PFAS Analytic Tools Training

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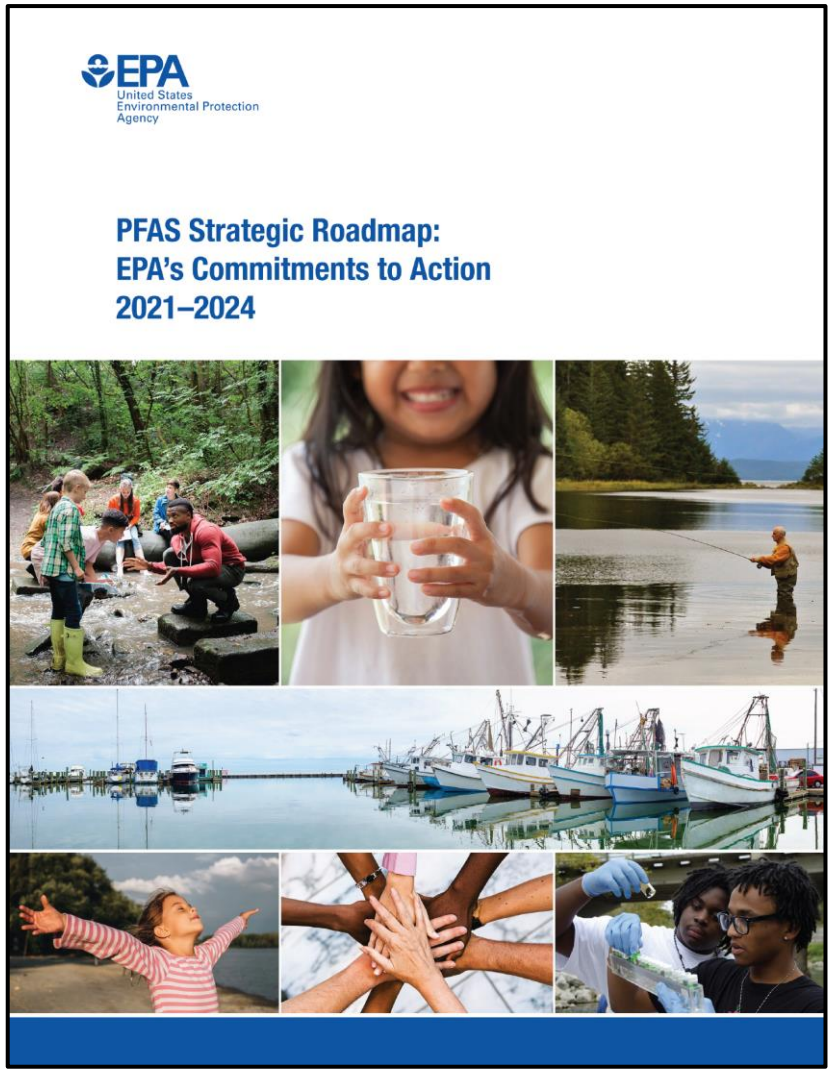
EPA's PFAS Strategic Roadmap

- 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).

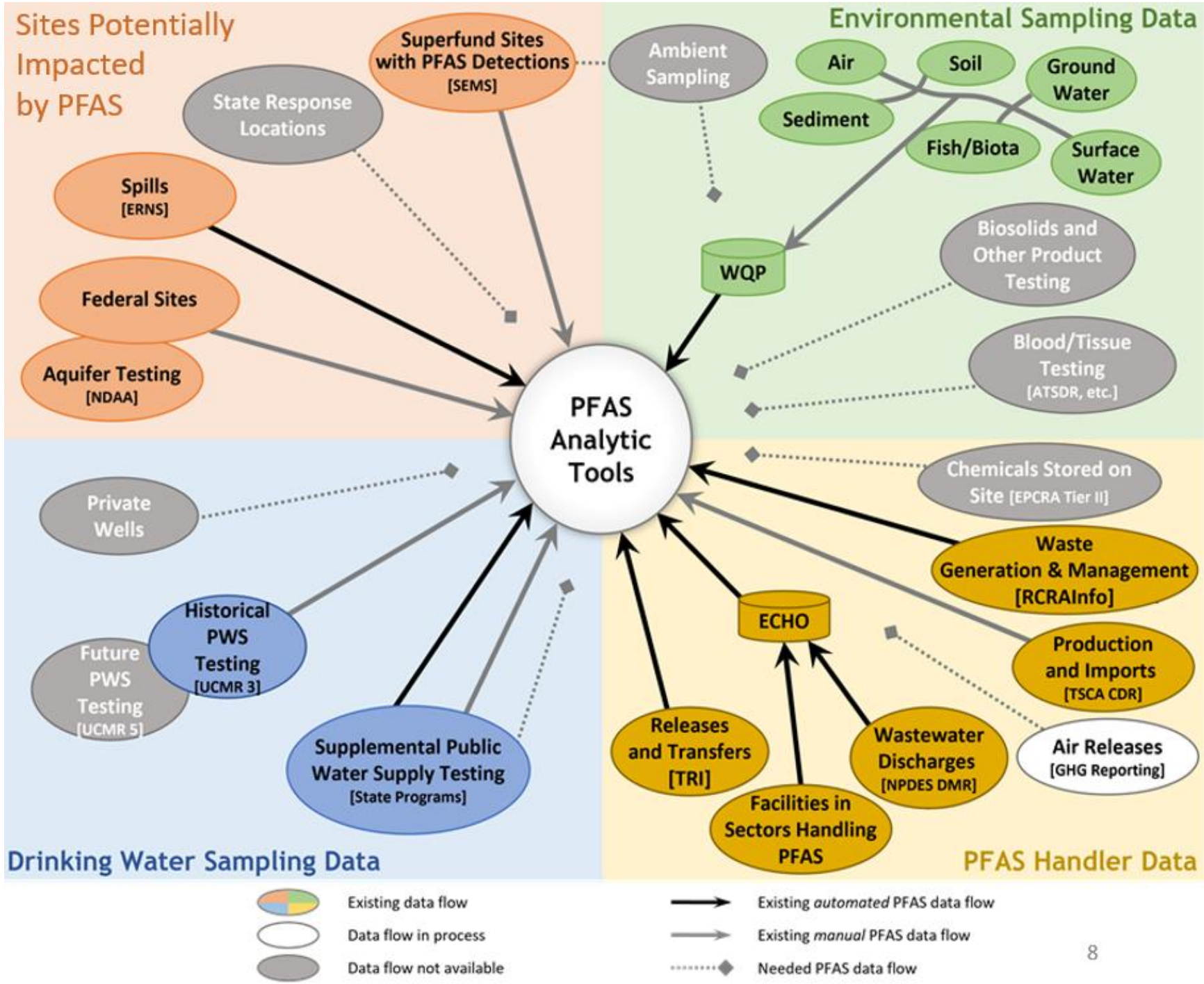
Development History

2019 - Version 1.0 released for government-wide use after EPA collaborated with the Environmental Council of the States and 14 participating states.

