

# The U.S. Toxics Release Inventory (TRI)



# Presentation Overview

- Toxics Release Inventory overview
  - Definitions
  - Regulatory coverage
- TRI's pollution prevention data
- TRI data uses
- Accessing TRI data

# What is the TRI?



**An information resource about toxic  
chemical waste management at facilities  
across the U.S.**



800+

individual chemicals and chemical categories

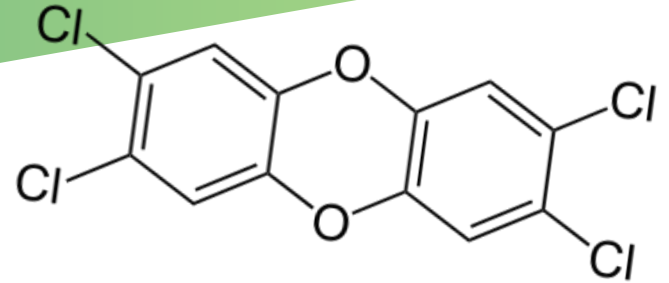
21,000+

industrial and federal facilities

since 1987

annual reporting directly from facilities

# What Chemicals Are Covered?



- TRI covers an important subset of chemicals used in commerce
- In general, chemicals on the TRI list are those that cause:
  - Cancer or other chronic human health effects
  - Adverse acute human health effects
  - Significant adverse environmental effects

See the complete list at [www.epa.gov/tri/tri-listed-chemicals](http://www.epa.gov/tri/tri-listed-chemicals)

# What Facilities Must Report?

- Covered industry sectors, including:



**Manufacturing**



**Federal Facilities**



**Coal/Oil Electricity  
Generation**



**Certain Mining  
Facilities**



**Hazardous Waste  
Management**

- Minimum number of employees
- Manufactures, processes, or otherwise uses more than a certain amount of a TRI-listed toxic chemical per year

# What information do facilities report to TRI?

**EPA**  
United States  
Environmental Protection  
Agency

**FORM R**  
Section 313 of the Emergency Planning and Community  
Right-to-Know Act of 1986, also Known as Title III of  
Superfund Amendments and Reauthorization Act

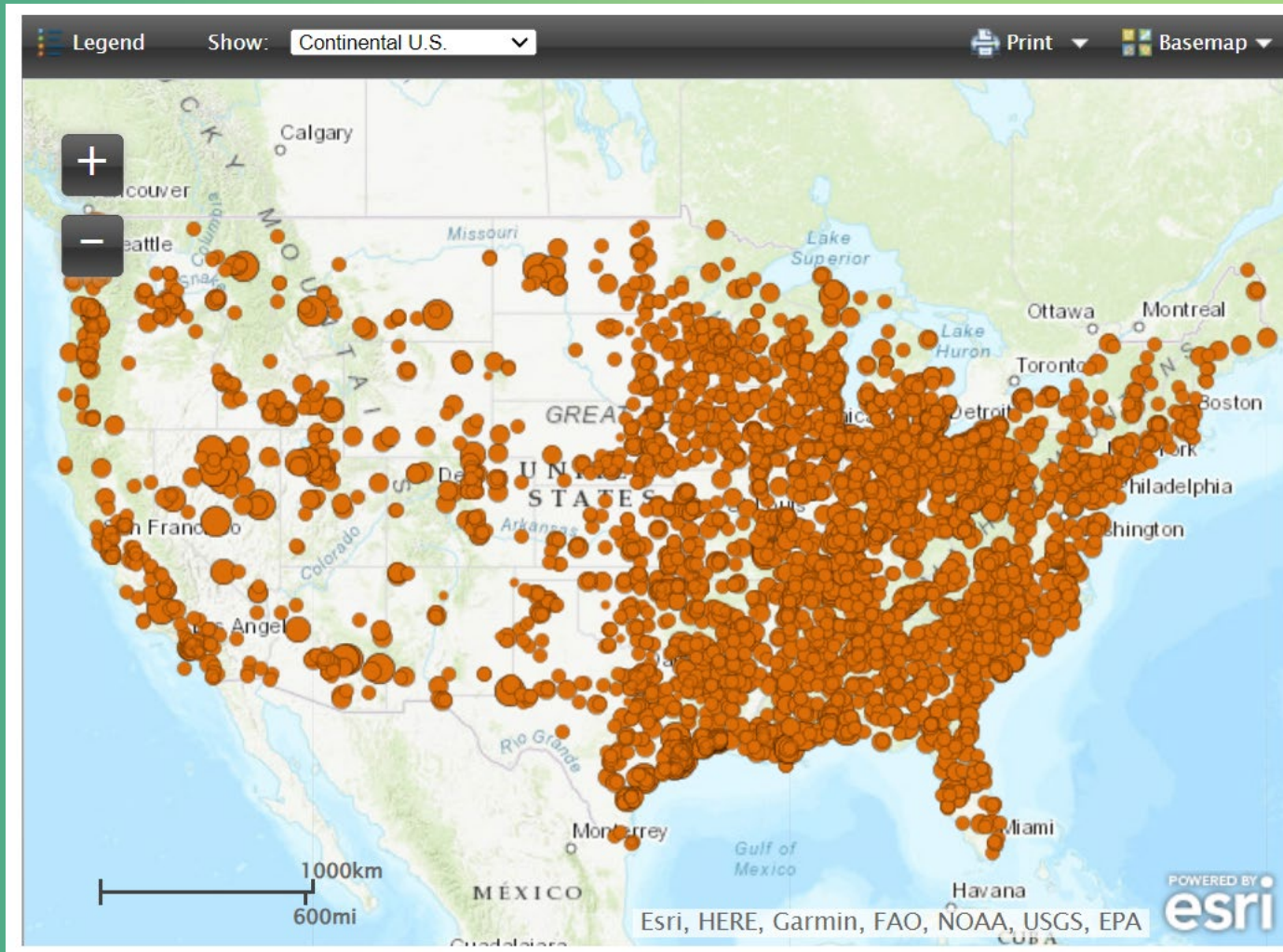
Complete form online via TRI-MEweb. For a trade secret submission, send completed forms to TRI Rep  
annual public burden related to the Form R is estimated to average 35.71 hours per response for a facility  
Instructions for more information on submissions and the Paperwork Reduction Act.

