

# Removing the Handle from the PFAS Pump: An Upstream Approach to Industrial PFAS Source Reduction

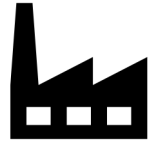
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Massachusetts Office of Technical Assistance

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# MA Toxics Use Reduction Act (TURA) of 1989



## Who reports?

Massachusetts manufacturers who:

- Operate under certain Standard Industrial Classification (SIC) codes
- Have >10 employees
- Manufacture or process  $\geq 25,000$ lbs (or otherwise use  $\geq 10,000$ lbs) of listed substances

Covers a little over 400 MA facilities



## What TURA requires

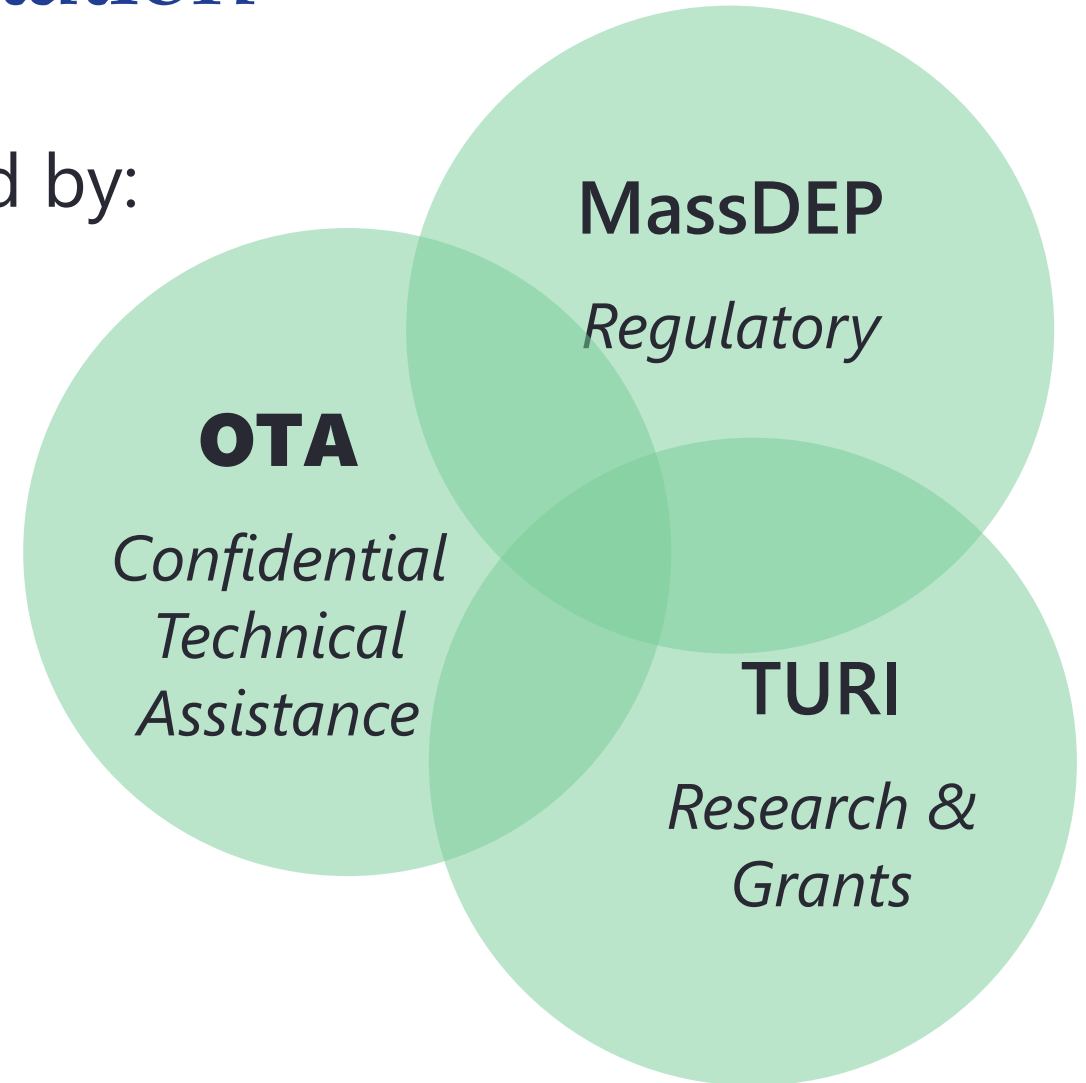
- Report to the state
- Pay a fee
- Create a Toxics Use Reduction Plan every two years

TURA does not prohibit companies from using listed chemicals.

