TUR Advisory Committee Meeting Summary

October 5, 2017 Saltonstall Building 100 Cambridge Street, Boston Conference Room B

Members Attending: 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), Peter Yarossi (Massachusetts Water Resources Authority [MWRA]), Kari Sasportas (Cambridge Public Health Department), Gary Nedelman (Mexichem), Ronald Westgate (Philips Lightolier)

Others Attending: Karen Rankin (Cabot Corporation), Katherine Robertson (Massachusetts Chemistry Technology Alliance [MCTA]), Bill Coyne (American Chemistry Council [ACC]), Steve Rosario (ACC), Liz Harriman (Toxics Use Reduction Institute [TURI]), Rachel Massey (TURI), Heather Tenney (TURI), Tiffany Skogstrom (Office of Technical Assistance [OTA]), Suzi Peck (MassDEP), Rich Bizzozero (Executive Office of Energy and Environmental Affairs [EEA]), Maia Rodriguez-Semp (OTA)

Welcome and Executive Director Update

The Executive Director provided a brief update on the activity of the Administrative Council. The Council last met on June 5, 2017 and voted to adopt the U.S. Environmental Protection Agency's addition of the EPCRA category hexabromocyclododecane (HBCD) to the TURA list of reportable substances with a reporting threshold of 100 pounds. The HBCD category includes CASRNs: 3194-55-6 (1,2,5,6,9,10-hexabromocyclododecane) a mixture of 16 isomers and 25637-99-4 (hexabromocyclododecane) a mixture of just 3 isomers. Also at the Council meeting, representatives from TURI presented the preliminary draft policy analysis for Halogenated Hydrocarbons: C1-C4 Not Otherwise Listed and reported Committee member comments on the preliminary draft to the Council. Council members requested that the final policy analysis include additional information on use in Massachusetts and that the TURA program agencies work with companies likely to report prior to listing to make sure they are aware of alternatives.

Approval of Minutes

The meeting minutes from the February 28, 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. It was noted that the draft minutes were sent out to the members soon following the February 28th meeting so as to allow members to review the minutes while the meeting content could more easily be recalled.

Science Advisory Board (SAB) Update

A representative from TURI provided a brief overview of the SAB's work over the past year stating that, in September 2016, the SAB began examining highly fluorinated compounds, beginning with the specific chemicals PFOA and PFOS. In January, 2017, the SAB

recommended that PFOS and its salts and PFOA and its salts be listed as categories under TURA based on persistence, bioaccumulation, ecotoxicity, and animal acute toxicity.

The representative from TURI stated that the Board then began examining shorter chain perfluorinated alternatives to PFOA and PFOS. Discussion followed among Committee members, TURA program representatives and representatives of the American Chemistry Council (ACC) about the use of short and long chain perfluorinated compounds and the legacy contamination of ground water in sites in New England and nearby states. An ACC representative shared a local experience of shifting to an alternative fire fighting product at a volunteer fire department.

Halogenated Hydrocarbons: C1-C4 Not Otherwise Listed

Representatives from TURI presented the policy analysis for the proposed chemical category provisionally described as "Halogenated Hydrocarbons C1-C4 Not Otherwise Listed" (C1-C4 NOL). The chemicals in the proposed category are used in a variety of applications, including solvent and refrigerant uses, among others. The policy analysis analyzes the implications of adding this category to the TURA list. With this addition, businesses in TURA covered sectors with 10 or more full time employee equivalents (FTEs) would be subject to TURA program requirements if they manufacture or process 25,000 lb/year, or otherwise use 10,000 lb/year, of chemicals in this category. These businesses would be required to file annual toxics use reports, pay annual toxics use fees, and develop a toxics use reduction plan every two years.

The SAB initiated this proposal, as they observed that there were potential substitutes for already listed substances (such as TCE and nPB) that were similar in structure and hazard, but were not yet listed. A primary reason for adding these substances would be to prevent regrettable substitutions, for example, to 1-Bromopropane (nPB) and other halogenated hydrocarbons and halocarbons.

The representatives from TURI stated that, while a large number of chemicals are included in the category as discussed, the listing of this category would be expected to result in a small number of filers. TURI distributed an illustrative draft list of chemicals that fit the C1-C4 chemical structure. The number of substances in the category that are expected to be currently in use in Massachusetts is small, as many are already individually listed on TURA, and many others are not known to be currently in commerce. The list was made available as a handout for all attendees of this meeting.

Comments and questions were then invited from Committee members and attendees. Questions and comments included the following.

