



# TURA Program Update

Nov 14, 2023

Liz Harriman - TURI

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Kari Sasportas - OTA



# Agenda

- TURA Governing & Advisory Bodies
- Decision making under TURA
- SAB update
- TURA Reporting Changes
- Staffing changes
- TURA program agency updates
- Breakout Q&A with MassDEP, OTA and TURI

# TURA Governing and Advisory Bodies



## **Science Advisory Board**

Managed by TURI  
Appointed by Governor  
Recommends chemicals



## **Advisory Committee**

Appointed by Secretary  
Multi-stakeholder policy input  
Advises Administrative Council

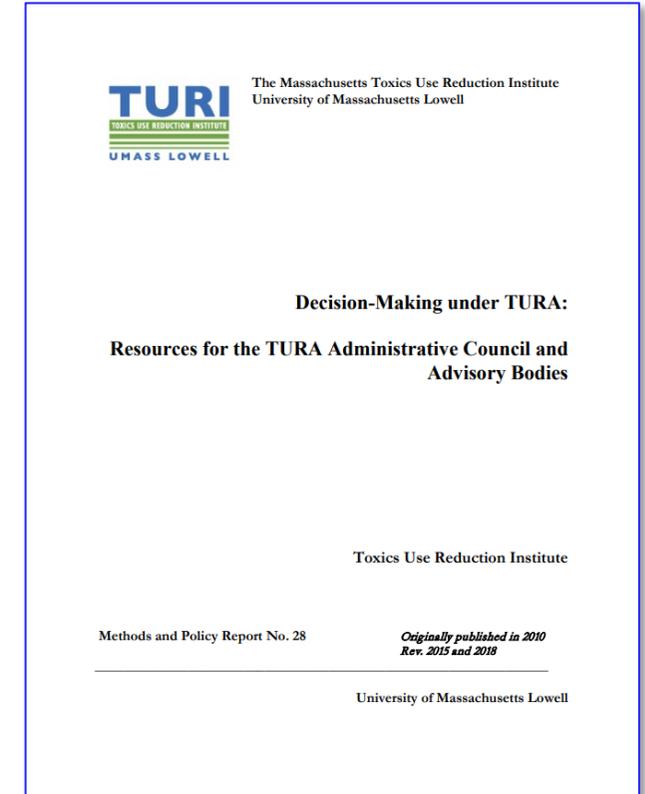


## **Administrative Council**

Chaired by Secretary or  
designee  
TURA governing body

# Decision-Making Under TURA: Resources for the TURA Administrative Council and Advisory Bodies

- Origin: The TURA Administrative Council requested this document be created to reference decision making processes and roles
- Designed as a resource for members of the TURA Governing and Advisory Bodies
- Resources include:
  - Overview of principles, roles and responsibilities related to TURA program decision making
  - Outline of current practices regarding listing and delisting decisions, chemical categorization, and other TURA program decisions
  - Background information on other topics, such as the role of expert judgment in decision making
- Living document, designed to be updated over time



# Science Advisory Board

- Recommendation to list a category of EPA Registered ADBAC (19 specific CAS #s) and DDAC (5 specific CAS #s) quaternary ammonium compounds (QACs, or “quats”)
  - [QACs fact sheet](#)
  - [QACs policy analysis](#) presented to Advisory Committee and Administrative Council
- Deliberations on Carbon Nanotubes and Carbon Nanofibers petition
  - SAB Recommendation to list Single- (SWCNTs) and Multi-Walled Carbon Nanotubes (MWCNTs) and Carbon Nanofibers (CNFs)
  - SAB Recommendation to designate Multi-walled Carbon Nanotubes as Higher Hazard Substances. SAB voted to put SWCNT and CNF on SAB's more hazardous chemicals list
- Flame retardants – advising MassDEP on new MA flame retardants law
  - [SAB Meeting minutes and materials](#)

# Administrative Council Update

- Aug 10 meeting of Administrative Council voted to open public participation process for:
  - EPA TRI additional chemicals
  - Quaternary Ammonium Compounds

# Current Regulations Package: Toxics Release Inventory (TRI) Additions

## EPCRA (TRI)

Additions are **required**

“Each year the council shall adjust the toxic or hazardous substance list to add or delete substances consistent with changes in said toxic chemical list.”

