

TURA Program Update - Oct 27, 2020

COVID-19 Pandemic

Note that all upcoming events are planned as virtual due to the COVID-19 pandemic and the necessity for social distancing. Please check TURI's website for on-going updates on events and resources, and feel free to contact TURI, OTA or MassDEP staff with any questions. For the latest news, we encourage you to sign up for program newsletters from TURI (www.turi.org) and OTA (<https://www.mass.gov/orgs/office-of-technical-assistance-and-technology-ota>).

Current and Upcoming Meetings and Events

- [Webinar-based Fall Continuing Education Conference](#) – Tues. Oct 27 and Thurs. Nov 5; two 90 min. sessions each day plus a short noontime TURA Program update on the 27th and a networking opportunity on the 5th.
 - Safer Cleaning and Disinfecting for Massachusetts Businesses
 - Using the New TURA Data Site
 - Successful TUR Implementation Stories
 - Economics Evaluations 102: Building a Stronger Case for Implementation
- TURA Advisory Committee, virtual meeting, Oct 30, 2020; 12:30-2:30
- Science Advisory Board Meeting, Nov 18, 2020 12PM-3:30PM; (virtual meeting) Agenda includes Quaternary Ammonium Compounds and overview presentation on Nanomaterials
- TURA Ad Hoc Committee virtual orientation meeting, Nov. 19, 2020; 3-5PM.
- TURA Addition of EPA EPCRA PFAS chemicals - Virtual Public Hearing Nov 20, 2020; 1-3PM

Recent Events

- [Morgan Advanced Materials Virtual Demo Site Visit - Sep 10, 1PM-2PM](#); Morgan received a TURI grant and switched from using TCE in a vapor degreaser to remove wax, to an aqueous system.
- [River Street Metal Finishing Virtual Demo Site Visit, Braintree, MA](#); River Street received a TURI grant to implement an acid purification system to reduce use of sulfuric acid.
- [Safer Cleaning and Disinfection for schools](#) Webinar with Massachusetts experts; Aug 14, 2020. View the two-hour webinar, slides and other resources on our website.
- [Riverdale Mills: Reduces Toxics in Coating Process Virtual Demo Site Visit](#), Northbridge, MA; wire mesh manufacturer used a TURI grant to design a brush roller system to reduce dragout and prevent bath contamination; June 25, 2020
- [Spring Continuing Education sessions](#) - see presentations from spring webinar sessions on effective planning, PFAS (including slides 6-14 on the NDAA TRI listing of 172 PFAS chemicals), economic evaluation methods and the Pharos Chemical and Material Library.

MassDEP COVID-19 filing deadline extension

- <https://www.mass.gov/guides/massdep-toxics-use-reduction-program>
- Due to the COVID-19 pandemic, MassDEP will treat as timely any Toxics Use Reduction (TUR) Report and Plan Summary filed up to 120 days after the original July 1, 2020, deadline (or by **November 1, 2020**).
- All other TUR requirements under M.G.L. Chapter 21I and 310 CMR 50.000 remain in effect, and the facilities subject to them must continue to comply, as well as operate in a manner that is protective of public health and the environment.
- Planner Certification: A Planner with a TURP certification (or recertification) that expires prior to July 10, 2020, should have filed a recertification application prior to October 1, 2020. A Planner with a TURP certification (or recertification) that expires on or after July 10, 2020, should file a recertification application prior to the date of its expiration.



Resources Related to COVID-19 Safer Cleaning and Disinfecting

- See TURI's website: https://www.turi.org/Our_Work/Cleaning_Laboratory/COVID-19_Safely_Clean_Disinfect
- [Guidance for Businesses](#): Find information about safer cleaning and disinfecting, and tools such as log and checklist templates.
- The TURI lab is testing efficacy of safer disinfectant chemistries and devices. Using a surrogate virus for COVID-19, the TURI Lab is evaluating devices and chemistries such as steam cleaning, hypochlorous acid, UV light, electrostatic sprayers and fogging chemicals. Stay tuned for results.
- [Asthma and Chemicals fact sheet](#): a focus on cleaning, disinfection and sterilization, in English and Portuguese.
- Updated [guidance and webinar for cleaning and disinfecting in schools](#)

OTA update

- OTA staff have offered free and confidential virtual site visits to Massachusetts businesses via zoom. [Download a listing of OTA contacts by industry.](#)

Recent Publications

- [Umicore case study](#) - Umicore Electrical Materials eliminates use of perchloroethylene in vacuum degreaser
- [Morgan Advanced Materials Triumphs over TCE](#) demo site, video and case study - Morgan eliminated TCE use for wax removal, substituting an aqueous process.
- Outstanding Bath case study - Bathtub refinisher pilots safer paint remover
- [Fat Moon case study](#) - Fat Moon Mushrooms replaces bleach with safer sanitizer
- [Assessment of alternatives to cleaners and sanitizers for the brewing industry](#) - TURI publication providing technical, financial, environmental, health and safety, and basic regulatory information on alternatives to traditional cleaners and sanitizers
- [Artificial Turf Fact Sheet](#) Includes Ways to Prevent Heat Hazards

