

**TUR Advisory Committee**  
**Meeting Summary**  
February 28, 2017  
Saltonstall Building  
100 Cambridge Street, Boston  
Conference Room A

**Members Attending:** Bill Judd (Industrial Compliance Group), Lucy Servidio (Capaccio Engineering), Mark Monique (Savogran), Tolle Graham (MassCOSH), Elizabeth Saunders (Clean Water Action), Kathy Flannery (Department of Labor Standards), Andrew Goldberg (Attorney General), Peter Yarossi (Massachusetts Water Resources Authority [MWRA]), Silvia Broude (Toxics Action Center)

**Others Attending:** Katherine Robertson (Massachusetts Chemistry Technology Alliance [MCTA]), Tricia McCarthy (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 welcomed members to the meeting and reminded members of the requirement that they complete ethics training. The Executive Director provided a brief update on the activity of the Administrative Council. An amendment to TURA regulations 301 CMR 41.00 was promulgated in September 2016 regarding the designation of Toluene Diisocyanates (TDI) as a Higher Hazard Substance. As of January 1, 2017, 2, 4-TDI (CAS 584-84-9); 2, 6-TDI (CAS 91-08-7); and TDI Mixed Isomers (CAS 26471-62-5) are designated as Higher Hazard Substances with reporting thresholds of 1,000 lbs.

The Executive Director discussed a request 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. A member commented that nanotubes, a byproduct of diesel combustion should be part of the assessment. There was a request put forward by several members that all existing state and federal regulations, including new EPA one-time reporting requirements, for nanomaterials be examined as part of an analysis. A member suggested that MassDEP reconstitute the interagency group on nanomaterials.

**Approval of Minutes**

The meeting minutes from the May 11, 2016 meeting were reviewed. Several members put forward a request that language on page two of the minutes concerning reporting requirements for submitting federal and state Form Rs be clarified. Alternate language was proposed, documented, and accepted by the committee. A motion was then made to accept the minutes, seconded and the minutes were accepted by the committee with the alternate language.

Original language: “Yes, as has been true since the advent of high hazard chemicals, facilities reporting on high hazard substances need to complete a Federal Form R as well as a state only Form R.”

Final language: “Yes, as has been true since the advent of higher hazard substances, facilities reporting on higher hazard substances that also meet the federal reportable threshold need to complete both a Federal Form R and a state only Form R.”

### **Halogenated Hydrocarbons: C1-C4 Not Otherwise Listed**

A representative from TURI introduced the preliminary draft of the policy analysis for the chemical category described as “Halogenated Hydrocarbons C1-C4 Not Otherwise Listed.” The category does not include oxygenated solvents, such as ethers or alcohols. 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. This policy analysis evaluates this category to determine if there are chemicals that are not already listed under TURA that should be added to the chemical list. The primary reason for adding these substances would be to prevent regrettable substitutions, for example, to 1-Bromopropane (nPB) and other halogenated carbons. The policy analysis is not related to higher or lower hazard substance designation. The chemicals in the described C1-C4 group have characteristics of and uses as solvents and refrigerants. Many of them are ozone depleting substances or greenhouse gases, as well as being toxic substances. One attendee asked if C1-C4 chemicals were listed under TURA, whether some companies would exceed the reporting requirement due to chemical use in refrigeration systems. Members and program staff agreed that because the reporting threshold of 10,000 pounds is for use and not amount kept on site, for these refrigeration chemicals it would be a rare occurrence that would cause a company to exceed that threshold. Perhaps a recharge of their refrigeration system, or the new installation of a very large refrigeration system might trigger a one-time need to report. TURI requested input from Advisory Committee members if they were aware of known uses of these substances in the Commonwealth and feasible alternatives in the area of refrigerants.

Question: How many companies are likely to be affected by a listing of this category under TURA?

Response: According to TURI’s estimates from Tier II reporting as of February 2017, it would appear that a small number of facilities would be affected. Analysis is not yet complete for trade name chemicals. Facilities identified in Tier II that could be affected by TURA reporting requirements have not been analyzed by SIC code, number of employees, or estimated annual use amounts. Also, analysis so far has been based on Tier II data which the committee agreed contains incomplete information.

Comment: A member raised the issue of worker safety issues associated with chemicals in the C1-C4 group and also asked whether ammonia is to be included in the category.

