# PFAS Regulatory State of the Union

## December 2024

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*Eurofins Environment Testing*

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# WHITE HOUSE

THEN & NOW

# THE BIDEN PLAN 2021

**“BIDEN WILL TACKLE PFAS POLLUTION BY DESIGNATING PFAS AS A HAZARDOUS SUBSTANCE, SETTING ENFORCEABLE LIMITS FOR PFAS IN DRINKING WATER, PRIORITIZING SUBSTITUTES THROUGH PROCUREMENT, AND ACCELERATING TOXICITY STUDIES AND RESEARCH ON PFAS.”**

- HAZARDOUS SUBSTANCE DESIGNATION
- DRINKING WATER MCLs
- PRIORITIZING SUBSTITUTES
- ACCELERATING TOXICITY STUDIES

https://joebiden.com/environmental-justice-plan/

# 2025-2028 ADMINISTRATION'S PLAN ????

*Check back Spring 2025!*

- Will EPA continue to complete the 2021 PFAS Strategic Roadmap?
- Will EPA create a new roadmap for 2025-2028?
- Don't forget about the changes in Congress and their agenda

# 119th CONGRESS

- Sen. Shelley Moore Capito (R-WV), chair of the Environment and Public Works Committee
- Vows to press for easing EPA's SDWA rules for six PFAS and to provide CERCLA liability waivers to passive receivers

# PFAS Federal Research and Development Strategic Plan

SEPTEMBER 03, 2024

## White House Releases New Research Strategy to Protect Communities from PFAS

OSTP › NEWS & UPDATES › PRESS RELEASES

Goals of this strategy:

- provide ***high-quality data*** to inform government decisions
- ***communicating*** PFAS research effectively to impacted communities;
- identifying technologies that can help ***remediate PFAS*** pollution;
- and generating actionable information, including about ***PFAS alternatives***

https://www.whitehouse.gov/ostp/news-updates/2024/09/03/white-house-releases-new-research-strategy-to-protect-communities-from-pfas/

# Congressional Review Act 1996 (CRA)

## The Lookback Mechanism

- *Section 801(d) of the CRA, known as the "lookback" mechanism, provides that if a rule is submitted to Congress with either fewer than 60 legislative days in the Senate or the House, before Congress adjourns its session sine die, a new period for congressional review of that rule becomes available in the following session of Congress*

https://www.epa.gov/laws-regulations/summary-congressional-review-act#:~:text=The%20CRA%20applies%20to%20all,rights%20or%20obligations%20of%20non%2D

# 2021 - 2024

# EPA PFAS STRATEGIC ROADMAP

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## RESEARCH

*increase understanding of PFAS exposures and toxicities, human health and ecological effects*

## RESTRICT

*proactively prevent PFAS from entering air, land, and water at levels that can adversely impact human health and the environment*

## REMEDIATE

*Broaden and accelerate the cleanup of PFAS contamination to protect human health and ecological systems*

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https://www.epa.gov/system/files/documents/2022-11/PFAS%20Roadmap%20Progress%20Report_final_Nov%2017.pdf

## RESEARCH

*increase understanding of PFAS exposures and toxicities, human health and ecological effects*

## RESTRICT

*proactively prevent PFAS from entering air, land, and water at levels that can adversely impact human health and the environment*

**Office of Chemical Safety and Pollution Prevention**

- ✓ Publish National PFAS Testing Strategy
- ✓ Review previous decisions and close the door on abandoned PFAS
  - ✓ ~300 'Inactive PFAS' with SNUR
  - ✓ Remove 12 PFAS from inert ingredients list for Pesticides
  - ✓ Remove PFAS from Safer Chemicals Ingredients List
- ✓ Enhance PFAS reporting under the Toxics Release Inventory
- ✓ Finalize new PFAS reporting under TSCA Section 8

https://www.epa.gov/assessing-and-managing-chemicals-under-tsca/list-chemicals-subject-section-4-test-orders
https://www.epa.gov/newsreleases/epa-takes-key-step-stop-unsafe-pfas-reentering-commerce
https://www.regulations.gov/docket/EPA-HQ-OPP-2022-0542
https://www.epa.gov/saferchoice/safer-ingredients#searchList

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# TSCA Section 8(a)(7) Reporting and Recordkeeping Requirements for PFAS

EPA to require certain persons that manufacture (including import) or have manufactured these chemical substances in any year since **January 1, 2011**, to electronically report information regarding ***PFAS uses, production volumes, disposal, exposures, and hazards***.