Video

- Why Become a TUR Planner? A mother –daughter perspective https://www.youtube.com/watch?v=kXwcu_BI9_U
- TURI Overview - https://www.youtube.com/watch?v=rEEg7Mdv_8Y
- [Riverdale Mills Reduces Use of Toxics in Wire Mesh Manufacturing Process](#)
- [River Street Metal Finishing Reduces Use of Sulfuric Acid](#)
- [Morgan Advanced Materials Eliminates the Use of TCE](#)

More on TURI Youtube channel: https://www.youtube.com/channel/UCVzI_YeguDRGua8K_zGXISA

- [Siemens Finds Safer Surfactant with Help from UMass Lowell Researchers](#)
- [Lytron Reduces TCE Emissions by 6,000 Pounds](#)
- [Assabet Valley Technical High School Replaces Solvents with Safer Solutions](#)

Administrative Council

The Administrative Council met on Sep 10, 2020 and voted to adopt the TRI listing of 172 long chain PFAS chemicals. As part of the federal FY 20 National Defense Authorization Act (NDAA), [172 PFAS chemicals were added to the US Environmental Protection Agency \(EPA\) Toxics Release Inventory \(TRI\)](#). Under TURA, EPCRA chemicals are incorporated into the TURA chemical list; the regulations package is being prepared and [draft regulations are out for public comment](#). These PFAS chemicals are reportable under federal TRI for 2020 reporting year (see below) but won't be reportable under TURA until the year after regulations are promulgated. A virtual public hearing is scheduled for Nov 20, 2020, 1-3PM.

The Administrative Council has created an Ad Hoc Committee on TURA Program Strengthening to review experiences in the 10+ years since the 2006 TURA Amendments, and to look forward to the next decade and the critical priorities of Massachusetts with respect to toxic chemicals and safer materials. The committee will meet virtually on Nov. 19

for an orientation, then subsequent topic-focused meetings will be scheduled. Anticipated topics include: compliance and enforcement, resource conservation and EMS planning, TUR planners and TUR planning, the list of TURA reportable substances, and fees. More information will be shared on TURI and OTA's websites as it becomes available.

New Reportable Substances for Reporting Year 2019

For **TURA reporting year 2019** (see MassDEP note above regarding filing deadline), covered industry sectors that use a category of chemicals known as C1-C4 Halogenated Hydrocarbons/Halocarbons Not Otherwise Listed (C1-C4 NOL) will need to report usage in 2020. Additional guidance is provided in [Appendix B of the Reporting Instructions](#).

Companies in covered industry sectors that use chemicals in this category should track their use during calendar year 2019 and, if their total use of these substances exceeds the reporting threshold, they must submit TURA reports by July 1, 2020. The reporting threshold for the C1-C4 NOL category is 25,000 pounds if the substances are incorporated into products or manufactured and 10,000 pounds if they are otherwise used. ([See Session E: presentations from Spring 2019 CE Conference](#))

New Reportable Substances for Reporting Year 2020

Nonylphenol ethoxylates (NPEs) TRI/EPCRA category

- Category of 13 specific NPEs
- [TRI/Federal: First reports due July 1, 2020 \(for RY2019\)](#)
- TURA/State: First reports due July 1, 2021 (for RY 2020)

New Federally Reportable Substances under TRI for Reporting Year 2020

PFAS TRI listings as required by the National Defense Authorization Act (NDAA 2020)

EPA has identified [172 PFAS chemicals](#) that have been added to TRI/federal reporting for 2020 reporting year, as required in the NDAA 2020 legislation. [See EPA's website](#) for more information. [EPA's regulations](#) have been published in the federal register ([85 FR 37354](#)).

PFAS Resources

- OTA has created a [downloadable supplier notification template letter](#) to assist industries identify potential products that may contain the 172 PFAS chemicals recently added to the EPA Toxics Release Inventory.
- OTA is working with MassDEP and EPA to provide free and confidential technical assistance to potential PFAS-using industries upstream from wastewater treatment plants.
- The [Science Advisory Board finalized their recommendation](#) on a category of PFAS substances in June; TURI is updating the policy analysis and will issue a new draft in October. Additional information from the [SAB deliberations](#) is on TURI's website.
- AFFF Alternatives Assessment - The Lowell Center for Sustainable Production and TURI have received a DoD SERDP grant to help the DoD to make informed, efficient choices about alternatives to aqueous film-forming foams (AFFF), a fluorinated product used in firefighting.

Upcoming virtual conference events of interest

- [Green Chemistry and Commerce Council](#) Started Sep 22, sessions thru Oct 28
- [A4 Symposium](#) Oct 26-30, 2020 – Association for the Advancement of Alternatives Assessment

New TURA Data Dashboard

TURI recently released a newly-designed [TURA Data online tool](#). Simply click on a chemical, company or town to view charts that make it easy to understand toxic chemical use in Massachusetts.

