiven [Foster.Stiven@epa.gov]; Schwarz, Stephanie [Schwarz.Stephanie@epa.gov]; Cybulski, Walter [Cybulski.Walter@epa.gov]; Barkas, Jessica [barkas.jessica@epa.gov]; Milton, Philip [Milton.Phillip@epa.gov]; Franklyn, Valarie [Franklyn.Valarie@epa.gov]; Jacob, Annie [Jacob.Annie@epa.gov]; Raccor, Brianne [Raccor.Brianne@epa.gov]

CC: Turk, David [Turk.David@epa.gov]; Fisher, Bethany [fisher.bethany@epa.gov]; Booth, Joshua [Booth.Joshua@epa.gov]; Rodman, Sonja [Rodman.Sonja@epa.gov]; Rebersak, Shannon [rebersak.shannon@epa.gov]; Hummel, Natalie [Hummel.Natalie@epa.gov]; Stanley, Cora [stanley.cora@epa.gov]


Start: 3/2/2022 7:00:00 PM
End: 3/2/2022 8:00:00 PM
Show Time As: Busy

Recurrence: (none)

Required Attendees: Bushman, Daniel; Sharkey, Susan; Cooperstein, Sharon; Lan, Alexis; Butler, Tristan; Raffaele, Kathleen; Lee, Virginia; Smith, ThomasA; Schechter, Kathryn; Callahan, Leigh; Dean, Rachel; Gorder, Chris; Shortt, Veronica; Foster, Stiven; Schwarz, Stephanie; Cybulski, Walter; Barkas, Jessica; Milton, Philip; Franklyn, Valarie; Jacob, Annie; Raccor, Brianne

Optional Attendees: Turk, David; Fisher, Bethany; Booth, Joshua; Rodman, Sonja; Rebersak, Shannon; Hummel, Natalie; Stanley, Cora

3/2 Agenda:

1. Continued discussion on the scope of covered PFAS, following feedback from different offices. Possible solutions:
 - a.
 - b. **Ex. 5 Deliberative Process (DP)**
 - c.
2. Continue to review public comments related to a reporting threshold and certain exemptions (general comments, de minimis, byproducts, impurities, and R&D substances). Please continue marking up the  Options Selection file with considerations (including pros/cons) that should be captured for senior management during options selection.
 - a. If possible, let's aim for getting all workgroup considerations & straw polls for the options related to reporting threshold & reporting exemptions by the end of next week's meeting.

Putting standing weekly meetings on the calendar; we'll cancel if there's no need for a meeting.

Moving the meeting series to my calendar.

Microsoft Teams meeting

From: Griffin, Stephanie <griffin.stephanie@epa.gov>

Sent: Wednesday, January 26, 2022 3:31 PM

To: Bushman, Daniel <Bushman.Daniel@epa.gov>; Schechter, Kathryn <Schechter.Kathryn@epa.gov>; Butler, Tristan <Butler.Tristan@epa.gov>

Cc: Turk, David <Turk.David@epa.gov>

Subject: 8a7 scope: specific substances of interest

Hi Kathy, Tristan, and Dan,

Here is the Teams file of comment excerpts & their summary describing specific substances that they believe are out of scope of the NPRM's definition, and would like to have included in the final rule. Some of the more commonly cited substances:

- various fluoropolymers, including PVDF, Fluoroethylene vinyl ether (FEVE), Ethylene-chlorotrifluoroethylene copolymer (ECTFE), and Polychlorotrifluoroethylene (PCTFE)
- trifluoroacetic acid (TFA) and other short-chain perfluorinated carboxylic acids
- fluorinated gases with only one -CF₃ group, including HFCs, HFOs, and HCFOs

ED_006319A_00003952-00005

-PFMOAA

Ex. 5 Deliberative Process (DP)

Note- I haven't yet thoroughly reviewed and edited the summary. If you see problems within the summary, please feel free to flag those for me!

