



An Introduction to PFAS Analytic Tools

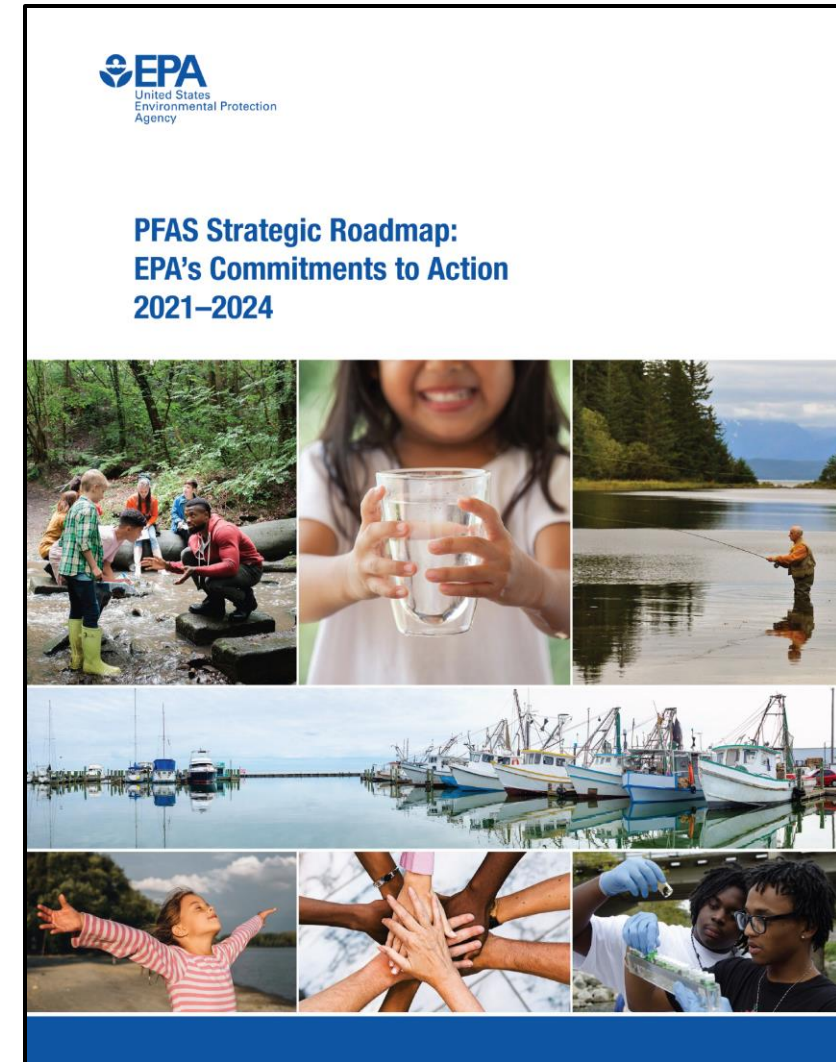
Rusty Wasem

U.S EPA Office of Enforcement and Compliance Assurance

Fall 2023

EPA's PFAS Strategic Roadmap

- In October 2021, EPA released the PFAS Strategic Roadmap, highlighting concrete actions the Agency will take across a range of environmental media and EPA program offices to protect people and the environment from PFAS contamination.
- The Roadmap is guided by three primary goals:
 - **Research:** Investing in research, development, and innovation to incorporate the best-available science into EPA's work.
 - **Restrict:** Working to proactively prevent PFAS from entering air, land, and water at levels that can adversely impact human health and the environment.
 - **Remediate:** Broadening and accelerating the cleanup of PFAS contamination to protect human health and ecological systems.



Goals of the PFAS Analytic Tools

- Develop an integrated resource to understand where PFAS detections are being identified across a wide set of databases.
- Compile as much nationally available data on PFAS as possible into an easy-to-use, automatically refreshed tool.
- Develop standard methods to extract PFAS chemical data from national data systems and develop best practices for regulatory partners that would like to contribute information.
- Support EPA investigations into PFAS contamination and further the collaboration with federal/state/local/tribal partners as noted in the [EPA PFAS Strategic Roadmap \(Link to 2022 Progress Report](#) – see p.8).

