

***Toxics Use Reduction Institute Science Advisory Board Meeting Minutes***  
***June 25, 2020***  
***Virtual Zoom Meeting***  
***10:00 AM***

***Members Present:*** Robin Dodson (Vice Chair), Hilary Hackbart, Wendy Heiger-Bernays, Christy Foran, Christine Rioux, Heather Lynch, Denise Kmetzo, Rich Gurney

***Members not present:*** Amy Cannon, Ken Weinberg, Dave Williams

***Program staff present:*** Liz Harriman (TURI), Heather Tenney (TURI), Hayley Byra (TURI), Pam Eliason (TURI), Hardiesse Dicka-Bessonneau (MassDEP), Tiffany Skogstrom (OTA), Tsedash Zewdie (MassDEP)

***Others present:*** Katherine Robertson (MCTA), Steve Korzeniowski (ACC), Carol Holahan (Foley Hoag ACC), Trisha McCarthy (Coyne PC for ACC), Erin Dickinson (ACC), Margaret Gorman (ACC), Harry Hechehouche (ACC), Kuper Jones (ACC), Erin DeSantis (ACC), Jay West (ACC), James Dunbar (MCTA via O'Neill and Associates), Ruthann Rudel (Silent Spring Institute), Kathryn Rodgers (Silent Spring Institute)

***Welcome & Introductions***

Each name or phone number showing on Zoom was called out and all attendees introduced themselves and their association. Visitors were asked to then mute and use the chat function if they had a question or comment.

***Approve May Minutes***

A board member asked for an edit to be made to page 2, paragraph 2 “breakdown” should be changed to be two words. Another edit was requested to change “Fluorocouncil representative” to “representative of ACC.” Lastly missing periods were identified in several places, so it was requested to insert periods where needed.

A motion was made to approve the minutes with the three edits that were identified. The minutes were unanimously approved (with 8 members present at the time of the vote).

***PFAS: Final Category Discussions***

The board was close to a motion and a vote at the June 16<sup>th</sup> meeting, but ran out of time. The goal at this meeting was to finish that discussion and answer any outstanding questions and concerns.

There was an objection by a representative from ACC citing deficient notice of the public meeting. Heather explained that the meeting was posted on the TURI website with an agenda for the meeting and the link to it was provided in the chat.

A TURA representative and a board member explained the minor suggested edits that were made to the PFAS definition from the previous meeting.

This definition does not include ultra-short chain (2 carbons or less) substances. Some board members are still concerned with their persistence, mobility, bioaccumulation, and possible toxicity and stated they would like to see more information on them in the future.

***At this point stakeholders were allowed time to comment and ask questions. Stakeholders were asked to keep their comments to three minutes and all stakeholders indicating they wanted to speak were given time to do so.***

A visitor stated that one of the things that can happen when TURA lists a chemical is that it can be designated as a higher hazard substance (HHS) or lower hazard substance (LHS). Can you classify a category? A TURA representative responded yes, a category can be classified as HHS or LHS, and it is also possible to pull chemicals out that did not fit that hazard designation.

A representative of ACC asked how this board plans to point the businesses in the right direction. Listing all these compounds is confusing. What is the purpose of listing all 4700 compounds? A TURA representative responded that is more of a policy question. The Science Advisory Board's job is to look at the science. If a vote is made to recommend to list, a policy analysis will be prepared that includes a discussion of the impacts faced by businesses and ways in which the TURA program can assist them. It would then go before the Advisory Committee and Administrative Council.

Another visitor asked if only 10 substances a year can be added. It was explained that a category is considered one substance regulatorily. The visitor requested that someone from the TURA program send the link to the regulation that explains this.

A visitor stated that they encourage TURI to use the broadest possible definition for this class so we can understand and address the possible risks. A lack of information from companies making and using these chemicals has made it challenging to study these chemicals, to know where to look for them and which chemicals to look for.

Board members discussed the approach of using a category definition. A board member stated that there is precedent for listing a large category, and that the definition crafted at the last meeting described an appropriate category. A visitor noted their concern about the category including chemicals without analytical methods or active use; a board member responded that they understood the desire to look at exposure, but that the TURA program looks at hazard, not risk, and the category lets companies know that chemicals similar to the ones they are using would likely present similar hazards.

Another board member stated their concerns for listing a category this large without sufficient hazard information on all the substances and stated they heard the stakeholder's concerns. We have not looked at the hazards of every PFAS and there is a lot of uncertainty. They acknowledged that we couldn't reasonably go through every PFAS due to time constraints, but wondered if we could have evaluated them from various subcategories first. The member stated they feel uncomfortable with saying every polymer is a precursor to hazardous PFAAs without looking at them all. Perhaps polymers should not be included similar to ultra-short chains, since we have not individually looked at their hazards. The board continued the discussion and a member noted some of the degradation references as sufficient evidence for them that the polymers were precursors.

## ***Motion***

A motion to recommend for listing a category of chemicals defined as **“those PFAS that contain a perfluoroalkyl moiety with three or more carbons (e.g.  $-\text{C}_n\text{F}_{2n}-$ ,  $n \geq 3$ ; or  $\text{CF}_3-\text{C}_n\text{F}_{2n}-$ ,  $n \geq 2$ ) or a perfluoroalkylether moiety with two or more carbons (e.g.  $-\text{C}_n\text{F}_{2n}\text{OC}_m\text{F}_{2m}-$ , or  $-\text{C}_n\text{F}_{2n}\text{OC}_m\text{F}_m-$ ,  $n$  and  $m \geq 1$ ).”**

A roll call vote was taken with seven members in favor, and one opposed.