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

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.


Sites Potentially Impacted by PFAS
Superfund Sites with PFAS Detections [SEMS]
State Response Locations
Spills [ERNS]
Federal Sites
Aquifer Testing [NDAA]
Environmental Sampling Data
Ambient Sampling
Air
Soil
Ground Water
Sediment
Fish/Biota
Surface Water
WQP
Biosolids and Other Product Testing
Blood/Tissue Testing [ATSDR, etc.]
PFAS Analytic Tools
Private Wells
Historical PWS Testing [UCMR 3]
Future PWS Testing [UCMR 5]
Supplemental Public Water Supply Testing [State Programs]
Drinking Water Sampling Data
Chemicals Stored on Site [EPCRA Tier II]
Waste Generation & Management [RCRAInfo]
ECHO
Production and Imports [TSCA CDR]
Releases and Transfers [TRI]
Wastewater Discharges [NPDES DMR]
Air Releases [GHG Reporting]
Facilities in Sectors Handling PFAS
PFAS Handler Data
Existing data flow
Data flow in process
Data flow not available
Existing automated PFAS data flow
Existing manual PFAS data flow
Needed PFAS data flow

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 5	1/2/2013 - 12/13/2016	-	2023	External Link
Environmental Media	Water Quality Portal	1/1/1901 - 11/30/2022	1/29/2023	2/5/2023	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	10/4/2022	Upcoming April / October	-
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	6/30/2022	6/30/2022	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	1/29/2023	2/5/2023	External Link
Industry Sectors	Federal Aviation Adminstration	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:

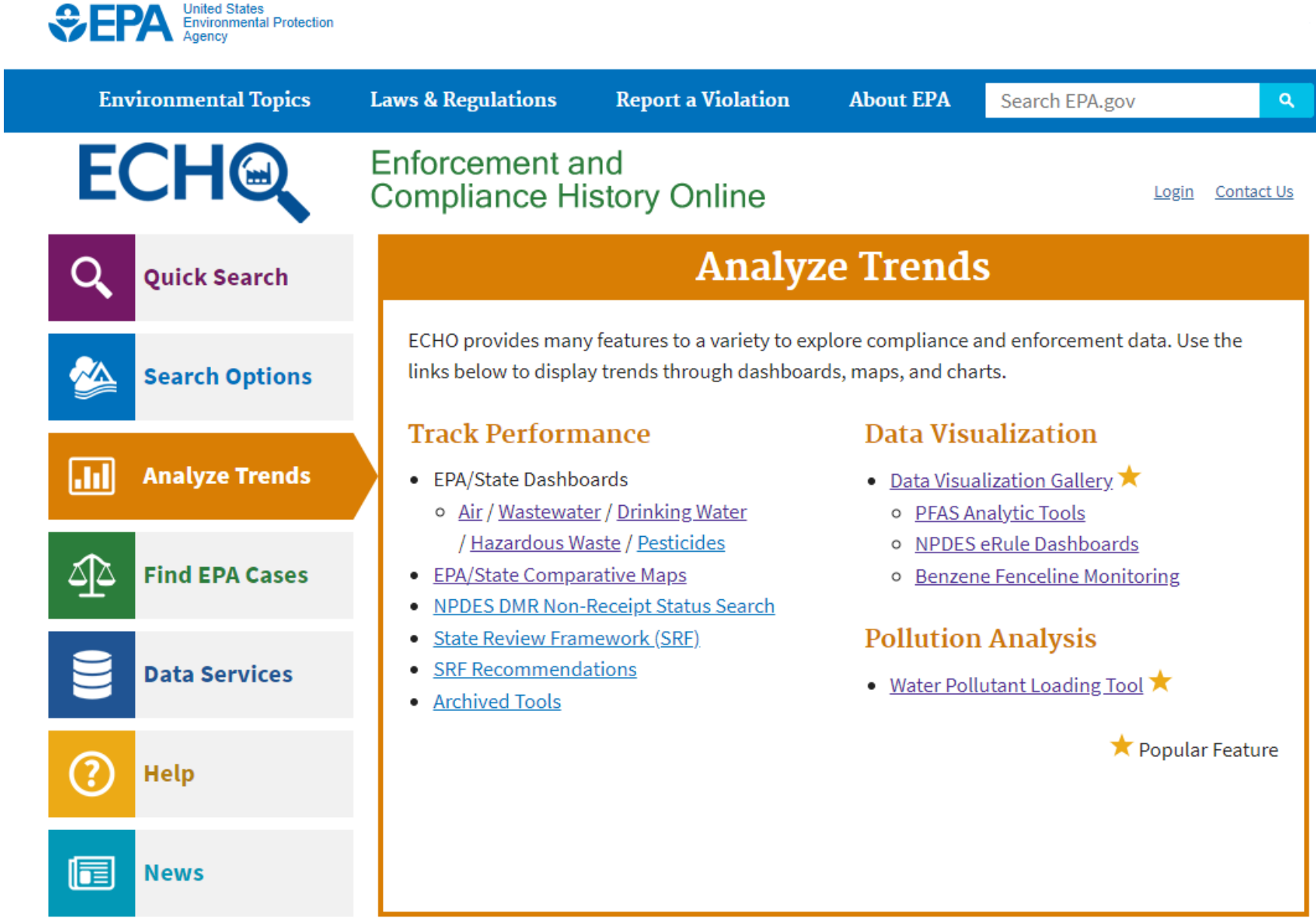
- Discharge Monitoring Data
- Drinking Water (State) Data
- Drinking Water (UCMR) Data
- Environmental Media Data
- Federal Sites Data
- Industry Sectors Data
- Production Data
- Spills Data
- Superfund Sites Data
- TRI Data - On-Site
- TRI Data - Off-Site
- TRI Data - Waste Managed
- Transfers Data