Development History

2019 - Version 1.0 released for government-wide use after EPA collaborated with the Environmental Council of the States and 14 participating states. WA, PA, MI, AL, NJ, NH, MN, AZ, CA, ME, OR, VT, AK, MA

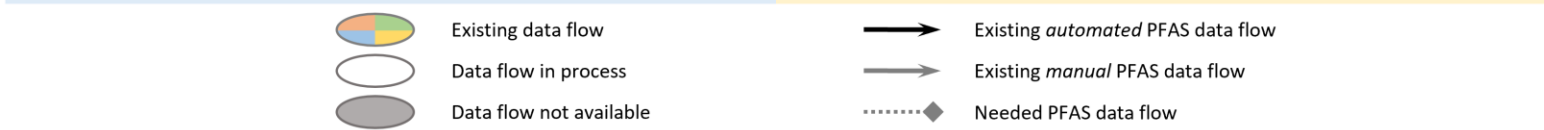
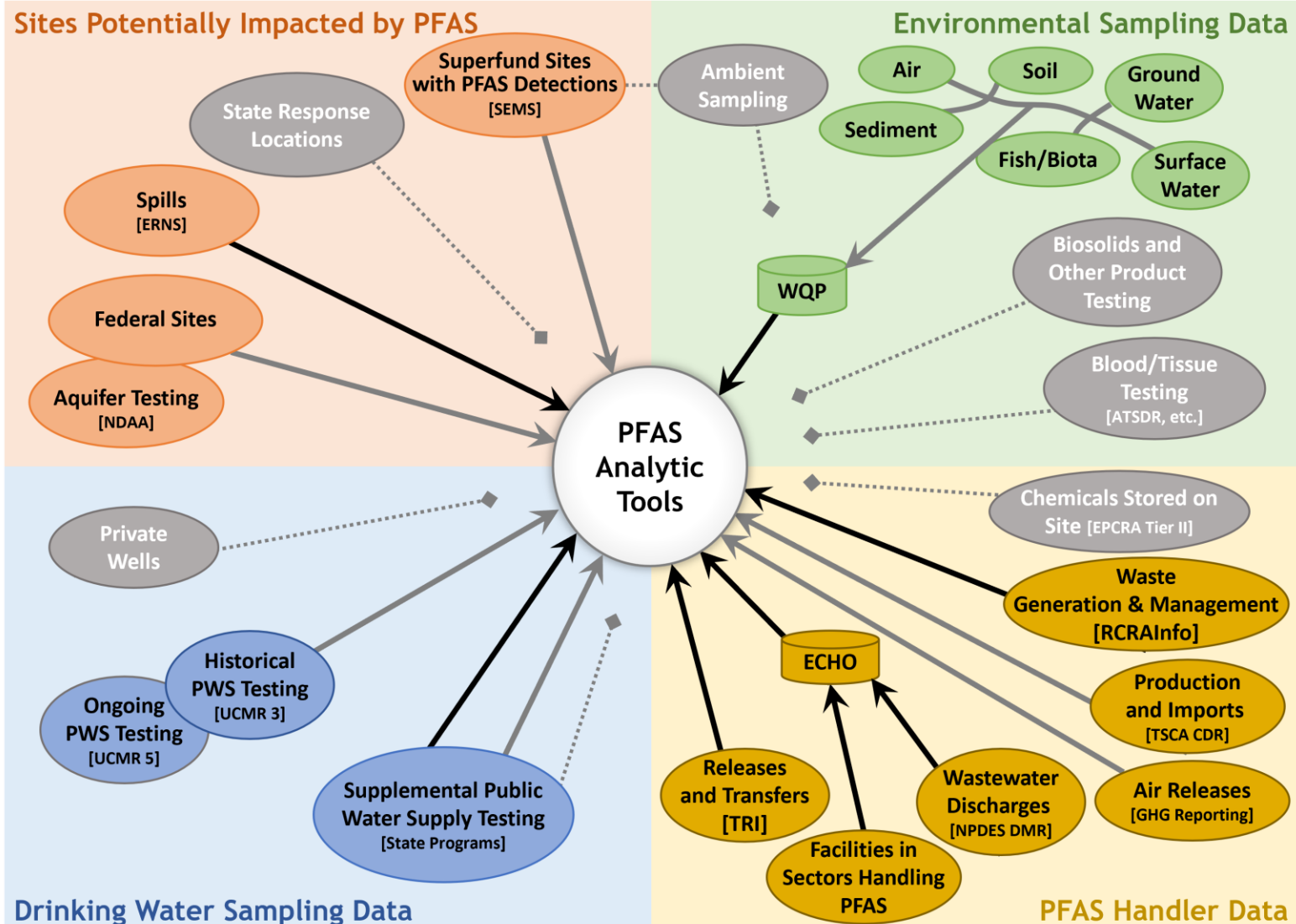
2020 – Version 2.0 was released for all federal / state / tribal / local government use.

