Toxics Release Inventory (TRI)





How To Access Data About Industrial Chemical Releases In Your Community



Overview

- What is the Toxics Release Inventory?
- Who has to report to TRI?
- Why is TRI important to Environmental Justice communities?
- Which are the limitations of TRI?
- How to access TRI Data?
 - -Live Demo on how to access TRI Data



What is the Toxics Release Inventory?



- TRI is an EPA information resource that can help you learn about toxic chemical releases from certain facilities in your neighborhood.
- TRI can tell you about:



Releases



Waste transfers



Recycling



Pollution prevention



• TRI includes data from more than **21,000** facilities across the country and covers **767** individual chemicals and **33** chemical categories.

Toxics Release Inventory



Why was the Toxics Release Inventory created?



Bhopal, India December 1984

- Methyl isocyanate gas was released at a Union Carbide chemical plant.
- Thousands died the first night, thousands more since and survivors continue to suffer with permanent disabilities.

Institute, West Virginia August 1985

- Chemicals released at a similar facility in the U.S.
- More than 100 people hospitalized.

These events led to the passage of the Emergency Planning and Community Right-to-Know Act (EPCRA) by Congress in 1986, which mandated the enactment of EPA's TRI program.

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Why is TRI important to Environmental Justice communities?

TRI can help EJ communities:

- Identify how many TRI facilities operate in the community and where they are located.
- Identify which chemicals are being released by TRI facilities.
- Track increases or reductions of toxic chemical releases from facilities located in the community over time.
- Compare the toxic chemical releases and pollution prevention efforts of facilities in one location with similar facilities across the country.
- Prioritize efforts to reduce pollution from facilities located in the community.



Which facilities must report to TRI?

Facility must be in a TRI-covered industry sector or category, including:



Manufacturing Facilities



Coal/Oil Electricity Generation



Certain Mining Facilities



Hazardous Waste Management



Federal Facilities

- Facility must have the equivalent of at least 10 full-time employees.
- Facility must manufacture, process or use more than a certain threshold amount of a TRI-listed toxic chemical per year.

Industrial Sectors Covered

Industrial Sector	Notes
Manufacturing	Facilities engaged in the mechanical or chemical transformation of materials or substances into new products
Metal mining	Not including metal mining services, and uranium, radium, and vanadium ores
Coal mining	Not including coal mining services
Electrical utilities	Limited to facilities that combust coal and/or oil for the purpose of generating electricity for distribution in commerce
Treatment, Storage, and Disposal facilities	Limited to facilities regulated under the Resource Conservation and Recovery Act, Subtitle C, 42 U.S.C. Section 6921 et seq.
Solvent recovery services	Limited to facilities primarily engaged in solvent recovery services on a contract or fee basis
Chemical distributors	Facilities engaged in the wholesale distribution of chemicals and allied products
Petroleum bulk terminals	Facilities engaged in the wholesale distribution of crude petroleum and petroleum products from bulk liquid storage facilities
Federal facilities	Federal facilities (covered by Executive Order 13423)

TRI Chemical Thresholds



A facility meeting all applicability criteria must file a Form R report for a Section 313 chemical if the facility:

- Manufactured or Processed more than 25,000 pounds of the chemical in the reporting year, or
- Otherwise Used more than 10,000 pounds of the chemical in the reporting year, or
- For Persistent, Bioaccumulative and Toxic (PBT) chemicals are subject to lower thresholds of 100 pounds, 10 pounds or 0.1 grams (for dioxins) in the reporting year.





What information do facilities report to TRI?

- On-site (at facility) releases of TRI chemicals to:
 - Air
 - Water
 - Land (e.g. landfills)
- Transfer of chemical waste to off-site locations
- Other waste management
 - Recycling
 - Treatment
 - Energy Recovery
- Pollution Prevention Activities







Limitations of TRI Data



Which are the limitations of TRI data?