All entities that manufactured/imported PFAS
-Deadline is May 8, 2025 to report.
*(includes 6 month delay)*

Small manufacturers limited to article imports
-Deadline is Nov 10, 2025 to report

T Toxic
S Substances
C Control
A Act

https://www.epa.gov/newsreleases/epa-finalizes-rule-require-reporting-pfas-data-better-protect-communities-forever

https://www.epa.gov/assessing-and-managing-chemicals-under-tsca/tsca-section-8a7-reporting-and-recordkeeping

# Toxics Release Inventory TRI

*public comment period: now through 12/9/24*

## Key Updates to the TRI for PFAS

EPA classifies PFAS compounds on the TRI as "chemicals of special concern", eliminating the *de minimis exemption for TRI reporting and Supplier Notification*.

October 2024, EPA proposes to add 16 individual PFAS and 15 PFAS categories representing over 100 PFAS to the TRI.

https://www.epa.gov/toxics-release-inventory-tri-program/addition-certain-and-polyfluoroalkyl-substances-toxics-release

E Emergency
P Planning
C Community
R Right-to-know
A Act

# Toxics Release Inventory TRI

## Key Information for Reporting Year 2024

- 196 PFAS are reportable
- Reporting forms due by July 1, 2025
- PFAS are designated as “chemicals of special concern” and de minimis exemption is no longer available
- de minimis exemption is unavailable for supplier notification purposes and this goes into effect Jan 1, 2025

## RESEARCH

*increase understanding of PFAS exposures and toxicities, human health and ecological effects*

## RESTRICT

*proactively prevent PFAS from entering air, land, and water at levels that can adversely impact human health and the environment*

Office of Water

- ✓ Establish a national primary drinking water regulation for PFOA and PFOS
- ✓ Nationwide monitoring for PFAS in drinking water, UCMR5
- ✓ Publish health advisories for additional PFAS
- ✓ Leverage NPDES permitting to reduce PFAS discharges to waterways
- ✓ Publish multi-laboratory validated analytical method for 40 PFAS
  - ✓ Released Method 1621 for Adsorbable Organic Fluorine (AOF)
  - ✓ Released Method 1633 for 40 PFAS in 8 environmental media
- ✓ Publish final recommended ambient water quality criteria for PFAS
- ✓ Monitor fish tissue for PFAS from the nation's lakes and evaluate human biomarkers for PFAS
- ✓ Finalize list of PFAS for use in fish advisory programs

*~ Restrict PFAS discharges from industrial sources through Effluent Limitations Guidelines program*

*~ Publish updates to PFAS analytical methods to monitor drinking water*

*~ Finalize risk assessment for PFOA and PFOS in biosolids*

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# PFAS Maximum Contaminant Levels (MCLs)

## Biden-Harris Administration Finalizes First-Ever National Drinking Water Standard to Protect 100M People from PFAS Pollution

As part of the Administration's commitment to combating PFAS pollution, EPA announces $1B investment through President Biden's Investing in America agenda to address PFAS in drinking water

April 10, 2024

**•PFOA, PFOS, PFHxS, PFNA, HFPO-DA**:

Regulate PFOA and PFOS at 4 ppt and PFHxS, PFNA & HFPO-DA at 10 ppt.

**•PFNA, PFHxS, PFBS, and HFPO-DA**:

Limit any mixture containing one or more of these chemicals using a hazard index calculation.