Stephanie Griffin
Data Collection Branch
Office of Pollution Prevention and Toxics
U.S. Environmental Protection Agency
(202) 564-1463 | griffin.stephanie@epa.gov

From: Le, Madison <Le.Madison@epa.gov>
Sent: Thursday, June 10, 2021 6:49 AM
To: Williamson, Tracy <Williamson.Tracy@epa.gov>
Cc: Henry, Tala <Henry.Tala@epa.gov>; Pierce, Alison <Pierce.Alison@epa.gov>; Schmit, Ryan <schmit.ryan@epa.gov>; Edelstein, Rebecca <Edelstein.Rebecca@epa.gov>; Alwood, Jim <Alwood.Jim@epa.gov>; Passe, Loraine <Passe.Loraine@epa.gov>; Fehrenbacher, Cathy <Fehrenbacher.Cathy@epa.gov>; Butler, Tristan <Butler.Tristan@epa.gov>
Subject: Re: Firedrill: Consolidated TA doc for Sen. Shaheen Emerging Contaminants/PFAS bill

Thanks Tracy!

Alison/Tala - Are Tracy's comments enough to be responsive to the request? Or is the an ask to provide recommended edits to the actual document language to align the definition (based on differences identified)?

Sent from my iPhone

On Jun 9, 2021, at 9:47 PM, Williamson, Tracy <Williamson.Tracy@epa.gov> wrote:

[Request: advise how the PFAS definition on page 3 of the TA doc is the same or different than the OPPT and OECD definitions]

Ex. 5 Deliberative Process (DP)

ED_006319A_00008509-00001

From: Butler, Tristan Butler.Tristan@epa.gov
Sent: Wednesday, January 26, 2022 4:08 PM
To: Schechter, Kathryn Schechter.Kathryn@epa.gov; Griffin, Stephanie griffin.stephanie@epa.gov; Bushman, Daniel Bushman.Daniel@epa.gov
Cc: Turk, David Turk.David@epa.gov
Subject: RE: 8a7 scope: specific substances of interest
Hi All,

I don't have much to add beyond what Kathy already sent, but H=here are my thoughts regarding the specific substances mentioned in Stephanie's email:

Ex. 5 Deliberative Process (DP)

ED_006319A_00003952-00004

PFMOAA- Does not meet the OPPT working definition of PFAS and does not contain an obvious synthetic byproduct that is PFAS. I do not see a way to adjust the OPPT working definition to include this substance. Most likely degrades into TFA

Fluorinated gases- It is difficult to say which of these substances would or would not meet the OPPT working definition, but it is safe to say that some of these substance would be excluded from reporting if current definition is used to define the scope.

From: Le, Madison <Le.Madison@epa.gov>
Sent: Thursday, June 10, 2021 6:49 AM
To: Williamson, Tracy <Williamson.Tracy@epa.gov>
Cc: Henry, Tala <Henry.Tala@epa.gov>; Pierce, Alison <Pierce.Alison@epa.gov>; Schmit, Ryan <schmit.ryan@epa.gov>; Edelstein, Rebecca <Edelstein.Rebecca@epa.gov>; Alwood, Jim <Alwood.Jim@epa.gov>; Passe, Loraine <Passe.Loraine@epa.gov>; Fehrenbacher, Cathy <Fehrenbacher.Cathy@epa.gov>; Butler, Tristan <Butler.Tristan@epa.gov>
Subject: Re: Firedrill: Consolidated TA doc for Sen. Shaheen Emerging Contaminants/PFAS bill

Thanks Tracy!

Alison/Tala - Are Tracy's comments enough to be responsive to the request? Or is the an ask to provide recommended edits to the actual document language to align the definition (based on differences identified)?

Sent from my iPhone

On Jun 9, 2021, at 9:47 PM, Williamson, Tracy <Williamson.Tracy@epa.gov> wrote:

[Request: advise how the PFAS definition on page 3 of the TA doc is the same or different than the OPPT and OECD definitions]

Ex. 5 Deliberative Process (DP)

Message

From: Henry, Tala [Henry.Tala@epa.gov]
Sent: 6/11/2021 4:41:13 PM
To: Wang, Lili [Wang.Lili@epa.gov]; Burneson, Eric [Burneson.Eric@epa.gov]
CC: Behl, Betsy [Behl.Betsy@epa.gov]; Flaherty, Colleen [Flaherty.Colleen@epa.gov]; Euling, Susan [Euling.Susan@epa.gov]; Rodgers-Jenkins, Crystal [Rodgers-Jenkins.Crystal@epa.gov]; Henry, Tala [Henry.Tala@epa.gov]
Subject: RE: Listing PFAS on the Contaminant Candidate List
Attachments: PrePubCopy_10017-78_FR_Doc_eSignature_2021-06-10_Definition on Page 13.pdf
Importance: High

Its out...

