



Massachusetts Toxics Use Reduction



TURA Administrative Council August 10, 2023



Welcome & Introductions

- Welcome New EEA Undersecretary Stephanie Cooper
 - Welcome New Members

Agenda

- Introductions and Welcome Undersecretary Stephanie Cooper
 - Welcome new members
- July 13, 2022 meeting minutes vote
- TURA Administrative Council Vote to add all current additions to the US EPA Toxics Release Inventory (TRI) ([nine PFAS](#), a [diisononyl phthalate \(DINP\) category](#), and [twelve other chemicals](#)) to the TURA List
- TURA Administrative Council Vote to add Science Advisory Board (SAB) recommended quaternary ammonium compounds (QACs) to the TURA List
- TURA Administrative Council Vote to add Environmental Justice (EJ) seat to TURA Advisory Committee
- TURA Program Update
- Adjourn

Note: Public comments/questions will be held until opened for general discussion

Format for Questions and Discussion

- Opportunities for questions and comments at the end of each topic
- Administrative Council members participate FIRST by raising hand
- Non-Administrative Council members will be given an opportunity to participate AFTER the Administrative Council member discussion
- Raise hand function will be used

How to ask questions

Use zoom function to raise your hand for comments or questions.

To access the "Raise Hand" function, click "Participants" at the bottom of your screen, and then click the "Raise Hand" button that appears under the list of participants. This will notify the host that you have a question or comment.

- Administrative Council members participate FIRST by raising hand
- Non-Administrative Council members will be given an opportunity to participate AFTER the Administrative Council member discussion

July 13, 2022 Meeting Minutes Vote



Approval of July 13, 2022
meeting minutes

Current Toxics Release Inventory (TRI) Additions

TURA requires that changes made by EPA to the EPCRA Section 313 Toxic Chemical List be mirrored in the TURA Toxic or Hazardous Substance List.

TRI Additions

9 PFAS

100 lb threshold

DINP Category

Normal TURA threshold
(25k/10k)

12 Other Chemicals

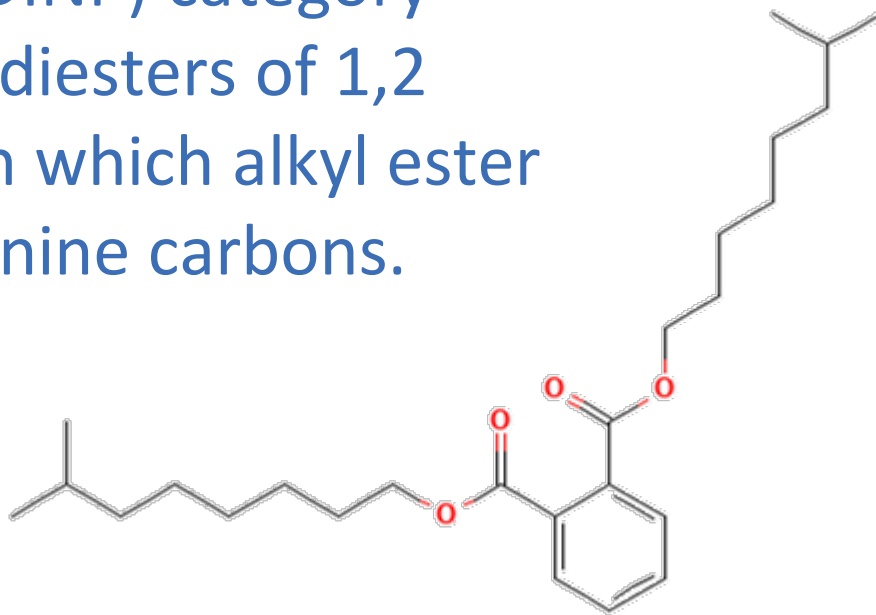
11 normal TURA threshold (25k/10k)
One 100 lb threshold

TURA Administrative Council Vote to add 9 TRI PFAS and 12 Other Chemicals to TURA List