# TURA Program Implementation

The TURA Program is co-implemented by:

- The Massachusetts Department of Environmental Protection
- The Toxics Use Reduction Institute at UMass Lowell
- The Massachusetts Office of Technical Assistance



# 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.

# TURA Governing Bodies



## **Science Advisory Board**

Managed by TURI  
Appointed by Governor  
Recommends chemicals



## **Advisory Committee**

Appointed by Secretary  
Multi-sector policy input



## **Administrative Council**

Chaired by Secretary or  
designee  
TURA governing body

# PFAS Tracking and Reporting Under TURA

	<b>TURA tracking starting:</b>	<b>Report to DEP:</b>	<b>Reportable:</b>	<b>Threshold:</b>
<b>Certain PFAS Not Otherwise Listed (“NOL”)</b>	January 1, 2022	July 1, 2023	As a category	25,000 lbs. manufactured/ processed; 10,000 lbs. otherwise used
<b>172 TRI PFAS (2020)</b>	January 1, 2021	July 1, 2022	Individually	100 lbs. (de minimis exemption applies; see <a href="#">MassDEP website</a> for details)
<b>Four TRI PFAS (2021)</b>	January 1, 2023	July 1, 2024		
<b>Four TRI PFAS (2022)</b>				
<b>Nine TRI PFAS (2023)</b>	Anticipated January 1, 2024	Anticipated July 1, 2025		

# Industrial Uses



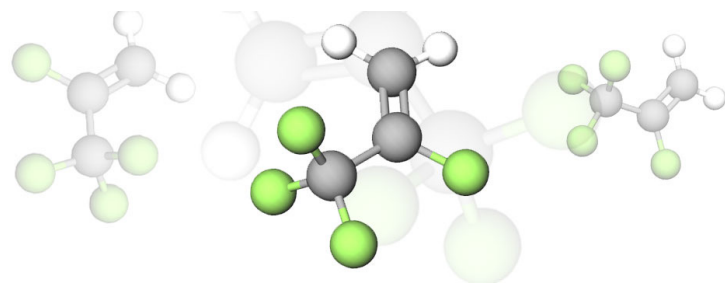
Polymers and resins;  
low-friction coatings



Processing aids



Metal finishing



Refrigerants (HFOs, HFCs)



Fire suppression (AFFF)