**• $1 billion in newly available funding:**

To help states and territories implement PFAS testing and treatment at public water systems

https://www.epa.gov/newsreleases/biden-harris-administration-proposes-first-ever-national-standard-protect-communities

**Published in CFR 4/26/24. Final rule is effective on June 25, 2024.**

# Hazard Index Calculation

$$H.I. = (GenX / 10ppt) + (PFBS / 2000ppt) + (PFNA / 10ppt) + (PFHxS / 10ppt)$$

Divide the measured concentration by the health-based value

Repeat calculation for each sample collected in the past year for that entry point and calculate the average H.I. for all samples taken in that year.

If the running annual average H.I. is > 1, it is a violation of the H.I. MCL.

# Unregulated Contaminants Monitoring Rule UCMR5

Before conducting your own assessment of the data, please review the UCMR 5 Data Summary Instructions for Accessing Results, and UCMR 5 Data Finder Walkthrough below. The UCMR 5 Data Finder allows people to easily search for, summarize, and download the available UCMR 5 analytical results. Results can be filtered using multiple data fields, including PWS, state,

https://www.epa.gov/dwucmr/fifth-unregulated-contaminant-monitoring-rule-data-finder#data-finder

## What a difference a decade makes…

### SCOPE

2023–2025
4 analytes (537.1)
25 analytes (533)
All PWS serving > 3,300
~800 Systems serving < 3,300

Represents ~35% of total results to be reported

### RESULTS TO DATE (from PWS w/ full set)

PFOS Avg >MCL in 7.9% of PWS
PFOA Avg >MCL in 6.4% of PWS
HFPO-DA >MCL in one PWS
PFNA >MCL in three PWS
HI Avg >MCL in 0.7% of PWS
4 analytes from 537.1, only one detection

# Drinking Water Contaminants Candidate List "CCL5"

Proposals for contaminants for consideration are submitted

Contaminants are selected for the CCL and published every five years

EPA must make regulatory determinations for at least five contaminants listed on the CCL every five years

***For the purposes of CCL 5, the structural definition of per- and polyfluoroalkyl substances (PFAS) includes chemicals that contain at least one of these three structures:***

*(1) R-(CF2)-CF(R')R", where both the CF2 and CF moieties are saturated carbons, and none of the R groups can be hydrogen.*

*(2) R-CF2OCF2-R', where both the CF2 moieties are saturated carbons, and none of the R groups can be hydrogen.*

*(3) CF3C(CF3)RR', where all the carbons are saturated, and none of the R groups can be hydrogen.*

*EPA is also providing a list of PFAS that meet the CCL 5 structural definition on its CompTox dashboard (https://comptox.epa.gov/dashboard/chemical-lists)*

https://www.regulations.gov/document/EPA-HQ-OW-2018-0594-0106

# Effluent Guidelines Program

## Program Plan 15

With OMB for review now

- ✓ Propose limits for chemical, plastics, synthetic fiber manufacturers (NDAA June 2024)
- ✓ Expand Textiles study (NDAA June 2025) *public comment reopened*
- ✓ Revise ELGs for Landfills category (NDAA June 2025)
- ✓ Not pursuing action for the Electrical and Electronic Components Category (NDAA June 2025)
- ✓ Will monitor the Pulp, Paper, and Paperboard Category and Airports
- ✓ Leather tanning/finishing, paint formulating, and plastics molding categories (NDAA December 2026)

NPDES News

https://www.epa.gov/system/files/documents/2023-01/11143_ELG%20Plan%2015_508.pdf#page=48