Newsroom: <https://www.epa.gov/newsreleases/epa-continues-take-action-pfas-protect-public>

The pre-pub went up yesterday.

<https://www.epa.gov/assessing-and-managing-chemicals-under-tsca/pre-publication-notice-tsca-section-8a7-reporting-and>

On page 13 is the 'definition' language (attached).

Tala R. Henry, Ph.D.
Deputy Director
Office of Pollution Prevention & Toxics

T: 202-564-2959
E: henry.tala@epa.gov

From: Henry, Tala
Sent: Wednesday, June 9, 2021 11:54 AM
To: Wang, Lili <Wang.Lili@epa.gov>; Burneson, Eric <Burneson.Eric@epa.gov>
Cc: Behl, Betsy <Behl.Betsy@epa.gov>; Flaherty, Colleen <Flaherty.Colleen@epa.gov>; Euling, Susan <Euling.Susan@epa.gov>; Rodgers-Jenkins, Crystal <Rodgers-Jenkins.Crystal@epa.gov>
Subject: RE: Listing PFAS on the Contaminant Candidate List

Almost...it cleared OMB on Monday...we are striving for pre-pub to be posted on Thursday...will forward you that when it happens.

Tala

Tala R. Henry, Ph.D.
Deputy Director
Office of Pollution Prevention & Toxics

T: 202-564-2959
E: henry.tala@epa.gov

From: Wang, Lili <Wang.Lili@epa.gov>
Sent: Wednesday, June 9, 2021 8:52 AM
To: Henry, Tala <Henry.Tala@epa.gov>; Burneson, Eric <Burneson.Eric@epa.gov>
Cc: Behl, Betsy <Behl.Betsy@epa.gov>; Flaherty, Colleen <Flaherty.Colleen@epa.gov>; Euling, Susan <Euling.Susan@epa.gov>; Rodgers-Jenkins, Crystal <Rodgers-Jenkins.Crystal@epa.gov>
Subject: RE: Listing PFAS on the Contaminant Candidate List

ED_006319A_00008520-00001

From: Burneson, Eric <Burneson.Eric@epa.gov>
Sent: Wednesday, May 19, 2021 10:27 AM
To: Henry, Tala <Henry.Tala@epa.gov>
Cc: Behl, Betsy <Behl.Betsy@epa.gov>; Flaherty, Colleen <Flaherty.Colleen@epa.gov>; Wang, Lili <Wang.Lili@epa.gov>; Euling, Susan <Euling.Susan@epa.gov>
Subject: Listing PFAS on the Contaminant Candidate List

Tala:

We are in the final stages of developing a draft fifth Contaminant Candidate List (CCL 5) for public comment and are working to transmit this draft to OMB in the coming weeks. Because of the high priority of PFAs the following language is in our notice:

Ex. 5 Deliberative Process (DP)

The notice also clarifies that listing contaminants as groups does not mean that the agency will regulate the contaminants as groups:

Ex. 5 Deliberative Process (DP)

I am writing to you because we do not have an OPPT participant on our Workgroup for this action and we wanted to be certain that this proposed CCL5 grouping does not have unforeseen implications for OPPT. Can you or someone from your organization let us know if you have concerns with this approach?

As you know, ORD and OPPT do not believe ALL PFAS are a single group – not from chemical structure/class, pchem property, or biological effects perspective, i.e., it is not best available science to consider all one class or group for assessment purposes.

Ex. 5 Deliberative Process (DP)

Ex. 5 Deliberative Process (DP)

Another issue occurs to me: Given there is not a consensus definition of PFAS (within EPA nor internationally...yet) how are you defining what will be on the CCL? OPPT has a “working definition”, i.e., a chemical structure definition we have used in several rulemakings.

Ex. 5 Deliberative Process (DP)

Ex. 5 Deliberative Process (DP)

Eric G. Burneson
Director, Standards and Risk Management
Office of Ground Water and Drinking Water
U.S. Environmental Protection Agency
202 564 5250 (Office)
202 380 8897 (Mobile)

From: Jones, Danielle Y. EOP/OMB; **Ex. 6 Personal Privacy (PP)**
Sent: Monday, March 22, 2021 7:20 PM
To: Smith, Peterj <Smith.Peterj@epa.gov>
Cc: Hofmann, Angela <Hofmann.Angela@epa.gov>; Mudd, Austin B. EOP/OMB <Austin.B.Mudd@omb.eop.gov>; Cooperstein, Sharon <Cooperstein.Sharon@epa.gov>
Subject: EO 12866 Interagency Review: EPA's Reporting and Recordkeeping for Perfluoroalkyl or Polyfluoroalkyl Substances Under Section 8(a)(7) of the Toxic Substances Control Act (TSCA) (RIN 2070-AK67)
Importance: High

Hi Peter,

Attached are the interagency comments on the EPA's draft proposed TSCA Section 8a PFAS rule.