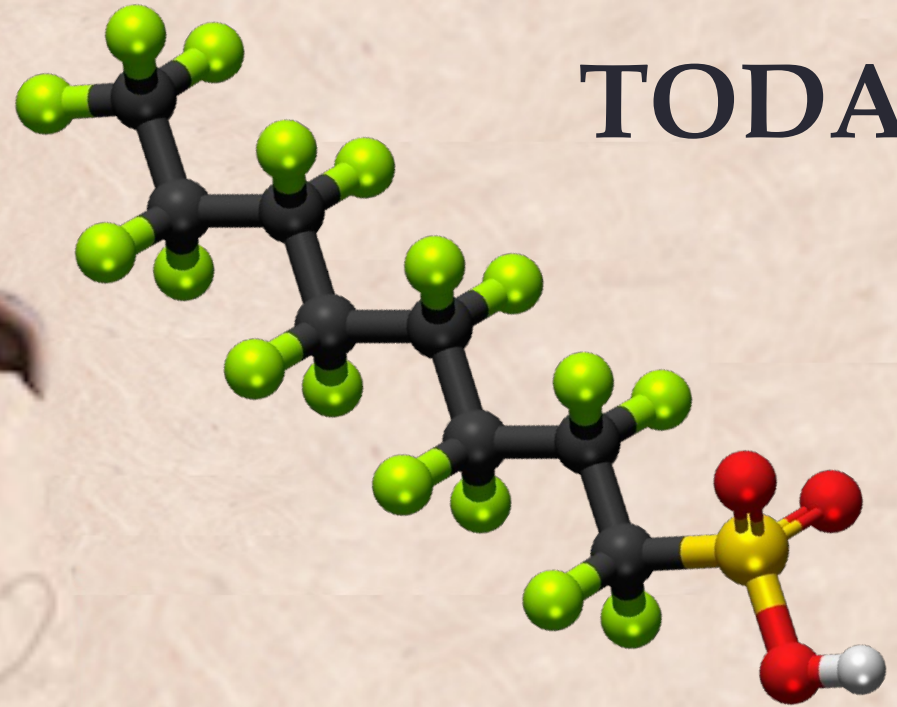


Recycled plastics & paper

1854



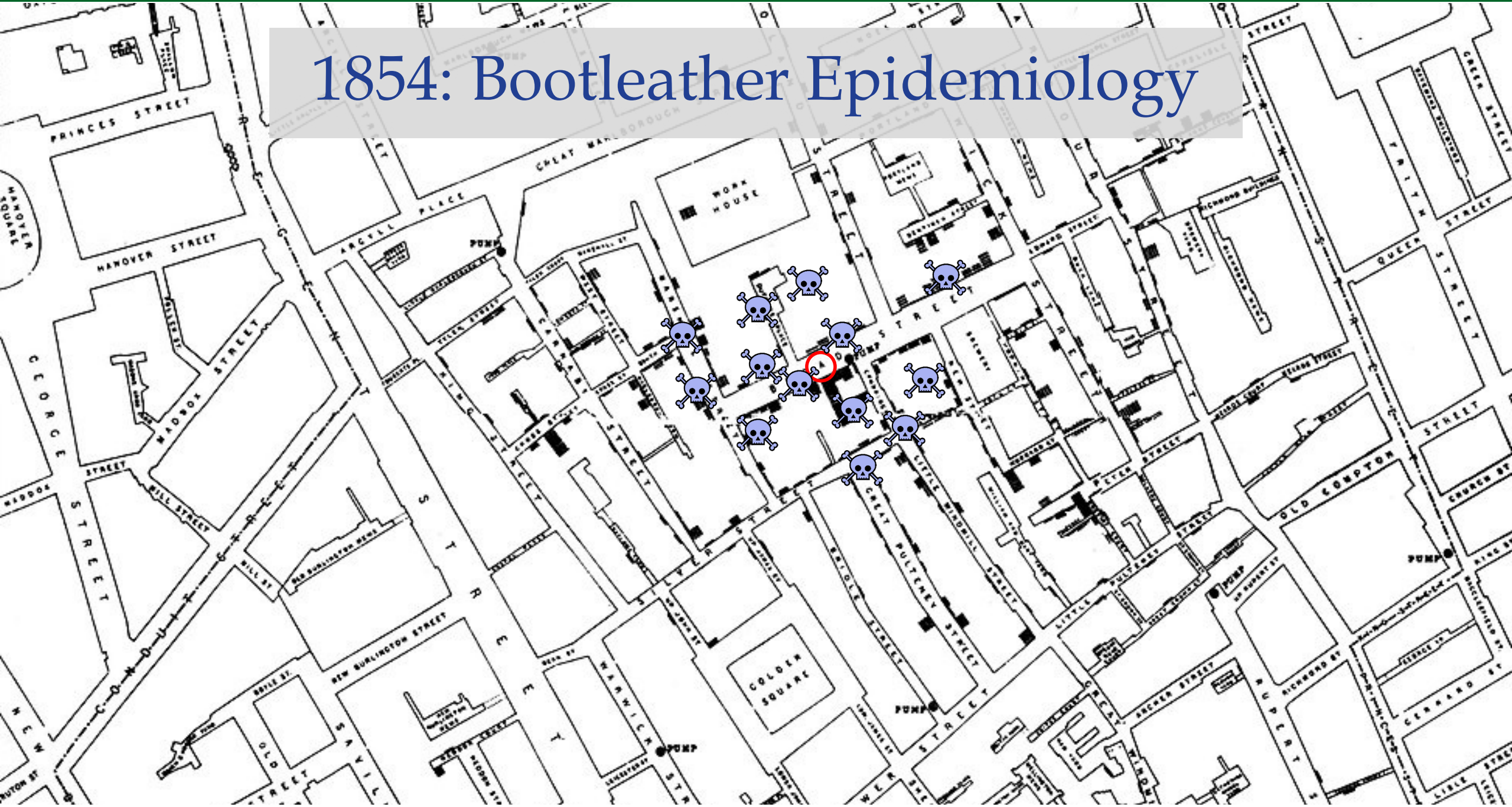
TODAY



From germs to 'forever chemicals'



# 1854: Bootleather Epidemiology



# Boots on the Ground

EPA

[Integrated Map](#)
[Drinking Water \(UCMR\)](#)
[Drinking Water \(State\)](#)
[Production](#)
[Environmental Media](#)
[Discharge Monitoring](#)
[Superfund Sites](#)
[Federal Sites](#)
[Contact Us](#)

Industry Sectors

[Transfers](#)
[Spills](#)
[Toxic Releases](#)

State MA
Status Active
Industry 16 of 24

T
i
!
PFAS Analytic Tools Home

More Information

**Filters:**

State Territory or Tribe

EPA Region

Industry

NAICS

SIC

Status

Facility Name

Has EJ Index above 80 percentile?

v Legend

Facility Point layer

Industry

- Cement Mfg
- Chemical Mfg
- Cleaning Product Mfg
- Consumer Products
- Electronics Industry
- Furniture and Carpet
- Glass Products
- Metal Coating
- Metal Machinery Mfg

↓ Counts by Industry

Industry	Count	Active
<b>Totals</b>	<b>1,371</b>	<b>1,371</b>
Electronics Industry	292	292
Metal Machinery Mfg	234	234
Metal Coating	180	180
Plastics and Resins	172	172
Chemical Mfg	159	159