- Annual data collected from TRI reporting facilities each year
- Covers many, but not all chemical releases and not all industry sectors
- Small facilities are not included (under 10 employees)
- Does not cover all sources of pollution, (e.g. cars and trucks)
- Does not describe how long or how often chemicals were released

For more information, see "Factors to Consider When Using TRI Data" at: www.epa.gov/toxics-release-inventory-tri-program/factors-consider-when-using-toxics-release-inventory-data

TRI Resources



TRI Resources and Contact Information for EJ Communities

- To learn more about TRI check out the new improved TRI search interface: www.epa.gov/tri/#trisearch
- TRI Information Center: (800) 424-9346 (Select option #3 from menu – 10 am - 5:00 pm ET)
- To email a question to a TRI program expert: tri.help@epa.gov
- TRI Contacts: www.epa.gov/tri/contacts
- TRI Regional Coordinators: www.epa.gov/tri/regionalcoordinators

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TRI Search



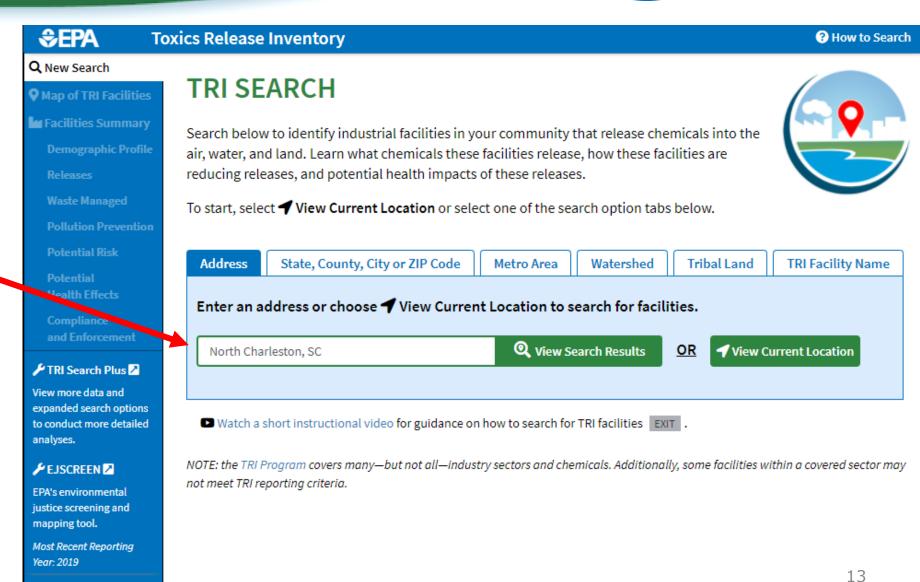
TRI Search is an EJ community-oriented mapping tool located at the bottom of EPA's TRI homepage (go to epa.gov/tri.

Various search options are available.

The best way to learn about nearby TRI toxic releases is to use the ADDRESS option.

 Enter name of city, neighborhood, school, etc.
 Then click "View Search Results."

You can also use "View Current Location" search option (but it may not work on some computers/with certain browser settings)



Map of TRI Facilities

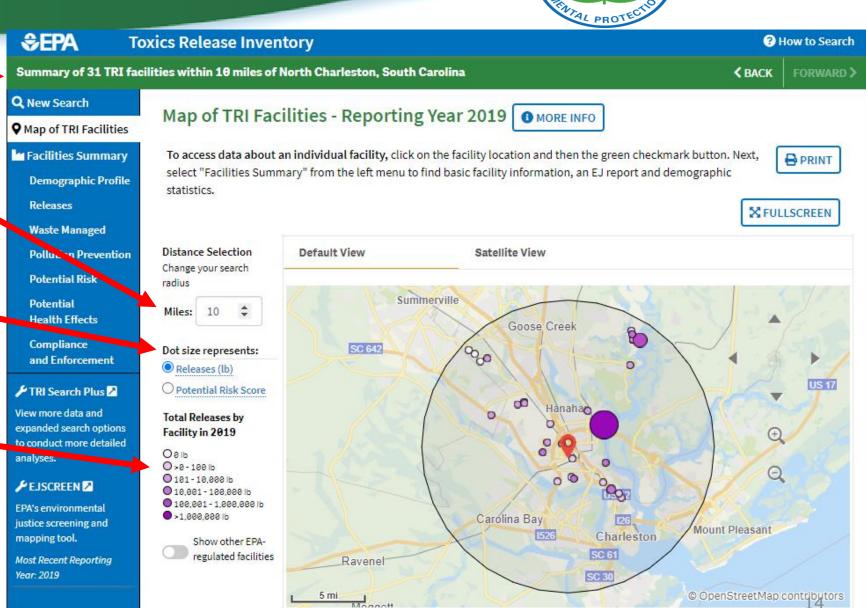


The green bar at top displays the number of TRI facilities located within the selected search radius.