Below are some of the overarching comments:

Ex. 5 Deliberative Process (DP)

ED_006319A_00003546-00001

Ex. 5 Deliberative Process (DP)

Please let me know if you have any questions or if you would like to schedule a call to discuss some of the comments on the EA.

All the best,
Danielle

Danielle Y. Jones
Senior Policy Analyst
Office of Management and Budget | Office of Information and Regulatory Affairs
Cell: **Ex. 6 Personal Privacy (PP)** Phone: **Ex. 6 Personal Privacy (PP)**

From: Hanley, Mary <Hanley.Mary@epa.gov>

Sent: Thursday, June 10, 2021 2:49 PM

To: Freedhoff, Michal <Freedhoff.Michal@epa.gov>

Subject: RE: DUE COB FW: Last call - due COB 6/10 - Consolidated TA doc for Sen. Shaheen Emerging Contaminants/PFAS bill

OW is asking whether OCSPP has a preferred PFAS definition. I understand that OECD's may still be in flux and the suggestion is to have them check back going forward. Do you have a preference. Maybe say: **Ex. 5 Deliberative Process (DP)**

Ex. 5 Deliberative Process (DP)

From: Freedhoff, Michal <Freedhoff.Michal@epa.gov>

Sent: Thursday, June 10, 2021 1:58 PM

To: Hanley, Mary <Hanley.Mary@epa.gov>

Subject: RE: DUE COB FW: Last call - due COB 6/10 - Consolidated TA doc for Sen. Shaheen Emerging Contaminants/PFAS bill

- 1.
- 2.
- 3.

Ex. 5 Deliberative Process (DP)

Michal Freedhoff, Ph.D.

Principal Deputy Assistant Administrator

Office of Chemical Safety and Pollution Prevention

U.S. Environmental Protection Agency

Freedhoff.michal@epa.gov

From: Spalt, Nicholas <Spalt.Nicholas@epa.gov>

Sent: Thursday, January 7, 2021 2:40 PM

To: Pilant, Drew <Pilant.Drew@epa.gov>; McMoran, Devon <McMoran.Devon@epa.gov>; Cantu, Theresa <Cantu.Theresa@epa.gov>; Lanier, Sarah <Lanier.Sarah@epa.gov>; Lindstrom, Andrew <Lindstrom.Andrew@epa.gov>

Subject: Deliverables from Today's Discussion

Enforcement Sensitive – Deliberative – Do not distribute

Hi Everyone,

Thanks again for the great discussion earlier. I've attached the zip file (renamed .piz) that is the data and FOIA response letter to PEER. Second, is the draft OECD document that suggests a modification to the definition of PFAS. There is also a CompTox list on the dashboard for these OECD compounds.

Ex. 5 Deliberative Process (DP)

Ex. 5 Deliberative Process (DP)

Will keep you posted with future development.

Regards,
Nick

Nicholas Spalt
U.S. EPA Office of Enforcement and Compliance Assurance (OECA)
Office of Compliance (OC) Enforcement Targeting and Data Division (ETDD)
Integration, Targeting and Access Branch (ITAB)

ED_006319A_00034713-00001

From: Patlewicz, Grace <Patlewicz.Grace@epa.gov>

Sent: Friday, May 15, 2020 6:05 PM

To: Williams, Antony <Williams.Antony@epa.gov>; Richard, Ann <Richard.Ann@epa.gov>

Subject: Sanity check

I missed the last discussion with OPPT etc re PFAS definitions...I assume our working definition for what constitutes a PFAS which we have defined on the Dashboard and spelt out to denote PFASSTRUCT remains unchanged?