Printing	117	117
Textiles and Leather	88	88
Paper Mills and Products	71	71
Petroleum	59	59
Paints and Coatings	49	49
Cleaning Product Mfg	28	28
Glass Products	16	16
Furniture and Carpet	11	11

*Facilities can be counted in more than one industry.*

# Identifying Massachusetts Manufacturers

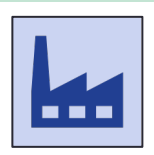
SIC Code	Industry
2821	Plastics Materials & Synthetic Resins
3479	Metal Coating & Allied Services
3999	Manufacturing Industries
2295	Coated Fabrics, Not Rubberized
5172	Petroleum Products

NAICS Code	Industry
322220	Paper Bag & Coated & Treated Paper Manufacturing
334419	Other Electronic Component Manufacturing
335999	All Other Miscellaneous Electrical Equipment & Component Manufacturing
335929	Other Communication & Energy Wire Manufacturing

# Identifying Massachusetts Manufacturers



Are they manufacturing in MA?



Does the process qualify as non-stick coating, waterproofing, etc.?

# Obstacles for Companies

## Lack of company awareness

PFAS not listed on SDS  
Confidential Business Information (CBI)  
Tainted incoming feedstock

## Regrettable substitution

'Shorter-chain' is still a 'forever chemical'