Presentation to additional State Organizations including Association of other State Organizations (ACWA, ASTSWMO, NACAA, ASDWA)

2022 – EPA released the PFAS Analytic Tools Data Sets (Excel Downloads) within the public-facing ECHO website.

2023 - EPA released the PFAS Analytic Tools to the public.

PFAS Analytic Tools Data Model



PFAS Data Sets Currency Table



PFAS Datasets

Dataset	Dataset Component	Date Range of Data in PFAS Analytic Tools	Date Data was Extracted for PFAS Analytic	Next Anticipated Extract Date	Source
Drinking Water (UCMR)	UCMR 3	2013 - 2016	4/1/2020	N/A	External Link
Drinking Water (UCMR)	UCMR 5	1/2/2013 - 12/13/2016	-	2023	External Link
Environmental Media	Water Quality Portal	1/1/1901 - 3/22/2023	5/29/2023	6/5/2023	External Link
Federal Sites	DoD Notifications to Agricultural Operations	3/1/2021 - 3/31/2022	3/31/2022	Upcoming September	External Link
Federal Sites	DOE	Current	4/24/2023	Unknown	External Link
Federal Sites	DOT FAA	Current	10/4/2022	Upcoming April / October	External Link
Federal Sites	NASA	Current	10/4/2022	Upcoming April / October	External Link
Federal Sites	US Department of Defense PFAS Spotlight	12/31/2022	12/31/2022	Upcoming March / September	External Link
Federal Sites	USCG	Current	10/4/2022	Upcoming April / October	External Link
Federal Sites	USDA	Current	10/4/2022	Upcoming April / October	External Link
Industry Sectors	ECHO	Current	5/29/2023	6/5/2023	External Link
Industry Sectors	Federal Aviation Administration	10/13/2022	10/13/2022	Unknown	External Link
Production	Chemical Data Reporting (CDR) under the Toxic Substance Control Act (TSCA)	2011	3/20/2019	N/A	External Link

Downloads:

- [Discharge Monitoring Data](#)
- [Drinking Water \(State\) Data](#)
- [Drinking Water \(UCMR\) Data](#)
- [Environmental Media Data](#)
- [Federal Sites Data](#)
- [Industry Sectors Data](#)
- [Production Data](#)
- [Spills Data](#)
- [Superfund Sites Data](#)
- [TRI Data - On-Site](#)
- [TRI Data - Off-Site](#)
- [TRI Data - Waste Managed](#)
- [Transfers Data](#)








Data Currency Table is available on the PFAS Analytic Tools Homepage. Quick downloads of the data sets are available, next anticipated extraction dates, range of dates for data from each data source are all presented in this table.

Access



Enforcement and Compliance History Online

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-  Quick Search
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-  **Analyze Trends**
-  Find EPA Cases
-  Data Services
-  Help
-  News

Analyze Trends

ECHO provides many features to a variety to explore compliance and enforcement data. Use the links below to display trends through dashboards, maps, and charts.

Track Performance

- EPA/State Dashboards
 - [Air](#) / [Wastewater](#) / [Drinking Water](#) / [Hazardous Waste](#) / [Pesticides](#)
- [EPA/State Comparative Maps](#)
- [NPDES DMR Non-Receipt Status Search](#)
- [State Review Framework \(SRF\)](#)
- [SRF Recommendations](#)
- [Archived Tools](#)

Data Visualization

- [Data Visualization Gallery](#) ★
- [PFAS Analytic Tools](#)
- [NPDES eRule Dashboards](#)
- [Benzene Fenceline Monitoring](#)

Pollution Analysis

- [Water Pollutant Loading Tool](#) ★

★ Popular Feature

Analyze Trends Tab on ECHO home page (echo.epa.gov) under Data Visualization

Direct Link
<https://echo.epa.gov/trends/pfas-tools>

PFAS Analytic Tools - TRI Tab



No selections applied

PFAS Analytic Tools Home

Toxic Releases

More Information

Filters:

EPA Region

State Territory or Tribe

Facility Name

NDA TRI PFAS Chemical?