[M.G.L 21I, §9\(A\)](#)

## EPCRA (TRI) Additions

### 9 PFAS

100 lb threshold

### DINP Category

Normal TURA threshold  
(25k/10k)

### 12 Other Chemicals

11 normal TURA threshold (25k/10k)  
One 100 lb threshold

# Some Differences between TURA & TRI

TURA	TRI
State regulation	Federal regulation
Focus on source reduction	Focus on releases/emissions
Report annually to MassDEP on process/manufacture/otherwise use/byproduct	Report annually to US EPA on releases to air/water/soil
More substances: Includes substances under both EPCRA (which includes TRI) and CERCLA, as well as listings specific to TURA. 1708 total listed entries, including 60 categories (301 CMR 41)	Fewer substances: Current TRI toxic chemical list contains 775 individually listed chemicals and 33 chemical categories.
TUR planning every two years – plan summary sent to DEP	Tracks and shows P2 efforts

# US EPA Changes to TRI Reporting for PFAS

EPA has finalized a rule to eliminate *de minimis* exemption for PFAS reporting and supplier notification requirements under TRI



## Toxics Release Inventory (TRI) Program

Providing Pollution Prevention and Toxic Chemical Release Information

### How this will impact TURA:

Eliminating de minimis exemption will likely result in increased PFAS reporting under TURA

- For TRI-listed PFAS on the TURA list, the 100 lb. TRI threshold is used
- For other PFAS on the TURA list, the thresholds are 25,000 lbs manufactured/processed, 10,000 lbs otherwise used, and the de minimis exemption still applies
- More PFAS source information will be captured through new supplier notification requirements
- NEW: [Updated OTA PFAS Supplier Notification Letter](#)

# PFAS Tracking and Reporting: TRI and TURA

	Report to TRI	TURA tracking starting	Report to DEP	How Reportable	Threshold
<b>TURA Certain PFAS NOL</b>	-----	January 1, 2022	July 1, 2023	As a category	25,000 lbs. manufactured/ processed; 10,000 lbs. otherwise used
<b>172 TRI/TURA PFAS – 2020</b>	July 1, 2021	January 1, 2021	July 1, 2022	Individually	100 lbs. (de minimis exemption no longer applies)
<b>Four TRI PFAS - 2021</b>	July 1, 2022	January 1, 2023	July 1, 2024		
<b>Four TRI PFAS - 2022</b>	July 1, 2023				
<b>Nine TRI PFAS - 2023</b>	July 1, 2024	Anticipated January 1, 2024	Anticipated July 1, 2025		

# New Leadership



## Executive Office of Energy and Environmental Affairs

- Rebecca Tepper, Secretary
- Stephanie Cooper – Undersecretary for the Environment



**MassDEP** – New Commissioner, Bonnie Heiple



**UMass Lowell** – New Chancellor, Julie Chen

# Staff updates



[Elisheva Thoreen, OTA](#)

*Environmental Engineer*

Retirement of Jim Cain, longtime Environmental Engineer



[Rebecca Dolan, MassDEP](#)

*Environmental Analyst*



[Gabriel Salierno, TURI](#)

*Green Chemist*

[Karen Thomas, TURI](#)

*EHS Specialist*

[Katie Daly, TURI](#)

*Communications and Outreach*

[Stephan Anstey, TURI](#)

*Office Assistant*

[Alex Symko, TURI](#)

*Safer Chemicals Specialist*

[Amelia Wagner, TURI](#)

*Safer Chemicals Specialist*

# TURA Program Agency Updates



# Toxics Use Reduction Institute (TURI)



- Education and Training for TUR Planners
- Science and Policy
  - Science Advisory Board
  - Policy Analysis, Data Analysis
- Research, development and assessment of safer alternatives
  - University research grants
  - Laboratory services for industrial and janitorial cleaning
  - Alternatives assessment
- Technical and financial support to businesses and communities
  - Grants and information resources
  - Business supply chain workgroups and research



# The Commonwealth of Massachusetts



## A Proclamation

Whereas, Champions of Toxics Use Reduction Day recognizes outstanding leaders who are making the Commonwealth a safer place for all residents to live, work, learn and play; and

Whereas, Many businesses rely heavily on hazardous chemicals, and their use results in risks to workers, surrounding communities and the environment; and these champions are the leaders working to create an economy that doesn't rely on toxic chemicals and instead prioritizes health, safety, and equity; and