You can select a search radius between 1 to 100 miles of the selected search radius. (The default radius is 10 miles.)

The size of the dots indicate which facilities reported the highest amount of toxic releases during the latest TRI reporting year.

This legend provides info about the range of toxic releases based on the color of the dots (. The deepest purple dots indicate the highest to light purple/white).

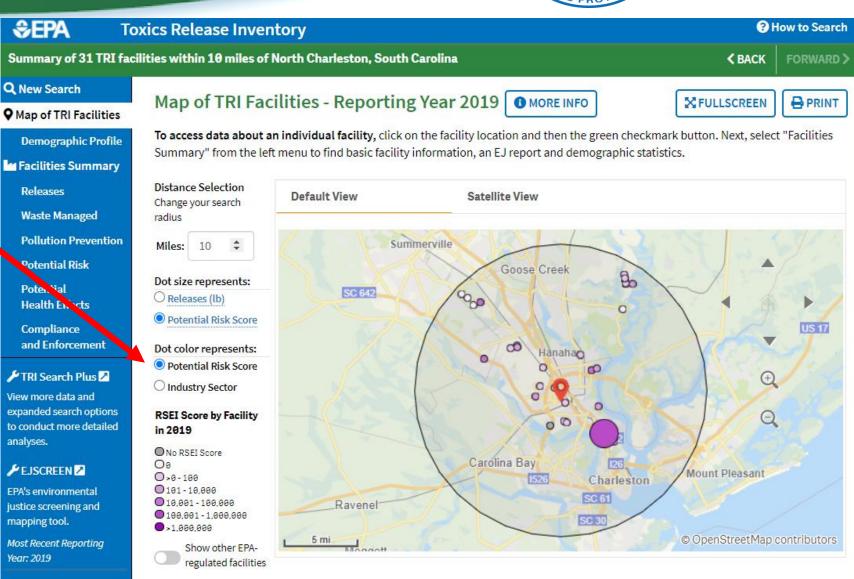


Map of TRI Facilities



Selecting "Potential Risk Score" shows a different facility as the primary driver of highest potential risk to human health regarding TRI toxic releases within 10 miles of North Charleston, SC.

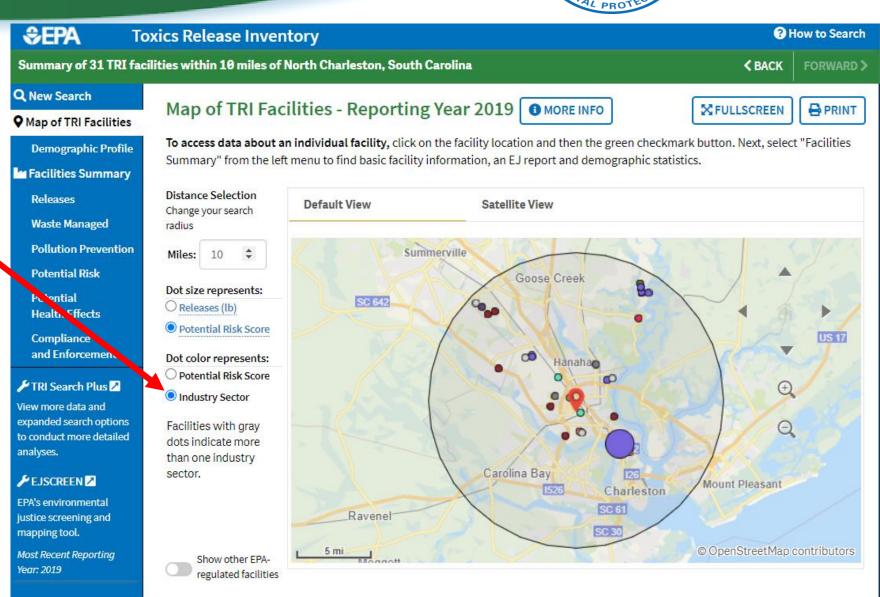
More info provided about "potential risk" later in this presentation.