TRI Additions to TURA	Threshold	EPA Report Date	Anticipated TURA Report Date	
9 PFAS	100 lbs	July 1, 2023	July 1, 2025	
1,3,4,6,7,8-hexahydro-4,6,6,7,8,8-hexamethylcyclopenta [g]-2-benzopyran		July 1, 2024		
Dibutyltin dichloride	25,000 lbs manufacturing or processing	July 1, 2024		
1,3-Dichloro-2-propanol				
Formamide				
n-Hydroxyethylethylenediamine				
Nitrilotriacetic acid trisodium salt				
p-(1,1,3,3-Tetramethylbutyl)phenol				
1,2,3-Trichlorobenzene				10,000 lbs otherwise used
Triglycidyl isocyanurate				
Tris(2-chloroethyl) phosphate				
Tris(1,3-dichloro-2-propyl) phosphate				
Tris(dimethylphenol) phosphate				

Diisononyl Phthalate Category Definition

The diisononyl phthalate (DINP) category includes all branched alkyl diesters of 1,2 benzenedicarboxylic acid in which alkyl ester moieties contain a total of nine carbons.



Companies Potentially Impacted

- Estimates are based on the 2021 Tier II data extract
- For those companies already paying the TURA maximum fee, this is simply an additional TUR Plan
 - Maximum fee ranges from \$5,500 to \$31,450 depending on number of FTEs
- For those companies not maxed out, this is an additional (\$1,100) fee per year at or above threshold use

TRI Additions	Estimated # of Impacted Companies	Estimated # of New TURA Filers
Nine PFAS	0	0
Twelve additional chemicals	4	2
DINP category	2	0
Total:	6	2

Next Steps – If the Vote is Affirmative

- First step in Opening the Public Participation Process
 - Written Comment Period (Dates TBA)
 - Hold Public Hearing (Dates TBA)
- Respond to Comments
- Report back to the Administrative Council
- Administrative Council Holds a Second Vote on Proposed Additions to the TURA List
- An Affirmative Vote would update regulations to include TRI additions, consistent with statute

Vote to add all TRI Additions to TURA List



Vote to add all Toxics
Release Inventory (TRI)
additions to the TURA List

Quaternary Ammonium Compounds Policy Analysis (Draft)

