TUR Advisory Committee
Meeting Summary
April 4, 2018
MassDEP Boston Office
1 Winter Street, Second Floor, Rooms A&B
Boston, MA 02108

Members Attending: Robert Audlee (Stainless Steel Coatings, Inc.), Bill Judd (Industrial Compliance Group), Lucy Servidio (Capaccio Engineering), Mark Monique (Savogran), Elizabeth Saunders (Clean Water Action), Kathy Flannery (Department of Labor Standards), Andrew Goldberg (Attorney General's Office), Alix Pierre-Louis (Massachusetts Water Resources Authority [MWRA]), Gary Nedelman (Mexichem), Tolle Graham (MassCOSH)

Others Attending: Molly Jacobs (UMass Lowell), Robert Rio (AIM), Katherine Robertson (Massachusetts Chemistry Technology Alliance [MCTA]), Tricia McCarthy (American Chemistry Council [ACC]), Steve Rosario (ACC), Liz Harriman (Toxics Use Reduction Institute [TURI]), Michael Ellenbecker (TURI), Rachel Massey (TURI), Heather Tenney (TURI), (Tiffany Skogstrom (Office of Technical Assistance [OTA]), Maia Rodriguez-Semp (OTA), Suzi Peck (MassDEP), Rich Bizzozero (Executive Office of Energy and Environmental Affairs [EEA])

Welcome and Executive Director Update

The Executive Director welcomed members and attendees and stated that business associated with the minutes from October 5, 2017 would be handled after the Chemical Safety and Climate Change Preparedness presentation to give additional members time to arrive.

Chemical Safety and Extreme Weather Events

Tiffany Skogstrom from OTA gave an overview of the scope of the current Chemical Safety and Climate Change Preparedness project funded by the U.S. Environmental Protection Agency (EPA). The presentation slides were provided to all members and attendees. Skogstrom also demonstrated the use of the online GIS map titled "Massachusetts Toxics Users and Climate Vulnerability Factors." The map is publicly available on www.mass.gov/eea/ota-climate.

Discussion:

A member commented that the state should encourage the use of alternative, back up energy sources to promote climate resilience.

Another member asked for clarification on the audience that has attended the workshops for business. Representatives from OTA stated that the first round of trainings focused on community leaders and stakeholders and the current round focuses on businesses and first responders.

A member commented that, from the industry perspective, this work to improve emergency preparedness planning and communication with first responders is very important. The member also encouraged increased engagement with communities surrounding facilities. The member noted that dynamic exchanges of this kind occurred in the past, and that opportunities for

communication among businesses, first responders and communities have declined in recent years. The member also noted that he reaches out to his local fire department annually.

A member also encouraged OTA to ensure that TUR planners are encouraged to attend the training events.

A member asked about the accuracy and completeness of the data used to create the GIS map. Representatives from OTA responded that some layers of data including information about toxics users and waste sites had recently been updated. However, it was noted that flood risk information is retrospective and does not reflect the increased frequency of more severe storms and flooding.

A representative of OTA also noted that OTA has helped some first responders to access federal Tier II data.

An attendee asked if OTA will continue training on this topic beyond the life of the EPA grant. Representatives from OTA responded that OTA would continue to work to fill requests for training and information if it receives requests from industry groups or Regional Emergency Planning Committees.

Approval of Minutes

The meeting minutes from the October 5, 2017 meeting were distributed and the Executive Director asked for questions and comments. None of the members had additional changes for the minutes and they were accepted by the Committee with no votes against and no members abstaining.

Nanomaterials Survey Results and Discussion of Next Steps

Prior to the presentation, the Executive Director clarified that a summary of Administrative Council comments would be given following both nanomaterials presentations.