Whereas, These champions show us that there are other ways to do business — the status quo can be changed. Everyone — whether they are firefighters or electronics manufacturers — can make a difference by replacing harmful chemicals; and

Whereas, Choosing safer alternatives protects both the public and the bottom line. When companies and communities step up and reduce dependence on toxic chemicals, it creates a ripple effect that inspires other businesses, industry leaders, and communities to join the movement as well; and

Whereas, These champions — and the 30 years of champions that precede them — prove that when business looks for opportunities for toxics use reduction, it encourages and enables them to go beyond the scope of regulations and prioritize chemical safety in other areas;

Now, Therefore, I, Maura T. Healey, Governor of the Commonwealth of Massachusetts, do hereby proclaim June 20<sup>th</sup>, 2023, to be,

## CHAMPIONS OF TOXICS USE REDUCTION DAY

And urge all the citizens of the Commonwealth to take cognizance of this event and participate vigorously in its observance.

Given at the Executive Chamber in Boston, this first day of June, in the year two thousand and twenty-three, and of the Independence of the United States of America, the two hundred and forty-sixth.

By Her Excellency

*Maura T. Healey*  
MAURA T. HEALEY  
GOVERNOR OF THE COMMONWEALTH

*Richard Driscoll*  
RICHARD DRISCOLL  
LT. GOVERNOR OF THE COMMONWEALTH

*William Francis Garcia*  
WILLIAM FRANCIS GARCIA  
SECRETARY OF THE COMMONWEALTH

God Save the Commonwealth of Massachusetts



# 2023 CHAMPIONS OF TOXICS USE REDUCTION CEREMONY

June 20, 2023  
Great Hall, State House

11:00 a.m. to 12:00 p.m.  
Presentation of Awards

12:00 to 1:30 p.m.  
Networking & Light Lunch

## Welcoming Remarks

### Baskut Tuncak

Director, Toxics Use Reduction Institute, University of Massachusetts Lowell

### Representative Daniel Cahill

Co-Chair, Joint Committee on Environment and Natural Resources

## Industry Awards

S.E. Shires  
Steel Art Company

### Undersecretary Stephanie Cooper

Undersecretary for Environment, Executive Office of Energy and Environmental Affairs

## Small Business Awards

Donoma Gymnastics  
Conklin Office Furniture

### Representative Kate Hogan

Speaker Pro Tempore, House of Representatives

## Community Awards

Nantucket PFAS Action Group & Firefighter Partners

### Commissioner Bonnie Heiple

Commissioner, Massachusetts Department of Environmental Protection

## Industry & Research Awards

Transene Company & UMass Lowell's Nagarajan Research Team

### Dr. Anne Maglia

Vice Chancellor for Research and Innovation, University of Massachusetts Lowell



# TURI Strategic Priorities

Halogenated Solvents - Drive to Zero

PFAS

Flame Retardants

# FY23 Champions of Toxics Use Reduction

## Focus on Safer Solvents

- S.E. Shires, *Holliston*
  - substituted ultrasonic cleaning for halogenated solvents
- Steel Art Company, *Norwood*
  - substituted aqueous cleaning for nPB
- Conklin Office Furniture, *Holyoke*
  - testing alternatives for safer adhesives and thinners



# FY23 Champions of Toxics Use Reduction

## Focus on PFAS

- Prof. Ram Nagarajan, UMass Lowell, partnering with Transene Co., *Danvers*
  - Surfactants in electronics manufacturing
- Nantucket PFAS Action Group, with firefighter partners in Fall River, *Hyannis and Nantucket*
  - Reducing PFAS in firefighter turnout gear
  - Training for firefighters around PFAS



# FY23 Champions of Toxics Use Reduction

## Focus on Flame Retardants

- Donoma Gym, *Stow*
  - Replacing foam pit cube with non-flame retardant foam cubes



# TURI FY24 Grants

- **Business Grants** - *research, evaluate and adopt safer alternatives to toxics*
  - Food processing and furniture manufacturing
- **Academic Research Grants** - *Safer alternatives to PFAS in manufacturing and products*
  - Non-PFAS coatings for textiles and food packaging; UML PIGE analytical equipment
- **Community Grants** – *focused on PFAS and toxics in children's play spaces*
  - Making use of UMass Lowell PIGE analytical equipment to detect PFAS

# Training and Education

## Toxics Use Reduction Planner Certification Course – Exam Dec 8

- 16 people in this year's class, predominantly from MA companies
  - Companies are investing in their staff to guide excellent TUR planning!
- Contact Pam if you have someone on your team you'd like to consider becoming a TUR Planner!