Had my update session with Rusty..managed to come out OK from the discussion (Yay!)..was quite a productive discussion overall so he seemed somewhat placated by the fact that we had been making progress 😊 Of all the things I thought were cut and dried - the PFAS structural definition was one that threw me - I thought that was settled - just wanted to double check..since he made reference to 'recent discussions Tony had been having'..and it made me think of the Program Offices discussions regarding how to define PFAS for the Federal Register and I wondered whether anything had changed that I had lost track of.

ED_006319A_00037235-00002

Thanks much

Have a great weekend...catch up next week

TFIF...it's felt like an extra long week what with ELMS stuff...

Cheers

Grace

Message

From: Patlewicz, Grace [/O=EXCHANGELABS/OU=EXCHANGE ADMINISTRATIVE GROUP (FYDIBOHF23SPDLT)/CN=RECIPIENTS/CN=325C1B8A80624AB08FB26FE9FBD4A55F-TIER, GRACE]
Sent: 10/14/2020 12:05:30 PM
To: Thomas, Russell [Thomas.Russell@epa.gov]
Subject: RE: NASEM meeting

Had a brief look at the slides - for the time allotted, I largely agree with the bullets you have listed.

Ex. 5 Deliberative Process (DP)

I think this is both a lack of consensus on how to define what a PFAS candidate actually is - that initial definition we had for the PFASSTRUCT list on the Dashboard has been augmented by several structural features to better capture the breadth of what PFAS represents because we were missing some obvious candidates. It is still an evolving process.

Moreover at the last OECD call on PFAS I was on last week..they are still discussions on how best to capture in a working definition what a PFAS is.

If we are still debating what constitutes a PFAS, what hope do we have on what the PFAS class or category might be!

Ex. 5 Deliberative Process (DP)

Ex. 5 Deliberative Process (DP)

Re our own approach - do we want to convey that the

Ex. 5 Deliberative Process (DP)

Ex. 5 Deliberative Process (DP)

From: Tobias, David <Tobias.David@epa.gov>
Sent: Friday, December 11, 2020 9:26 AM
To: Schechter, Kathryn <Schechter.Kathryn@epa.gov>
Subject: Definition of PFAS in the data call in rule

Good morning Kathy

"

For the purposes of this proposed action, the structural definition of PFAS includes per- and polyfluorinated substances that structurally contain the unit $R-(CF_2)-C(F)(R')R''$. Both the CF_2 and CF moieties are saturated carbons and none of the R groups (R , R' or R'') can be hydrogen.

"

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I was wondering whether $R-[(CF_2)-O]_n-R$ would fall in the data call in rule? It seems like perfluoro ethers like this wouldn't, which surprised me when I thought more about this definition. I think there are chemicals with the CF_2-O repeat group, why wouldn't we want them to be part of the rule?

Thanks

David Tobias
Currently on detail in Chemical Risk and Reporting Enforcement Branch/WCED/OCE/OECA

Message

From: Tobias, David [Tobias.David@epa.gov]
Sent: 12/15/2020 2:02:35 PM
To: Schechter, Kathryn [Schechter.Kathryn@epa.gov]
Subject: RE: Definition of PFAS in the data call in rule

Defining chemical class is hard.

Ex. 5 Deliberative Process (DP)

David Tobias
Currently on detail in Chemical Risk and Reporting Enforcement Branch/WCED/OCE/OECA

From: Schechter, Kathryn <Schechter.Kathryn@epa.gov>
Sent: Monday, March 15, 2021 8:13 AM
To: Stanley, Darrell <stanley.darrell@epa.gov>
Subject: FW: PFAS definition

Hi Darrell. Until we publish our working definition, we should not be sharing. I guess you can tell the submitter that there is a lot of activity with PFAS lately and that we will be publishing this information in the near future.

kathy

Dr. Kathy Schechter
Chemist, Industrial Chemistry Branch (MC-7406M)
1201 Constitution Ave., NW
Washington, DC 20460
Telephone: (202) 564-8589
Fax: (202) 564-8679

From: Williamson, Tracy <Williamson.Tracy@epa.gov>
Sent: Friday, March 12, 2021 6:09 PM
To: Schechter, Kathryn <Schechter.Kathryn@epa.gov>
Subject: RE: PFAS definition

Tala keeps saying that we have it published in two places

Ex. 5 Deliberative Process (DP)

The def is in the 8(a)(7) rule,

Ex. 5 Deliberative Process (DP)

Ex. 5 Deliberative Process (DP)

From: Schechter, Kathryn <Schechter.Kathryn@epa.gov>
Sent: Wednesday, February 24, 2021 2:37 PM
To: Williamson, Tracy <Williamson.Tracy@epa.gov>
Subject: PFAS definition

Just received an email from Darrell about a submitter wanting to see a published definition of PFAS for EPA. I know that we had discussed this earlier and wanted to know if you had thought of where that might have been.