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

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

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



No selections applied

PFAS Analytic Tools Home

Filters:

- EPA Region
- State Territory or Tribe
- Reporting Year
- Facility Name
- NPDES Permit Number
- Facility Registry Service (FRS) ID
- Parameter Description
- Parameter Code
- Chemical Abstracts Service Number

PFAS Discharge Monitoring Report Data from CWA NPDES

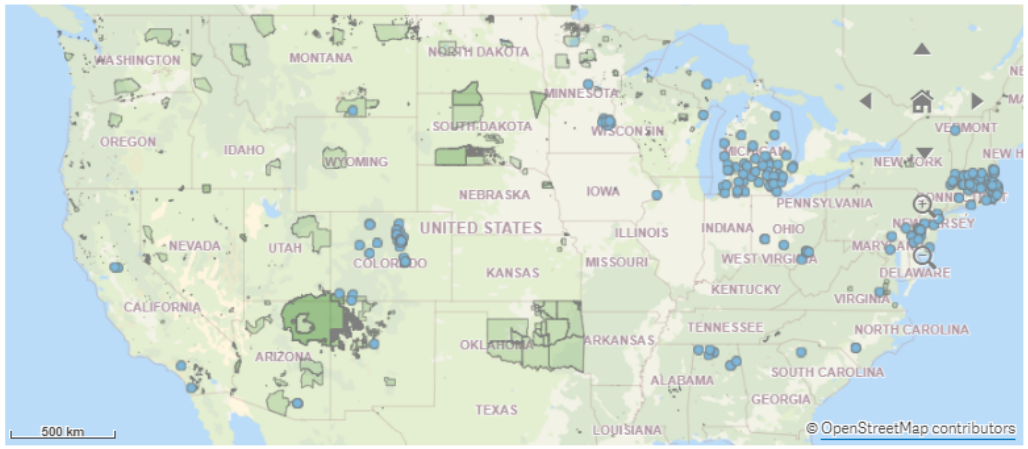
More Information

Total Facilities	Facilities in Selection	Chemicals in Selection
214	214	76

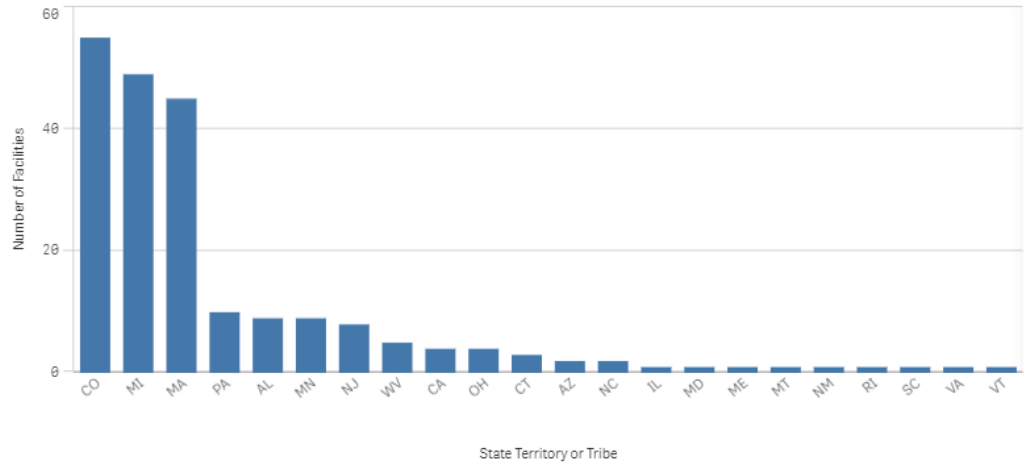
Legend

BIA Tribal Boundaries & Areas

CWA Discharger with PFAS Monitoring



Number of Facilities by State/Territory/Tribe



Facility	Year	NPDES Permit Number	ECHO Facility Report	FRS ID	Outfall Number	Parameter Description	Param... Code	CAS Number	Pollutant Load (kg/yr)	Wastew... Flow (MGal/yr)	Average Daily Load	Average Conce... (mg/L)	Average Daily Flow	Estim... Factor
Totals									**113,308.74...**					
SAGINAW TWP WWTP	2021	MI0023973	ECHO Facility Report Link	110000722460	001	Perfluorooctanesulfonate	51526		6.749.83265	2327.40000	108.86909	3.90305	6.36667	NA
THREE RIVERS WWTP	2022	MI0020991	ECHO Facility Report Link	110000733207	001	Perfluorooctanesulfonate	51526		12,965.07937	592.78000	53.06122	10.69503	1.62667	NA

DMR Location N...
CHEMOURS COMPAN...

PFAS Analytic Tools Home

Filters:

- EPA Region
- State Territory or Tribe
- Reporting Year
- Facility Name
- NPDES Permit Number
- Facility Registry Service (FRS) ID
- Parameter Description
- Parameter Code
- Chemical Abstracts Service Number