This section only applies if you are  
revising or withdrawing a  
previously submitted form,  
otherwise leave blank.

**Revision (Enter up to two code(s))**

- **On-site releases**
  - Air emissions
  - Surface water discharges
  - Disposal to land
- **Other on-site waste management**
  - Recycling
  - Energy recovery
  - Treatment
- **Transfers to off-site locations**
- **Newly implemented pollution prevention activities**

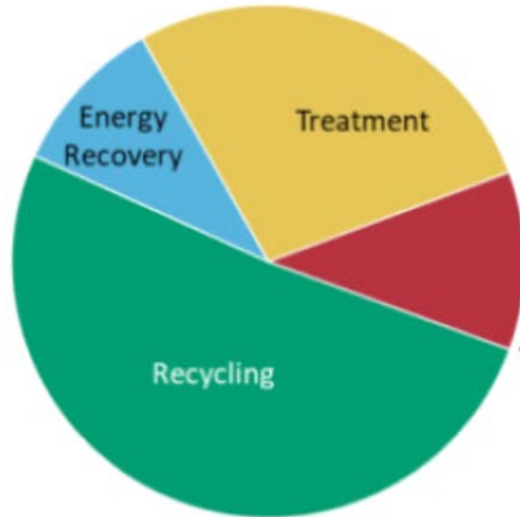
# 2021 TRI Reporting Facilities



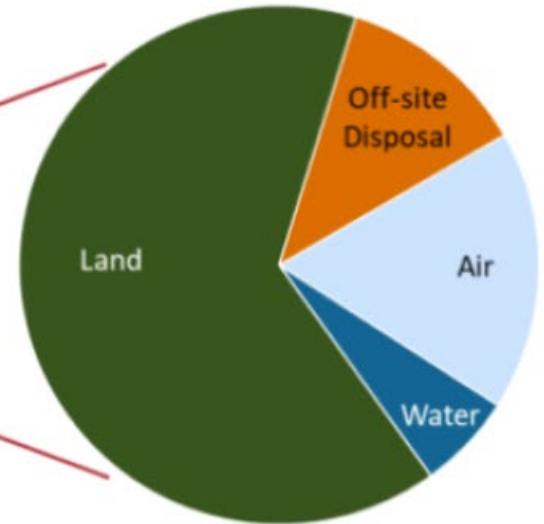


# 2021 TRI Data – Waste Managed

**Production-Related Waste Managed, 2021**  
29.3 billion pounds



**Disposal or Other Releases, 2021**  
3.3 billion pounds





Air release

Air releases

Off-site transfer

On-site recycling

Off-site transfer to POTW

Water release



# What Pollution Prevention Data do Facilities Report?

Source reduction activities are practices that reduce, eliminate, or prevent pollution at its source. Source reduction is also referred to as **Pollution Prevention (P2)**.

- Facilities are **required** to report all newly implemented source reduction activities involving TRI chemicals
  - Includes selection from 24 source reduction activity codes. Example: “S02: Substituted an organic solvent”
  - Codes are tracked across 5 categories
- Must also indicate the method(s) used to identify the activity (e.g., audit, vendor assistance)



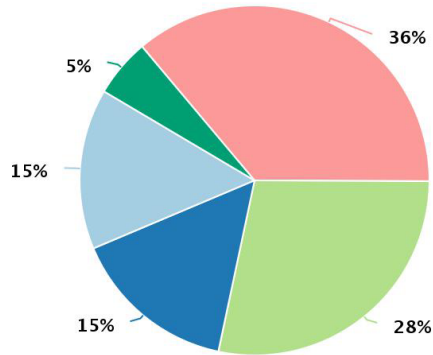
# Benefits of TRI P2 Data Collection



- Explore a shared knowledge base of source reduction practices
- Learn from peers along the value chain
- Increased opportunity to identify replicable practices
- Create a strong incentive for companies to reduce pollution and be good neighbors in their communities
- Measure facility/industry progress on reducing environmental releases and hazards

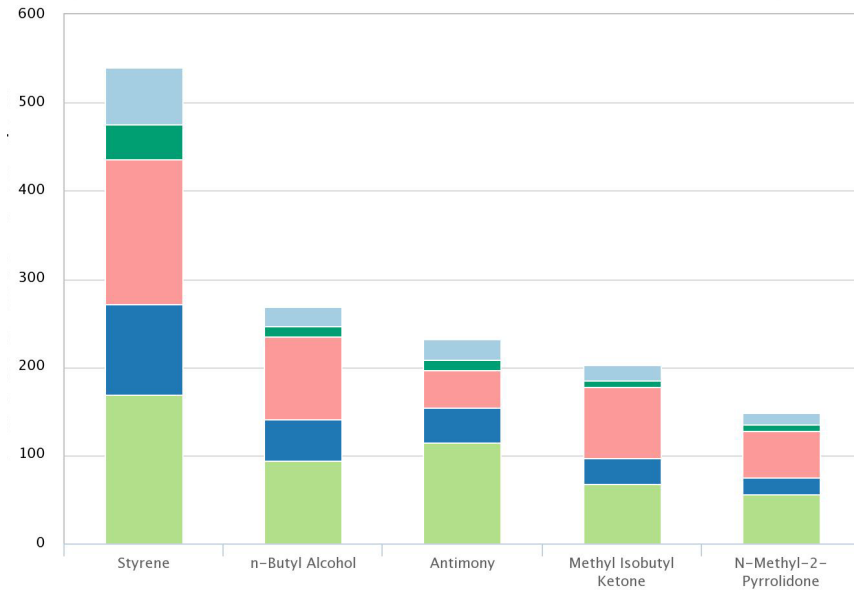
# 2021 TRI Data - Pollution Prevention

## Source Reduction Activities Reported, 2021



## Source Reduction Activities by Chemical, 2017-2021

Click on legend items below to customize items displayed in the chart



# How EPA uses TRI P2 data

- Promoting P2 success stories
- Chemical- and industry-specific spotlights
- Videos highlighting good work being done at TRI-reporting facilities
- P2 Search Tool
- Tracking facility performance
- Facilitating tech transfer
- Identifying research/assistance needs