Tiffany Skogstrom, OTA Outreach and Policy Coordinator, gave a brief summary of the preliminary results from a survey administered, starting in December 2017, to gather information from respondents that use, process, or manufacture nanomaterials in Massachusetts. The presentation slides were provided to all members and attendees. The survey was developed and administered as part of the TURA program's ongoing response to the November 2016 request that was sent to Massachusetts Secretary of Energy and Environmental Affairs, Matthew Beaton, regarding policy development for nanomaterials. Thirteen environmental, labor, and advocacy groups coauthored the request that nanomaterials be assessed to ensure that they are used and disposed of in a manner that protects environmental and worker safety in the Commonwealth.

Skogstrom stated that further analysis of the survey responses is needed and that OTA is accepting intern applications to help with this effort. The survey will remain open until further notice.

Discussion:

An attendee raised the topic of the one-time call for reporting information on engineered nanomaterials to the U.S. EPA. The attendee asked if TURA is looking for the same information

as would be available via the EPA requirement. Program staff responded that there could be some overlap, but that the TSCA call for information is only for existing nanomaterials that haven't been reported on via a SNUR or pre-manufacture notice, that the deadline for complying is next fall, and that there is likely to be a significant amount of information claimed confidential. In response, a member commented that future OTA interns could ask companies if they complied with this federal reporting requirement. The Executive Director expressed the intent to inquire with EPA about the options for sharing results of the one-time reporting requirement.

The Executive Director stated that the TURA program is open to suggestions from Committee members about how to proceed in response to the 2016 nanomaterials request.

A member requested an overview of the scale of outreach done to solicit feedback for the nanomaterials survey. Representatives from OTA and TURI stated that the survey had been sent to targeted companies that may use or manufacture nanomaterials as well as widely disseminated by university, government agency, and industry trade association partners including MCTA and the ACC. Members suggested continued outreach to gather additional results.

Break

Presentation on Best Management Practices for Handling Nanomaterials

Dr. Michael Ellenbecker and Molly Jacobs of UMass Lowell gave a presentation titled "Engineered Nanomaterials: Overview of Hazards and Best Management Practices." The presentation slides were provided to all members and attendees.

Dr. Ellenbecker noted that many asbestos-related deaths continue to occur each year, due to exposures that occurred decades prior, and noted the similarities between asbestos and carbon nanotubes in possible mechanisms of toxicity.

Discussion:

After the presentation, a member commented that it is encouraging that HEPA filters can help prevent worker exposures to nanomaterials if they're properly fitted.

Another member commented that it seems appropriate that government agencies related to health and safety make efforts to understand nanomaterials and asked if the U.S. EPA is looking at MACT or other specifications for incinerators to prevent nanomaterials from being released to the environment. The presenters responded that they were not aware of such specifications.

An attendee representing the ACC commented to express that the ACC has previously offered to present speakers and information on nanomaterials. The attendee stated that he believes the industry has been portrayed as negligent when it comes to safety protocols; he stated the ACC has a nanomaterials panel and they welcomed the opportunity to act as a resource to the program.

A representative from MassDEP commented that the "Engineered Nanomaterials" presentation not only did not disparage industry but had expressly stated that most companies were handling the material responsibly. The presenters reinforced their interest in safety, particularly in small companies and access to accurate health, safety, and environmental information about engineered nanomaterials.

A member asked if CAS numbers differ sometimes between nanomaterial and bulk materials. Representatives from OTA and TURI responded that typically the CAS number for a nanomaterial will be the same as that of the bulk material. The member expressed concern that if the CAS number is the same, workers may not be aware of occupational hazards posed by nanomaterials.

A member expressed concern about carbon nanotubes used in dry lubricants.

A member requested that the program discuss the possibility of listing certain categories of nanomaterials under TURA, and the possibility of using a low weight threshold due to the small size of the particles.

The Executive Director stated that Administrative Council members expressed concern about companies' and workers' ability to identify nanomaterials and obtain health, safety, and environmental information about them from the Safety Data Sheets or elsewhere. The Executive Director added that it would be helpful for the ACC to provide information on identifying whether a material is a nanomaterial.