Next Steps – If the Vote is Affirmative

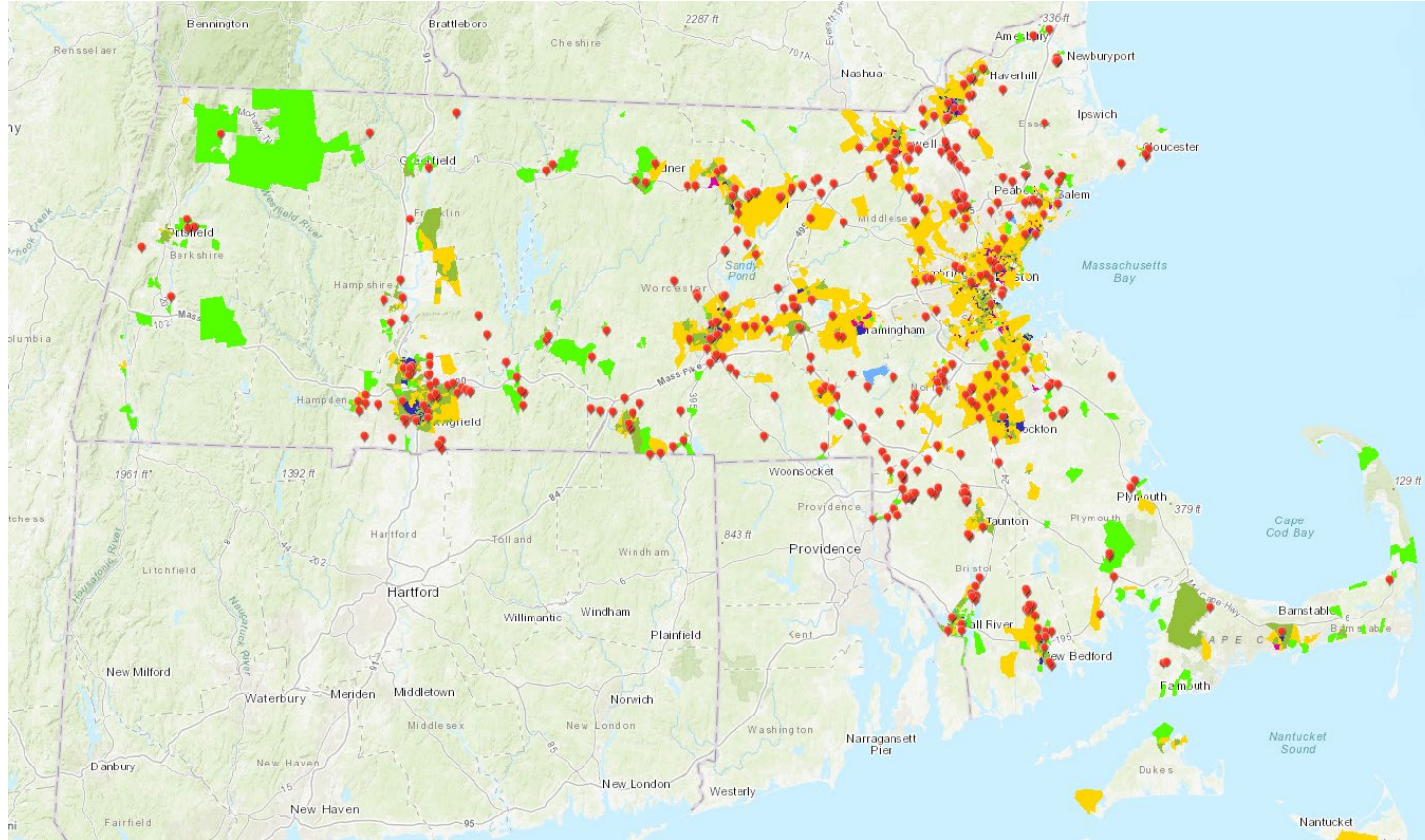
- First step in Opening the Public Participation Process
 - Written Comment Period (Dates TBA)
 - Hold Public Hearing (Dates TBA)
- Respond to Comments and update QAC Policy Analysis
- Report back to the Administrative Council
- Administrative Council Holds a Second Vote on Proposed Additions to the TURA List
- An Affirmative Vote would update regulations to include proposed QACs

Vote to add Recommended Quaternary Ammonium Compounds Category to the TURA List



Vote to add TURA Science
Advisory Board
Recommended Quaternary
Ammonium Compounds
(QACs) Category to the TURA
List

Environmental Justice Seat Addition to TURA Advisory Committee



Vote to add an Environmental Justice seat to the TURA Administrative Council



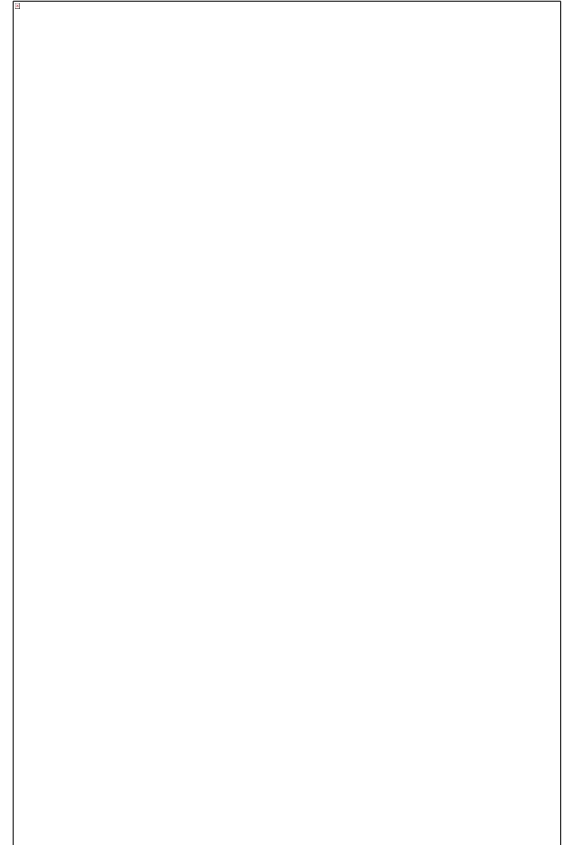
Vote to add an
Environmental Justice Seat
to the TURA Administrative
Council