Chemical Name

Waste Transfer Type

Waste Management Type

Media Type

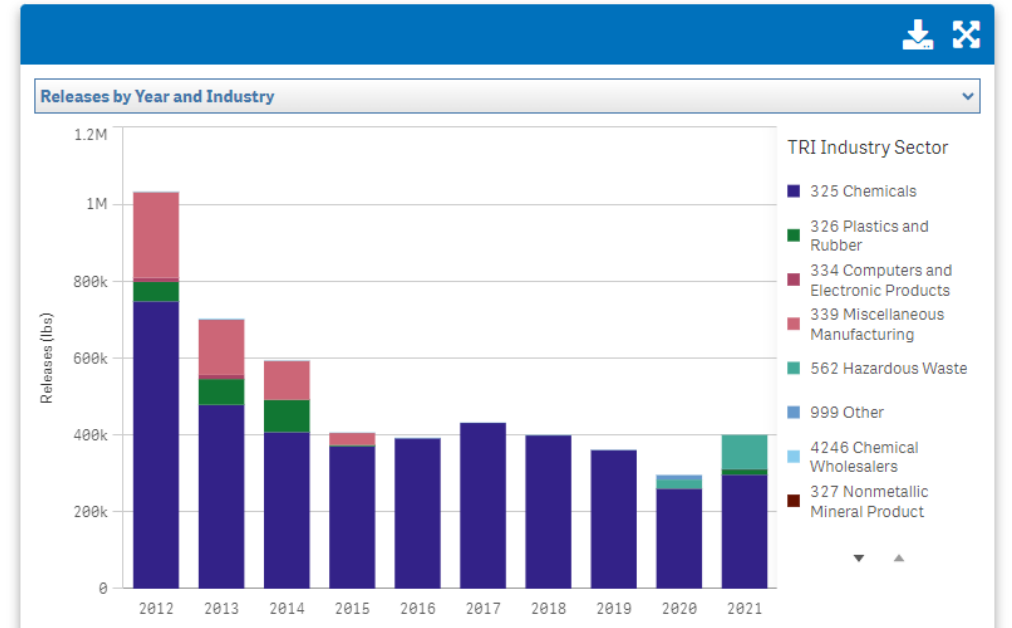
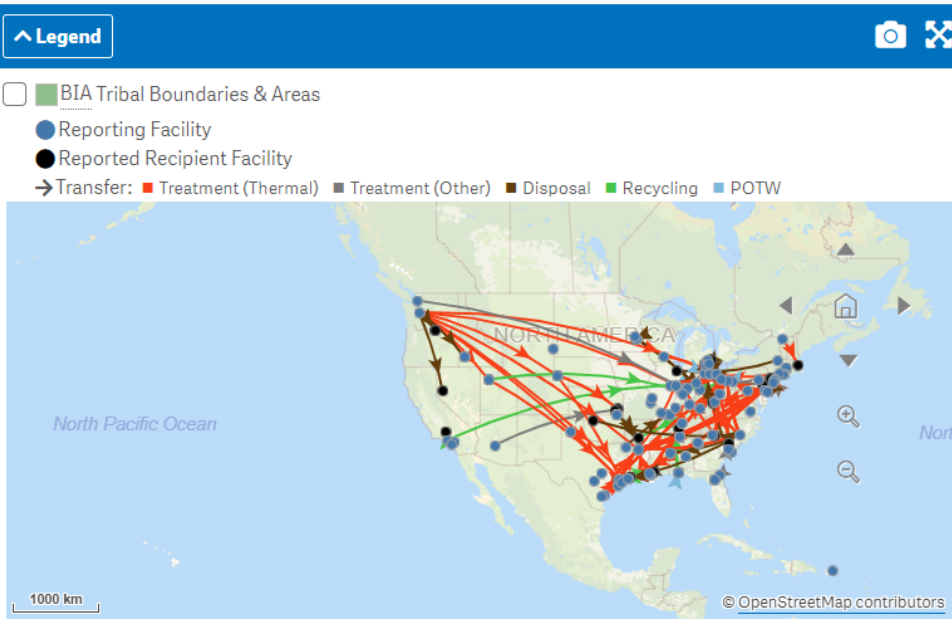
Reporting Year