https://www.epa.gov/system/files/documents/2023-01/11143_ELG%20Plan%2015_508.pdf

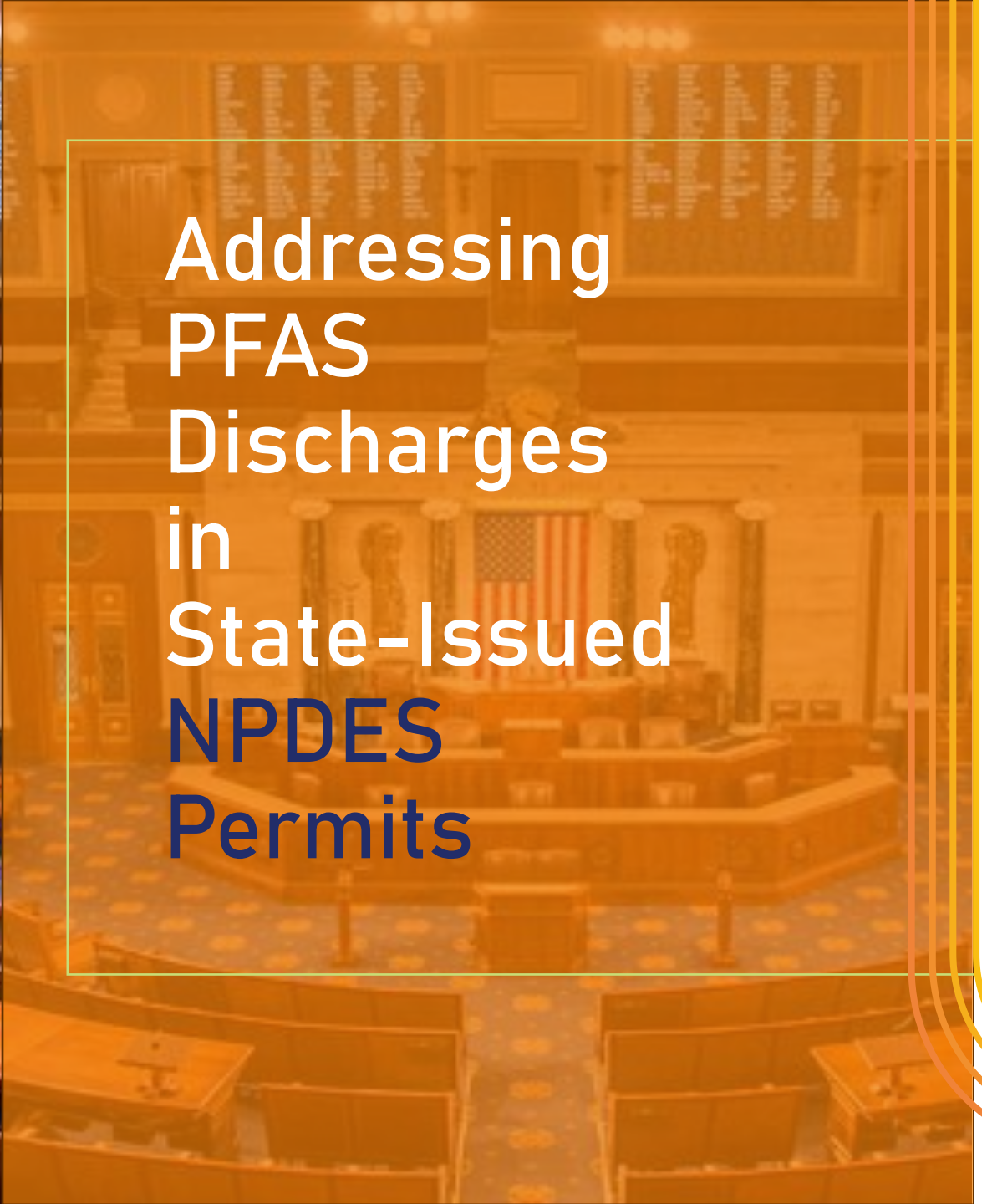
*2023 NDAA, SEC. 5883. CLEAN WATER ACT EFFLUENT LIMITATIONS GUIDELINES*
*The Administrator shall publish in the Federal Register effluent limitations guidelines and standards for priority industry categories, not later than the following dates…*

# Effluent Guidelines Program

## Program Plan 15

- ✓ EPA intends to initiate a Publicly Owned Treatment Works (POTW) influent study of PFAS
- ✓ Information Collection Request (ICR) underway. Public comment period closed May 28, 2024. *EPA reopens public comments as of Oct 10th for additional 30 days*
- ✓ Submit to OMB for review
- ✓ Collect data in *2025-2026*
- ✓ The sampling would be done using EPA Method 1633 and EPA Method 1621

https://www.govinfo.gov/content/pkg/FR-2024-03-26/pdf/2024-06408.pdf



# Addressing PFAS Discharges in State-Issued NPDES Permits

## EPA issues guidance to state permit writers and pretreatment authorities to address PFAS

- Monitoring should include the 40 PFAS by method 1633
- 1621 for AOF can be used if appropriate