Response: Ammonia is not included in the category although it is used as a refrigerant. Refrigerants that will be included in the C1-C4 category are not as acutely toxic as ammonia but some do have ozone depleting properties or global warming impacts.

Comment: A member expressed the concern that, if new chemicals are listed under TURA as a category, it becomes difficult for companies to know if they are using a reportable chemical, especially if no CAS registry numbers are listed. The member predicted challenges with threshold determinations.

Response: The program shares that concern. If a chemical category defined by chemical structure is added to the TURA list, reporting guidance will also include a list of known individual chemicals and CAS numbers.

Comment: The representative from the Attorney General's office expressed interest in a regulatory construct that prevents companies from avoiding the regulatory requirements by adopting regrettable substitutions to reportable chemicals.

Response: The Council has discussed a desire to avoid regrettable substitutions. Also, listing chemicals or substances as a category rather than individually can assist in preventing regrettable substitutions. Other programs categorize substances into groups to encourage action associated with classes of chemicals rather than an individual chemical.

Question: Is the list of chemicals in this Halogenated Hydrocarbons C1-C4 Not Otherwise Listed category that TURI is examining available to members?

Response: TURI will distribute the entire list to the committee members and requests input and information on the list from the committee. The list will indicate which substances are in commerce and which substances are already on the TURA list.

### **ERP Dry Cleaning Update**

A representative from MassDEP presented an update on the dry cleaner Environmental Results Program (ERP) and provided members with several charts detailing the perchloroethylene use trends in dry cleaning in the Commonwealth. The representative explained that overall, the use of perchloroethylene (perc) for garment cleaning per year has decreased. It's estimated that an increasing proportion of professional garment cleaning in Massachusetts is now done using wet cleaning techniques but not necessarily using what TURI classifies as professional wet cleaning. Also, since 2000, the number of garment cleaning shops reporting to MassDEP that they use perc machines has decreased from 612 to 275 and since 2005 120 dry cleaners have switched from Perc to alternative cleaning methods. (60% of these switch to high flashpoint hydrocarbon cleaning). Those installing systems that use alternative solvents have increased, while those installing new perc machines have decreased. In 2000 34 of the 46 new machines were perc machines. Facilities reporting in 2016 indicated that all 22 new machines used alternatives to perc. The representative from MassDEP reminded the committee that partially because of the work of the TURA program, the message is coming across that perc has negative health and environmental effects and garment cleaning shops are not installing more new perc machines; when they install new machines, they choose alternative solvents or wet cleaning. A representative from TURI added that TURI is currently updating the existing alternatives assessment chart that shows perc and the alternatives in garment cleaning with environmental or health information. The SAB reviewed some new information about some of the solvent alternatives to perc that will be included.

The topic came up that the most popular alternative to perc has been high flashpoint hydrocarbons. To this, a member raised the question of environmental or health and safety concerns associated with these hydrocarbons. They also raised the question of listing high flash hydrocarbons under TURA. The possibility of expanding the ERP program to include the alternatives was discussed. A member commented that in their experience, sometimes solvents are necessary in cloth and garment cleaning to clean items heavily soiled with oil.

### **Advisory Committee Member Activities & Priorities**

Advisory Committee members were asked what they and their organizations/companies were focused on related to TUR and toxic chemicals. This discussion is a continuation from one started at the May 2016 meeting.

Andrew Goldberg (Attorney General): Stated that while it's great to see professional garment cleaners progress away from perc, the AG has continuing concerns about shops that are touting their processes as "eco-friendly" or "green" when they are not doing professional wet cleaning, but instead are using solvent alternatives to perc which may have health or environmental concerns of their own. Consumers have the right to know which process the garment cleaner of their choice is using. Also, consumer education is important as the current situation is unfair to shops that make the switch to 100% professional wet cleaning and have to compete with the marketing of shops using hydrocarbons.

Kathy Flannery (Division of Labor Standards): DLS has partnered with Boston and Everett fire departments to assist first responders with process safety management (PSM) and the use of ammonia at facilities for refrigeration. This is a capacity building effort for the first responders and corresponds with a recent OSHA priority regarding PSM and ammonia for refrigeration. Announced the OSHA Summer Summit on June 13 and encouraged members to register early.