PFAS Discharge Monitoring Report Data from CWA NPDES

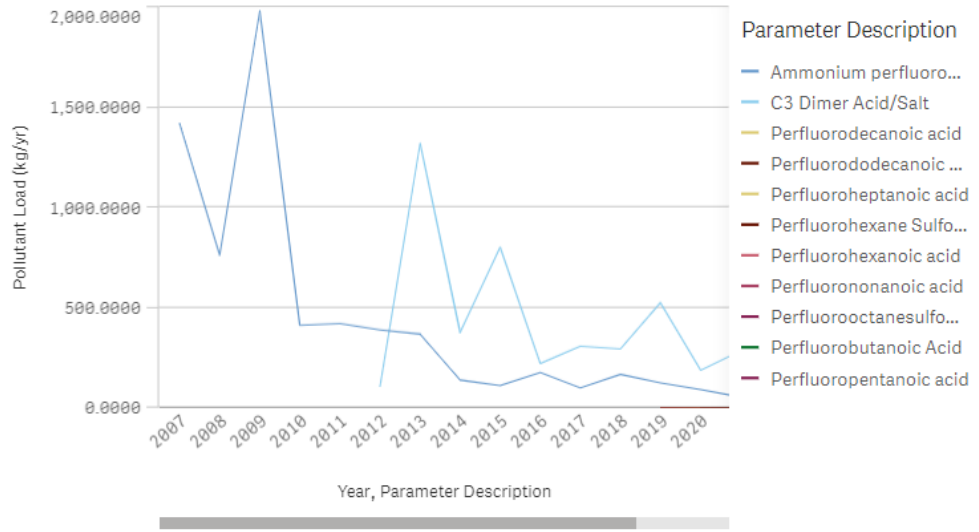
More Information

Total Facilities	Facilities in Selection	Chemicals in Selection
214	1	11

Legend

- BIA Tribal Boundaries & Areas
- CWA Discharger with PFAS Monitoring

Facility DMR Loading Over Time



ActivityIdentifier
5879 of 20847

PFAS Analytic Tools Home

Filters:

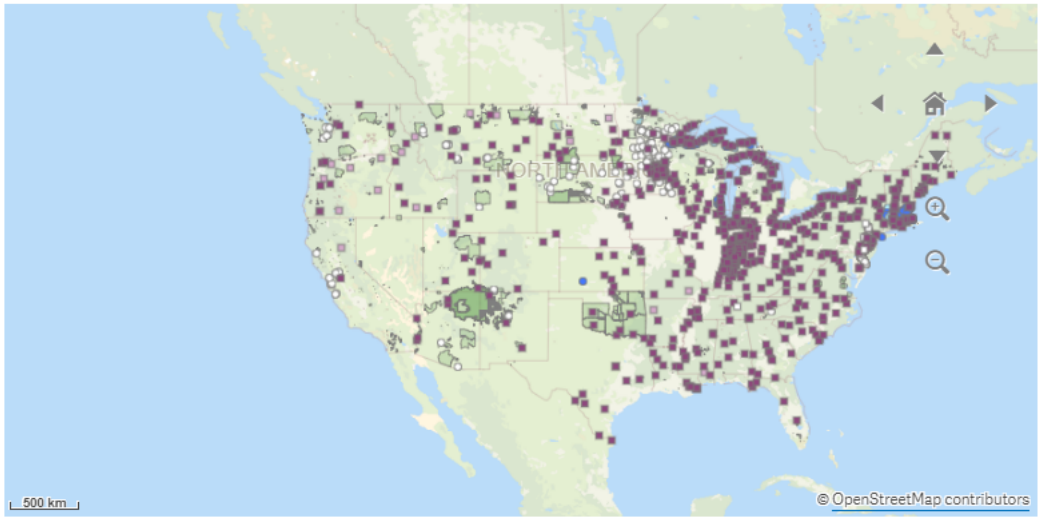
- State Territory or Tribe
- EPA Region
- Media Name
- PFAS Chemical Name
- Year Sample Taken
- Concentration Category
- QAPP Approved
- Analytical Method
- Result Detection
- Organization

PFAS Multimedia Environmental Sampling Data from the Water Quality Portal

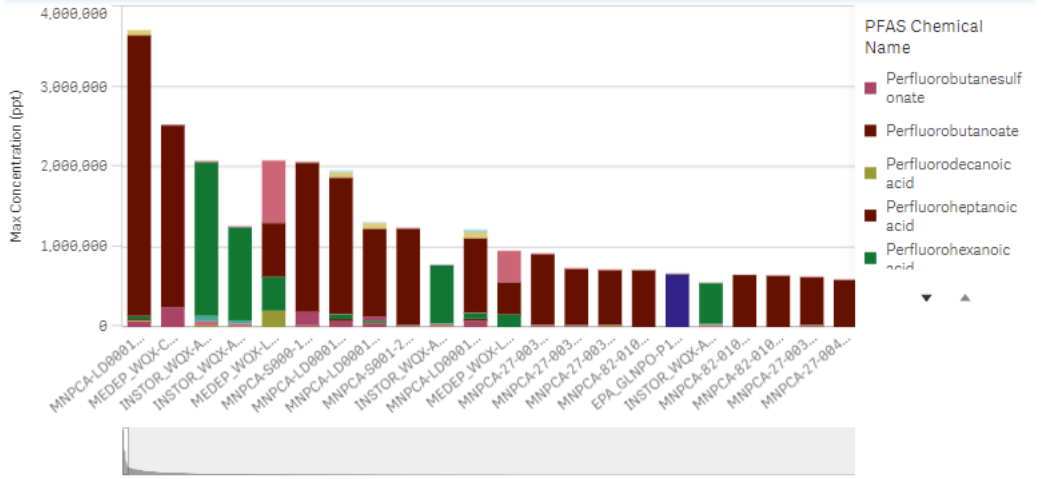
More Information

Sites	Water Samples	Tissue Samples	Air Samples	Soil Samples	Sediment Samples	Other Samples
2,048	20,719	32,105	5	216	621	0

Legend — Unchecking items in the legend only removes them from the map. To filter this page by media, use the Media Name filter at left.