TURA Program Updates



TURA Form S Filing/Reporting Changes

- TURA category: Certain PFAS NOL
 - Reportable for 2022, reports due July 1, 2023
 - Guidance available in [TURA Reporting Instructions Appendices](#)
 - [Updated TURA Chemical list](#)
 - [Includes Certain PFAS NOL guidance list on separate sheet](#)
 - [PFAS Webinar](#)



PFAS Tracking and Reporting: TRI and TURA

	Report to TRI	TURA tracking starting	Report to DEP	How Reportable	Threshold
TURA Certain PFAS NOL	-----	January 1, 2022	July 1, 2023	As a category	25,000 lbs. manufactured/ processed; 10,000 lbs. otherwise used
172 TRI/TURA PFAS – 2020	July 1,2021	January 1, 2021	July 1, 2022	Individually	100 lbs. (de minimis exemption applies; see MassDEP website for details)
Four TRI PFAS - 2021	July 1, 2022	January 1, 2023	July 1, 2024		
Four TRI PFAS - 2022	July 1, 2023				
Nine TRI PFAS - 2023	July 1, 2024	Anticipated January 1, 2024	Anticipated July 1, 2025		

Science Advisory Board

- Recommendation to list 24 EPA Registered ADBAC and DDAC quaternary ammonium compounds (QACs, or “quats”)
 - [QACs fact sheet](#)
- Deliberations on Carbon Nanotubes and Carbon Nanofibers petition in process
 - SAB Recommendation to list Single- and Multi-Walled Carbon Nanotubes (MWCNTs) and Carbon Nanofibers
 - Currently deliberating on question of thresholds and HHS designation
- Flame retardants – advising MassDEP on new MA flame retardants law
 - [March 10, 2023 SAB meeting minutes](#)
 - [May 12, 2023 SAB meeting materials](#)
- Next meeting: September 22, 2023 (virtual)

TURA Program Agency Updates



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 Changes



[Elisheva Thoreen, OTA](#)

Environmental Engineer



[Rebecca Dolan, MassDEP](#)

Environmental Analyst

Katelynn King,
MassDEP

Environmental Analyst



[Gabriel Salierno, TURI](#)

Green Chemist

[Karen Thomas, TURI](#)

EHS Specialist

[Stephan Anstey, TURI](#)

Office Assistant

Alex Symko, TURI

Safer Chemicals Specialist

Amelia Wagner, TURI

Safer Chemicals Specialist



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. But 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 preceded them — prove that when businesses look 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 20th, 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 actively 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

Kimberly D'Amico
KIMBERLY D'AMICO
LT. GOVERNOR OF THE COMMONWEALTH

William Francis Gavin
WILLIAM FRANCIS GAVIN
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 fire fighter 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 Grant RFPs

- Business Grants (will be awarded in August)
 - \$15,000 - \$35,000 to research, evaluate and adopt safer alternatives to toxics
- Academic Research Grants (will be awarded in August)
 - Safer alternatives to PFAS in manufacturing and products
- Community Grants – RFP's will be issued shortly
 - PFAS discovery thru PIGE analysis and safer alternatives
 - Toxics in children's spaces, e.g., flame retardants

Training and Education

Toxics Use Reduction Planner Certification Course

- Required for consultants and recommended for in-house professionals wanting to certify TUR Plans for MA companies
 - More and more companies investing in their staff to gain this knowledge, practice and certification
- Kicks off Aug 15
- Features online and in-person instruction, veteran planners and small group work developing a TUR Plan for a fictionalized company



Fall TUR Conference

- Scheduling for November 9, 14 and 16
- Virtual (via Zoom registration)
- Will focus on safer chemicals and alternatives to TUR planning.

