

# What do I really need to Know about PFAS?

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# What are PFAS?

- The per- and polyfluoroalkyl substances (PFAS) are a group of chemicals used to make fluoropolymer coatings and products that resist heat, oil, stains, grease, and water
- Because of their widespread use and their persistence in the environment, many PFAS are found in the blood of people and animals all over the world and are present at low levels in a variety of food products and in the environment.
- PFAS are found in water, air, fish, and soil at locations across the nation and the globe.
- Scientific studies have shown that exposure to some PFAS in the environment may be linked to harmful health effects in humans and animals.
- There are thousands of PFAS chemicals, and they are found in many different consumer, commercial, and industrial products. This makes it challenging to study and assess the potential human health and environmental risks.

# EPA PFAS Home Page

<https://www.epa.gov/pfas>



# Proposed Hazardous Substance Designation for PFOA and PFOS

- On August 26, 2022, EPA issued a proposal to designate two of the most widely used PFAS as hazardous substances under CERCLA, or Superfund. This rulemaking would increase transparency around releases of these harmful chemicals and help to hold polluters accountable for cleaning up their contamination

# EPA PFAS RoadMap

October 18, 2021

- **Research**
  - Effects on human health and ecology
  - Effective interventions using the best science
- **Restrict**
  - Proactively prevent PFAS from entering air, land, and water (*NPDES and Pretreatment programs*) at levels that can impact human health and the environment
- **Remediate**
  - Broaden and accelerate cleanups



# EPA PFAS RoadMap - NPDES

- Develop PFAS analytical methods for all matrices
- Leverage NPDES Permitting to reduce PFAS discharges
- Restrict PFAS discharges through ELG rulemaking
- Develop PFAS water quality criteria
- Enhance PFAS fish advisories –fish tissue
- Finalize biosolids risk assessment

# Proposed ELG Plan 15

January 11, 2021

Expected Final November/December 2022

- PFAS Manufacturers and Formulators/Processors Rule
- PFAS – Metal Finishing Rule



# PFAS Manufacturers and Formulators/Processors Rule

## Proposal in Summer 2024

- Organic Chemicals, Plastics and Synthetic Fibers (OCPSF) Rule – 40 CFR 414
- Manufacturing – raw material feedstock
  - Chemours, 3M and Daikin
- Formulators – processing raw PFAS feedstock into intermediate or commercial product



# PFAS Metal Finishing Rule

- Metal Finishing Rule – 40 CFR 433
  - 6 core and 40 ancillary process operations
- Focus is on Chromium electroplating and anodizing operations – Hard Chrome Plater
  - PFAS used for mist fume suppression to control air emissions
- Proposal – Summer 2025

# Multi-Industry PFAS Study

- OCPSF – 40 CFR 414
- Metal Finishing – 40 CFR 433
- Electroplating – 40 CFR 413
- Landfills – 40 CFR 445
- Pulp Paper and Paperboard – 40 CFR 430
- Leather Tanning and Finishing – 40 CFR 425
- Plastics Molding and Forming – 40 CFR 463
- Textile Mills– 40 CFR 410
- Paint Formulating – 40 CFR 446
- Commercial Airports – 40 CFR 449



# Draft PFAS Method 1633

September 2021

- Single Lab Validated
- PFAS Method in Aqueous, Solid, Biosolids and Tissue by LC-MS/MS
- Expect Final Method by end of 2022

[https://www.epa.gov/system/files/documents/2021-09/method\\_1633\\_draft\\_aug-2021.pdf](https://www.epa.gov/system/files/documents/2021-09/method_1633_draft_aug-2021.pdf)

# Memo - Addressing PFAS Discharges in EPA-Issued NPDES Permits

- Effluent-monitoring for **NPDES Industrial Permits**
- Influent/Effluent/Biosolids monitoring for **POTW Permits**
  - Quarterly monitoring for 40 PFAS using Draft Analytical Methods 1633
  - Electronic Reporting of Data via DMRs
- **Best Management Practices**
  - Product Elimination or substitution
  - Accidental Discharge minimization
  - Equipment decontamination or replacement (legacy)



# Memo - Addressing PFAS Discharges in EPA-Issued NPDES Permits

- **BMP Actions for Firefighting foams for stormwater permits:**
  - **Prohibit the use of AFFFs** in stormwater permits other than for actual firefighting.
  - **Eliminate PFOS and PFOA -containing AFFFs.**
  - **Require immediate clean-up** where AFFFs have been used, include diversions, etc. to prevent discharges via storm sewer systems.
- **Pretreatment Activities where EPA is Control Authority**
  - Update IU Inventory
  - Require BMPs and pollution prevention to address PFAS discharges to POTWs.
  - Require quarterly monitoring.
  - Where authority exists, develop IU BMPs or local limits.

# MA and NH NPDES Permits ONLY – for now

The Permittee shall commence annual sampling of the following types of industrial discharges into the POTW:

- Commercial Car Washes
- Platers/Metal Finishers
- Paper and Packaging Manufacturers
- Tanneries and Leather/Fabric/Carpet Treaters
- Manufacturers of Parts with Polytetrafluoroethylene (PTFE) or teflon type coatings (i.e. bearings)
- Landfill Leachate
- Centralized Waste Treaters
- Known or Suspected PFAS Contaminated Sites
- Fire Fighting Training Facilities
- Airports
- Any Other Known or Expected Sources of PFAS



# What is in YOUR PERMIT?

<https://www.epa.gov/npdes-permits>