## Upcoming Training Opportunities

- VCN Demonstration – Dec 13, 2023, 1-3 PM
  - At TURI's Lab, Lowell
- RC Planner Certification course
- Additional technology demonstrations
- Spring TUR conference – in person
  - Dates and location to be announced

Track upcoming events from TURI's home page or calendar: [www.turi.org](http://www.turi.org)

# OTA Updates

- OTA Technical Assistance
- PFAS Identification
- PFAS Surveys
- Ongoing Collaboration with WWTFs
- Environmental Justice



# Office of Technical Assistance (OTA)

- **Non-regulatory** agency
- Provides **free, confidential** technical and compliance assistance to MA businesses that use toxic substances
- Gives **concrete recommendations** for toxics reduction and resource conservation

OTA has conducted 3,500 site visits at 1,500 facilities, reducing **millions of pounds** of toxic chemicals and **millions of dollars** in operating costs.

# Identifying PFAS Use in a Facility

Look for common uses of PFAS

- Common uses include textile coatings (e.g., water-repellency), surfactants, degreasing (e.g., solvents), metal finishing (e.g., fume suppressants), polymers and resins, and AFFF
- Check your SDSs for products likely to contain PFAS
- Note listings described as Confidential Business Information (CBI) or proprietary as items of concern – contact your supplier or [OTA](#) for help

Check available CAS numbers against reportable definition

- Review [TURA guidance](#) and use reportable definition to check CAS # against [existing databases](#)
- Paper and metal finishing industries, [contact OTA](#) to take survey
- If no CAS numbers are available for fluorinated compounds, contact your supplier or [OTA](#) for technical assistance

Send a notification letter to your chemical or product supplier

- Use [OTA's template](#) to notify your supplier
- Involve your purchasing department in this effort
- Keep records to demonstrate good faith effort

Contribute to developing product list

- The TURA program is developing a list of products confirmed to contain PFAS
- If your supplier notifies you of products containing PFAS, please share this information with OTA/TURI

[TUR Resources: Per- and Polyfluoroalkyl Substances](#)

# Resources for Companies: PFAS Identification

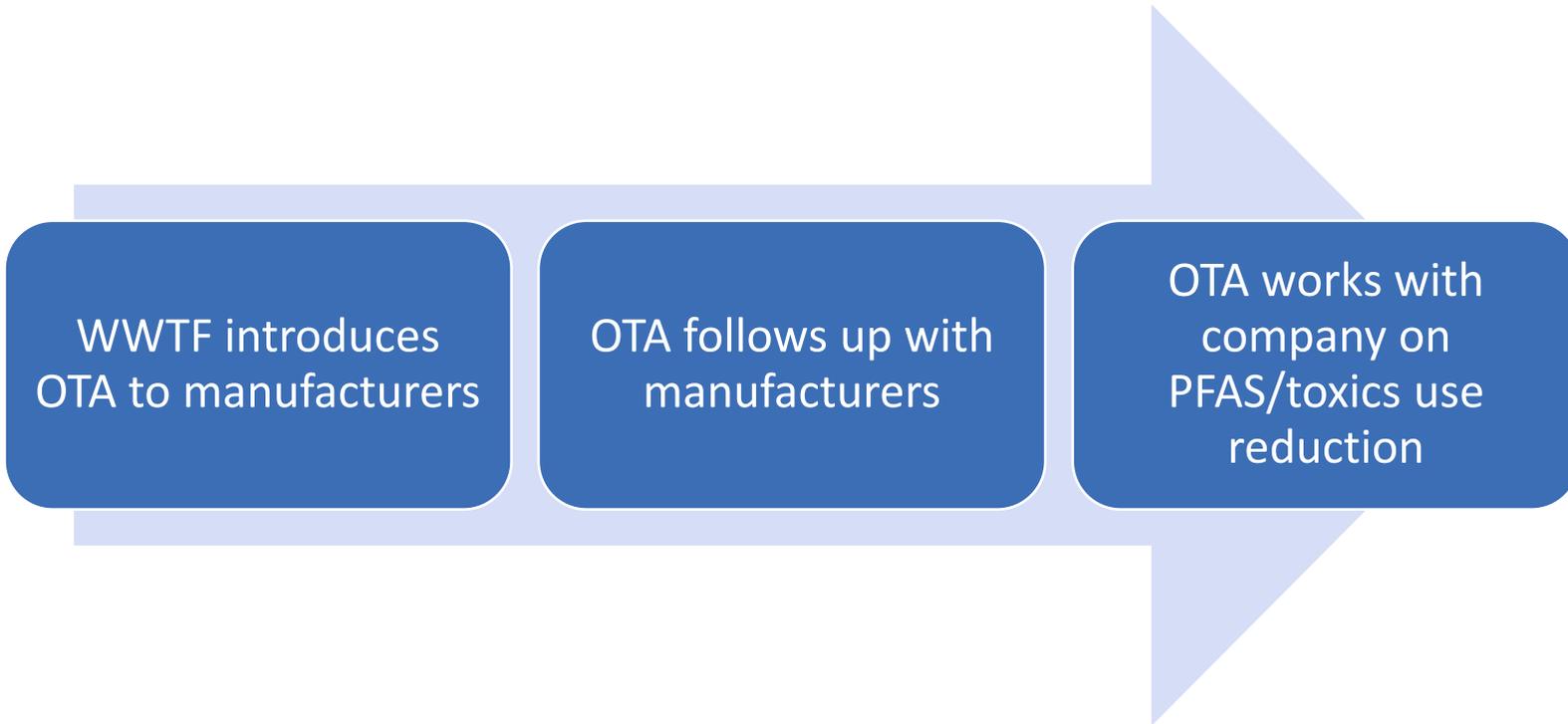
Assessments to  
identify PFAS  
sources