Message

From: Bushman, Daniel [Bushman.Daniel@epa.gov]
Sent: 4/14/2020 9:06:45 PM
To: Schechter, Kathryn [Schechter.Kathryn@epa.gov]
CC: Turk, David [Turk.David@epa.gov]
Subject: RE: Scope of PFAS definition

Ex. 5 Deliberative Process (DP)

Daniel R. Bushman, Ph.D.
TRI Petitions Coordinator and Chemical List Manager
202-566-0743
OCSPP/OPPT/TRI Program Division/Regulatory Development Branch
www.epa.gov/tri/chemicals

From: Schechter, Kathryn <Schechter.Kathryn@epa.gov>
Sent: Tuesday, April 14, 2020 4:53 PM
To: Bushman, Daniel <Bushman.Daniel@epa.gov>
Cc: Turk, David <Turk.David@epa.gov>
Subject: RE: Scope of PFAS definition

Don't forget to **Ex. 5 Deliberative Process (DP)**

Dr. Kathy Schechter
Chemist, Industrial Chemistry Branch (MC-7406M)
1201 Constitution Ave., NW
Washington, DC 20460
Telephone: (202) 564-8589
Fax: (202) 564-8679

From: Bushman, Daniel <Bushman.Daniel@epa.gov>
Sent: Tuesday, April 14, 2020 4:44 PM
To: Schechter, Kathryn <Schechter.Kathryn@epa.gov>
Cc: Turk, David <Turk.David@epa.gov>
Subject: RE: Scope of PFAS definition

It also doesn't help **Ex. 5 Deliberative Process (DP)**

Ex. 5 Deliberative Process (DP)

It will be interesting to see what ORD suggests.

Daniel R. Bushman, Ph.D.
TRI Petitions Coordinator and Chemical List Manager
202-566-0743
OCSPP/OPPT/TRI Program Division/Regulatory Development Branch
www.epa.gov/tri/chemicals

From: Schechter, Kathryn <Schechter.Kathryn@epa.gov>
Sent: Tuesday, April 14, 2020 4:37 PM
To: Bushman, Daniel <Bushman.Daniel@epa.gov>
Cc: Turk, David <Turk.David@epa.gov>
Subject: RE: Scope of PFAS definition

Thanks Dan. It is hard to come up with a definition when you do not know what the limitations are! We have seen all kinds of structures [Ex. 5 Deliberative Process (DP)] For example, [Ex. 5 Deliberative Process (DP)]

Ex. 5 Deliberative Process (DP)

Dr. Kathy Schechter
Chemist, Industrial Chemistry Branch (MC-7406M)
1201 Constitution Ave., NW
Washington, DC 20460
Telephone: (202) 564-8589
Fax: (202) 564-8679

From: Bushman, Daniel <Bushman.Daniel@epa.gov>
Sent: Tuesday, April 14, 2020 4:27 PM
To: Schechter, Kathryn <Schechter.Kathryn@epa.gov>
Cc: Turk, David <Turk.David@epa.gov>
Subject: RE: Scope of PFAS definition

Hi Kathy,
I was excluding

Ex. 5 Deliberative Process (DP)

Ex. 5 Deliberative Process (DP)

Dan

Daniel R. Bushman, Ph.D.
TRI Petitions Coordinator and Chemical List Manager
202-566-0743
OCSPP/OPPT/TRI Program Division/Regulatory Development Branch
www.epa.gov/tri/chemicals


From: Schechter, Kathryn <Schechter.Kathryn@epa.gov>
Sent: Tuesday, April 14, 2020 3:37 PM
To: Bushman, Daniel <Bushman.Daniel@epa.gov>

Start: 4/6/2022 6:00:00 PM
End: 4/6/2022 7:00:00 PM

Recurrence: (none)

Required Attendees: Lan, Alexis; Bushman, Daniel; Sharkey, Susan; Cooperstein, Sharon; Butler, Tristan; Raffaele, Kathleen; Lee, Virginia; Smith, ThomasA; Schechter, Kathryn; Callahan, Leigh; Dean, Rachel; Gorder, Chris; Shortt, Veronica; Foster, Stiven; Schwarz, Stephanie; Cybulski, Walter; Barkas, Jessica; Milton, Philip; Franklyn, Valarie; Jacob, Annie; Raccor, Brianne