### Tools and Resources

**Example Permit Language, State and Local PFAS Strategies, and Other PFAS Permitting Resources**

### Funding Resources

- Clean Water State Revolving Fund Emerging Contaminants

### BMP and Source Reduction Resources

- Fact Sheet: Pollution Prevention Strategies for Industrial PFAS Discharges (pdf) (713.1 KB)

https://www.epa.gov/npdes/industrial-wastewater#pfas

# BIOSOLIDS

The EPA to complete a risk assessment of PFOA/PFOS in biosolids by the winter of 2024 to determine if regulations are needed

NASDA, in partnership with the EPA and Environmental Council of the States, jointly developed "Principles for Preventing and Managing PFAS in Biosolids."

ENERGY & ENVIRONMENT

**State's new solid waste rules don't solve the sludge problem**

**More farms contaminated by PFAS chemicals**

SCIENCE NEWS MAY 4, 2022 / 2:00 AM

**Maine passes first PFAS biosolids ban, taking stand against forever chemicals**

By Brooks Hays

https://www.epa.gov/biosolids/joint-principles-preventing-and-managing-pfas-biosolids

https://www.epa.gov/biosolids/risk-assessment-pollutants-biosolids#:~:text=The%20Biosolids%20Program%20has%20developed,chemicals%20that%20fail%20the%20screen.

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# EPA Method 1633

# EPA Method 1621

- Targeted Analysis of 40 PFAS
- Non-Potable Water, Soil, Landfill Leachate, Biosolids & Tissue
- LCMSMS, WAX SPE, Isotope Dilution
- Multi-Lab Validation Complete

- Adsorbable Organic Fluorine (AOF)
  - Proxy analysis for 'Total PFAS'
    - Applies to aqueous samples
      - Multi-lab validated

https://www.epa.gov/cwa-methods/cwa-analytical-methods-and-polyfluorinated-alkyl-substances-pfas

## RESTRICT

*proactively prevent PFAS from entering air, land, and water at levels that can adversely impact human health and the environment*

## REMEDIATE

*Broaden and accelerate the cleanup of PFAS contamination to protect human health and ecological systems*

### Office of Land and Emergency Management

- ✓ Proposed rule making to designate PFOA and PFOS as CERCLA hazardous substances
- ✓ Issue advance notice of proposed rulemaking on various other PFAS under CERCLA
- ✓ Issue updated guidance on destroying and disposing of certain PFAS and PFAS-containing materials

- ✓ *Issue advance notice of proposed rulemaking to designate PFOA, PFOS, PFBS and GenX as hazardous constituents under RCRA*

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# CERCLA Hazardous Substances PFOA & PFOS

*Effective July 8, 2024*

*"Pursuant to section 102(a) of the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA), EPA is designating PFOA and PFOS, including their salts and structural isomers, as hazardous substances"*

**EPA has the authority to:**

- Order investigation and remediation, including cost recovery;
- Re-open closed sites;
- Private parties will have a cause of action for cost recovery; and
- PFOA/PFOS included in the scope of Phase 1s to satisfy "All Appropriate Inquiries Rule"

EPA-HQ-OLEM-2019-0341

# RCRA HAZARDOUS *CONSTITUENTS*

*Proposed rule, not adopted yet*

**EPA Proposes to list PFOA, PFOS, PFBS, PFNA, PFHxS, PFDA, PFHxA, PFBA, & HFPO-DA as RCRA "Hazardous Constituents"**

**Those chemicals listed are subject to Corrective Action requirements under RCRA at hazardous waste treatment, storage, and disposal facilities.**