Map of TRI Facilities



Selecting "Industry Sector" displays different colored dots that indicate the industry sector for each of the TRI facilities. (Examples include Chemicals, Paper, Foods industry sectors).



Demographic **Profile**

Demographic data tell you about certain characteristics of the people who live near the facilities in your selected search. The location of TRI facilities are shown on top of demographic data from EPA's EJSCREEN.

This legend explains what the colors for each of the various demographic indicators represent.

\$EPA Toxics Release Inventory

How to Search

Summary of 31 TRI facilities within 10 miles of North Charleston, South Carolina

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PRINT

Q New Search

Map of TRI Facilities

Facilities Summary

Demographic Profile

Releases

Waste Managed

Pollution Prevention

Potential Risk

Potential **Health Effects**

Compliance and Enforcement

FTRI Search Plus 🗸

View more data and expanded search options to conduct more detailed analyses.

CREEN

EPA's environme justice screening and mapping tool.

Most Recent Reporting Year: 2019

Change Your Search Radius (Miles):

Demographic data tell you about certain characteristics of the people who live near the facilities in your search area. In the map below, locations of TRI facilities are shown on top of Census block

Select a Demographic Indicator Only one indicator is shown at a time.

- Demographic Index
- O Low Income
- O People of Color
- O Less Than HS Education
- O Linguistically Isolated
- O Children Under 5
- O Seniors Over 64

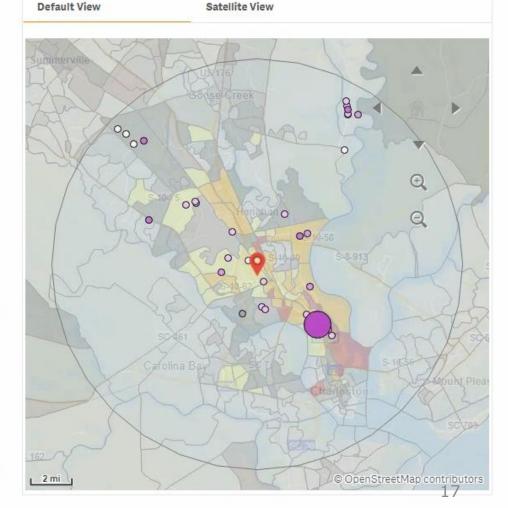
Dot size represents:

- O Releases (lb)
- Potential Risk Score

National Percentiles for **Demographic Index**

National Percentiles	Percentages
95 - 100 percentile	≥ 80.78
90 - 95 percentile	< 80.78
80 - 90 percentile	₹72.44
70 - 80 percentile	< 58.88
60 - 70 percentile	× 46.08
50 - 60 percentile	< 36.55
Less than 50 percentile	< 29,44
Data not available	N/A

Census block groups on the map are colored based on the selected indicator's percentage value and national percentile. Data are based on EJSCREEN.

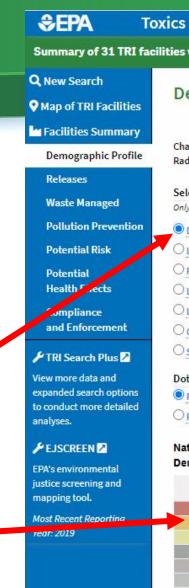


Demographic Profile

Demographic data provides information about certain characteristics of the people who live near the facilities in your selected search. The location of TRI facilities are shown on top of demographic data from EPA's EJSCREEN.

"Demographic Index" is the combination of percent low income and percent people of color.

A legend explains what each of the colors represent in the demographic index.