**EPA Pollution Prevention (P2) Spotlight**  
Reducing Trichloroethylene (TCE) Waste in the Fabricated Metals Sector

**Overview of TCE and Fabricated Metal Manufacturing**  
Facilities in the **Fabricated Metal Product Manufacturing** sector make purchased metal into products through processes such as forging, stamping, bending, forming, welding, machining, and assembly. Some facilities in this sector use the solvent trichloroethylene (TCE) in vapor degreasing, which cleans metal parts in preparation for further finishing operations, like painting or welding.

TCE (CAS 79-01-6), a volatile organic compound (VOC), poses a human health hazard to the central nervous system, kidney, liver, immune system, reproductive system, and to the developing fetus. TCE is also characterized by EPA as carcinogenic to humans by all routes of exposure (i.e., by inhalation, ingestion, and dermal exposure).<sup>1</sup> Because of these concerns, EPA selected TCE as one of the first existing chemicals to evaluate for safety under its **Toxic Substances Control Act (TSCA) Work Plan** and released a final risk assessment in June 2014 indicating human health risks from inhalation exposures to TCE in certain commercial degreaser use scenarios.

**Quick Stats for 2012**

- 44 Fabricated Metal facilities reported TCE to TRI
- 15 facilities reported 21 newly implemented source reduction (P2) activities
- 79% decrease in TCE releases from 2001-2012

**TCE Reductions Reported to the Toxics Release Inventory (TRI)**  
The quantity of TCE releases reported to TRI by the fabricated metals sector decreased by 79% between 2001 and 2012. The sector's on- and off-site releases fell from 3 million pounds to 0.6 million pounds, and its total production-related waste managed (which includes quantities recycled, used for energy recovery, treated, and released) fell from more than 80 million pounds to less than 39 million pounds reported annually.

The number of fabricated metal facilities reporting TCE to TRI decreased by 69% over this time period from 141 to 44, indicating that many facilities eliminated TCE use entirely or reduced use below the 10,000 reporting threshold. This decrease appears to be the result of P2 activities rather than facility closures, as the overall number of TRI-reporting facilities in this sector fell by only 20% during the same time period.

**Management of TCE by Fabricated Metal Manufacturers**

Learn more about the TRI Program at: [www.epa.gov/tri](http://www.epa.gov/tri)

**EPA Pollution Prevention (P2) Spotlight**  
Reducing Decabromodiphenyl Oxide Waste Management

**Overview of Decabromodiphenyl Oxide (decaBDE)**  
Decabromodiphenyl oxide, also known as decabromodiphenyl ether and decaBDE (CAS 110-97-6), is a brominated flame retardant. It is used to meet fire safety standards in a broad range of plastics and polymers with applications in diverse sectors, including electrical and electronic equipment, textiles, building and construction materials, and transportation.

Chronic oral exposure to decaBDE causes neurobehavioral effects in animals, and data from studies conducted in mice and rats provides "suggestive evidence of carcinogenic potential."<sup>1</sup> DecaBDE has high potential for bioaccumulation in wildlife and humans, as do its breakdown products (lower brominated diphenyl ether congeners).<sup>2</sup>

**Quick Stats**

- 33 Facilities reported decaBDE to TRI in 2014, down from 131 in 2001
- 139 source reduction (P2) activities were reported by 47 facilities in the past 3 years
- Facilities reported an 84% decrease in decaBDE releases from 2001 to 2014

**decaBDE Reported to the Toxics Release Inventory (TRI)**  
For the 2014 TRI reporting year, the Plastics and Rubber Manufacturing sector (NAICS 28) reported the most decaBDE managed as production-related waste, followed by Electrical Equipment, Appliances, and Component Manufacturing sector (NAICS 33), and the Textile Mills sector (NAICS 31). These industries reported significant decreases in their releases of decaBDE during the past several years, showing an overall trend toward chemical substitution and other P2 activities for this chemical.

In December 2009, due to the human health and environmental concerns posed by decaBDE, the largest producers and suppliers of decaBDE in the U.S. committed to end their production, transportation, and sales of the chemical by the end of 2013. Reported releases of decaBDE decreased by 77% from 2009 to 2014 and 84% since 2001. During this period, the quantity of decaBDE managed as waste (which includes quantities recycled, used for energy recovery, treated, and released) decreased by 81%, from over 1.4 million pounds in 2001 to less than 0.3 million pounds in 2014. The number of facilities reporting the chemical also declined by 75% over this time period. While facility closures or reduced production levels may explain why some facilities stopped reporting, 61% of the facilities that stopped reporting on decaBDE in 2014 or earlier continued to report to EPA's TRI Program for other chemicals. This indicates that these facilities maintained, or even enhanced, or at least reduced the quantities of decaBDE they manufacture, process or otherwise use below the reporting TRI reporting thresholds for these activities.