Total Reporting Facilities
91

Total Chemicals Reported
67

Facilities in Selection
91

Chemicals in Selection
67



TRI On-site Releases

Repor... Year TRIFID FRS ID Street City County State ZIP Co

PFAS Analytic Tools - TRI Tab



NDA TRI PFAS ...
Yes

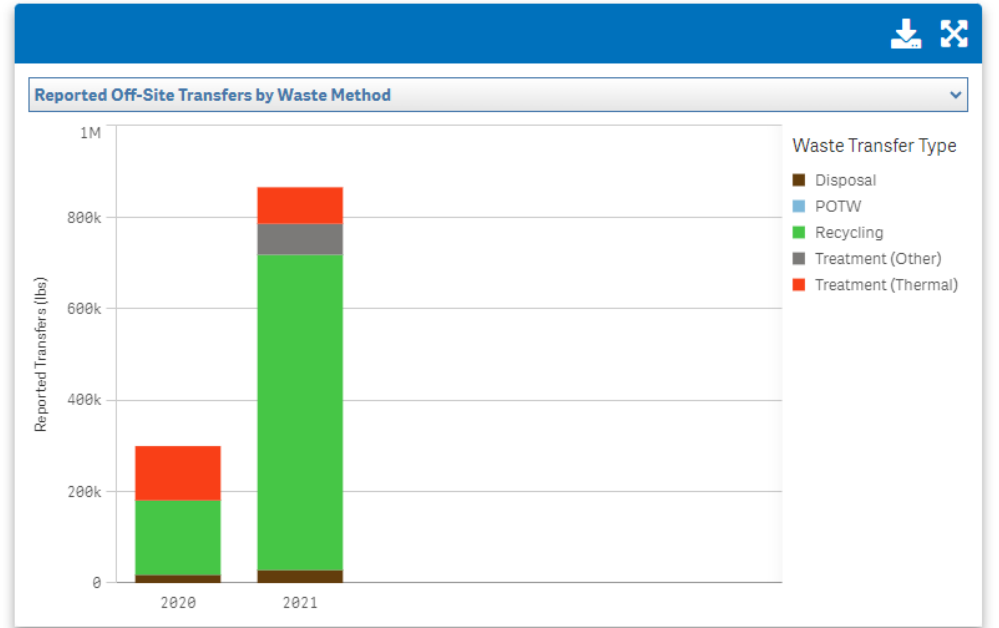
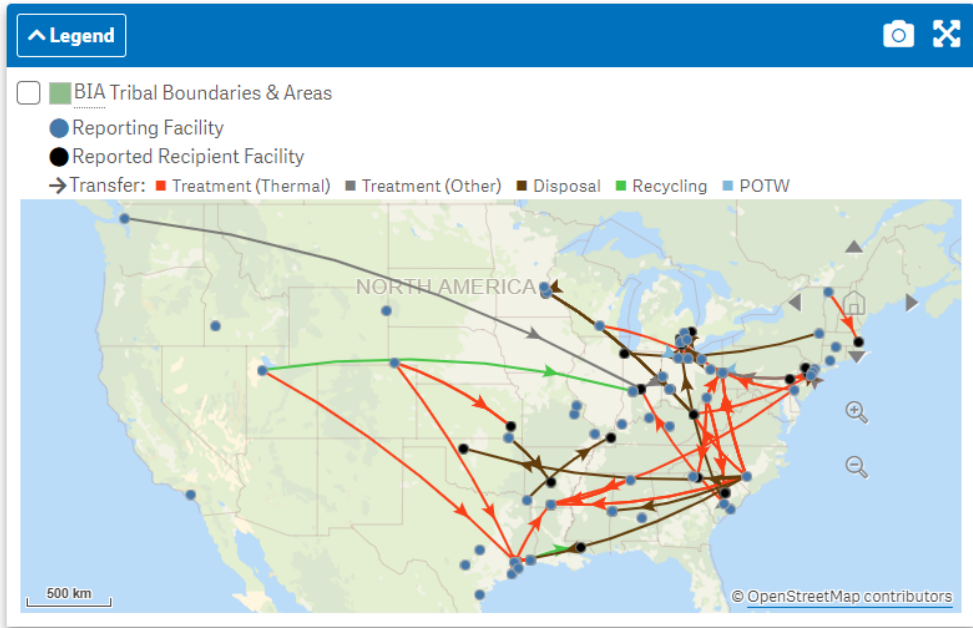
PFAS Analytic Tools Home