TURA Program Staff Changes

- Tiffany Skogstrom has been named Acting Director of OTA and Executive Director of the TURA Administrative Council, replacing Rich Bizzozero, who retired in the spring.
- Caredwen Foley has joined OTA managing communications and outreach. She brings a broad background in communications and public health; see her bio on [OTA's staff page](#). Welcome Caredwen!
- Felice Kincannon has taken a well earned retirement from TURI, although you may still hear from her via Greenlist! We appreciate all she has done keeping TURI's information and communications work on track, and we will miss her!

TURI FY21 Grants Awarded

Safer Solvents for Manufacturers and Dry Cleaners

- Assistant Professor Wan-Ting (Grace) Chen of **Plastics Engineering** at UMass Lowell is partnering with **Johnson Matthey**, a manufacturer of active pharmaceutical ingredients and intermediates with facilities located in North Andover and Devens. The goal of the research project is to find safer alternatives to methylene chloride, a toxic chemical used in reaction and purification processes. The researchers plan to identify safer alternative solvents, screen the alternatives for health and safety considerations and test the performance of selected solvents.
- **Steel Art Company**, Inc. of Norwood, a designer and manufacturer of architectural-quality signage, is working with the TURI Lab to find a safer substitute to n-propyl bromide, a higher hazard substance that's used to clean aluminum, stainless steel and brass parts. Once the TURI Lab evaluates the effectiveness of safer options, Steel Art will select their preferred chemistry and purchase compatible equipment, which may include ultrasonic or low agitation systems.
- **Grove Hall Cleaners** of Dorchester aims to eliminate the use of perchloroethylene, a solvent classified as a probable human carcinogen by the International Agency for Research on Cancer. The dry cleaner will switch to Professional Wet Cleaning, which allows for "dry-clean-only" clothes to be effectively washed with water and detergents in computer-controlled machines and finished with tensioning and pressing equipment.

Safer Cleaning and Disinfection

- **Family Martial Arts Center** of Leominster and Fitchburg is re-opening their karate studios using safer cleaning and disinfecting products during the pandemic. The small business is purchasing three steam vapor units to clean and disinfect a 6,500 square foot space and electrolyzed water systems to disinfect the front door, bathroom and front desk areas. By using this new equipment, the facility will eliminate the use of bleach and quaternary ammonium compounds-based disinfectants, both of which can cause respiratory and other health issues.
- The **Clean Water Fund** located in Boston is training house cleaners, custodians, teachers and members of environmental justice communities about how to choose safer cleaning and disinfecting products amid the coronavirus. Through workshops, online trainings and social media, the project team will share information about hazardous chemicals in cleaners and disinfectants that are linked to asthma, respiratory irritation and other health impacts. The grant partners – **MassCOSH, the Resilient Sisterhood Project, Vida Verde Women's Co-op of the Brazilian Women's Group, and the American Federation of Teachers/Massachusetts Chapter** – will host workshops to protect vulnerable groups from harmful exposure to toxics in cleaners and disinfectants.
- The **Brazilian Women's Group** of Brighton is training Brazilian domestic workers and other Portuguese-speaking women about how to make and use safer cleaning products. The project team will also share information about how to minimize coronavirus impacts in their local community, where 75 percent of Brazilian women work as domestic or essential workers. They will also reach out to nannies, elder care workers and childcare providers.
- **Informed Green Solutions** of Deerfield is developing and sharing information with schools about how the coronavirus spreads and the appropriate ways to choose and use safer cleaning and disinfecting products. By learning how to integrate effective control systems into operational systems, schools will minimize the need for expensive janitorial services that use hazardous products. A handbook and other training materials will be shared via webinars and websites



- **Silent Spring Institute** of Newton is sharing information with Black women about how to select personal care and cleaning products that don't contain toxics, such as phthalates, parabens, phenols and antimicrobials. Studies show that women of color have higher total amount of toxic chemicals in their bodies compared to white women. Led by the Silent Spring Institute in partnership with the Resilient Sisterhood Project, the project aims to identify and reduce chemical exposures that may contribute to endocrine disruption, asthma, diabetes, and cancer, diseases that put Black women at an increased risk of severe illness from COVID-19. The project team will host virtual workshops, survey women about product usage using an online application and launch a social media campaign about safer alternatives.

Food Systems and Processing

- **Wellspring Harvest Corporation** of Springfield, an urban hydroponic greenhouse that grows lettuce, tomatoes and cucumbers, is eliminating the use of pesticides by closely managing humidity levels to control the growth of powdery mildew infestations on crops. The small business is installing a misting system to ensure that relative humidity does not drop below 50 percent. The extremely fine mist evaporates without wetting plants, thus preventing conditions for mildew growth while raising humidity to prevent spores from spreading.

For more information, contact the TURA program. E-mail addresses are available on our websites and are the preferred method of communication while we are all working remotely:

- OTA: <https://www.mass.gov/service-details/otas-team>
- MassDEP: Lynn Cain, lynn.cain@mass.gov or Walter Hope, walter.hope@mass.gov
- TURI: https://www.turi.org/About/Staff_List