Several members agreed that the issue of identifying nanomaterials versus bulk materials and identifying nanomaterials in mixtures is of concern.

The Executive Director reaffirmed that the TURA program would request access to the information reported to the U.S. EPA as part of the one-time reporting requirement on nanomaterials.

Discussion of Outreach Results and Council Vote to List C1-C4 Halogenated Hydrocarbons/ Halocarbons Not Otherwise Listed

During the February 28, 2018 meeting of the Administrative Council on Toxics Use Reduction, the members of the Administrative Council voted to add the category referred to as C1-C4 Halogenated Hydrocarbons/Halocarbons Not Otherwise Listed (C1-C4 NOL) to the TURA list of reportable Toxic or Hazardous Substances (TURA List).

The February 28th vote initiates the formal Chapter 30A (the state Administrative Procedure Act) process to amend the TURA List (301 CMR 41.00), that will include a public hearing and 21 day public comment period. With the addition of the C1-C4 NOL category, businesses subject to TURA that otherwise use 10,000 pounds per year of chemicals in this category, would be required to report that use to MassDEP. The reporting threshold for companies that manufacture or incorporate any of the new chemicals into products would be 25,000 pounds per year.

Prior to the Council vote, the Executive Director did outreach to 43 individuals at 21 Tier II companies that were identified as using a chemical in the C1-C4 NOL category. The outreach material included information regarding the proposed category, a link to the policy analysis and the draft list of chemicals, examples of trade-names and common names for the chemicals like R134a, and information about the scheduled February 28, 2018 Administrative Council meeting and vote. The Executive Director received one request to clarify the list of chemicals to be included in the proposed category and no other response as a result of that outreach. As a follow-up measure, the Executive Director contacted two refrigeration system fabricators and installers in Massachusetts. The company representatives did not express concern with the proposal to list

the C1-C4 NOL and offered to partner with the Office of Technical Assistance on outreach to their customers that are subject to USEPA Risk Management Planning (RMP) because of the use of anhydrous ammonia.

The Executive Director stated the Council members expressed some concern about the use of flammable refrigeration alternatives, mainly in non-TURA covered SIC codes.

Discussion:

A Committee member commented that it should be made clear to companies that many are unlikely to trip the TURA threshold for use of C1-C4 NOL chemicals in refrigeration systems.

A member requested a general timeline for the Chapter 30A process. The Executive Director responded that it's likely that the public comment period would take place during the fall of 2018.

Program Agency Updates

TURA Program representatives referred members and attendees to the "TURA Program Update" handout for April 2018. A representative from TURI specifically mentioned the upcoming Spring Toxics Use Reduction Planner Continuing Education Conference on April 25th in Marlborough, MA as well as a recent TURA program report on competitiveness impacts of TUR.

The member from Capaccio Environmental Engineering, Inc. announced that Capaccio would host a South Korean delegation in April.

Adjourn

Handouts

April 4, 2018 Advisory Committee Meeting Agenda

October 5, 2017 Advisory Committee Meeting Draft Minutes

Chemical Safety and Climate Change Preparedness Slides

Spring 2018 Chemical Safety and Climate Change Preparedness Workshop Flyer

November 2016 Nanomaterials Request

October 2017 ACC Letter to Secretary Beaton

October 2017 MCTA Letter to Assistant Secretary Sieger

Nanomaterials Survey Memo

Preliminary Nanomaterials Survey Results

Engineered Nanomaterials: Overview of Hazards and Best Management Practices Slides

TURI Nanomaterials Fact Sheet

February 2018 TURI Policy Analysis: C1-C4 Halogenated Hydrocarbons/Halocarbons Not Otherwise Listed

February 2018 Draft List: C1-C4 Halogenated Hydrocarbons/Halocarbons Not Otherwise Listed

TURA Program Update, April 2018

Fiscal Year 2017 Progress Report on the Massachusetts Toxics Use Reduction Program

Toxics Use Reduction and Resource Conservation: Competitiveness Impacts for Massachusetts Businesses