- OTA technical staff flag likely sources of PFAS
  - Companies may share list of CAS numbers with OTA
- OTA pursues research on products of concern
- Companies may opt to share product information with OTA to populate a list of PFAS-containing products

[TUR Resources: Per- and Polyfluoroalkyl Substances](#)

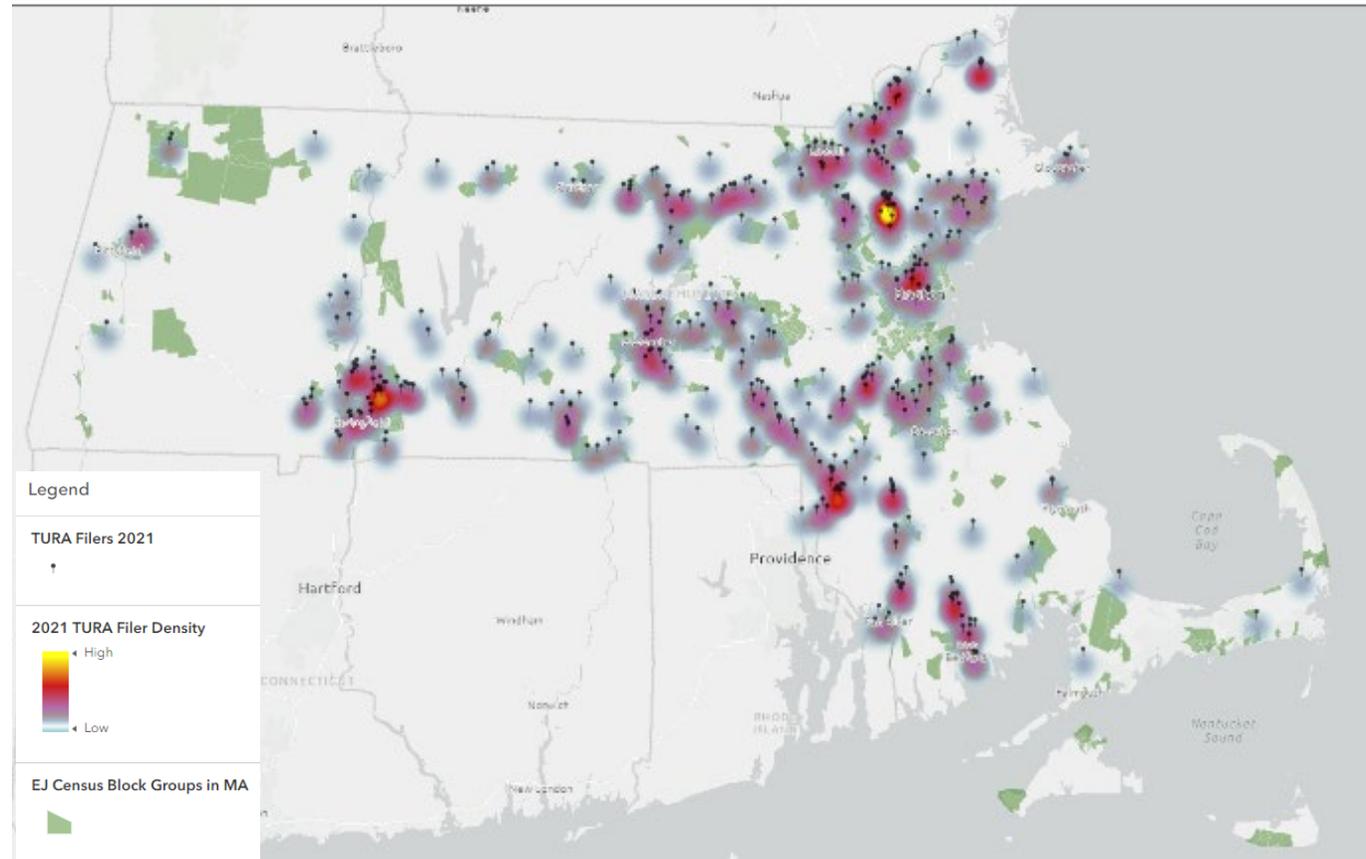
# Wastewater Treatment Facilities (WWTF) & Upstream Manufacturers