PFAS Analyte Concentrations (ppt) by Activity Identifier



Organization	State Territo... or Tribe	State (Other)	Enviro... Media Name	Activity Identifier	Activity Type Code	Year	Analys...	Project Identifier	Monitoring Location Ident
Totals									
EPA Great Lakes National Program	MI		Tissue	EPA_GLNPO-P128-2011FF:LSBloater20:4018420	Sample-Composite Without Parents	2011	4/7/2014	FMP-CSMISSP2011	EPA_GLNPO-P128

No selections applied

PFAS Analytic Tools Home

More Information

Transfers

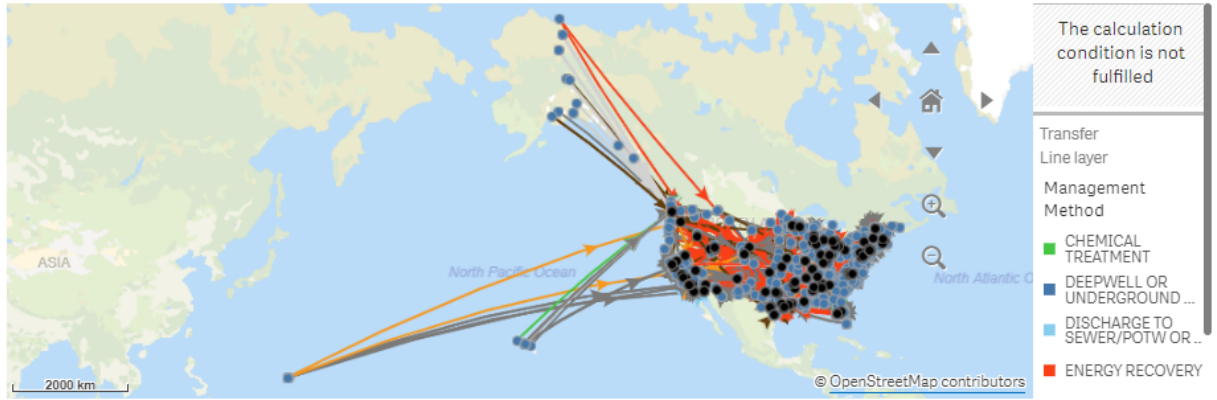
Filters:

- EPA Region (Generator)
- State Territory or Tribe (Generator)
- Management Method
- Destination Region
- Destination State
- Generator Facility
- Destination Facility

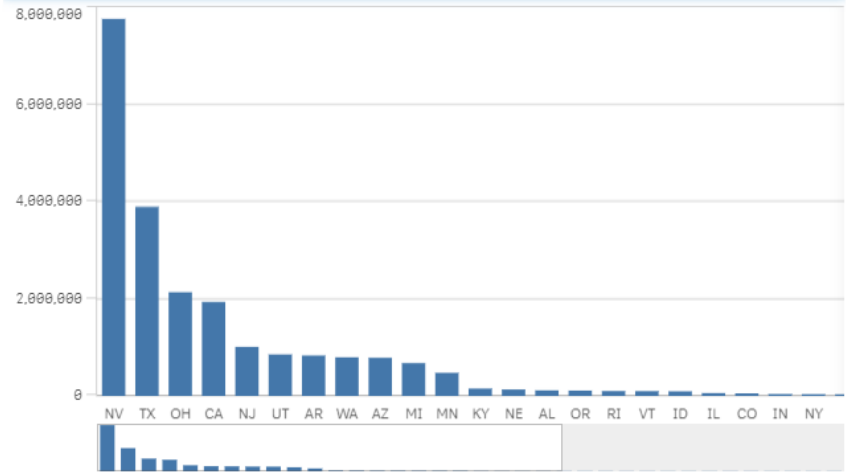
Generators	Destinations	Manifests
1,189	122	4,577

Legend

BIA Tribal Boundaries & Areas
Generator
Destination
Transfer (see legend at right for color coding)



Quantity (Kg) by Destination State



DATE_...	MANAGEMENT_METHOD_...	GENERA...	GENERATOR_NAME	EJSC... Report (Gener...	GENE...	GENE... (Other)	GENERATOR...	DES_FA...	NON_HAZ_WASTE_DESCRIPTION	DES_FACILITY_NAME
12/11/2022	INCINERATION	ILD054236443	3M Cordova -Materials Resource Division	EJSCREEN Report Link	IL		Cordova	ARD0697481...	NONE, NON-REGULATED LIQUID (PERFLUORO-FLUOROSULFONYL-BUTOXYPROPIONYL FLUORIDE), N/A,	Clean Harbors El Dorado LLC
12/10/2022	INCINERATION	ILD054236443	3M Cordova -Materials Resource Division	EJSCREEN	IL		Cordova	ARD0697481...	NONE, NON-REGULATED LIQUID	Clean Harbors El Dorado LLC

