Message

From: Lara, Rhina [Lara.Rhina@epa.gov]
Sent: 3/30/2021 3:03:40 PM
To: Leifer, Kerry [Leifer.Kerry@epa.gov]
Subject: RE: PFAS in Pesticide Packaging Inquiry: MN Dept of Ag, DDL 3/30 1 PM

Ooo yes, thanks for pointing that out!

From: Leifer, Kerry <Leifer.Kerry@epa.gov>
Sent: Tuesday, March 30, 2021 11:03 AM
To: Lara, Rhina <Lara.Rhina@epa.gov>
Subject: RE: PFAS in Pesticide Packaging Inquiry: MN Dept of Ag, DDL 3/30 1 PM

Hi Rhina

Q1 has a typo "subcultural" should be "substructural."

Kerry Leifer, Chief
Chemistry, Inerts and Toxicology Assessment Branch
Registration Division (7505P)
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U.S. Environmental Protection Agency
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e-mail: leifer.kerry@epa.gov

From: Lara, Rhina
Sent: Tuesday, March 30, 2021 10:55 AM
To: Leifer, Kerry <Leifer.Kerry@epa.gov>; Aubee, Catherine <Aubee.Catherine@epa.gov>
Cc: Giles-Parker, Cynthia <Giles-Parker.Cynthia@epa.gov>; Saunders, Jennifer <Saunders.Jennifer@epa.gov>; 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

Hi Kerry,

Thank you for suggesting I reach out to ORD! I am working on questions 3 and 4 with them. Their explanation of the EPA CompTox Chemicals Dashboard helped me edit question 1. Here are the questions and responses that will still need RD input.

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. Pesticide active ingredients on the list are included because they have small substructural elements similar to those of the substructures that informed the creation of the PFAS Master List. Pesticides that have small PFAS substituents could produce PFAS through various processes. 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.***
There are numerous definitions of PFAS, some which are quite broad and include any "man-made chemical with at least one fully fluorinated carbon atom." Regardless of chemical structure, ingredients in pesticide products are subject to a risk assessment process prior to approval. While some pesticide chemicals have fluorinated structures, currently registered pesticides do not contain ingredients that have structures or properties comparable to prominent PFAS.

3. ***How is this master list created?***
Working with ORD on response.

Ex. 5 Deliberative Process (DP)

4. ***Do these pesticides qualify as PFAS or are they included only because researchers have interest in them?***
Working with ORD on response.

Ex. 5 Deliberative Process (DP)

5. ***Are there any known potential concerns about these pesticide active ingredients?***

Best,
Rhina M. Lara *(she/her/hers)*
Communications Branch
Office of Chemical Safety and Pollution Prevention
U.S. Environmental Protection Agency
Phone: (202) 815- 5722

From: Leifer, Kerry <Leifer.Kerry@epa.gov>
Sent: Monday, March 29, 2021 1:03 PM
To: Lara, Rhina <Lara.Rhina@epa.gov>; Aubee, Catherine <Aubee.Catherine@epa.gov>
Cc: Giles-Parker, Cynthia <Giles-Parker.Cynthia@epa.gov>; Saunders, Jennifer <Saunders.Jennifer@epa.gov>; 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

Hi Rhina,

Questions 3 and 4 are related to the EPA CompTox Chemicals Dashboard, which is a project of the Center for Computational Toxicology and Exposure/ORD. I would think they would be in the best position to answer those questions.

I am trying to track down the registration status of lufenuron, noviflumuron, tetraconazole, and pyrifluquinazon but my OPPIN connection is spotty right now. I know tetraconazole is one of the Fungicide Branch's chemicals and the other three chemicals are all insecticides so they would be in one of the RD IVB's. I've copied the FB and the three IVB Branch Chiefs on this message.

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From: Lara, Rhina
Sent: Monday, March 29, 2021 11:48 AM
To: Aubee, Catherine <Aubee.Catherine@epa.gov>
Cc: Leifer, Kerry <Leifer.Kerry@epa.gov>
Subject: PFAS in Pesticide Packaging Inquiry: MN Dept of Ag, DDL 3/30 1 PM
Importance: High

Hi Catherine and Kerry,

We received an inquiry through the PFAS in Pesticide Packaging inbox regarding certain active ingredients in pesticides (Lufenuron, Noviflumuron, Tetraconazole, and Pyrifluquinazon) and whether they are considered PFAS. I tried to answer two of the questions using some of our previously approved responses, but will need your help in answering the others. We don't have a strict deadline on these, but would like to have an answer prepped by Wednesday morning.

Here is the incoming message:

I am Raj Mann, Section Manager for the Pesticide Non-point Section at the Minnesota Department of Agriculture. I have few questions regarding PFAS chemicals and pesticide active ingredients.
In our last call on March 5, EPA confirmed that no PFAS chemicals are registered as pesticides. However, while reading more about these chemicals, I came across the following EPA webpage which hosts a master list of PFAS chemicals: https://comptox.epa.gov/dashboard/chemical_lists/pfasmaster. Several pesticide active ingredients appear in the PFAS master list, including Lufenuron, Noviflumuron, Tetraconazole, and Pyrifluquinazon. The reason for the inclusion of these pesticide active ingredients is unclear beyond the fact that they contain fluorine atoms. The webpage states that there is no clear definition of PFAS chemicals (see excerpt below).

> *"There is no precisely clear definition of what constitutes a PFAS substance given the inclusion of partially fluorinated substances, polymers, and ill-defined reaction products on these various lists. Hence, PFASMASTER serves as a consolidated list of substances spanning and bounded by the below lists, defining a practical boundary of PFAS chemical space (within DSSTox) of current interest to researchers and regulators worldwide. This PFAS Master List will continue to expand as component lists grow. (Last Updated: September 16th 2020)."*

My questions are as follows:

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?
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.
3. How is this master list created?

4. Do these pesticides qualify as PFAS or are they included only because researchers have interest in them?
5. Are there any known potential concerns about these pesticide active ingredients?

Response:

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?***

Ex. 5 Deliberative Process (DP)

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.***

Ex. 5 Deliberative Process (DP)

3. ***How is this master list created?***

4. ***Do these pesticides qualify as PFAS or are they included only because researchers have interest in them?***

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Best,
Rhina M. Lara *(she/her/hers)*
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