A member asked why the category was not designed to include chemicals with more carbons, e.g., 6 carbons in a benzene ring. TURA program staff explained the reason that the SAB selected C1-C4 was to keep a manageable scope.

In response to questions, TURA program staff clarified that the category is defined as including only "not otherwise listed" chemicals meeting the chemical structure criteria. Chemicals that are already listed individually would not be affected by the addition of this category to the list. TURA program staff also clarified that filers would add together their use of all chemicals in the

category for reporting purposes, and that the program would not receive detailed information on use of individual chemicals within the category.

A representative from TURI reiterated the goal of preventing regrettable substitutions and pointed to the value of bringing previously unregulated and untracked chemicals with similar hazards under regulation.

A member expressed support to move forward with the listing, given the hazards of chemicals in the proposed category.

Another member raised concern regarding the potential confusion of a category that included both refrigerants and solvents. The member also requested information on whether drug developers are using any of the chemicals in the proposed category as solvents (while noting that these uses would be unlikely to be reportable under TURA). A representative from TURI clarified that substances on the list are used for a wide variety of applications, including but not limited to solvent and refrigerant applications. Any individual chemical may be used for a variety of applications.

A representative from OTA stated the listing of this chemical category presented an opportunity to do outreach on refrigerants, especially for companies that would be affected by listing this category. A member responded suggesting that there might be an external source of guidance on refrigerant choice that could be helpful in outreach.

Update: Request for Policy Development on Nanomaterials

The Executive Director stated that at the most recent Administrative Council meeting a request for information and input on the use of nanomaterials in Massachusetts was given to all Council members and attendees, including representatives from the Massachusetts Chemistry Technology Alliance (MCTA) and the American Chemistry Council (ACC). A response to the request was received from the member representing the Department of Labor Standards who forwarded a two page summary of work performed by an interagency nanomaterials workgroup in 2008. The TURA program is developing a survey to collect information from manufacturers and users of nanomaterials in Massachusetts. TURI has also produced a fact sheet on Engineered Nanomaterials that provides information on carbon nanotubes, quantum dots, nano titanium dioxide, and nanosilver. Discussion followed review of the fact sheet regarding the uncertainty of defining and identifying nanomaterials.

A representative from the ACC provided the Executive Director with copies of a letter on nanomaterials sent to Secretary Beaton in response to the 2016 request. The representative stated that the ACC has extensive insight and information on nanomaterials and would offer that information and an expert to speak at a future Committee meeting. Representatives from the TURA program reiterated that any information on uses of nanomaterials that industry could provide, would be appreciated.

A representative from the Massachusetts Chemistry Technology Alliance (MCTA) put forward that nanomaterials should not be represented as new and un-researched, stating that a member company has used engineered nanomaterials for over 40 years. A Committee member responded with the concern that length of use does not indicate that a substance is benign and expressed the importance of examining health impacts.

A Committee member representative from the Department of Labor Standards noted that the TURI fact sheet will be useful in educating OSHA Consultation Program staff about engineered nanomaterials.

A Committee member asked whether Safety Data Sheets provide information on particle size, and expressed concern that some businesses could be using engineered nanomaterials without being aware of it.

Agency Updates

A TURA Program-wide update was distributed to members. A few additional notes:

TURI

TURI will move to Boott Mills in Lowell in January or February of 2018.

A representative from TURI passed around copies of a new competitiveness report featuring cost savings and efficiencies achieved by several Massachusetts companies (www.turi.org/competitiveness).

TURI provided an overview of the FY18 grants awarded.

MassDEP

A representative from MassDEP provided an update on the new online TURP certification and recertification process, the upgraded reporting system and inspector trainings held in partnership with OTA to improve enforcement efforts.

The representative also responded to a member's question regarding updates on the results of the Amnesty program.

OTA

A representative from OTA reviewed the Mark Richey Woodworking Toxics Reduction case study and FY17 technical assistance results provided on the TURA Program Update. Another representative from OTA gave an update on the Building Chemical Safety into Climate Change Resilience project. Municipal and first responder trainings were being held at the time of this meeting and trainings for private facilities will be scheduled winter through spring 2018.

Adjourn

Handouts

TURA Program Update October 2017

TURI Policy Analysis, Halogenated Hydrocarbons C1-C4 Not Otherwise Listed

Draft List of Halogenated Hydrocarbons C1-C4 Not Otherwise Listed Chemicals

TURI Fact Sheet on Engineered Nanomaterials

February 28, 2017 Meeting Minutes for the Advisory Committee to the TUR Administrative Council

FY18 TURI Grants Overview

Municipal Training Schedule, Building Chemical Safety into Climate Change Resilience Project