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

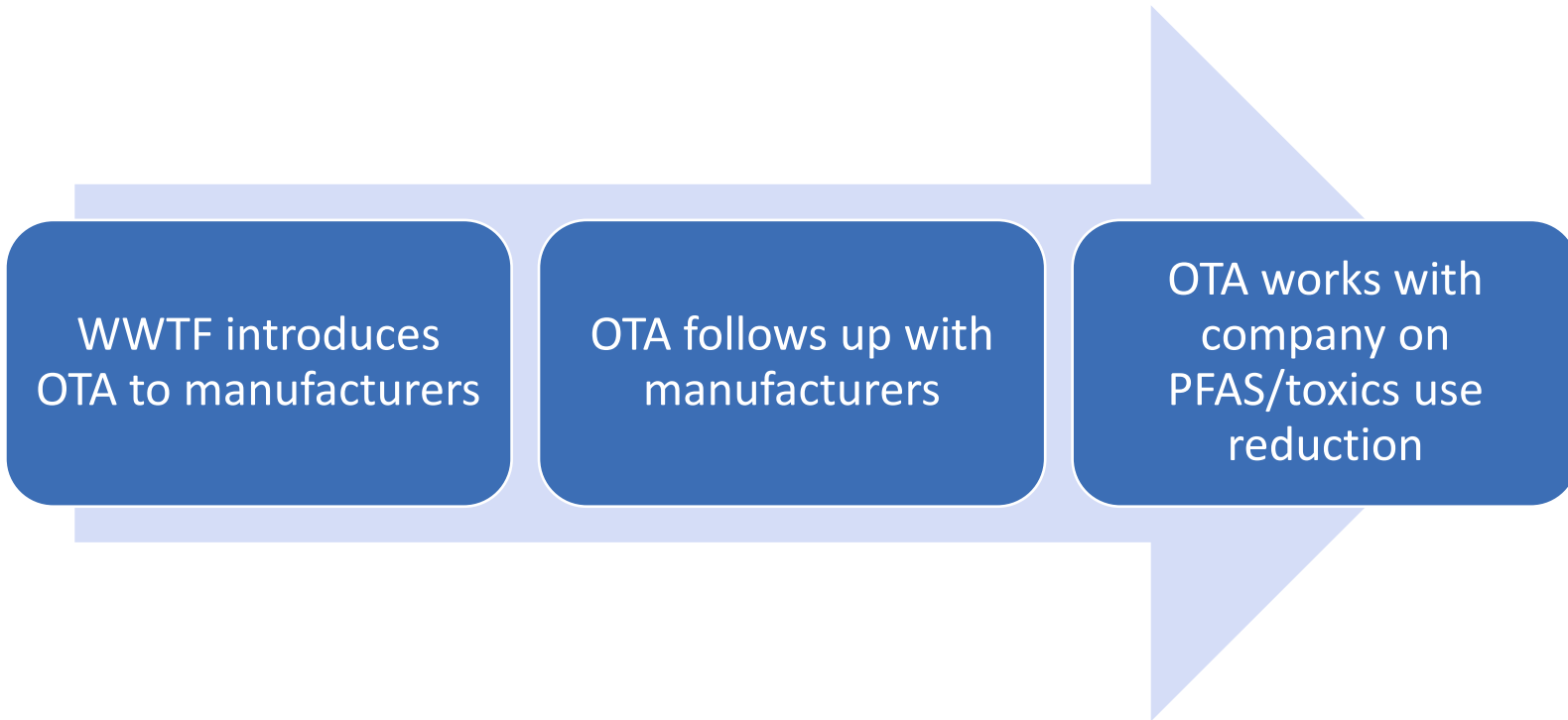
Send a notification letter to your chemical or product supplier

