

National Pretreatment Updates



*Amelia Whitson, whitson.amelia@epa.gov
Pretreatment Coordinator, US EPA Region 9
BACWA Pretreatment Committee Meeting
February 14, 2024*

A long-exposure photograph of a waterfall, creating a soft, blurred effect of white water cascading over dark rocks. The image is positioned on the left side of the slide, with a vertical grey bar separating it from the text area.

EPA Updates

- Electronic Reporting
- Guidance Manual Updates
- RCRA Rule for Hazardous Waste Pharmaceuticals
- CWA Methods Update Rule
- Effluent Limitation Guidelines Planning
- Reuse and Resource Recovery
- PFAS and Pretreatment

NPDES Electronic Reporting Rule

- Final rule effective December 21, 2015 (5-year phase-in for pretreatment reporting)
- Replaces much paper-based NPDES reporting with electronic reporting. Does not add additional reporting requirements on permittees.



EPA Region 9 Annual Pretreatment Reports (2009)

NPDES Electronic Reporting Rule

- Pretreatment reporting
 - Covers submittals of:
 - Annual Pretreatment Reports (POTW to Approval Authority)
 - Semi-annual Industrial User Compliance Reports discharging to POTWs without approved pretreatment programs (IU to Approval Authority)
 - Must begin submitting these reports electronically starting December 21, ***2025*** (deadline extended in Sep 2020)



NPDES Electronic Reporting Rule



Lead for this technical workgroup is

Carey Johnston
(Office of Compliance)

johnston.carey@epa.gov

- EPA-State Pretreatment E-Reporting Technical Workgroup kicked off April 2017
- [Implementation Technical Paper, 27 July 2018](#)
 - Define the reference values, business rules, and other data standards
 - Discuss options for data access so that they are useful for program management.
 - Make recommendations for future IT development
- Next steps
 - Computer Programming (as necessary)
 - Beta Testing of Forms
 - Implementation

Receiving Electronic Reports from IUs

- EPA published an **updated** guidance document in May 2018 on POTW Pretreatment Programs and Electronic Reporting: https://www.epa.gov/sites/production/files/2018-05/documents/cromerr_potw_1.pdf
- Lays out two-step process for:
 - (1) Seeking CROMERR approval, and then
 - (2) Modifying your approved pretreatment program to accept IU reports electronically in place of paper copies
- There are some “off-the-shelf” options that have partially gone through Step (1) above: <https://encromerr.epa.gov/About>



Guidance Manual Updates

- IU Inspection and Sampling Manual for POTWs – published January 2017

-
- Procedures Manual for Reviewing a POTW Pretreatment Program Submission
 - Guidance Manual for POTW Pretreatment Program Development
 - Guidance for Developing Control Authority Enforcement Response Plans
 - Completion of Appendices to IU Permitting Manual
 - Guidance Manual for Control of Wastes Hauled to POTWs



RCRA Rule: Management Standards for Hazardous Waste Pharmaceuticals

- Final Rule signed December 11, 2018
- Prohibits healthcare facilities from sewerage hazardous waste pharmaceuticals
- [May 2022 Fact Sheet for Publicly Owned Treatment Works](#)

<https://www.epa.gov/hwgenerators/final-rule-management-standards-hazardous-waste-pharmaceuticals-and-amendment-p075>



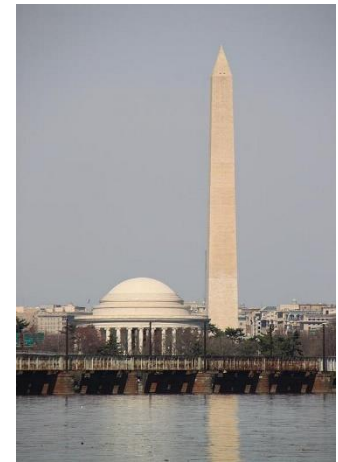


Clean Water Act Methods Update Proposed Rule

- Methods Update Rule proposed February 21, 2023
- Comments accepted through April 24, 2023; not finalized yet
- Proposed changes include:
 - Minor technical changes and clarifications to improve existing methods
 - New or revised methods published by voluntary consensus bodies, such as ASTM International and the Standard Methods Committee
 - Methods reviewed under the Alternate Test Procedures program and found to be comparable to methods currently in 40 CFR Part 136