# OTA Environmental Justice (EJ)

- OTA seeking candidates for new EJ seat on Advisory Committee
- OTA actively involved in EJ and climate justice work
- OTA developing GIS Story Map to illustrate current toxics use and release in relation to current EJ populations and historical redlining
- OTA has dedicated funding for new EJ internship position

TURA Filer Density and EJ Census Block Groups





# Massachusetts Dept. of Environmental Protection (MassDEP)



- Promulgates regulations based on environmental legislation, and issues policies and procedures to support the regulations
- Inspects regulated facilities to ensure regulatory compliance, and issues enforcement for non-compliance
- Provides outreach and education on regulatory programs
- Certifies TUR planners
- Evaluates program success and provides analysis for program improvement

## Recent MassDEP Actions (RY2019-RY2022)

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2 Reporting Penalty Assessment Notices (RPAN)

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43 Notices of Noncompliance (NON) and 8  
Warning letters issued to facilities

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5 NONs issued to TUR Planners

# MassDEP Enforcements

## Violations seen include:

- Failure to file
- Missing chemicals
- Failure to respond to QA/QC request
- Missing or incomplete Plan Summaries
- Improper certification
  - Missing TUR Planner certifications
  - Failure to hire an active TUR Planner
  - Hiring a TUR Planner not certified to sign for the type of Plan completed
  - Signing a TUR Plan when Planner's certification had already expired
  - Signing for a Plan type that the TUR Planner not certified for

**MassDEP has started the TURA audit program again**

# Reminders for the Upcoming Year

- RY2023 is a Planning Year
- File on Time
- Need to file BOTH the TURA Reporting packet and the TURA Planner Certification packet found in eDEP



The screenshot shows a web interface titled "Toxics" with two transaction options:

Toxics		
Toxics Use Reduction Act (TURA) Planner Certification	This form is for MassDEP Certified Toxics Use Reduction Planners use, to Certify TUR, RC or EMS Plans.	<a href="#">Start Transaction</a>
Toxics Use Reduction Act (TURA) Reporting	This form is for facilities that must file a Toxics Use Report.	<a href="#">Start Transaction</a>