- 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

Wastewater Treatment Facilities (WWTF) & Upstream Manufacturers



Resources for Companies: PFAS Identification

Assessments to
identify PFAS
sources

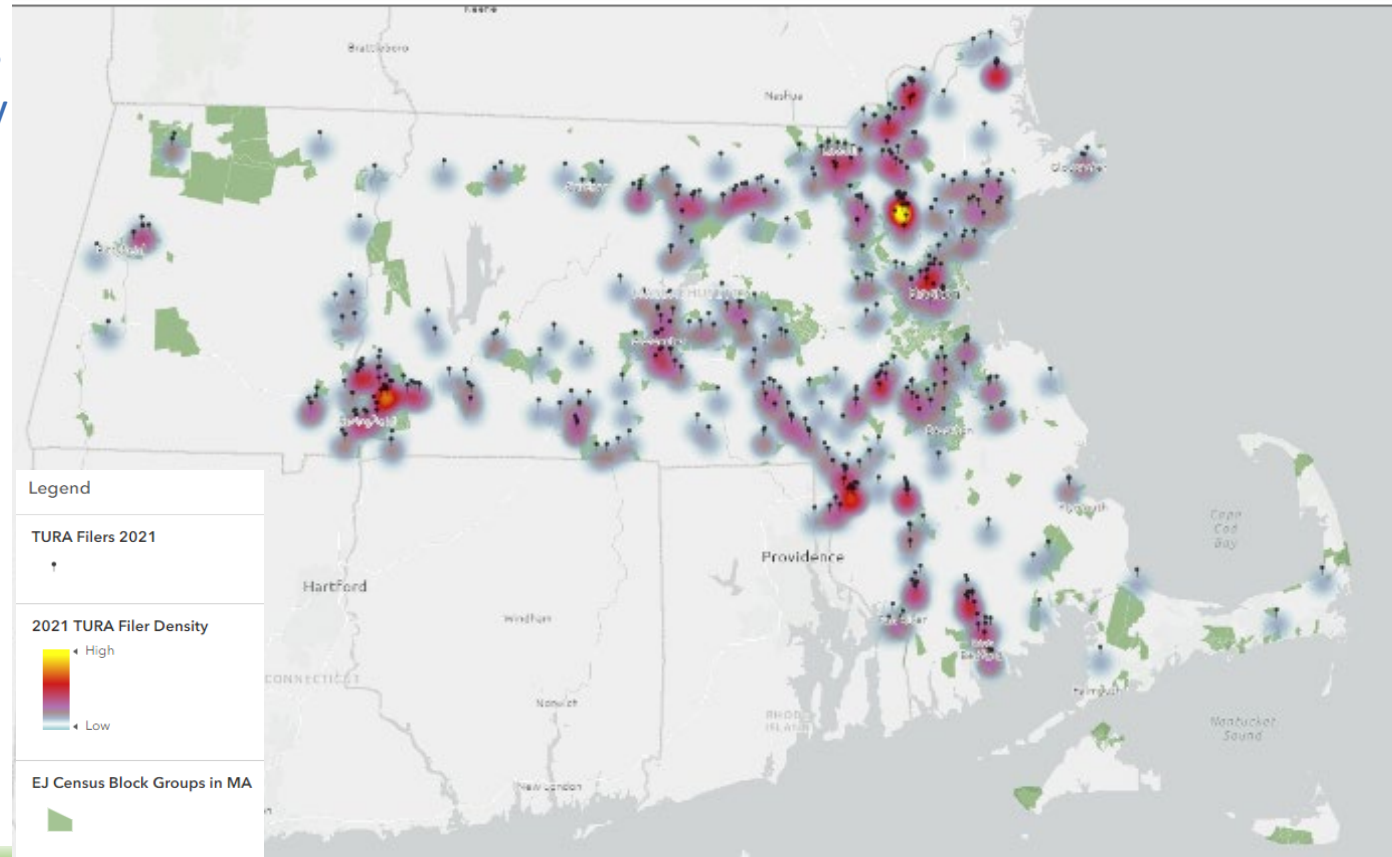


- OTA technical staff flag likely sources of PFAS
 - Companies may share list of CAS numbers with OTA
- OTA pursues research on products of concern
- Companies may opt to share product information with OTA to populate a list of PFAS-containing products

OTA/TURI Environmental Justice (EJ)

- OTA & the TURA Program have responded to public comments and revised draft EJ Key Agency Actions incorporated in EEA's EJ Strategy, to be released late fall 2023
- OTA & TURI development of program EJ website and story map in progress
- TURI has conducted an assessment of EJ in MA to inform strategic planning process