## To be continued....

EPA must undertake a two-step process to categorize PFAS-contaminated waste as **hazardous waste** subject to RCRA:

(1) list PFAS as a Hazardous Constituent in 40 CFR part 261, Appendix VIII

(2) publish a finding that PFAS-containing waste could pose a "substantial present or potential hazard to human health or the environment when improperly treated, stored, transported, or disposed of, or otherwise managed"

https://www.epa.gov/hw/proposal-list-nine-and-polyfluoroalkyl-compounds-resource-conservation-and-recovery-act

# Understanding the "RESOURCE CONSERVATION AND RECOVERY ACT"

## Regulation of Hazardous Waste "Cradle to Grave""

Subtitle C gives EPA the authority to control and regulate hazardous waste from "cradle-to-grave, requiring tracking of hazardous waste from generation to disposal. Subtitle C only governs "hazardous wastes".

## Corrective Action

The RCRA Corrective Action Program requires facilities that treat, store, or dispose of hazardous wastes to investigate and clean up contaminated soil, groundwater, and surface water.

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# EPA PFAS Destruction & Disposal Guidance

*Public comment period closed 10/15/24*

- ✓Updated guidance release April 2024
- ✓Same methods: landfilling, underground injection control (UIC), thermal treatment and the wildly unpopular interim storage
- ✓Addresses utilization of analytical tools for demonstration of mineralization of PFAS in Appendix A
- ✓Significant data gaps remain

https://www.epa.gov/pfas/interim-guidance-destroying-and-disposing-certain-pfas-and-pfas-containing-materials-are-not

## RESEARCH

*increase understanding of PFAS exposures and toxicities, human health and ecological effects*

## RESTRICT

*proactively prevent PFAS from entering air, land, and water at levels that can adversely impact human health and the environment*

## REMEDIATE

*Broaden and accelerate the cleanup of PFAS contamination to protect human health and ecological systems*

- ✓ Build the technical foundation to address PFAS air emissions
- ✓ Develop and finalize monitoring approaches for measuring stack emissions and ambient
- ✓ Publish OTM-45 for semivolatile PFAS from source air emissions

~ Increase understanding of the fate and transport of PFAS air

?? Develop information on cost-effective mitigation technologies

**Office of Air and Radiation**

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# OTM-45 & OTM-50

- EPA Published OTM-45 for Semivolatile and Particulate-bound PFAS from Source Air Emissions
- EPA Published OTM-50 for Volatile PFAS from Source Air Emissions

AFFF

# Transition to Fluorine Free Foams

FLUORINE-FREE FOAM (F3) LIQUID CONCENTRATE FOR LAND-BASED, FRESH WATER APPLICATIONS

In accordance with

DEPARTMENT OF DEFENSE SPECIFICATION MIL-PRF-32725

TYPE 3 (3%)

**DO NOT MIX WITH OTHER FOAM CONCENTRATES**

This fire extinguishing concentrate is for use by dilution with fresh water in fixed or mobile systems at volume proportions of 3% (i.e., 3 gallons concentrate to 97 gallons of fresh water) at the time of use. This concentrate is not compatible and cannot be mixed in tanks with other foam concentrates including other MIL-PRF-32725 concentrates. The concentrate shall not be stored at temperatures below 35 °F or at temperatures above 120 °F.

https://aboutblaw.com/6pN

## Federal Aviation Administration

## National Part 139 CertAlert

**Advisory**Cautionary**Non-Directive**Advisory**Cautionary**Non-Directive**Advisory**Cautionary**Non-Directive**

**Date:** 9/13/2023 **No. 23-07**

**To:** Airport Operators, FAA Airport Certification Safety Inspectors, ARFF Departments and Mutual Aid Providers

**Subject:** Availability of Fluorine Free Foam (F3) on the Navy's Qualified Products List (QPL)

https://www.faa.gov/airports/airport_safety/aircraft_rescue_fire_fighting/f3_transition

*DoD needs more time to safely replace AFFF with F3 at 1,500 facilities and 6,000 mobile assets*