**Waste Management of decaBDE**

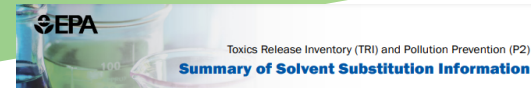
**USING DATA FOR COLLABORATIVE ACTION AT INDUSTRIAL FACILITIES**

# EPA Case Study: Solvent Substitutions

- TRI facilities reported **46,035 source reduction comments** from 2005 to 2020
  - For many years, comments data had been underutilized and only explorable in downloadable formats or through limited keyword filtering options
- To make more readily-accessible relevant data and optimize usability of such data:
    - Created an inclusive and efficient methodology to automate analysis of solvents-related information and minimize manual processing
    - Used open-source R script to extract and process comments data based on filtering parameters and keyword matches
    - Identified **1,926 comments related to solvent substitutions** during this 15-year timespan



# Greater Accessibility to Solvent Substitution Information Reported to TRI



## Overview of Solvent Use and Substitution

Solvents are chemicals used to dissolve other substances. At industrial facilities, this means solvents are often used as cleaners, degreasers, reaction media, extraction aids, and ingredients in products. However, exposure to solvent chemicals released into the air, water, and land has the potential to harm humans and the environment. The best way to prevent these chemicals from entering the environment is to eliminate or reduce their use in facility operations—a process known as source reduction. Learn about the benefits of source reduction.

Substituting a solvent with a less hazardous alternative is one approach to source reduction. Identifying suitable substitutions requires a holistic evaluation of the process(es) in question, including material inputs, energy requirements, and necessary solvent properties. The hazard profiles of potential replacement solvents must be well characterized to avoid replacing one hazardous solvent with another that is just as harmful or worse. Additionally, efficacy, cost, government regulations, and product standards may be important factors for solvent substitution. Learn more in the solvent substitution resources listed below.

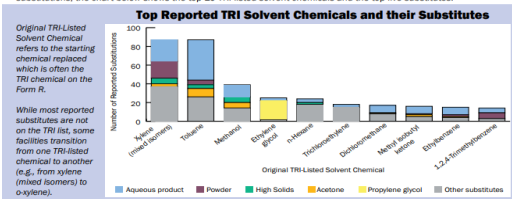
### Quick Stats

- Facilities in 16 industry sectors reported **391** comments about specific solvent substitutions from 2005-2020
- Comments cover **116** distinct solvent substitutions for TRI-listed chemicals
- Substitutions are typically associated with modifications to cleaning or coating materials

## TRI Pollution Prevention Data Analysis

The Toxics Release Inventory (TRI) includes several chemicals commonly used as solvents. Each year, facilities subject to TRI requirements must report any newly implemented pollution prevention activities and may provide optional comments describing efforts to reduce the use of TRI chemicals. Between 2005 and 2020, facilities submitted 1,926 comments related to substitutions of TRI-listed solvent chemicals. A subset of 391 comments described specific substitutions (e.g., name the alternative chemical or process), reported by facilities in 16 industry sectors. These comments represent 116 distinct substitution combinations for TRI-listed solvent chemicals.

The reported solvent substitution comments are mainly associated with modifications to cleaning or coating materials and processes. Facilities most commonly replaced xylene (mixed isomers), toluene, and methanol. The most common substitutes were aqueous products and powder coatings, followed by high solids. Based on comments with specific substitutions, the chart below shows the top 10 TRI-listed solvent chemicals and the top five substitutes.




- Environmental Topics
- Laws & Regulations
- Report a Violation
- About EPA

## Toxics Release Inventory (TRI) Program

# Solvent Substitutions Reported to TRI

Solvents are chemicals used to dissolve other substances. At industrial facilities, this means solvents are often used as cleaners, degreasers, reaction media, extraction aids, and ingredients in products. Exposure to solvent chemicals released into the air, water, and land has the potential to harm humans and the environment. The best way to prevent these chemicals from entering the environment is to eliminate or reduce their use in facility operations—a process known as source reduction. [Learn more about the benefits of source reduction.](#)

### On this page:

- [Explore solvent substitution comments reported by facilities](#)
- [Examples of descriptive information about solvent substitutions reported by facilities](#)
- [Solvent substitution resources](#)



Read our summary handout

CONTACT US

## Explore Solvent Substitution Comments Reported by Facilities

For an overview of the substitution information reported by facilities to the Toxics Release Inventory (TRI) between 2005 and 2020, refer to the summary handout.

### Solvent Substitution Comments Reported to TRI, 2005–2020

No selections applied

Industry Sectors with Substitutions: **16** | Specific Substitution Comments: **391** | Distinct Substitution Combinations: **116**

Sub to TRI  
 TSCA Flag  
 SICL Flag

[Download current data](#)  
[Download all data](#)  
[Definitions](#)

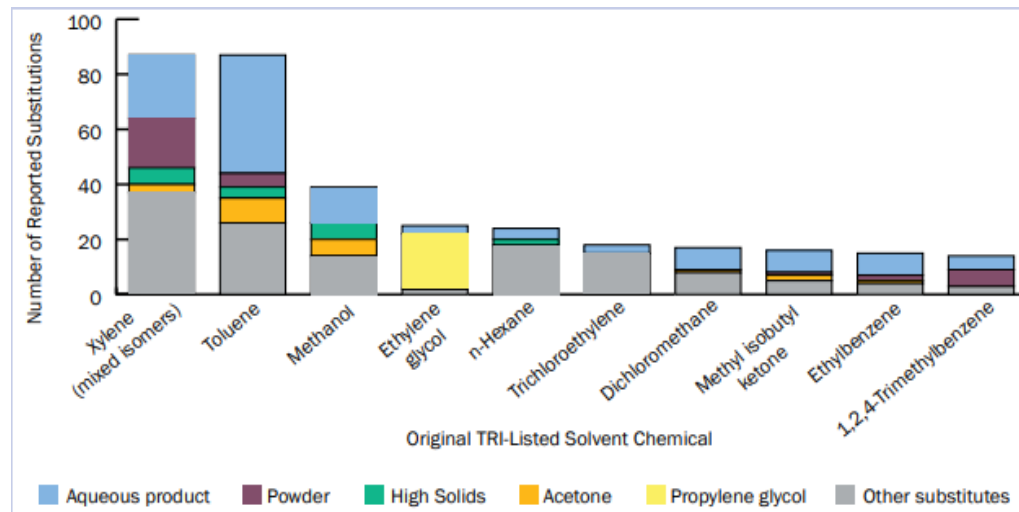
To narrow results, use the flags or the table headers to filter.