4/6 meeting agenda:

- SBAR Panel updates?
- Other updates:
 - Met with Michal yesterday to go over options related to reporting threshold and certain reporting exemptions (de minimis, impurities, byproducts, and R&D substances)
 - Thanks to those who've reviewed the FRN outline! I'll start adding information to the background section
 - PFAS definition: received feedback from Tala last week on viable rationales for modifying the proposed definition. It may be in the workgroup's best interest to move this discussion to a separate standing meeting among the workgroup members with equities and/or interest in this outcome until we've figured out the scope for the final rule. – if this works for others, I'd like to send an invite for a Tuesday or Thursday meeting on this topic
- Next RTCs to discuss (before end of April): tiered reporting; articles/article importers; small business exemptions
 - Workgroup poll on tiered reporting options—aim for next week if the workgroup isn't ready to vote today?
 - Begin discussion on public comments on including articles (generally) – see questions for the workgroup within the comment summary of the RTC file  [05e Including Articles \(General\) comment-response-document.docx](#)

ED_006319A_00039142-00001

From: Goodrow, Sandra [Sandra.Goodrow@dep.nj.gov]
Sent: 3/19/2020 4:13:18 PM
To: taylorj1@michigan.gov; Strynar, Mark [Strynar.Mark@epa.gov]
Subject: Re: C6O4 structure

So, I would love to have the ITRC team discuss the potential for the need to revise the definition and engage those relevant scientists in the discussion. I will definitely throw it in the pot of things we have to do.

As far as the refrigerants, they seem to have always been left out of the discussion due to their very different mechanisms of fate and transport, and ultimate impacts on the environment. As I understand it, those PFCs (the first true PFCs) are generally a concern for their greenhouse gas action. Very different physical and chemical properties, so it seems that the PFAS world broke up with them long ago. I am not saying that this should be forever!

Let's keep our eyes out for papers on this issue and share if we see something interesting.

Thanks, Joy and Mark! I hope everyone is well and stays well!

Sandra M. Goodrow, Ph.D.
Research Scientist I
NJ Dept. of Environmental Protection
Division of Science & Research
428 E. State St., 1st Floor
Mail Code 428-01, P.O. Box 420
Trenton, NJ 08625-0420
(609) 940-4164 *New Phone Number!*
Sandra.Goodrow@dep.nj.gov

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From: Taylor Morgan, Joy (EGLE) <TAYLORJ1@michigan.gov>
Sent: Thursday, March 19, 2020 11:26 AM
To: Goodrow, Sandra <Sandra.Goodrow@dep.nj.gov>; Strynar, Mark <Strynar.Mark@epa.gov>
Subject: [EXTERNAL] RE: C6O4 structure

Yes, we are hearing similar stories from industry. There are questions being asked now too on the cyclics from some environmental groups.

Maybe there is a way the definition can be broad enough to not exclude these chemicals but I'm not sure the best way to do this and hope for both of your guidance. Sandra, do you hope to add cyclics to your definition in the Tech Reg document and try to better address the refrigerant issue? Is this being released as a draft for review and comment? So appreciate your input!

From: Goodrow, Sandra <Sandra.Goodrow@dep.nj.gov>
Sent: Wednesday, March 18, 2020 2:45 PM

ED_006319A_00042216-00001

To: Strynar, Mark <Strynar.Mark@epa.gov>; Taylor Morgan, Joy (EGLE) <TAYLORJ1@michigan.gov>
Subject: Re: C6O4 structure

Thanks for your thoughts on this, Mark. Yes, why should they get a pass!

At ITRC, we have several industry people that push hard for limiting the definition to protect their products. ITRC will be releasing the Tech Reg document in a few weeks with their input, but will continue for another two years to incorporate additional information. This naming and classification will be something we should try to come to a consensus about...with your help, I hope!

Thanks, again!

Stay well, everyone!

Message

From: Detlef Knappe [knappe@ncsu.edu]
Sent: 7/27/2020 1:01:56 PM
To: Strynar, Mark [Strynar.Mark@epa.gov]
CC: Jane Hoppin [jahoppin@ncsu.edu]; Nadine Kotlarz [nkotlar@ncsu.edu]
Subject: Re: does this definition make sense?