Qualified Products Database

Main | Search | Reports | Help

Governing Spec: **MIL-PRF-32725(1)**

The Qualified Product List for the following governing specification was last updated on **28-MAR-2024**

| QA | FSC | QPL Number | Governing Spec | Doc Date | Doc Status | Title | QPL Notes |
|---|---|---|---|---|---|---|---|
| SH | 4210 | QPL-32725 | MIL-PRF-32725 | 17-AUG-2023 | Active | Fire Extinguishing Agent, Fluorine-Free Foam (F3) Liquid Concentrate, for Land-Based, Fresh Water Applications | Preamble Footnotes |

https://qpldocs.dla.mil/search/parts.aspx?qpl=4513&param=MIL-PRF-32725&type=26144

*"the deadline to end the use of AFFF on military installations is now extended to October 1, 2025."*

# ECHO Enforcement and Compliance History Online

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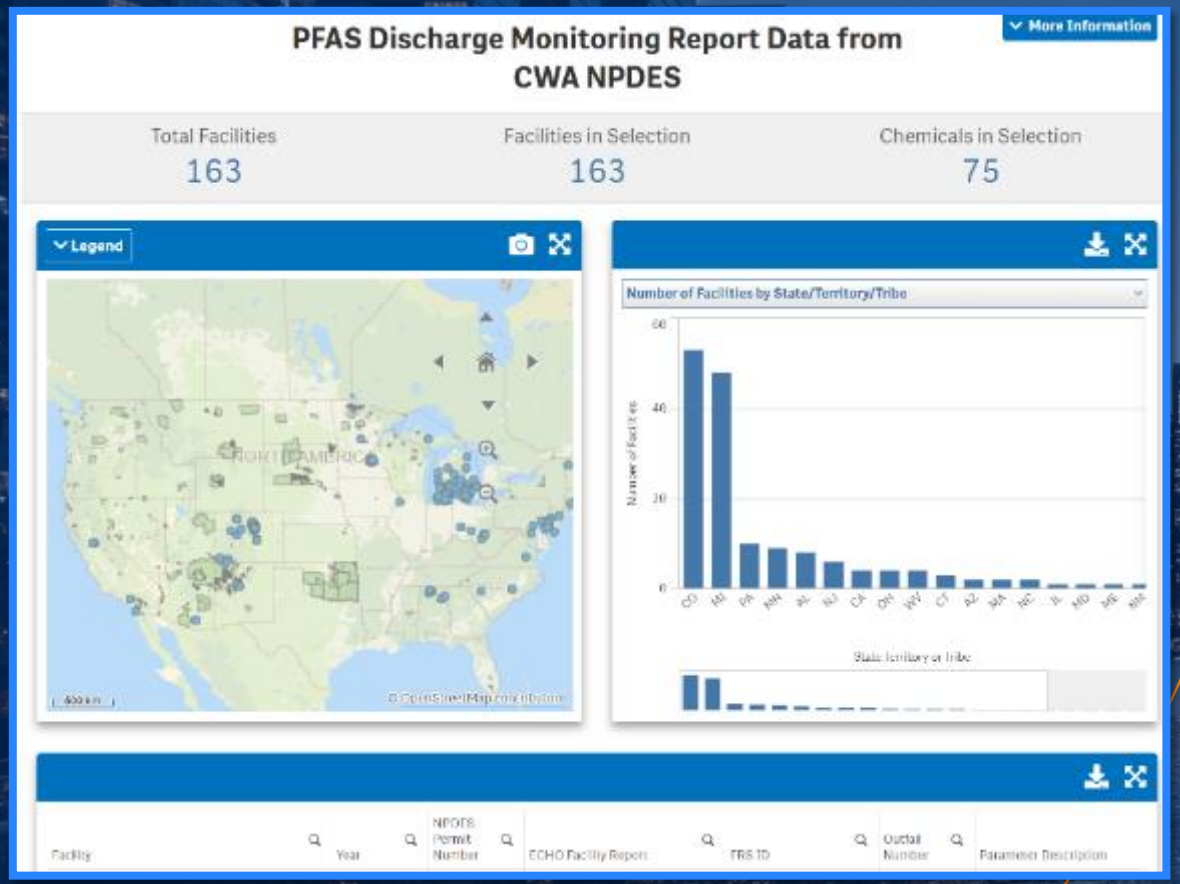
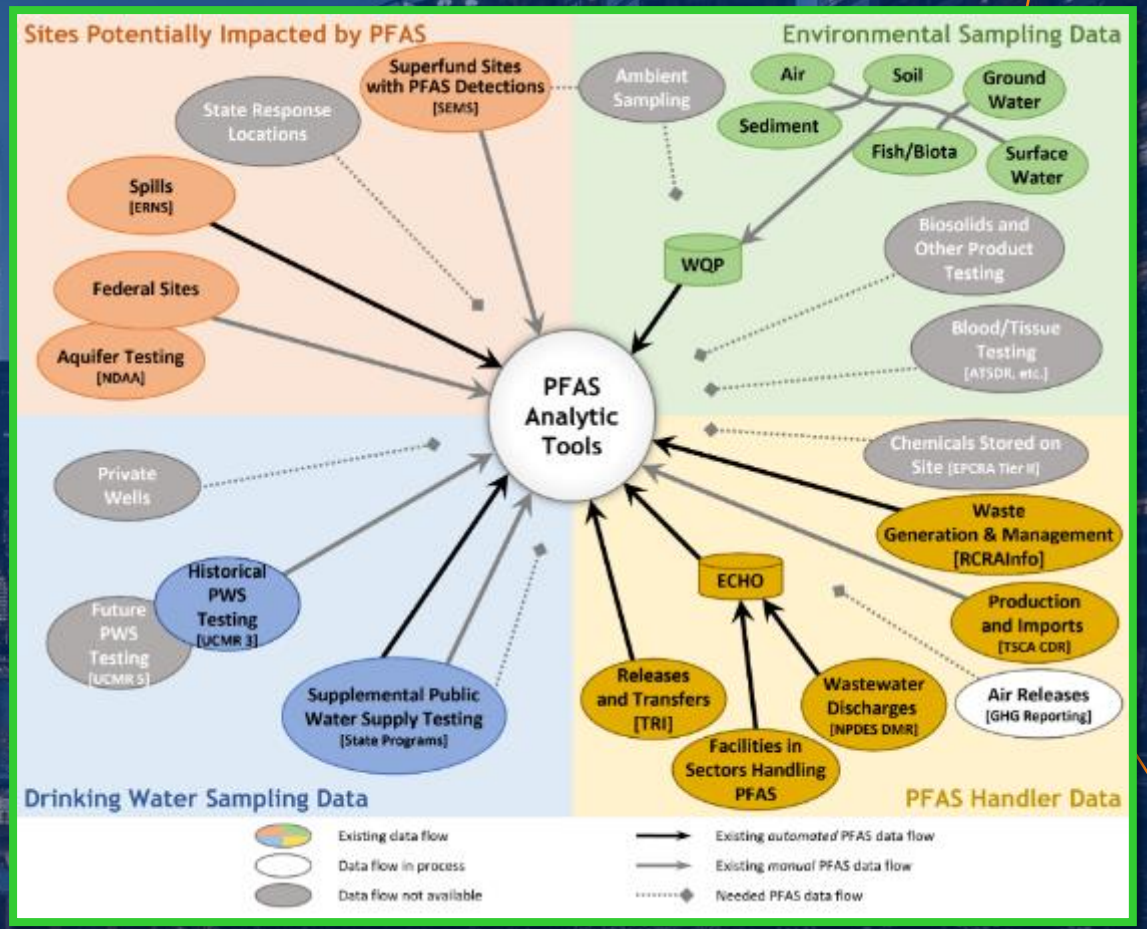
## EPA's **PFAS Analytic Tools** draws from multiple national databases and reports to consolidate information in one webpage

Details on how to use the tool can be found in the PFAS Analytic Tools Users' Guide (PDF)

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# THANK YOU

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