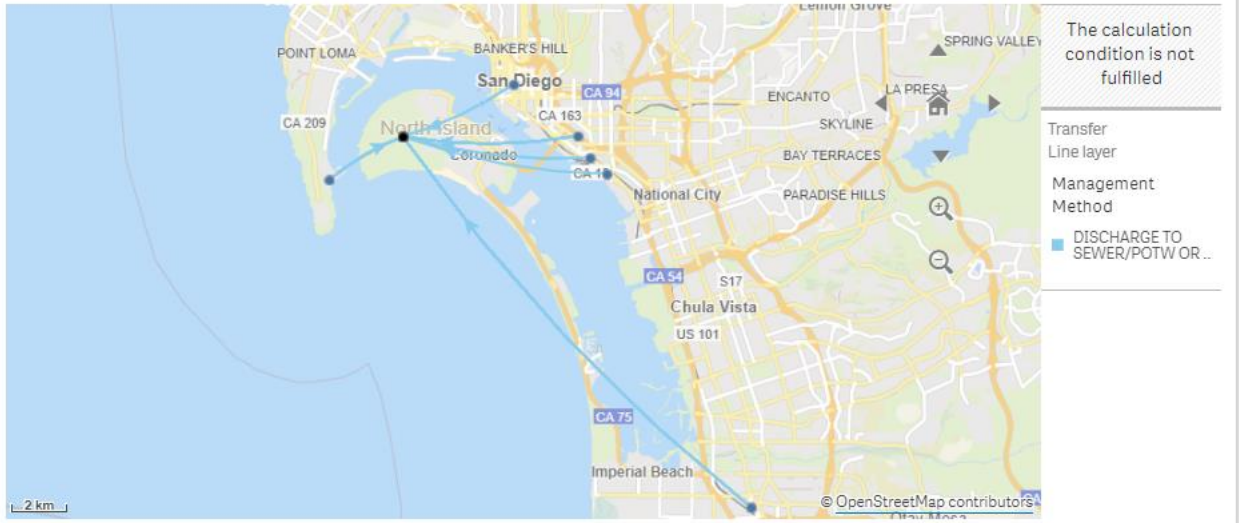
PFAS Analytic Tools Home

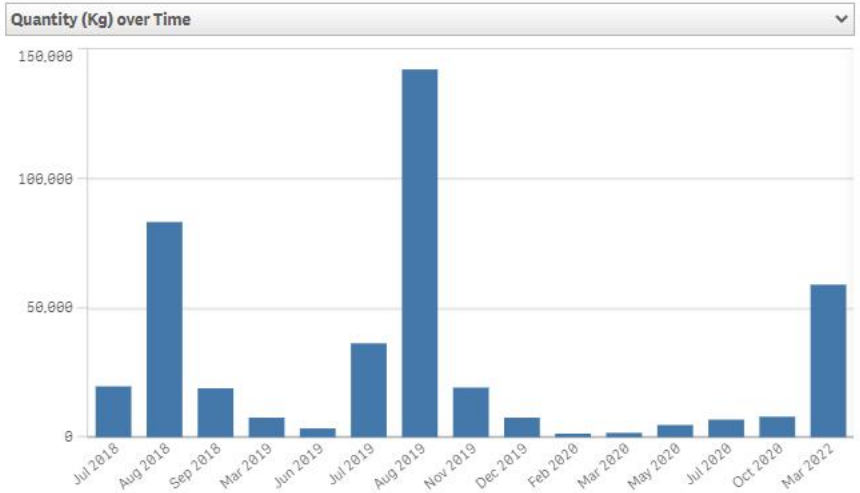
Filters:

- EPA Region (Generator)
- State Territory or Tribe (Generator)
- Management Method
- Destination Region
- Destination State
- Generator Facility
- Destination Facility

Generators	Destinations	Manifests
6	1	35

Legend





DATE_...	MANAGEMENT_METHOD_...	GENERA...	GENERATOR_NAME	EJSC... Report (Gener...	GENE...	GENE... (Other)	GENERATOR...	DES_FA...	NON_HAZ_WASTE_DESCRIPTION	DES_FACILITY_NAME
3/25/2022	DISCHARGE TO SEWER/POTW OR NPDES	CA6170024289	NAVAL STATION (NAVSTA) 32ND ST., HAZARDOUS WASTE FACILITY COMPLEX	EJSCREEN Report Link	CA		SAN DIEGO	CA7170090016	NON-RCRA HAZARDOUS WASTE, LIQUID (DIESEL, BILGE WATER W/AFFF)	NAVAL AIR STATION NORTH ISLAND (NASNI) HAZARDOUS WASTE FACILITY COMPLEX
3/23/2022	DISCHARGE TO SEWER/POTW OR NPDES	CA6170024289	NAVAL STATION (NAVSTA) 32ND ST., HAZARDOUS WASTE FACILITY COMPLEX	EJSCREEN Report Link	CA		SAN DIEGO	CA7170090016	NON-RCRA HAZARDOUS WASTE LIQUID (DIESEL, BILGE WATER W/AFFF)	NAVAL AIR STATION NORTH ISLAND (NASNI) HAZARDOUS WASTE FACILITY COMPLEX

No selections applied

PFAS Analytic Tools Home

Filters:

EPA Region

State Territory or Tribe

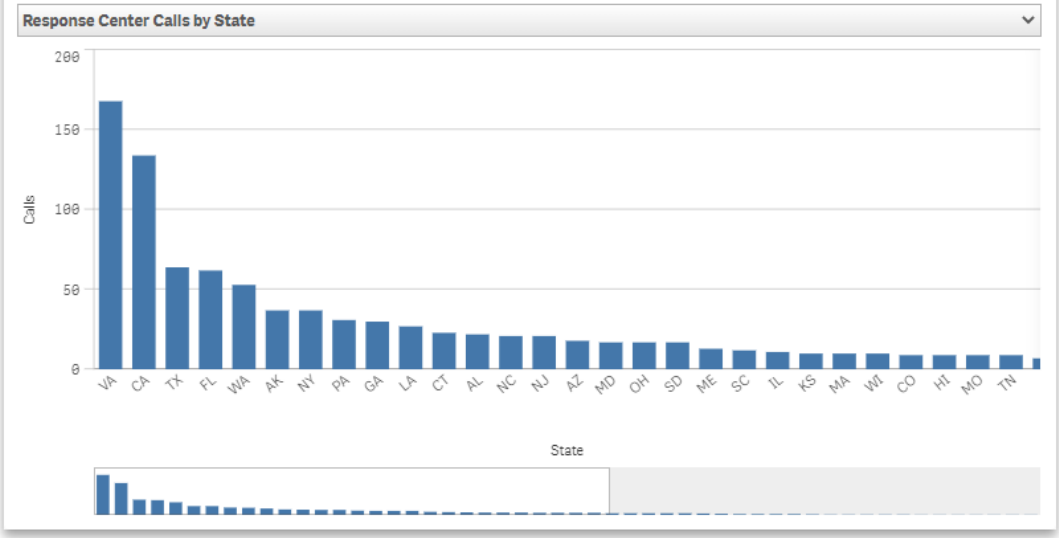
Year

Water Reached?

Spills

More Information

Legend



SEQN...	Year	Amount of Material	Unit	Material Involved	Incident Description	Address	City
1356634	2023	3000	Gallon(s)	HAND SANITIZER CONTAINING ETHANOL WITH FIRE FIGHTING	CALLER IS REPORTING THE SPILLING OF HAND SANITIZER CONTAINING ETHANOL MIXED WITH FIRE FIGHTING FOAMWATER GOING DOWN THE STORM DRAIN. CALLER STATED THIS WAS DUE TO AN ACTIVE FIRE AT THE INCIDENT LOCATION AND THIS RESULTED IN THE SPILL OF THE MATERIALS. THE AMOUNT	-	LOS ANGELES