- Filters:
- EPA Region
 - State Territory or Tribe
 - Facility Name
 - NDA TRI PFAS Chemical?
 - Chemical Name
 - Waste Transfer Type
 - Waste Management Type
 - Media Type
 - Reporting Year

Toxic Releases

More Information

Total Reporting Facilities: 91
Total Chemicals Reported: 67
Facilities in Selection: 55
Chemicals in Selection: 57



TRI Off-site Transfers

Name	Repor... Year	OffsiteFRSID	OffsiteFRSStreet	OffsiteFRS...	Offsite State or Country	Offsite...	Offsite...	Offsite...	Offsite...	FormT...	DCN	Ct
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PFAS Analytic Tools - TRI Tab



NDA TRI PFAS ...
Yes

PFAS Analytic Tools Home

Toxic Releases

More Information

Filters:

EPA Region

State Territory or Tribe

Facility Name

NDA TRI PFAS Chemical?

Chemical Name

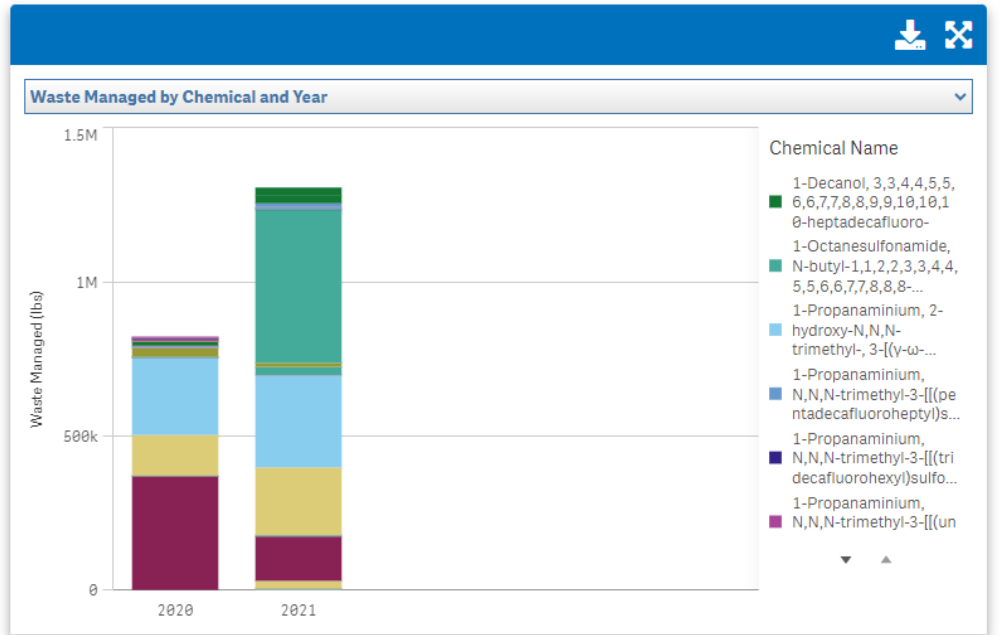
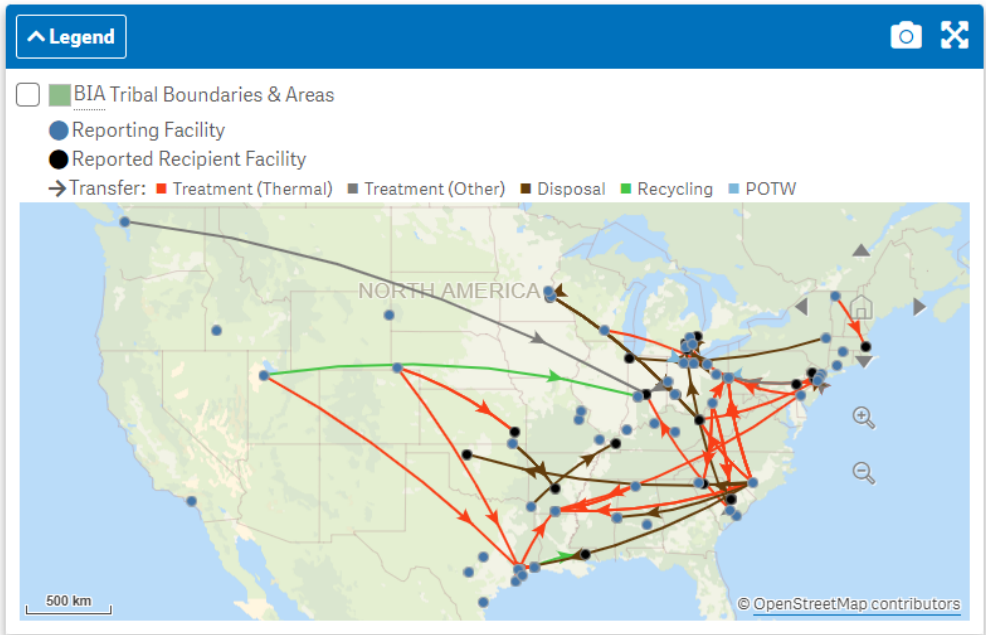
Waste Transfer Type