TRI Chemical ID	Original Chemical	Substitute Chemical 1	Substitute Chemical 2	Comment	Year	TRI Facility	TRI Industry Sector	NAICS
0000079005	1,1,2-Trichloroethane	Aqueous product		Installed and brought on line an aqueous washing system to replace the degreaser.	2019	K & G MANUFACTURING CO - 5502 LKGMNF22EPA	332 Fabricated Metals	332710 Machine Shops
0000095636	1,2,4-Trimethylbenzene	Aqueous product		Aqueous parts cleanser replaced solvent based cleanser in early 2011, should see significant reductions for 2011 RY.	2010	RIBER PRODUCTS INC - 4361WRKRP4915T	336 Transportation Equipment	336399 All Other Motor Vehicle Parts Manufacturing
0000095636	1,2,4-Trimethylbenzene	Aqueous product		Converted to waterbase finish	2013	FLEXSTEEL INDUSTRIES INC - 39759FLX5T500IN	337 Furniture	337211 Upholstered Household Furniture Manufacturing
0000095636	1,2,4-Trimethylbenzene	Aqueous product		Internal practices to reduce solvent content of vehicle coatings. Switched from solvent to water based coatings for a significant portion of vehicle manufacturing process.	2012	HONDA DEVELOPMENT & MANUFACTURING OF AMERICA LLC - ALABAMA - 35064HDMF1800H	336 Transportation Equipment	336112 Light Truck and Utility Vehicle Manufacturing
0000095636	1,2,4-Trimethylbenzene	Aqueous product		Reduction in total amount of chemicals used and going to a water based product for final	2011	SHAFFER COMMERCIAL SEATING	337 Furniture	337211 Wood Office Furniture

- Webpage
- Handout
- Interactive table
- Downloadable spreadsheet

# Better Understanding of What Substitute Chemicals or Technologies Industry is Using

- **391 comments** describe specific substitutions (e.g., name the alternative chemical or process), reported by facilities in 16 industry sectors
  - Primary sectors: Chemicals, Metal Manufacturing and Fabrication, and Transportation Equipment
- **116 distinct substitution combinations** for TRI-listed solvent chemicals sectors
- Facilities most commonly **replaced xylene (mixed isomers), toluene, and methanol**
- The most common substitutes were **aqueous products and powder coatings, followed by high solids formulations**



# More TRI Data Uses

## Who uses the data?



\*Includes federal, state, local, and tribal governments

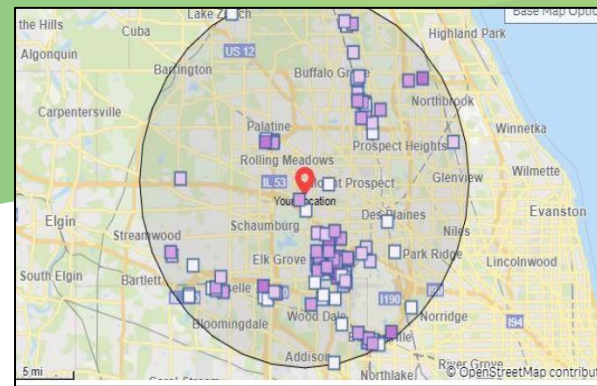
## For what purposes?

- Track environmental performance of facilities
- Estimate potential chemical risks
- Encourage pollution prevention

Leading to increased **awareness**, **understanding** of impact, and improved **decision making**.

# Accessing TRI Data

[www.epa.gov/tri/tri-data-and-tools](http://www.epa.gov/tri/tri-data-and-tools)



## TRI Explorer

You are here: EPA Home » TRI » TRI Explorer » Release Reports - Release Industry Report

## Release Reports

Fact Sheets | **Release Reports** | Waste Transfer Reports | Waste Quantity Reports

Chemical | Facility | Federal Facility | Trends | Geography

## Release Industry Report

This site uses pop-up windows. Click here to learn how to allow pop-ups from this site

[Go To New Report](#)

### Year of Data

2019

### Geographic Location

All of United States

### Chemical

All chemicals

### Data Set

The default is Data Source: 2019 Updated Dataset (released October 2020)

Select 2018 Updated Dataset (released April 2020)

Select 2018 National Analysis Dataset (released November 12, 2019)

[Generate Report](#)

### Report columns to include

Total On-site Disposal or Other Releases

- On-Site Disposal to Class I Wells, RCRA Landfills, and Other On-Site Landfills
- Other On-Site Disposal or Other Releases

Total Off-site Disposal or Other Releases

- Off-Site Disposal to Underground Injection Wells, RCRA Subtitle C Landfills, and Other Landfills
- Other Off-Site Disposal or Other Releases