## Fear of liability

Other PFAS sources = misplaced liability

Lack of regulation / Confusing  
regulations

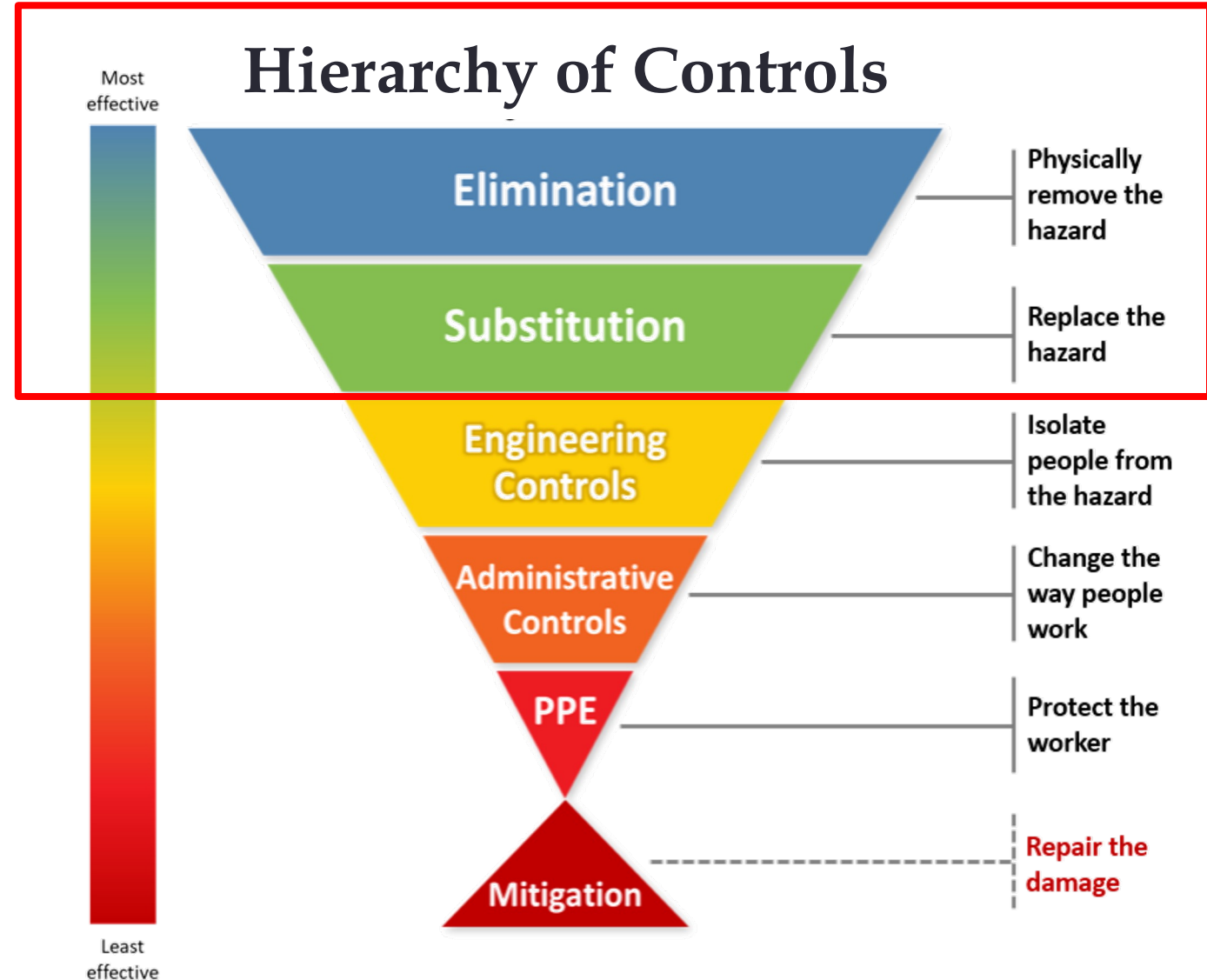
# Source Reduction and Pollution Prevention

## Source reduction, or pollution prevention:

The reduction, elimination, or prevention of pollution at its source.