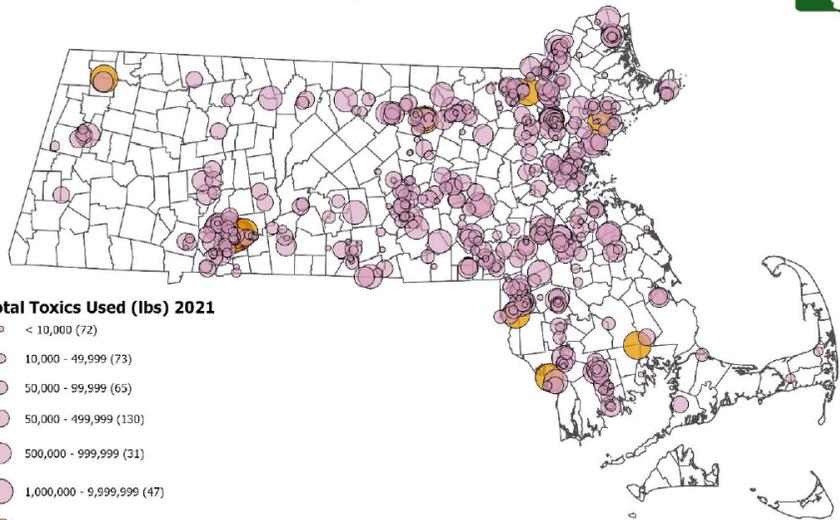
- Questions when filing? contact MassDEP ([tura.program@mass.gov](mailto:tura.program@mass.gov))

## Reminders for the Upcoming Year (cont.)

- If you filed an RC Plan in the prior planning cycle, file BOTH an RC Plan Progress Report AND a traditional TUR Plan.
- TUR Planners should check their certification status
- Mistakes in your filing? AMEND the report
- Outreach is sent to the "Authorized Signer" listed on the Toxics Use Fee Worksheet
- Utilize the most up-to-date versions of the TURA chemical list.

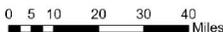
# TURA Information Release: Reporting Year 2021 (2007 Core)

Toxics Use in Massachusetts  
All Reported Use in 2021



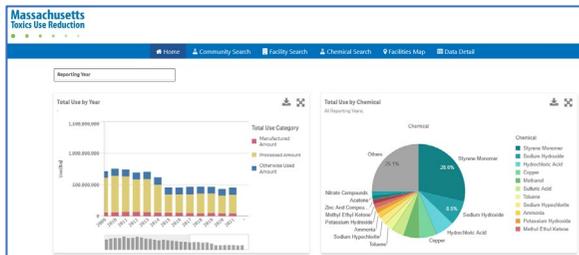
Total Toxics Used (lbs) 2021

- < 10,000 (72)
- 10,000 - 49,999 (73)
- 50,000 - 99,999 (65)
- 100,000 - 499,999 (130)
- 500,000 - 999,999 (31)
- 1,000,000 - 9,999,999 (47)
- 10,000,000 - 99,999,999 (10)
- 100,000,000 - 100,982,636 (1)



Data Sources:  
 - TURA Facilities Locations: MassDEP BAW and GIS  
 - Toxics Use: 2021 Annual TURA Reports submitted to MassDEP/Toxics Use Reduction Program  
 - Municipal Boundaries: TTD/MassGIS

[TURA Data online tool & dashboard](#)



