Toxics Use Reduction Institute Science Advisory Board Meeting Minutes September 30, 2020 Virtual Zoom Meeting 12:00 PM

Members Present: Dave Williams (Chair), Robin Dodson (Vice Chair), Christy Foran, Christine Rioux, Heather Lynch, Denise Kmetzo, Rich Gurney, Amy Cannon

Members not present: Wendy Heiger-Bernays, Ken Weinberg

Program staff present: Liz Harriman (TURI), Heather Tenney (TURI), Hayley Byra (TURI), Pam Eliason (TURI), Hardiesse Dicka-Bessonneau (MassDEP), Tiffany Skogstrom (OTA), John Raschko (OTA), Caredwen Foley (OTA)

Others present: Katherine Robertson (MCTA), Carol Holahan (Foley Hoag ACC), Trisha McCarthy (Coyne PC for ACC), Margaret Gorman (ACC), Harry Hechehouche (ACC), Phil Wettengel (MCTA via O'Neill and Associates), Shawn Swearingen (ACC), Laura Spark (Clean Water Action), Lisa Cashins (DLS), Jamie Dunbar (MCTA via O'Neill and Associates)

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, which TURI monitored, thereafter.

Program Updates

A TURA program representative gave an update on the program including TURI's Continuing Education conference and topics, recent events, webinars, resources and research being conducted around safer cleaning and disinfecting. See "Program Update" handout for details.

Approve June 25th Meeting Minutes

A motion was made to approve the June meeting minutes with the addition of a note stating that the chat box conversation is copied verbatim from zoom chat. The motion was seconded and a roll call vote was taken. The minutes were approved with six approvals and two abstentions.

Nanomaterials Petition Introduction

The TURA Administrative Council received a petition to add nanomaterials, specifically carbon nanofibers and carbon nanotubes (single-walled and multi-walled) to the TURA List, to designate them as higher hazard substances and to lower the reporting threshold to 100g. Heather provided an overview of the work that has been conducted on nanomaterials in the past in the TURA program,

including a previous letter to the Secretary from Clean Water Action, et al; an OTA survey to attempt to determine MA users; and previous presentations from experts to the SAB at their request. Heather walked through the various sections of the petition and the supplemental documents that were provided. See the "Petition for Nanomaterials" document and supplemental documents for more details. The strategy for today was to provide an introduction and talk through the petition with the board. At the next meeting additional studies will be added to the LibGuide and TURI will arrange for a nanomaterials expert to speak at the November meeting and give an overview of the topic.

A representative from Clean Water Action (one of the petitioners) gave a brief summary of the petition, and provided insight into the use of nanomaterials in Massachusetts, as it is one of the nation's leading centers for nanotech. It was emphasized that without a listing in Massachusetts, we are unaware of the actual extent that nanomaterials are being manufactured, used, disposed of, and released.

A board member asked how we will consider occupational issues and Heather explained that worker health and safety is part of the TURA mission, and that we endeavor to have a board member who has that expertise.

Going forward we will be adding additional information to the LibGuide, including materials that were recommended by a few TURA representatives and members, and resources on some of the key health endpoints. We will be actively looking for information. A request for information has been put out on the TURI website and an announcement was added to the TURI newsletter.

A board member asked if this is this how petitions are handled and if there is any level of screening to make sure there is supporting information. Heather responded that yes, the petition is reviewed by the Executive Director for the Administrative Council and TURI for completeness before it is brought to the board. It was noted that the program has not received a listing petition in many years.

A board member suggested thinking about lessons learned from the board's experience with the PFAS category. PFAS was particularly challenging as information and the regulatory approach was still emerging, and everyone was trying to understand/classify them at the same time. It was suggested to look into frameworks that already exist for nanomaterials and see how others have grouped/classified them.

Quaternary Ammonium Compounds Introduction

Liz gave some background on TURI's research in its lab regarding safer disinfection in light of the COVID-19 pandemic. Quaternary Ammonium compounds are widely used and their use is growing. EPA developed 4 groupings and identified some representative health studies in 1988 under the pesticide program.

Hayley presented background information on quaternary ammonium compounds and an example of a representative chemical, didecyl dimethyl ammonium chloride (DDAC). The board's input was invited regarding which representative chemical(s) they would like to look at. TURI began with DDAC as an example because there is quite a bit of information on DDAC and it was the chemical that EPA chose to represent Category 1 In 1988.

Members expressed pros and cons of reviewing two topics at once. There was general board support for prioritizing deliberations on quaternary ammonium compounds, given the pandemic, and meanwhile bringing in expert speakers for nanomaterials to provide background for future deliberations.

Next Meeting

Heather proposed the week of November 9th or 16th for the next meeting but will be sending out a doodle poll to find the best availability.

Handouts

All handouts were posted on the TURI website prior to the meeting and can be found here:

https://www.turi.org/Our Work/Policy/Toxics Use Reduction Act/Councils and Committees/TURA S cience Advisory Board/Meeting minutes/Meeting Minutes/September 30 2020

- DRAFT June Meeting Minutes
- TURA Program Update

Nanomaterials

- Ellenbecker Jacobs 2016: Briefing on Nanomaterials
- Shatkin 2016: Nanomaterials Presentation to SAB
- WHO 2017: Some Nanomaterials and Nanofibers
- CDC 2013: Current Intelligence Bulletin
- Cambridge PH Supplement to Petition
- PEER Supplement to Petition
- CWA Supplement to Petition
- Petition for Nanomaterials

Quaternary Ammonium Compounds

- Mt Sinai 2015: QAC for Physicians
- EPA 2006: Registration Eligibility Decision for Aliphatic Alkyl Quaternaries (DDAC)
- EPA 1988: Clustering of Quaternary Ammonium Compounds
- DRAFT DDAC EHS Summary

Chat Box Conversation (inserted verbatim from zoom chat)

12:33:09 From Visitor: Was the petition provided to list serv? If no, can you please send? Thank you!

12:33:25 From Visitor: found it

12:34:33 From TURA Representative: OK, for others, there is a link on the TURI SAB meeting calendar item

12:48:08 From Visitor: Our petition was focused on CNTs and CNFs only not other nanomaterials

12:50:09 From Visitor: We looked at studies on both CNTs and CNFs and on SWCNT and MWCNT.

12:53:20 From Visitor: We found some information that suggested that the largest manufacturers of CNTs are in Massachusetts.

12:59:35 From Visitor: I have to run to another zoom meeting but will attempt to come back if I can. Have a great day, everyone

13:02:49 From Visitor: Will the stakeholders be notified when additional materials ate added to the Lib Guide or do we have to continue to check daily?

13:03:10 From Visitor: What is the likely timeline of review and decision making?

13:09:27 From Visitor: Do you know if SWCNT's can change into MWCNT spontaneously?

13:18:56 From Visitor: Have quats with different chemical structures been developed in the last 30 years that would need a new Group?

13:32:33 From Visitor: What information does EPA require from vendors to get products on the N list? Would it include information useful to the Board?

13:43:57 From Visitor: it is very difficult for stakeholders to address more than one major campaign at a time.

13:49:05 From Visitor: I have to go—thank you all!