



TURA Program Update - March 2021

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

For the latest news, sign up for program newsletters from [TURI \(see recent newsletter\)](#) and [OTA \(see recent newsletter\)](#).

Current and Upcoming Meetings and Events

- [TURA Program Strengthening Ad Hoc Committee](#) (all meetings to be held virtually):
 - TUR Planners and TUR Planning, Tuesday, Mar 30, 2021, 1pm - 3pm
 - Toxic Substances, Thursday, Apr 29, 2021, 11am - 1pm
 - Fees, Thursday, May 13, 2021, 10am - 12pm
- [Science Advisory Board Meeting](#), Mar 11, 2021, 12pm - 3:30pm
- [Spring Continuing Education Conference](#), April 6, 8, 13:
 - Apr 6 Keynote: The Intersection of Toxics Use Reduction and Environmental Justice, by Ana Mascareñas, Environmental Equity Deputy Director and Tribal Liaison, CA DTSC
 - Other sessions: materials accounting fundamentals, alternate planning such as Resource Conservation or EMS, EU REACH, and Energy saving tools.
- [Lean Manufacturing and Pollution Prevention for the Food and Beverage Sector](#), March-June 2021
Funding provided for this training through an EPA Region 1 Healthy Community grant

Recent Events

- TURA Program Strengthening Ad Hoc Committee Meetings:
 - [Alternative Planning - RC and EMS](#), Jan 13, 2021
 - [Compliance and Enforcement](#), Dec 14, 2020
 - [Orientation](#), Nov. 19, 2020
- [Virtual Fall Continuing Education Conference](#) – Oct 27 and Nov 5. Sessions: Safer cleaning and disinfecting, new TURA Data site, TUR success case studies, and economic evaluation to build the case for TUR implementation.
- [TURA Advisory Committee, Oct 30, 2020](#)
- [Science Advisory Board Meeting, Nov 18, 2020](#): Quaternary Ammonium Compounds and Nanomaterials
- [Science Advisory Board, Jan 14, 2021](#)
- [Morgan Advanced Materials Virtual Demo Site Visit, Sep 10, 2020](#); Morgan received a TURI grant and switched from using TCE in a vapor degreaser to remove wax, to an aqueous system.
- OTA webinar for technical assistance providers on best practices for remote technical assistance provision, Dec 14, 2020
- OTA webinar co-hosted with Department of Labor Standards for Massachusetts manufacturers on what to expect during OTA and DLS remote technical assistance visits, Feb 10, 2021
- [TURI Webinars](#): Legislative 30-minute briefings:
 - Oct 21, 2020 – [Safer cleaning and disinfecting](#)
 - Feb 9, 2021 – [Using the new TURA data site](#)
- Joint TURA Program Environmental Justice Staff Meeting, Jan 20, 2021

Resources and Media 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 with updated list of safer disinfectant products
- [Guidance for Businesses](#): Find information about safer cleaning and disinfecting, and tools such as log and checklist templates and a [fact sheet](#).
- 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 devices. Stay tuned for results.
- STAT, Dec 16, 2020. [Misting the White House between administrations won't kill Covid-19 — and it could be harmful, experts say](#)
- [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.](#)
- Tiffany Skogstrom has been appointed Director of OTA (previously Acting Director and Chemical Policy and Outreach Analyst) and Executive Director of the TURA Administrative Council.
- Hired Environmental Justice Intern, Krishana Abraham-Petrie
- Welcomed back previous PFAS & Nanomaterials Intern, Marcela Rojas-Vasquez

Recent Publications

- [River Street Metal Finishing case study](#)
- [Riverdale Mills case study](#) –
- [Workshop Auto case study](#)
- [Outstanding Bath case study](#)
- [US Pack](#) - Process improvements reap large rewards for custom formulation and packaging facility
- [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.
- [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
- [Martha's Vineyard Athletic Fields Case Study](#) – Innovative maintenance practices for organically managed grass athletic fields.
- [Marblehead Natural Grass Playing Fields Case Study](#) was updated in Nov 2020.

Video

- [Aerospace and Defense Consortium Finds Safer Alternatives to Hexavalent Chromium](#) – interview with David Pinsky (Raytheon Missiles and Defense) and Greg Morose (TURI); Oct 2020
 - [Why Become a TUR Planner? A mother-daughter perspective](#)
 - [TURI Overview](#)
 - [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](#)

- [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 adopted the TRI listing of 172 long chain PFAS chemicals, and those [regulations have been promulgated](#). 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 were finalized in Dec 2020. These PFAS chemicals are reportable under federal TRI for 2020 reporting year (see below) and under TURA for the 2021 reporting year.

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. Discussion topics include: compliance and enforcement, resource conservation and EMS planning, TUR planners and TUR planning, the list of TURA reportable substances, and fees.

MassDEP Update: Flame Retardant Law

An Act to Protect Children, Families, and Firefighters from Harmful Flame Retardants was passed by the legislature and signed into law by the Governor on January 1, 2021. MassDEP has a [New Flame Retardants Law webpage](#) that lists the chemicals being prohibited from sale in certain products; the regulations are in process. The law requires MassDEP to evaluate at least every 3 years, in consultation with TURI and the Science Advisory Board, whether other flame retardant chemicals should be added to the list. The TURA program will also assist MassDEP with outreach to impacted stakeholders to inform them about the law and TUR opportunities, including safer alternatives.

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 \(for RY 2019\)](#)
- TURA/State: First reports due July 1, 2021 (for RY 2020)

New PFAS Reportable Substances under TRI for Reporting Year 2020, under TURA for 2021

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](#)). Chemicals were added to the [TURA list of Toxic or Hazardous Substances](#) in December 2020, and will be reportable for 2021 (Form S's due July 1, 2022). (See [Session B: PFAS chemicals, uses and compliance obligations presentation](#) from Spring 2020 virtual conference)

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 [updated the policy analysis in Oct 2020](#). 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.
- [PFAS in artificial turf](#)
- [TURI's PFAS information page](#)

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.

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.
- **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 updated to incorporate procedures and best practices associated with the novel human coronavirus, and will be shared via webinars and websites ([access the handbook at TURI's website](#)).
- 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.

- **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