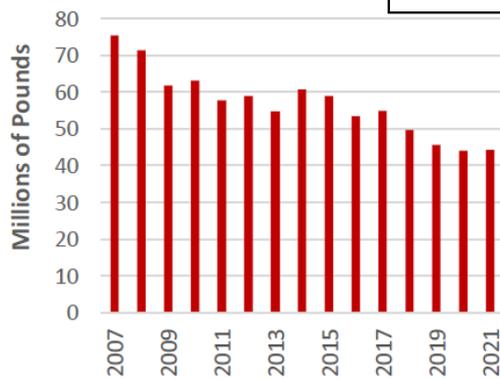
Production Adjusted  
Total Use

62% ↓



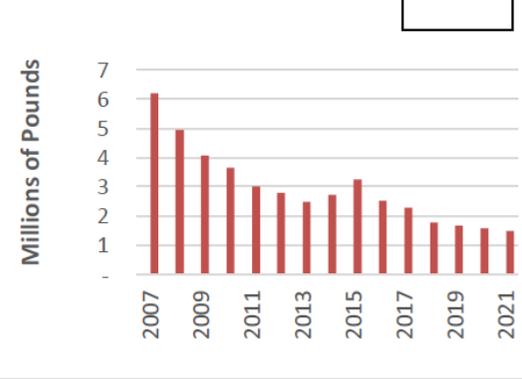
Production Adjusted  
Byproduct

41% ↓



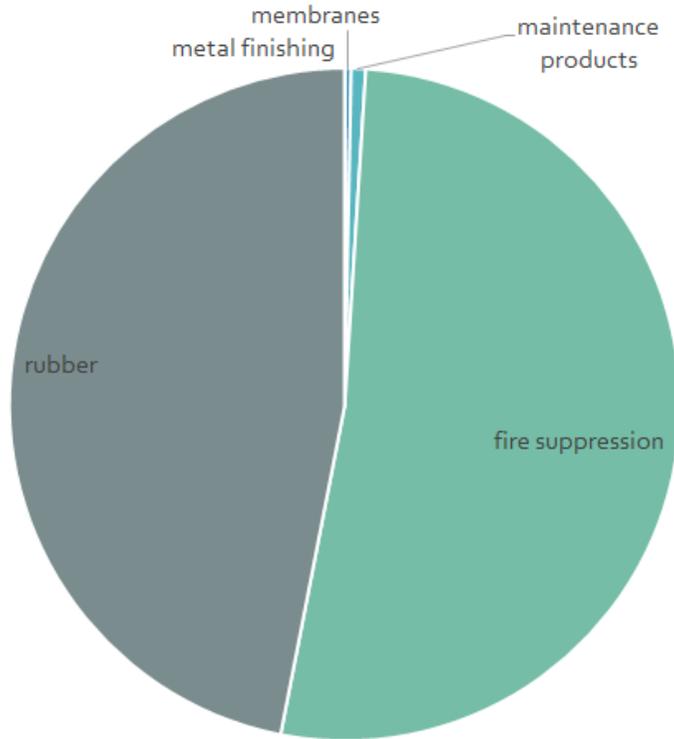
Production Adjusted  
On-Site Releases

76% ↓



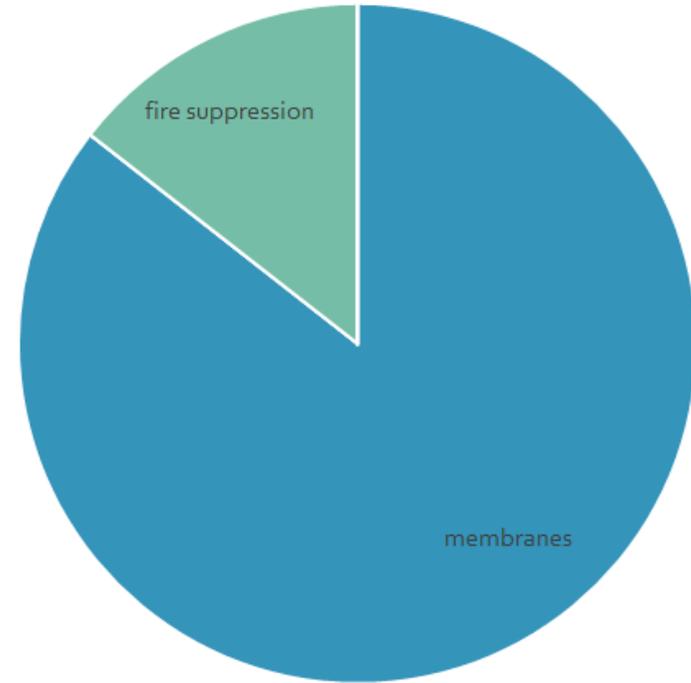
# TURA Data - Preliminary information on Certain PFAS NOL category

2022 Preliminary PFAS Use by TURA Filers



■ membranes ■ maintenance products ■ fire suppression ■ rubber ■ metal finishing

2022 Preliminary PFAS Releases by TURA Filers



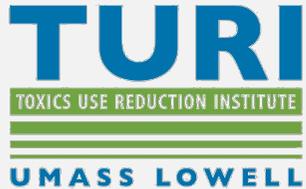
■ membranes ■ maintenance products ■ fire suppression ■ rubber ■ metal finishing

## Job opportunities

# WE'RE HIRING!

- MassDEP – [Environmental Analyst III PFAS position](#) (priority review before Nov 15)
- TURI policy analyst – [job description](#)
- NEWMOA positions
  - IC2, IMERC & TPCH Project Staff/Managers – [job description](#)
  - Solid Waste, Haz. Waste Senior Project Staff/Manager – [job description](#)

# Contact us any time!



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*Also contact Tiffany for Administrative Council and Advisory Committee questions*  
OTA Staff: <https://www.mass.gov/service-details/otas-team>



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