Results in less waste to control, treat, or dispose of

Reduces hazard posed to public health and the environment



# Helping Companies Identify PFAS Sources

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 [draft 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

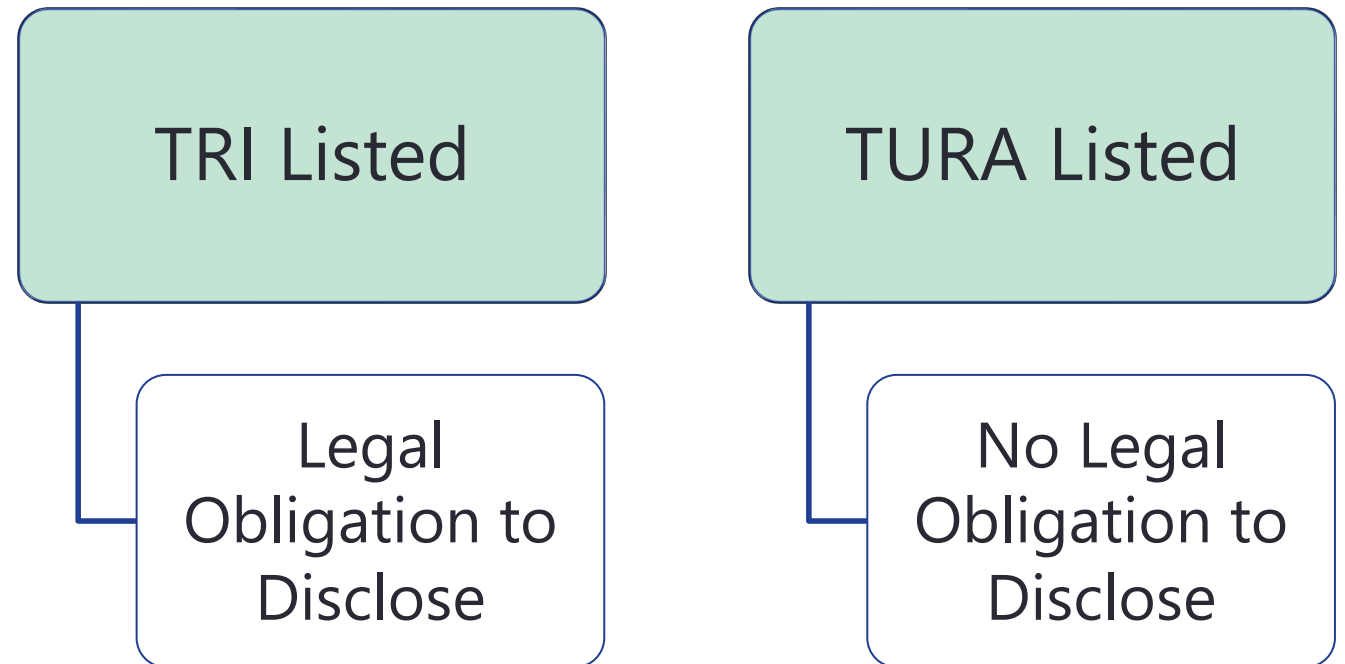
Contribute to developing product list



- 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

# PFAS Identification: Supplier Notification Letter

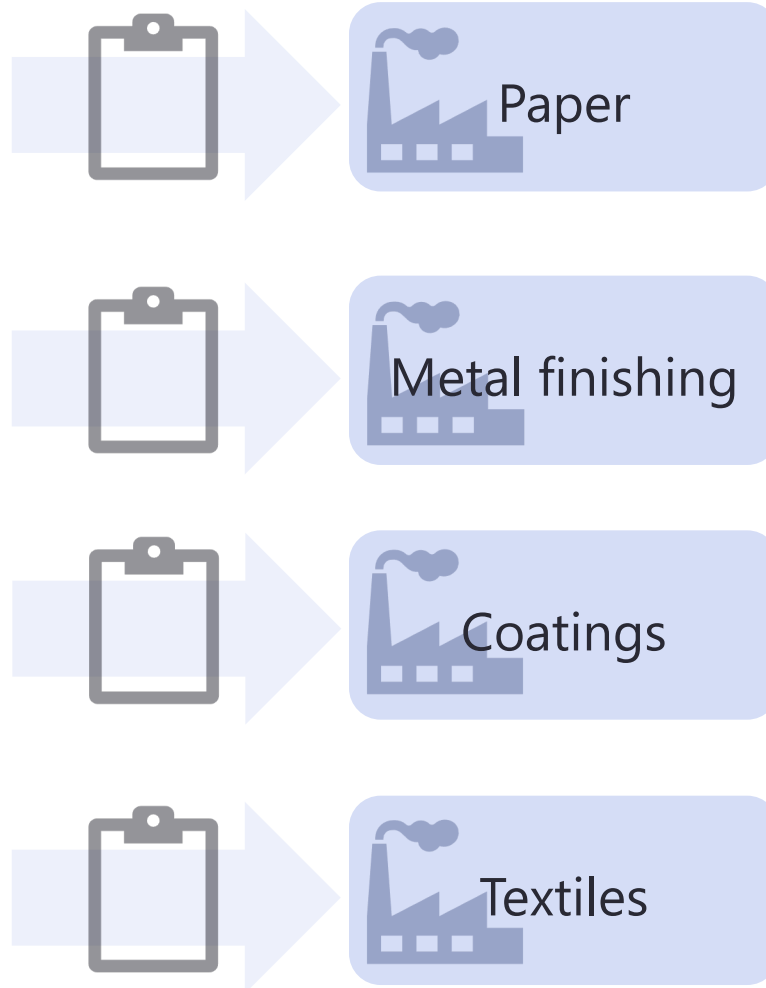
OTA has developed a **supplier notification letter** (template in handouts) that companies can use to request information from their suppliers about PFAS reportable under TRI and TURA.





# Resources for Companies: PFAS Identification

Assessments to  
identify PFAS  
sources  
*(in development)*



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

# Resources for Companies: PFAS Identification

- General resources
- Supplier notification
- OTA site visits



Recipient Name

Supplier Business Name

Address Line 1

Address Line 2

City, State ZIP

Account #: 00000000

RE: PFAS Supplier Notification Requirements under the Massachusetts Toxics Use Reduction Act (TURA) and the Toxics Release Inventory (TRI)

Dear Name,

Company Name (account #: 00000000) requests your cooperation and assistance to comply with new chemical listings under the Massachusetts Toxics Use Reduction Act (TURA) and the federal Emergency Planning and Community Right-to-Know Act (EPCRA).