Toxics Release Inventory

? How to Search

Summary of 31 TRI facilities within 10 miles of North Charleston, South Carolina

SBACK

FORWARD >





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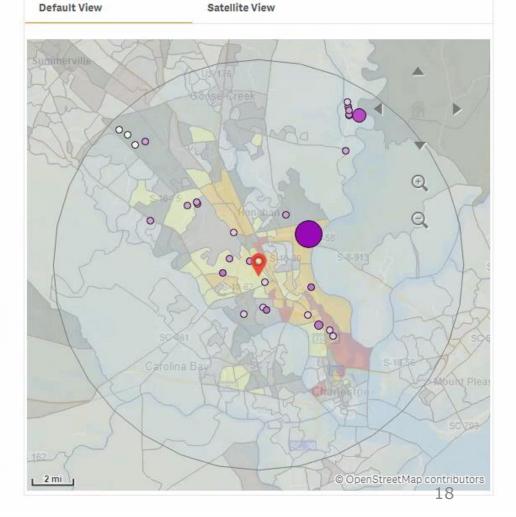
Releases (lb)

O Potential Risk Score

National Percentiles for **Demographic Index**

Percentages	National Percentiles
2 80.78	95 - 188 percentile
< 80.78	90 - 95 percentile
< 72.44	80 - 90 percentile
< 58.88	70 - 88 percentile
× 46.00	60 - 70 percentile
< 36.55	50 - 68 percentile
< 29.44	Less than 50 percentile
N/A	Data not available

Census block groups on the map are colored based on the selected indicator's percentage value and national percentile. Data are based on EJSCREEN.



TRI Print-Friendly Report

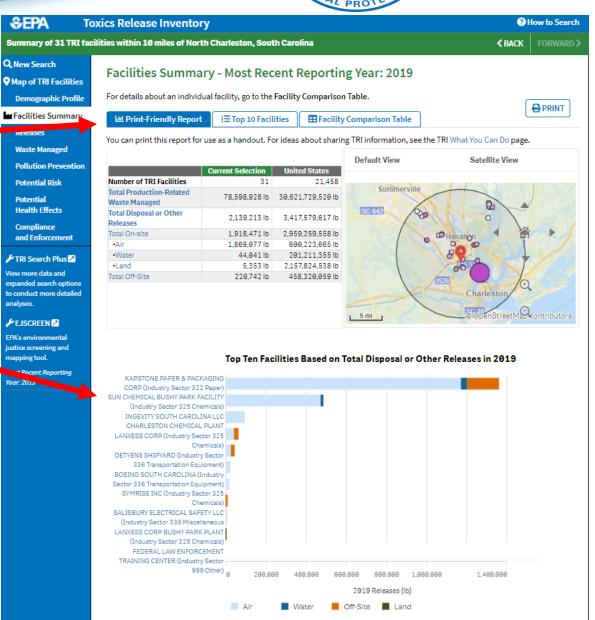


Select "Print-friendly Report" tab in the "Facilities Summary" section of the left-side blue menu.

You can make double-sided photocopies of the report and distribute them as a handout at town hall events, neighborhood association meetings, etc.

This bar chart displays the top 10 facilities in your search selection with the highest total releases.

In this example, the majority of releases were emitted to air.



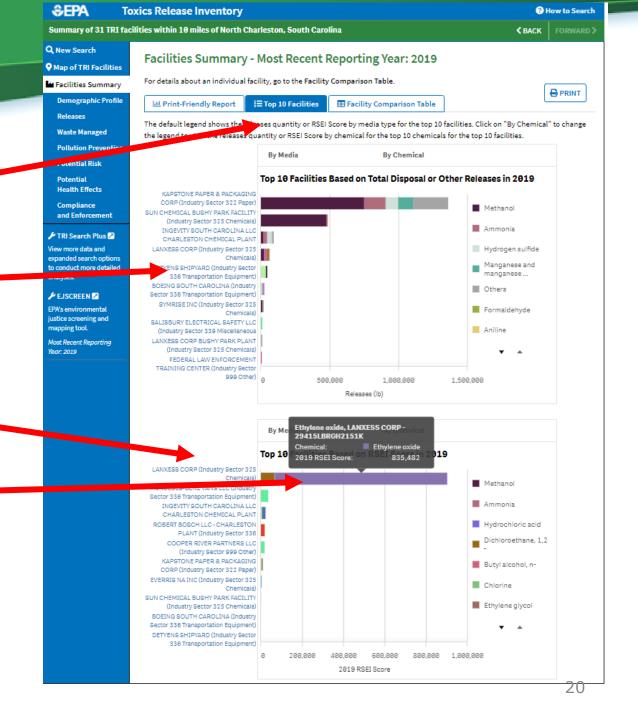
Top 10 Facilities

Select the "Top 10 Facilities" tab in "Facilities Summary" to view 2 charts:

First chart shows the TRI facilities that released the highest amount of total disposal and other toxic releases by media (air, water, land, off-site) or by chemical (shown here).

2nd chart shows the top 10 TRI facilities with highest "potential risk score" by media or by chemical (shown here).

Hover over individual segments of the bar chart to view more detailed information.



TRI Facility Comparison Table



"Facility Comparison Table" tab provides a list of all the TRI facilities in your search selection.

Default displays the facilities with the highest RSEI score in descending order.

You can change sorting preference by clicking on a different column header.

Select "EJ Report" link to access environmental and demographic indicator data for each facility (derived from EJSCREEN).

31 TRI facilities within 10 miles of North Charleston, South Carolina

Toxics Release Inventory

For details about an individual facility, go to the Facility Comparison Table.

Facilities Summary - Most Recent Reporting Year: 2019

ऻ Print-Friendly Report **∃** Top 10 Facilities

■ Facility Comparison Table

1 DEFINITIONS ♣ DOWNLOAD

? How to Search

FORWARD >

To change the corting order in the table, click on a column header.

For individual facility information, cues facility name and then the green checkmark button.

Facility	(Miles)	Releases (lb)	RSEI Score	Report
Totals	-	2,139,213	1,009,588	
LANXESS CORP - 29415LBRGH2151K	4.13	64,570	902,701	Link
MERCEDES-BENZ VANS LLC - 29456DMLRC851PA	8.21	4,035	35,069	Link
INGEVITY SOUTH CAROLINA LLC CHARLESTON CHE	2.50	93,352	22,648	Link
ROBERT BOSCH LLC - CHARLESTON PLANT - 29418	5.72	2,452	17,935	Link
COOPER RIVER PARTNERS LLC - 29445MBYCRHIGHW	8.74	4,208	17,504	Link
KAPSTONE PAPER & PACKAGING CORP - 29411WST	2.87	1,360,478	8,955	Link
EVERRIS NA INC - 29418GRCSR7200I	4.24	527	3,352	Link
SUN CHEMICAL BUSHY PARK FACILITY - 29445SNC	8.79	486,664	809	Link
BOEING SOUTH CAROLINA - 2941WTHBNG54INT	1.79	24,875	325	Link
DETYENS SHIPYARD - 29405DTYNS1670D	2.75	45,811	123	Link
ALLIED AVIATION FUELING OF SOUTH CAROLINA LL	1.48	270	57	Link
US DOD DFSP CHARLESTON - 29406SDFNS5862N	2.81	751	46	Link
KEMIRA CHEMICALS INC - 29445KMRCH1514B	8.53	4,235	33	Link
EATON AEROSPACE - 29418TNRSP723CR	4.54	725	18	Link

Distance

O EDA
≎EPA
Summary of 31 TRI f
Q New Search
• Map of TRI Facilities
≝ Facilities Summary
Demographic Profile
Releases
Releases Waste Managed
Waste Managed
Waste Managed Pollution Prevention
Waste Managed Pollution Prevention Potential Risk
Waste Managed Pollution Prevention Potential Risk Potential Health Effects Compliance
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FTRI Search Plus 🗸

View more data and expanded search options to conduct more detailed analyses.

≯ EJSCREEN **☑**

EPA's environmental justice screening and mapping tool.