Toxic Releases

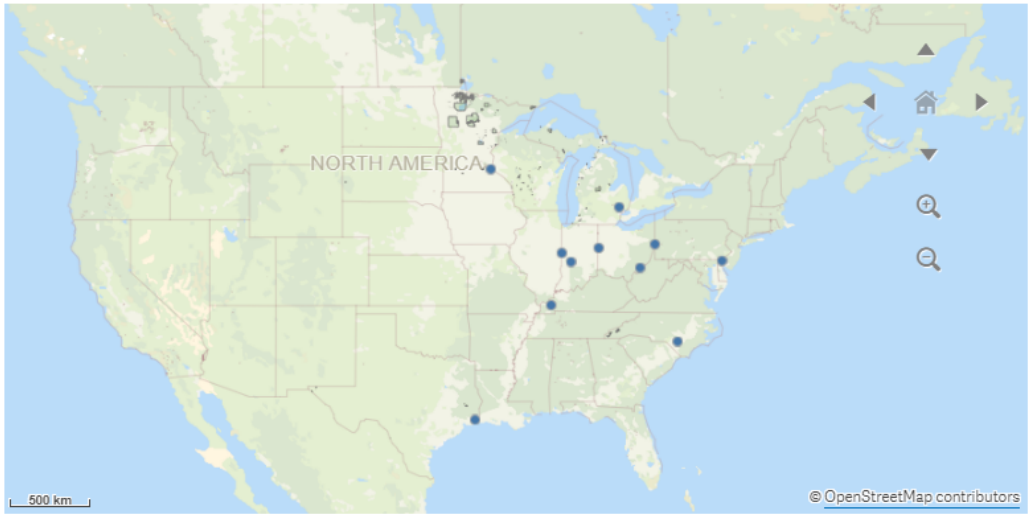
More Information

Filters:

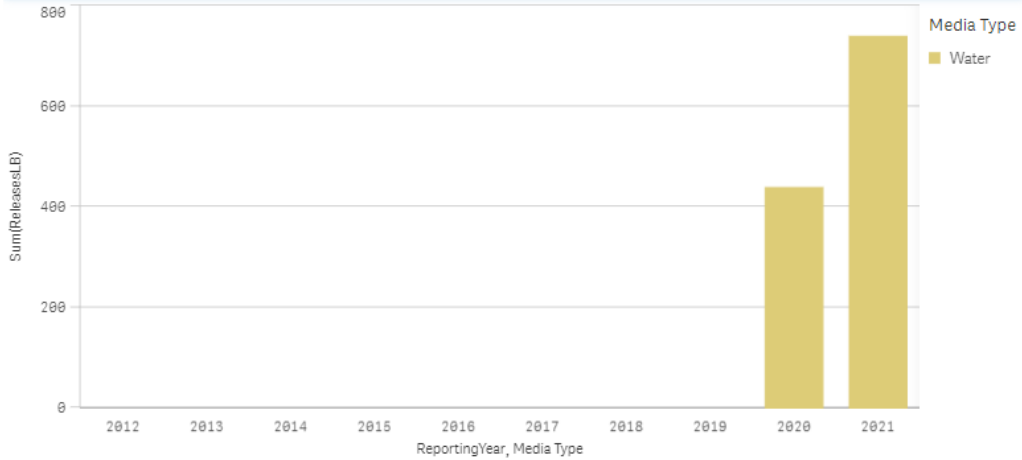
- EPA Region
- State Territory or Tribe
- Facility Name
- NDAA TRI PFAS Chemical?
- Chemical Name
- Waste Transfer Type
- Waste Management Type
- Media Type
- Reporting Year

Total Reporting Facilities	Total Chemicals Reported	Facilities in Selection	Chemicals in Selection
92	68	11	21

Legend



Releases by Media and Year



TRI On-site Releases

Facility Name	Repor... Year	TRIFID	FRS ID	Street	City	County	State	ZIP Code	Primary NAICS Code
Totals									
HERITAGE THERMAL SERVICES	2016	43920VNRLL1250S	110027242320	1250 ST GEORGE ST	EAST LIVERPOOL	COLUMBIANA, OH	OH	43920	562213 Solid Waste Co Incinerators

PFAS Chemical Manufacturer and Importer Data from TSCA CDR

More Information

Filters:

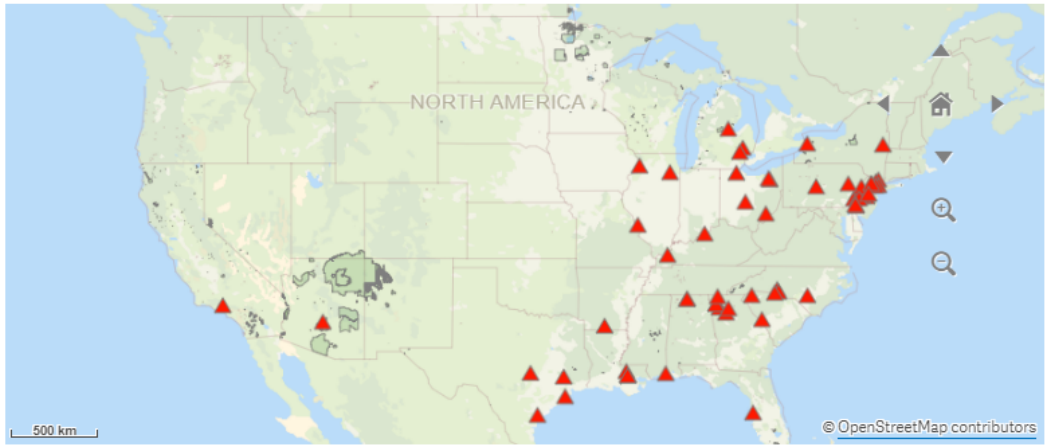
- EPA Region
- State Territory or Tribe
- Reporting Year
- Parent Company Name
- Facility Name
- Facility Registry Service ID
- Chemical ID Number
- Activity

Total Parent Companies	Total Facilities	Parent Companies in Selection	Facilities in Selection	Number of Chemicals in Selection
124	150	46	62	227