Total On-and-Off-site Disposal or Other Releases

Table Name	Summary with Print Table	Properties	Header Row	First Column	Filter Buttons
U.S._2019_1	Remove Duplicates	Export	Sort Row	Last Column	Bandwidth
Properties	Cancel to Range	Export	Export	Bandwidth	Bandwidth
Properties	Tools	External Table Data	Table Size Options		
1	REPORTING YEAR	TRADE SECRET INDICATOR	TRFID	FACILITY NAME	FACILITY
2	2018	NO	35623PACT1700H	REFRACTORY SALES & SERVICE CO INC	1,790 Mlb
3	2018	NO	28693POND0504R	APPALACHIAN TREES SERVICES LLC	399,000
4	2018	NO	9082WANG3300E	LOS ANGELES PLANT S3	3485 (1.2)
5	2018	NO	77924LPT3700M	VALERO REFINING - TEXAS UP HOUSTON REFINERY	3793 Mlb
6	2018	NO	9199WELLENVIE	USIBELL COAL MINE INC	208 Mlb
7	2018	NO	3079WELLENVIE	BLUE CUBE OPERATIONS LLC - PLAZAEMINI SITE	23205 Mlb
8	2018	NO	17823VANTRES100M	MOONTOWN STEAM ELECTRIC STATION	18 Mlb
9	2018	NO	6253NALLC120E	MULLER CO PLANT #1	5226 (1.6)
10	2018	NO	92708ARTR1310W	IBC TRANSPORT DYNAMICS CORP	3131 Mlb
11	2018	NO	50875SHAND3000W	ST PAUL PARK REFINING CO LLC	363.37 Mlb
12	2018	NO	42426CING1000TU	CONROY ALUMINUM SERVIC LLC	9404 Mlb
13	2018	NO	69049CENS1000EAT	WORTHEN INDUSTRIES INC SPRAG DIV	11,140 Mlb
14	2018	NO	30775SURV1000P	HOOD CONTAINER OF LOUISIANA LLC - ST FRANCISVILLE MILLS	2385 Mlb
15	2018	NO	34822WOM1295166	CHEMICAL COMPOUNDING CO	791,000
16	2018	NO	73002CHER1001P	COOPER TIRE CO	3300 Mlb
17	2018	NO	810443EAC62000W	FREEMONT ALCANTARA SEBERTA INC	6200 Mlb
18	2018	NO	34822WOM1295166	NORTHERN SUN DIV OF ADIP	3425 Mlb
19	2018	NO	63830CEN1000H0W	CONTINENTAL CEMENT CO LLC	1,000 Mlb
20	2018	NO	63055BOPW1000S	AMKEN MISSOURI LABACHE ENERGY CENTER	226 Mlb
21	2018	NO	7840817M053390N	PLANT MILLS RESOURCE CORPUS CHRISTI EAST PLANT	1,790 Mlb
22	2018	NO	632018GGW000114	BIRSS & STRATTON CORP	791 Mlb
23	2018	NO	324017TKY1000AVK	KAYONER PERFORMANCE FIBERS JESUP MILL	4470 SAVANNAH HAY
24	2018	NO			

Tools vary by level of complexity, type of output, and amount of context added.



## Toxics Release Inventory (TRI) Program



**What is the TRI?** The Toxics Release Inventory (TRI) is a resource for learning about toxic chemical releases and pollution prevention activities reported by industrial and federal facilities. TRI data support informed decision making by communities, government agencies, companies, and others. Section 313 of the [Emergency Planning and Community Right-to-Know Act \(EPCRA\)](#) created the TRI.

[TRI Site Map](#) | [El Inventario de Emisiones Tóxicas](#)

### What is the TRI?



- Learn why the TRI was created and what chemicals and industry sectors it covers.

### Report TRI Data



- Resources for facilities and submit TRI reports.

### Access & Use Data



- Guidance, and examples of TRI uses.

### Get TRI Email & Text Updates

Enter your email  
  
[sign up](#)

# TRI Toxics Tracker via TRI Homepage

**EPA TRI Toxics Tracker** How to Search

[Use esta herramienta de búsqueda en español](#)

**Q New Search**

- Map of TRI Facilities
- Facilities Summary
  - Releases
  - Waste Managed
  - Pollution Prevention
  - Potential Risk
  - Chemicals

**Open full version of TRI Toxics Tracker with more data and expanded capabilities.**

Search below to view summary information reported by TRI facilities in the **most recent reporting year**.

Use the search features to identify industrial facilities in your community that release chemicals into the air, water, and land, or manage the waste through other methods. Learn what chemicals these facilities release, efforts to reduce releases, and potential health impacts associated with the chemical releases.

**Address | State, County, City or ZIP Code** **Metro Area** **Watershed** **Tribal Land** **TRI Facility Name**

Enter an address or select a location to search for facilities.

Search by address, place name, city, ZIP Code... State ▾ My location isn't listed

Or, use your current location. 📍 County ▾ City ▾ ZIP Code ▾

Then: [View search results](#)

**Data sources**

*NOTE: the TRI Program covers many—but not all—industry sectors and chemicals. Additionally, some facilities within a covered sector may not meet TRI reporting criteria.*

*Most Recent Reporting Year: 2021*

# Full Version of TRI Toxics Tracker

ReportingYear  
3 of 10

CLEAR BACK FORWARD

Home Page

Welcome to TRI Toxics Tracker, where you can access nationwide TRI data from the past 10 years and easily explore by geography, facility, industry, chemical, or specific data elements.

You are currently viewing data for facilities based on your search parameters shown in the green bar above

Map

Summary

Tribal Lands

Releases

Waste Managed

Waste Transfers

Pollution Prevention

Chemicals

Potential Risk

Customizable Tables

# Facilities

23,708

# Reporting Years

3 (2019 - 2021)

# Chemicals Reported

559

# Re

2

Use this page to:

- Select your search parameters. Selections will be summarized in the green bar above.
- View search results by clicking a topic (e.g., "releases") in the left menu. You can filter within a topic by using the tabs at the top of each page.

## Start a search:

Geography  Sector  Chemical  TRI Facility Name or ID

### Choose a geography type:

- Street address
- State, County, City, and/or ZIP Code
- Metro Area
- Watershed
- Tribal Land
- EPA Region

Search by address, place name, city, ZIP Code...