Tolle Graham (MassCOSH): MassCOSH is working on its Healthy Schools initiative with Boston Public Schools. The current goal of the program is to expand the green cleaning policy as they discovered that teachers and staff in early education classrooms sanitize and disinfect according to NAEYC standards to earn that accreditation. The Healthy Schools initiative is focusing on educating teachers on moving away from bleach and other traditional sanitizers and disinfectants that have quaternary ammonium compounds. Ongoing challenges with this teacher education initiative include labor management issues. The Massachusetts Asthma Action Partnership is currently looking for funding to do a seminar on disinfection and asthma prevention.

Peter Yarossi (MWRA): Updated the committee that current priorities include fats oils and grease pollution prevention and mitigation. MWRA also had spikes of molybdenum last year – possibly due to very dry conditions and less dilution in streams. Molybdenum (Mo) is used as an anti-corrosive in cooling towers. Mo is more expensive compared to zinc, phosphates and some other alternatives. The MWRA did public information postings and surveys to find out whether and where it is being used in cooling towers.

Elizabeth Saunders (Clean Water Action): Currently encouraging and assisting municipalities with the removal of lead service lines. Funding is available for this through MWRA. The Alliance for a Healthy Tomorrow Coalition is continuing work on policy issues for flame

retardant exposure. Clean Water Action is also working to collaborate with retailers to help them develop policies to reduce toxics in their supply chains and make information available about where chemicals are being used in products.

Mark Monique (Savogran): Working on screening green co-solvents for effectiveness in cleaners and degreasers in small amounts. The substances are marketed as having negligible VOCs and are supposed to be biodegradable. A representative from TURI indicated that they were also interested in newer solvents and degreasers and could fund preparation of GreenScreen hazard analyses if that would be helpful and informative.

William Judd (Industrial Compliance Group): Presented personal opinion that the recent trend to ignore science in policy making is a problem and informed members about the various marches and rallies for science coming up on April 22 or Earth Day.

Lucy Servidio (Capaccio Environmental Engineering): All work at Capaccio touches on toxics. The company now has six Toxics Use Reduction Planners. Consultants at Capaccio help companies with process hazard analysis and other toxics related compliance issues. They also have a new initiative to help their clients raise environmental issues to the “C suite.”

### **Agency Updates**

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

#### **TURI**

The Spring TUR Planner Continuing Education conference will be held on April 6, 2017.

#### **Science Advisory Board**

An update was provided on the Science Advisory Board’s current work on perfluorinated compounds (PFCs). The representative said that the board had voted to recommend listing perfluorooctanoic acid (PFOA) and perfluorooctanesulfonic acid (PFOS), and will be reviewing other perfluoroalkyl substances, including C4, C6 and C9 compounds.

#### **MassDEP**

An update was provided on the amnesty program. Over 200 chemical reports from 110 facilities were received by MassDEP. An effort to retrain MassDEP inspectors on performing TURA inspections is underway; initial trainings for inspectors have already occurred. The representative from MassDEP reported that the process to apply to become a Toxics Use Reduction Planner (TURP) is now online. Steps still need to be taken to load current TUR Planners into the system and send those individuals their PIN. The upcoming TURA/ TRI reporting trainings have been scheduled for the 2<sup>nd</sup> and 4<sup>th</sup> weeks of May.

#### **OTA**

A representative from OTA provided an update on the ongoing Building Chemical Safety Into Climate Change Resiliency Planning pollution prevention grant from EPA. OTA is now in the second year of the grant and is working with the chosen seven Regional Planning Agencies to plan their first trainings which will be for first responders and community stakeholders.

Consultant Todd Dresser has been chosen to assist OTA with the work of the grant. A second round of trainings will be geared for toxics users to help them incorporate TUR into emergency preparedness planning.

The Executive Director requested that any comments on the FY16 TURA Annual Report be sent to him directly.

Maia Rodriguez-Semp, OTA Communications Coordinator as of August 2016 was introduced to the committee.

### **Adjourn**

### **Handouts**

TURA Program Update May 2016 – February 2017

TURI Policy Analysis, Halogenated Hydrocarbons C1-C4 Not Otherwise Listed -Draft February 2017

Fiscal Year 2016 TURA Annual Report Draft

Nanomaterials Letter

May 11, 2016 Meeting Minutes for the Advisory Committee to the TUR Administrative Council

ERP Dry Cleaning Update for February 2017