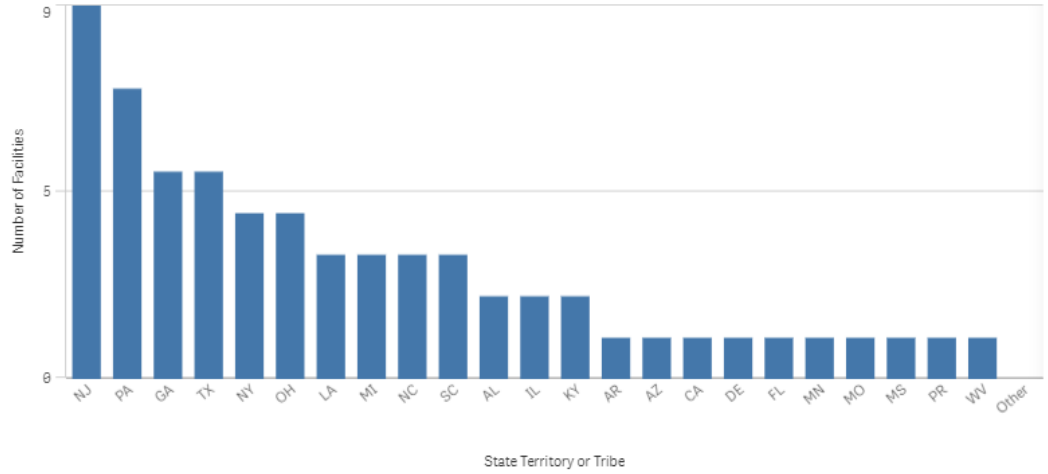
Legend

BIA Tribal Boundaries & Areas

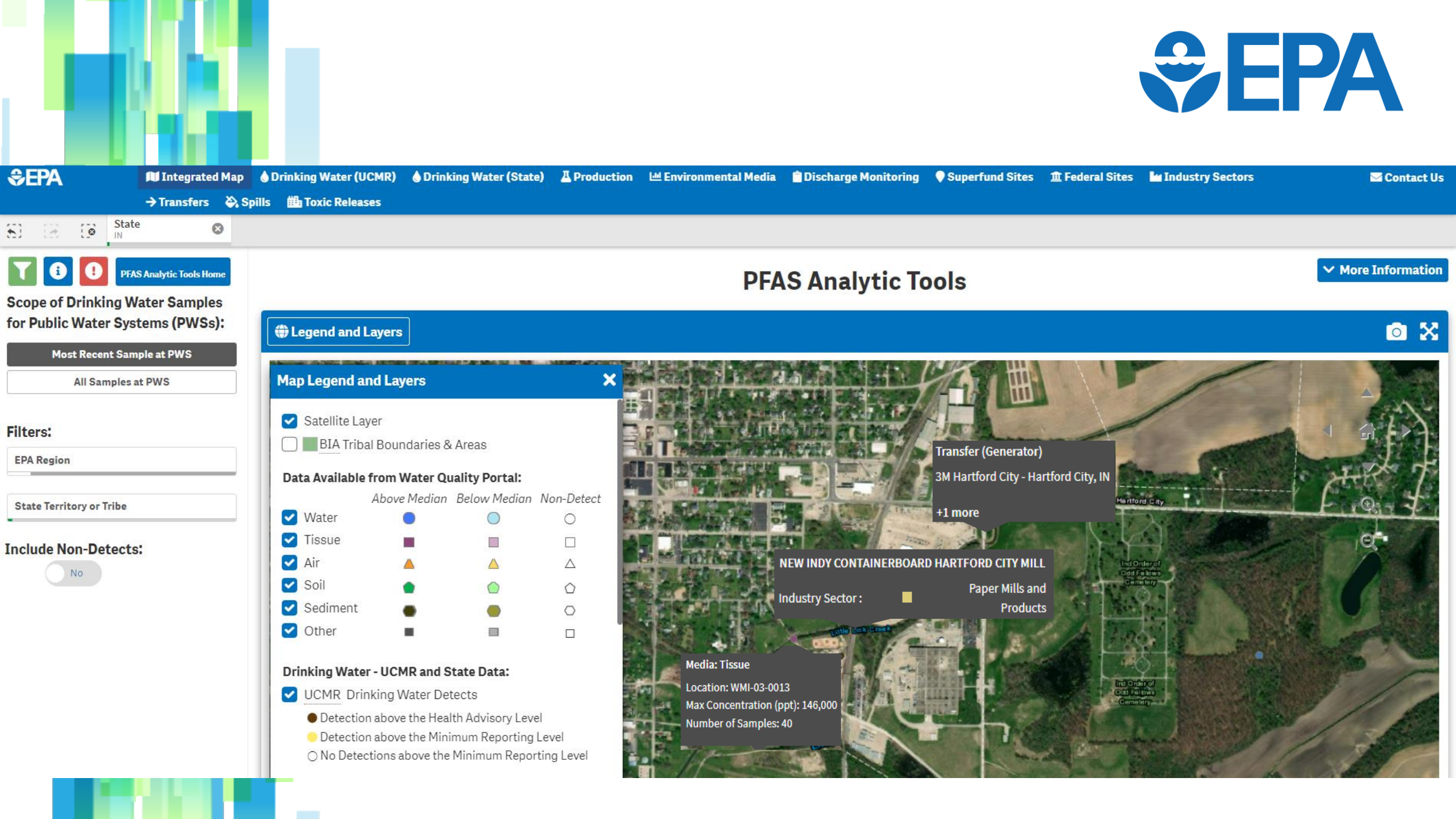
PFAS Manufacturer or Importer



Number of Facilities by State/Territory/Tribe



Facility Name	Repor... Year	Identifier	ECHO Facility Report	Chemical ID Number	Chemical Name	Physical Forms	Activity	Chemi... Recycl...	Dome... Manuf... Amount	Im Ar
3M COMPANY	2020	110000367567	ECHO Facility Report Link	34455-00-0	1,1,2,2,3,3,4,4,4-Nonafluoro-N,N-bis(2-hydroxyethyl)butane-1-sulphonamide	CBI	CBI	CBI	CBI	CE


EPA
Integrated Map
Drinking Water (UCMR)
Drinking Water (State)
Production
Environmental Media
Discharge Monitoring
Superfund Sites
Federal Sites
Industry Sectors
Contact Us
Transfers
Spills
Toxic Releases
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
Water
Tissue
Air
Soil
Sediment
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
Transfer (Generator)
3M Hartford City - Hartford City, IN
+1 more
NEW INDY CONTAINERBOARD HARTFORD CITY MILL
Industry Sector :
Paper Mills and Products
Media: Tissue
Location: WMI-03-0013
Max Concentration (ppt): 146,000
Number of Samples: 40
Hartford City
Little Lick Creek

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