OR

Use Current Location

Search Radius (Miles): 10

Search

Data sources: 2021 National Analysis Dataset, released May 2023. Risk Indicators (RSE) model results based on 2021 National Analysis dataset

Years quick selections:

3 years (default)

5 years

10 years

Most recent year

NOTE: the TRI Program covers many—but not all—industry sectors and chemicals. Additionally, some facilities within a covered sector may not meet TRI reporting criteria.

< MORE



Geography

State/Territory

County

Sector

General Industry Sector

Industry Subsector

Chemical

TRI Chemical Name (ID)

Other EPA Program

General

Reporting Year

TRI Facility Name - ID

# Adding Context to TRI Data



- **Potential health effects associated with TRI chemicals are based on the Occupational Safety and Health Administration (OSHA) Carcinogen List and EPA's TRI-CHIP datasets.**
- *Demographic data layers provide characteristics of residents by census block groups, derived from EPA's EJScreen tool.*
- *Risk-Screening Environmental Indicators (RSEI) scores are relative unitless values to help understand potential impacts of TRI air and water releases, derived from EPA's RSEI model.*

# Potential health effects associated with TRI chemicals

- Releases
- Waste Managed
- Waste Transfers
- Pollution Prevention
- Chemicals
- Potential Risk
- Customizable Tables

TRI Chemical Na...
Other EPA Program
Health Endpoint
Chemical Groups
Chemical Synonym

Releases by Chemical
Waste Managed by Chemical
Chemical
Activities by Chemical
Potential Health Effects

Health Effect Definitions
Search in listbox

Chemicals and Potential Health Effects			
Chemical	Releases (lb)	RSEI	Health Effect Notes
<b>Totals</b>	5,283,154	2,68	
1,3-Butadiene (106-99-0)	61,447	1,09	
Chromium compounds (N090)	18,486	99	Cancer: Known to be a human carcinogen only applies to chromium (VI) compounds
Benzene (71-43-2)	38,859	24	
Hydrogen cyanide (74-90-8)	141,669	81,899	Endocrine, Hematological, Neurological, Reproductive
Nickel compounds (N495)	8,217	63,139	Body Weight, Cancer, Hematological, Immunological, Respiratory
Cadmium compounds (N070)	1,510	43,553	Cancer, Musculoskeletal, Renal, Respiratory

- Health Endpoint
...
✖
✔
- 
- Body Weight
  - Cancer
  - Cardiovascular
  - Dermal
  - Developmental
  - Endocrine
  - Gastrointestinal
  - Hematological
  - Endocrine, Hematological, Neurological, Reproductive
  - Body Weight, Cancer, Hematological, Immunological, Respiratory
  - Cancer, Musculoskeletal, Renal, Respiratory



# Adding Context to TRI Data



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# Mapping Demographic Data

## Legend

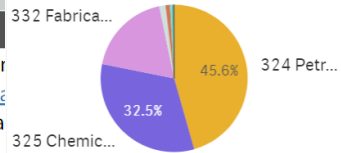
### National Percentiles for Demograp...

National Percentiles	Percent
95 - 100 percentile	≥ 78.59
90 - 95 percentile	< 78.59
80 - 90 percentile	< 69.84
70 - 80 percentile	< 56.19
60 - 70 percentile	< 45.01
50 - 60 percentile	< 36.05
Less than 50 percentile	< 29.04
Data not available	N/A

Census block groups on the map are color based on the selected indicator's [percent value and national percentile](#). Data are on EJScreen.

### Releases by Industry Sector

The colors in this pie chart provide a legend for the facility dot colors on the map.



Facilities with more than one industry sector are shown in gray on the map.

**EPA TRI Toxics Tracker** | ReportingYear: 2021 | FacilityIDName: 139 of 29658

Home Page | Map | Summary | Tribal Lands | Releases | Waste Managed | Waste Transfers | Pollution Prevention | Chemicals | Potential Risk

You are currently viewing data for facilities based on your search parameters shown in the green bar above. [Filters and Options](#)

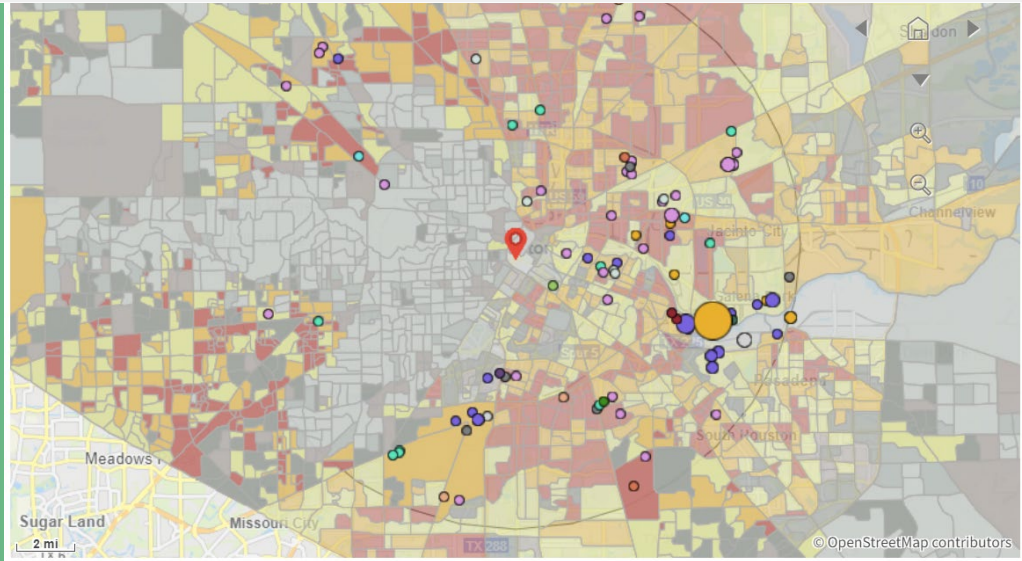
# Facilities: 89 | # Reporting Years: 1 (2021 - 2021) | # Chemicals Reported: 93 | # Reporting Forms: 408

### Map of TRI Facilities

To access data about an individual facility, click on the facility location and then the checkmark button. Next, select "Summary" from the left menu to find basic facility information, an EJ report and demographic statistics.