TURA Filer Density and EJ Census Block Groups



Recent MassDEP Actions

RY2019-2021 outstanding enforcement actions addressed

25 Notices of Noncompliance (NON) and 3 Warning letters issued to facilities

5 NONs issued to TUR Planners

MassDEP Enforcements

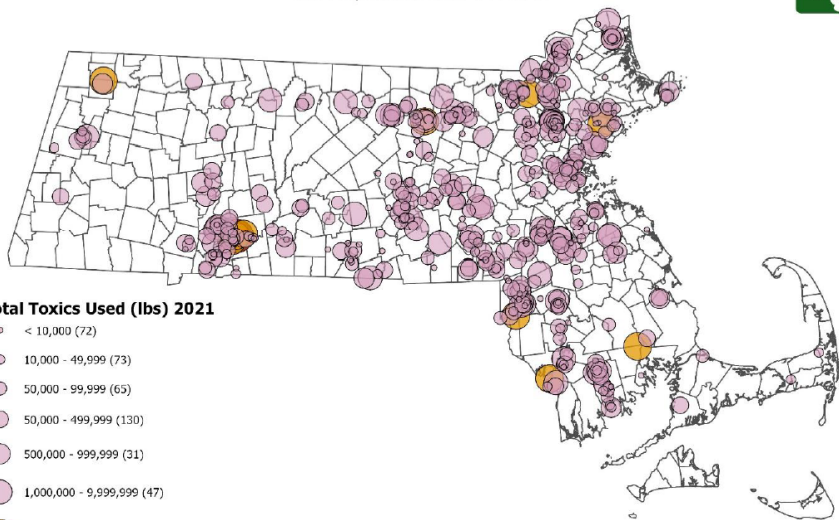
Violations seen include:

- 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

TURA Information Release: Reporting Year 2021

Toxics Use in Massachusetts
All Reported Use in 2021



Total Toxics Used (lbs) 2021

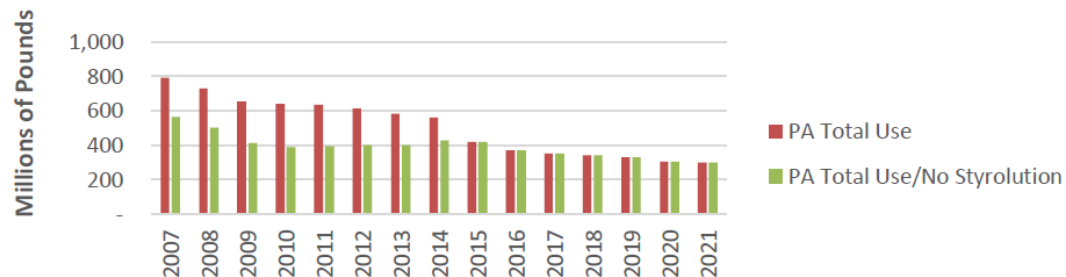
- < 10,000 (72)
- 10,000 - 49,999 (73)
- 50,000 - 99,999 (63)
- 50,000 - 499,999 (130)
- 500,000 - 999,999 (31)
- 1,000,000 - 9,999,999 (47)
- 10,000,000 - 99,999,999 (10)
- 100,000,000 - 100,982,636 (1)

0 5 10 20 30 40
Miles

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

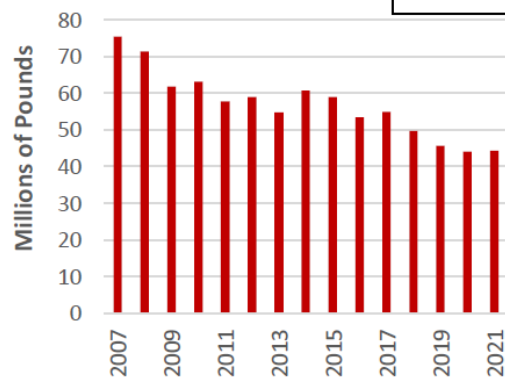
**Production Adjusted
Total Use**

62% ↓



**Production Adjusted
Byproduct**

41% ↓



**Production Adjusted
On-Site Releases**

76% ↓



Contact us any time!



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Or appropriate staff person:

TURI Staff: https://www.turi.org/About/Staff_List



Tiffany Skogstrom tiffany.skogstrom@mass.gov

Also for Administrative Council questions

OTA Staff: <https://www.mass.gov/service-details/otas-team>



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Reporting: Walter Hope walter.hope@mass.gov

C&E: Rebecca Dolan rebecca.g.dolan@mass.gov



Adjourn



Direct all questions to
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