A board member stated that other groups and organizations (OECD, Wang) are looking at definitions and we should consider those when they are published.

A board member noted the threshold amounts are set for 100 lbs. for each chemical that EPA listed (172 chemicals). A lower threshold should be considered especially given that EPA has set a lower threshold based on hazard. The board should also consider ultra-short chains at future meetings. Board members suggested that persistent, bioaccumulative, and toxic (PBT) chemicals (for example, the PFAAs that the board reviewed in detail) could be pulled out of the category for individual lower thresholds.

A board member asked how companies will test for PFAS. A TURA representative stated that companies are allowed to estimate from information from suppliers or any available information that they have. A board member suggested that elemental analysis methods could also be used if suppliers are protecting specific formulations under CBI.

A board member suggested that as the program talks to companies about the chemicals they are using and encourages them to talk with their suppliers, that providing the industry's Guide to Safe Handling of Fluoropolymers document could be helpful and start good conversations.

A TURA representative stated that a big part of this is education and learning more about what companies are using and how to use it safely. There have been many comments from board members and stakeholders that pertain to the policy challenges and opportunities; we will be sharing the policy analysis as it is being created and those comments will be addressed.

A special thanks was given to the board for the huge amount of work and time they have invested over the last several years; every board member has made valuable contributions and has contributed to the lively discussion. If, as a result of the policy discussions, we have more questions, we will bring them back at a future meeting.

## ***Future Work***

A board member asked how we decide what chemical we look at next. A TURA representative stated that if the board is concerned about something we can consider that, or it could be a program priority or the request could come from an external party.

As a side note, a board member recommended that TURI put the nine hand sanitizers FDA recently cautioned about as containing methanol, in our next newsletter.

As we have noted here today there is a desire to look at ultra-short chain PFAS. We also received a petition for the TURA program to look at carbon nanotubes and carbon nano fibers. There was a flame retardant bill in legislature about a year ago, that would require the TURA program to evaluate several flame retardants - if that were to be passed that would become part of the SAB's work. Finally, TURI is

looking at the safest cleaning and disinfecting products and comorbidities related to COVID-19 – there may be some specific substances that come to the SAB pertaining to that.

### ***Next Meeting***

The next meeting will be planned for the end of September.

### ***Handouts***

All handout documents listed below were provided electronically to all attendees prior to the meeting.

- Draft June 16<sup>th</sup> meeting minutes
- OECD spreadsheet with EPA information
- Degradation/Transformation of PFAS PowerPoint
- Category Considerations
- Options for PFAS Category Definitions
- Example Structure from each OECD Subcategory
- SAB remote meeting ground rules

### ***Chat Box Conversation***

From Board Member to Everyone: My internet connection says it's unstable. I can't hear right now. If it doesn't get better I will rejoin from my phone. My internet connection is bad. I can't hear any audio, I'm going to rejoin from my phone.

From Visitor to Everyone: ACC would like to state its objection to the public notice provided for the meeting. The notice provided on the TURI website does not contain a "list of topics that the chair reasonably anticipates will be discussed at the meeting" as required by Mass. Gen. Laws ch. 30A, § 20(b). Please note our objection for the record. We think the meeting should be adjourned and reconvened after proper public notice has been approved.

From TURA Representative to Everyone: June 16 meeting minutes approved as edited, discussing PFAS categories, with a recap from last week.

From Visitor to Everyone: Please address ACC's objection prior to conducting this meeting. I'm currently reviewing but don't want to delay the meeting unnecessarily.

From Visitor to Everyone: I have a general question when the timing is appropriate.

From TURA Representative to Everyone: OK I expect there will be plenty of opportunity to ask general questions. But please let me know if there is a specific moment when you feel it is most pertinent, if you do not get a chance by then.

From TURA Representative to Everyone: Agenda is hyperlinked  
[https://www.turi.org/Calendar/Science\\_Advisory\\_Board\\_Meeting6/Agenda](https://www.turi.org/Calendar/Science_Advisory_Board_Meeting6/Agenda)

From Visitor to Everyone: Once this part is wrapped up, may I interject?

From Visitor to Everyone: I have a question

From Visitor to Everyone: I have a question

From Visitor to Everyone: I have a comment

From Visitor to Everyone: ACC objects to any limitation to public input. In the ground rules for the meeting, no such limitation was discussed. Nor were any stakeholders given any notice that such a limitation would be imposed. Again, this is a serious departure from how SAB meetings have historically been conducted and an improper (and unfair) limitation seriously compromising the process.

From Visitor to Everyone: Is there a 3 minute limitation on speakers?

From Visitor to Everyone: I think there is still public input from a visitor.

From Visitor to Everyone: Question on this

From Visitor to Everyone: Another comment

From Visitor to Everyone: In general Fluoropolymers under normal conditions of use do not break down.

From Visitor to Everyone: TURA representatives can you please make sure that the board members comments are included in the minutes.

From TURA representative to Everyone: of course.

From Visitor to Everyone: I have a comment please

From Visitor to Everyone: thank you

From Visitor to Everyone: I would strongly object a threshold of 100 lbs for the entire category

From Visitor to Everyone: Can you share who filed the petition?

From Visitor to Everyone: Upton had its Town Meeting in person.