Most Recent Reporting Year: 2019

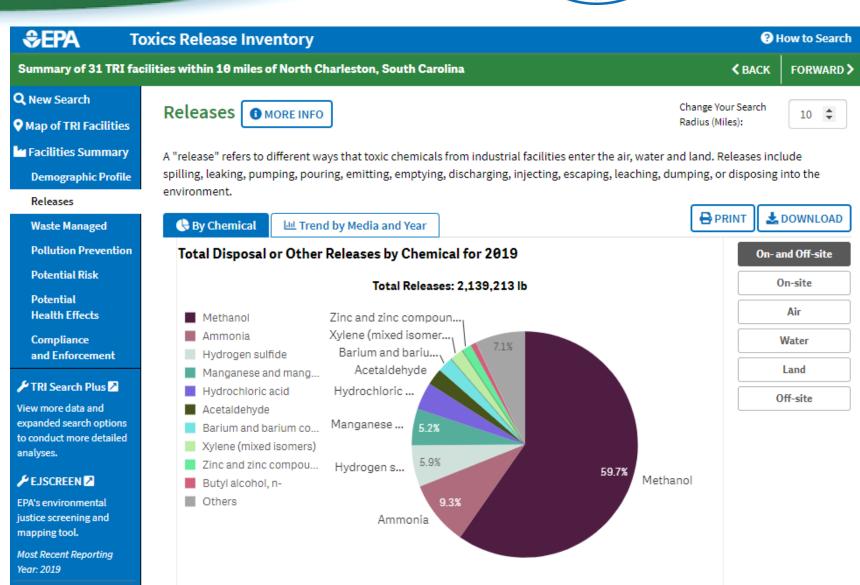
TRI Total Releases by Chemical



"Releases" section in blue menu bar displays the top chemicals released by all the facilities in your search selection.

The default view displays the top chemicals released on-site as well as transferred off-site for all media (air, water and land).

Other filter options allow you to view releases by air, water or land – or specifically on-site releases or off-site transfers.



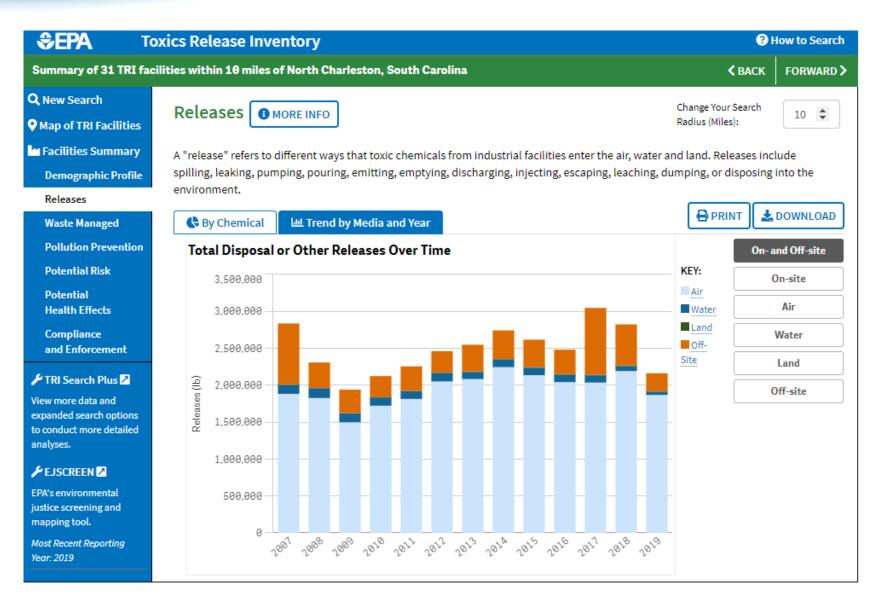
TRI Trends Data Total Releases by Media and Year



Select "Trend by Media and Year" tab to learn whether total releases for the TRI facilities in your search selection increased or decreased over time

In this example, the majority of total releases were emitted to air.

The same filter options are available as those displayed in the previous slide.



U.S. EPA TRI Contacts



We Are Happy To Assist You!



Ezequiel Velez
US EPA Region 4
TRI Program Coordinator
(404) 562-9191
velez.ezequiel@epa.gov

Christina Guthrie
US EPA Headquarters
Data Analysis & Dissemination Branch
(202) 564-8846
uthrie.christina@epa.gov