Waste Management Type

Media Type

Reporting Year

Total Reporting Facilities: 91
 Total Chemicals Reported: 67
 Facilities in Selection: 55
 Chemicals in Selection: 57



TRI Total Waste Management

Repor... Year

TRIFID

FRS ID

Street

City

County

State

ZIF Co

PFAS Analytic Tools Integrated Map



State IN

PFAS Analytic Tools Home

Scope of Drinking Water Samples for Public Water Systems (PWSs):

- Most Recent Sample at PWS
- All Samples at PWS

Filters: EPA Region

State Territory or Tribe

Include Non-Detects: No

PFAS Analytic Tools

More Information

Legend and Layers

Map Legend and Layers

- Satellite Layer
- BIA Tribal Boundaries & Areas

Data Available from Water Quality Portal:

	Above Median	Below Median	Non-Detect
<input checked="" type="checkbox"/> Water	●	●	○
<input checked="" type="checkbox"/> Tissue	■	■	□
<input checked="" type="checkbox"/> Air	▲	▲	△
<input checked="" type="checkbox"/> Soil	◆	◆	◇
<input checked="" type="checkbox"/> Sediment	●	●	○
<input checked="" type="checkbox"/> Other	■	■	□

Drinking Water - UCMR and State Data:

- UCMR Drinking Water Detects
 - Detection above the Health Advisory Level
 - Detection above the Minimum Reporting Level
 - No Detections above the Minimum Reporting Level



Questions regarding PFAS Analytic Tools?

Where to Find Online Help

1) [The PFAS Analytic Tools Home Page](#)

2) [FAQs Page](#)

3) [Technical Documentation](#)

Other General Questions can be [sent here](#).

For more information on EPA's overall PFAS efforts, visit www.epa.gov/pfas

Data Set Specific Documentation

Data Set	Contact for More Information
Ambient Environmental Sampling for PFAS (Water Quality Portal)	https://www.waterqualitydata.us/contact_us/
Drinking Water Testing Unregulated Contaminant Monitoring Reporting (UCMR)	https://www.epa.gov/dwucmr/forms/dwucmr
Drinking Water Testing (State)	https://echo.epa.gov/resources/general-info/contact-us
PFAS Manufacture and Imports Toxics Substances Control Act – Chemical Data Reporting (TSCA CDR)	https://www.epa.gov/chemical-data-reporting/forms/contact-us-chemical-data-reporting-under-tsca
Superfund Sites with PFAS Detections (SEMS)	https://www.epa.gov/superfund/forms/contact-us-about-superfund
Clean Water Act Discharge Monitoring (ICIS-NPDES)	https://echo.epa.gov/resources/general-info/contact-us
Federal Sites	https://echo.epa.gov/resources/general-info/contact-us
Facilities in Industries that May be Handling PFAS Enforcement and Compliance History Online (ECHO)	https://echo.epa.gov/resources/general-info/contact-us
Waste Transfers – Resource Conservation and Recovery Act (RCRA e-Manifest)	https://www.epa.gov/e-manifest/forms/contact-us-about-hazardous-waste-electronic-manifest-system
Spills – Emergency Response Notification System (ERNS)	https://nrc.uscg.mil/ContactUs.aspx
Toxics Release Inventory (TRI)	https://www.epa.gov/toxics-release-inventory-tri-program/forms/tri-program-contacts



Tool Demonstration



Questions? And Comments

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