Yup. Here's the section from Buck et al. (2011):

Perfluoroalkyl and polyfluoroalkyl substances in the environment: Terminology, classification, and origins

To avoid any subjectivity associated with these adjectives, we urge scientists to adopt the definition provided by the Organisation for Economic Co-operation and Development (OECD 2011), which stipulates that “long-chain” refers to:

perfluoroalkyl carboxylic acids with eight carbons and greater (i.e., with 7 or more perfluorinated carbons) and, perfluoroalkane sulfonates with six carbons and greater

(i.e., with 6 or more perfluorinated carbons).

The “long-chain” definitions for PFCAs and PFSA are different in number of C atoms because a PFSA (e.g., PFHxS, C₆F₁₃SO₃H) with a given number of carbons (6 in the example given) has a greater tendency to bioconcentrate and/or bioaccumulate than a PFCA with the same number of C atoms (e.g., PFHxA, C₈F₁₇COOH) (Martin et al. 2003a, 2003b). Although the OECD definition does not include perfluoroalkyl substances other than carboxylates and sulfo- nates, one may consider that a perfluoroalkyl chain with 7 or more C atoms, e.g., C₇F₁₅-, is, in any case, “long.”

I would challenge the last sentence. Compounds like PFO5DoDA and Nafion by-product 2 behave like long-chain compounds even though they would not be considered long-chain based on the definition provided in the last sentence. Also, when writing the PFAS class paper, the usefulness of the long-/short-chain definition was debated. The narrative that short-chain PFAS are safe is steadily repeated by the fluorochemical industry, but the narrative detracts from efforts to manage the entire PFAS class and continues the cycle of developing “regrettable substitutions”

Best,

Detlef

From: Lindstrom, Andrew <Lindstrom.Andrew@epa.gov>
Sent: Tuesday, June 29, 2021 2:01 PM
To: Zhanyun.wang <zhanyun.wang@ifu.baug.ethz.ch>
Cc: Washington, John <Washington.John@epa.gov>; Strynar, Mark <Strynar.Mark@epa.gov>
Subject: RE: Follow-up on PFAS GHGRP Meeting

Zhanyun,

Thank you very much.

With such a specific (and odd to me) definition, it seems to be strategically limiting where further inquiries will be made.

Exclusion of CF₃ compounds and PVDF is a big loophole.

Thank you!

Andy

From: Wang Zhanyun (IfU, ESD) <zhanyun.wang@ifu.baug.ethz.ch>
Sent: Tuesday, June 29, 2021 1:52 PM
To: Lindstrom, Andrew <Lindstrom.Andrew@epa.gov>
Cc: Washington, John <Washington.John@epa.gov>; Strynar, Mark <Strynar.Mark@epa.gov>
Subject: Re: Follow-up on PFAS GHGRP Meeting

Dear Andy,

The new proposed definition of PFAS for TSCA will let go many F-gases, pesticides, pharmaceuticals and dyes that contain only one -CF₃ group and PVDF (second largest used fluoropolymers). Notably, DuPont tested fluorotelomers that have structures such as F(CF₂CH₂)_n-CH₂-CH₂-R instead of F(CF₂CF₂)_n-CH₂-CH₂-R before. And such new compounds won't fall under the new definition as well (but I don't know if Chemours have plans to produce them). Similarly, compounds with the structure F(CF₂-O)_n-R will not fall under this new definition.

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It'll not cause problem internationally, as the OECD definition does allow users to set their user-specific working scope, but of course it'll set some precedents for some people/organisations.

This definition may come from Antony Williams' s group (at least I first heard about it from them a while ago).

Best regards,
Zhanyun

On 29 Jun 2021, at 19:36, Lindstrom, Andrew <Lindstrom.Andrew@epa.gov> wrote:

Zhanyun,

Do you have any comments or reaction to the new proposed definition of PFAS for TSCA?

I'm interested to hear if you think this will help or cause problems internationally?

Specifically, why would they choose this definition:

"...includes per- and polyfluorinated substances that structurally contain the unit $R-(CF_2)-C(F)(R')R$ ". Both the CF_2 and CF moieties are saturated carbons and none of the R groups (R, R' or R") can be hydrogen."

John, maybe we should reference this in the *Science* article.

Thank you very much,

Andy