**Map Options:**

- Change your search radius (miles): 10
- Current address search:
- Dot size represents:
  - Releases (lb)
  - Waste Managed (lb)
  - Potential Risk Score
- Dot color represents:
  - Releases (lb)
  - Industry Sector
- Demographic data:
  - Hide
  - Show
- Select a demographic indicator:
  - Demographic Index
  - Supplemental Demographic Index
  - Low Income
  - People of Color
  - Unemployment
  - Less Than High School Education
  - Limited English Speaking
  - Under Age 5
  - Over Age 64
- Non-TRI facilities:
  - Hide
  - Show



# Adding Context to TRI Data



- *Potential health effects associated with TRI chemicals are based on the Occupational Safety and Health Administration (OSHA) Carcinogen List and EPA's TRI-CHIP datasets.*
- *Demographic data layers provide characteristics of residents by census block groups, derived from EPA's EJScreen tool.*
- **Risk-Screening Environmental Indicators (RSEI) scores are relative unitless values to help understand potential impacts of TRI air and water releases, derived from EPA's RSEI model.**

# Potential impacts from TRI releases to air and water: RSEI scores

- Home Page
- Map
- Summary
- Tribal Lands
- Releases
- Waste Managed

You are currently viewing data for facilities based on your search parameters shown in the green bar above

Filters and Options

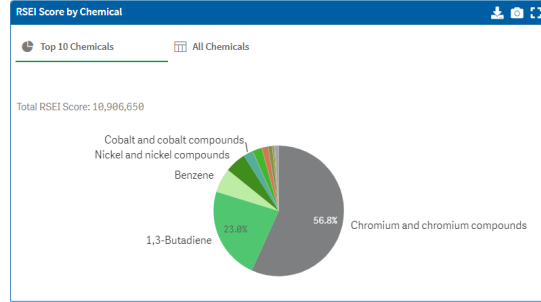
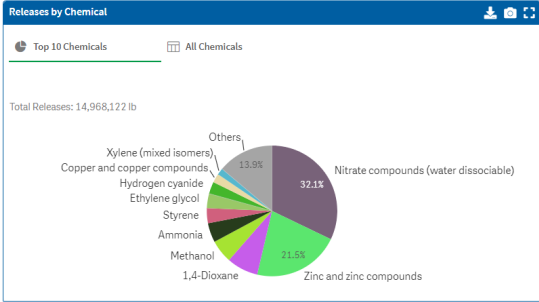
# Facilities 97	# Reporting Years 3 (2019 - 2021)	# Chemicals Reported 103	# Reporting Forms 1,270
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## Potential Risk

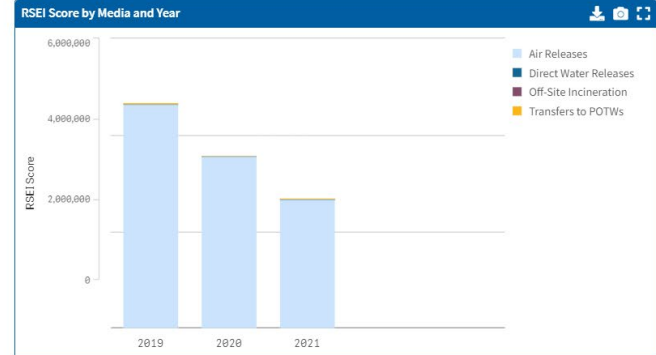
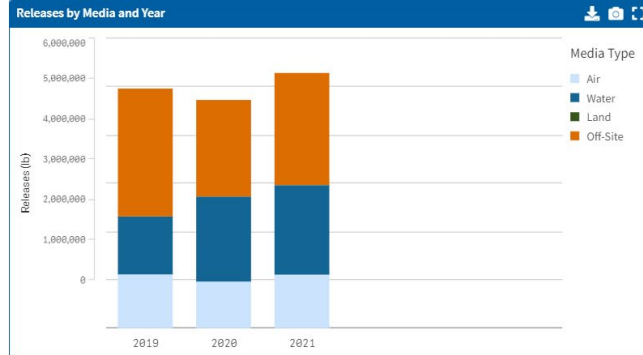
MORE INFO

TRI potential risk data are derived from EPA's Risk-Screening Environmental Indicators (RSEI), a screening-level modeling tool that uses TRI air and water data to provide information about potential health-related impacts from toxic industrial releases. RSEI Score is a unitless value that accounts for the size of the chemical release, how the chemical degrades and moves through the environment, the size and location of the exposed population, and the chemical's toxicity. See the "More Info" button for more details.

Compare TRI Total Releases vs. RSEI | By Chemical | By Media | By Industry Sector | By Location | Summary Table



By Media | By Industry Sector | By Location | Summary Table



## TRI Resources:

TRI Homepage - <https://www.epa.gov/toxics-release-inventory-tri-program>

TRI Toxics Tracker - <https://edap.epa.gov/public/extensions/TRIToxicsTracker/TRIToxicsTracker.html#continue>

TRI Data & Tools Page - <https://www.epa.gov/toxics-release-inventory-tri-program/tri-data-and-tools>

TRI Pollution Prevention - <https://www.epa.gov/toxics-release-inventory-tri-program/pollution-prevention-p2-and-tri>

Risk Screening Environmental Indicators Model - <https://www.epa.gov/rsei>

Factors to Consider when Using TRI Data - <https://www.epa.gov/toxics-release-inventory-tri-program/factors-consider-when-using-toxics-release-inventory-data>

# Questions?

Office of Pollution Prevention & Toxics – Data Analysis & Dissemination Branch

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