# Why Referrals Work Better than Cold Calls

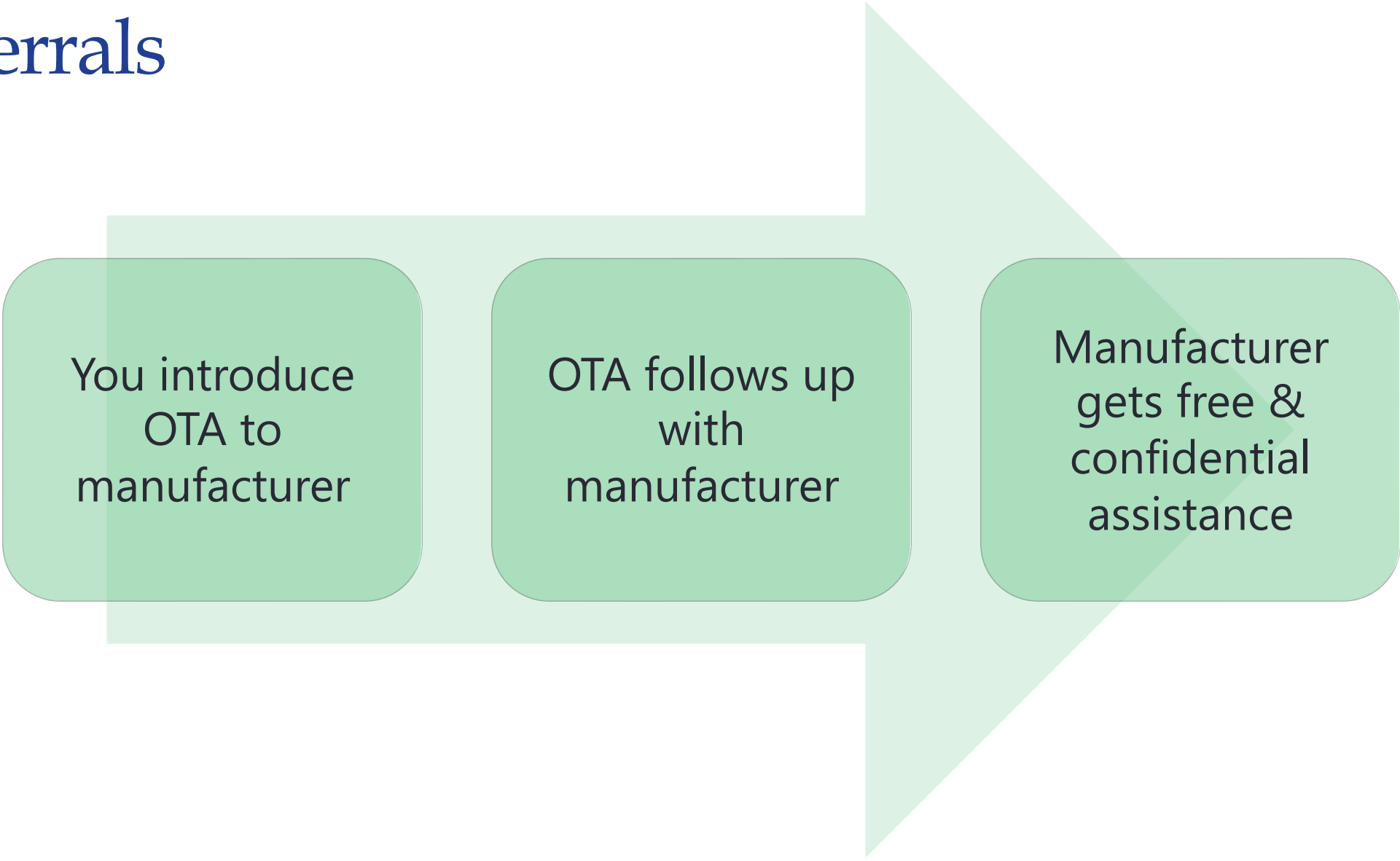
"Office of What?" (You have a relationship - they don't know OTA)

Mistrust of Government Agencies

Shifting Regulatory Landscape – PFAS is a lot to keep track of

Context of Interactions – OTA is non-regulatory - we can help bring them into compliance

# Referrals



You introduce  
OTA to  
manufacturer

OTA follows up  
with  
manufacturer

Manufacturer  
gets free &  
confidential  
assistance

# Removing the Handle from the PFAS Pump

## Phase 1

Set up a meeting with OTA to discuss outreach strategies

Provide OTA with a contact list of SIUs within TURA SIC codes

Contact SIUs regarding PFAS-source reduction efforts & informing them that OTA will be in touch with them

## Phase 2

OTA contacts SIUs for follow up, offering:

- Metal Finishing Survey
- Paper Industry Survey
- General PFAS Source Reduction strategies

OTA conducts free & confidential site visits

OTA tracks any notable reductions while maintaining confidentiality

# Creating Opportunities to Remove the Handle

- Include OTA information in any general communications / newsletters with your SIUs
- Use NPDES permit renewal notification / PFAS regulatory updates as an opportunity to encourage manufacturers to utilize OTA as a free resource
- Invite OTA to present to your SIUs at an event and meet & greet
- Co-host a webinar with OTA for your SIUs, keeping them informed of everything that they need to know about PFAS
- **Remember that companies are interested in PFAS source reduction, too. Keep talking with them.**
- Your ideas?

# Preventing Chemicals from Reaching Your Facility

OTA's **free, confidential** services can assist and encourage manufacturers to incorporate toxics use reduction, thereby decreasing chemical releases, by offering the following services:

Accepting referrals to toxics users

Identifying users of PFAS, or other chemicals, within your community

Engaging with manufacturers within your community

An upstream effort between the TURA Program and other agencies, like yours can help reduce the amount of chemicals that reach your community.

# Contact Us

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