<https://www.epa.gov/cwa-methods/methods-update-rules>

Effluent Limitations Guidelines (ELG) Planning



<https://www.epa.gov/eg/current-effluent-guidelines-program-plan>

- Effluent Guidelines Program Plan 15 published January 2023
 - Determined revisions to the [Landfills](#) category are warranted to address PFAS discharges; will begin rulemaking.
 - Expanding detailed study of PFAS use and discharges from the [Textile Mills](#) category.
 - Updates on rulemaking to revise limitations for the [Organic Chemicals, Plastics, and Synthetic Fibers](#) (OCPSF) category to address PFAS. *(est. proposal May 2024)*
 - Updates on rulemaking to revise limitations for the [Metal Finishing](#) category to address PFAS discharges from chromium plating operations. *(est. proposal end of 2024)*
 - Updates on rulemaking to revise the existing limits for the [Meat and Poultry Products](#) category to add pretreatment standards and address nutrients. *(est. proposal Dec 2023)*
 - Update on proposed Supplemental Rulemaking for the [Steam Electric Power Generating](#) category. *(proposed Mar 2023)*
 - Continuing PFAS Multi-Industry Study, currently looking at airports and [Pulp, Paper, and Paperboard](#) category.
- Continuing to populate Industrial Wastewater Treatment Technology Database (IWTT): <https://www.epa.gov/iwtt>

National Water Reuse Action Plan

- Feb 2020: EPA announced the release of the National Water Reuse Action Plan: Collaborative Implementation (Version 1)
 - Available in two forms:
 - Printed publication
 - Online Platform
- Updates on Collaborative Progress:
 - Year 3 (March 2023)
 - Year 2 (March 2022)
 - Year 1 (April 2021)

National Water Reuse Action Plan

Improving the Security, Sustainability, and Resilience of Our Nation's Water Resources

Collaborative Implementation (Version 1)



February 2020



Water Reuse in the Pretreatment Program

National Water Reuse Action Plan

Improving the Security, Sustainability, and Resilience of Our Nation's Water Resources

Collaborative Implementation (Version 1)



February 2020

- 40 CFR 403.2 - Objectives of general pretreatment regulations:
 - ... (c): To improve opportunities to *recycle and reclaim municipal and industrial **wastewaters*** and sludges.
- May 2022 - Water Reuse Interagency Working Group established under the Bipartisan Infrastructure Law

Sign up for Water Reuse Updates:

<https://www.epa.gov/waterreuse/forms/sign-water-reuse-email-updates>



WRAP Online Platform

- ▶ **2.4:** Enhance Wastewater Source Control through Local Pretreatment Programs to Opportunities for Municipal Wastewater - NACWA & WEF
- ▶ **3.1:** REUSExplorer: “Compile Existing Fit-for-Purpose Specifications”
Access existing reuse regulations, technical information, and policies through a searchable compilation: Search by state, source water, application
<https://www.epa.gov/waterreuse/regulations-and-end-use-specifications-explorer-reuseexplorer>
- ▶ **8.7:** Highlight Water Reuse Opportunities in the National Pretreatment Program Framework - *new!*



<https://www.epa.gov/waterreuse/national-water-reuse-action-plan-online-platform>

PFAS STRATEGIC ROADMAP: EPA'S COMMITMENTS TO ACTION 2021-2024

- EPA Administrator Michael Regan established the EPA Council on PFAS in April 2021.
- The Council developed the PFAS Strategic Roadmap, released in October 2021 – a bold, strategic, whole-of-EPA strategy to protect public health and the environment from PFAS.
- The Roadmap:
 - Sets timelines for concrete actions from 2021 to 2024;
 - Fills a critical gap in federal leadership;
 - Supports states' ongoing efforts; and
 - Builds on the Biden-Harris Administration's commitment to restore scientific integrity.

www.epa.gov/pfas



PFAS Strategic Roadmap: EPA's Commitments to Action 2021–2024





KEY ROADMAP ACTIONS: ***PROTECTING OUR WATER***

Set enforceable limits for PFOA and PFOS in drinking water (*proposed and final rules in 2023*)

Improve PFAS drinking-water data through monitoring, toxicity assessments, and health advisories (*Dec 21 & June 22*)

Develop technology-based PFAS limits for industrial dischargers (*2022 & ongoing*)

Address PFAS in Clean Water Act permitting, analytical methods, water quality criteria & fish advisories (*2022 & ongoing*)

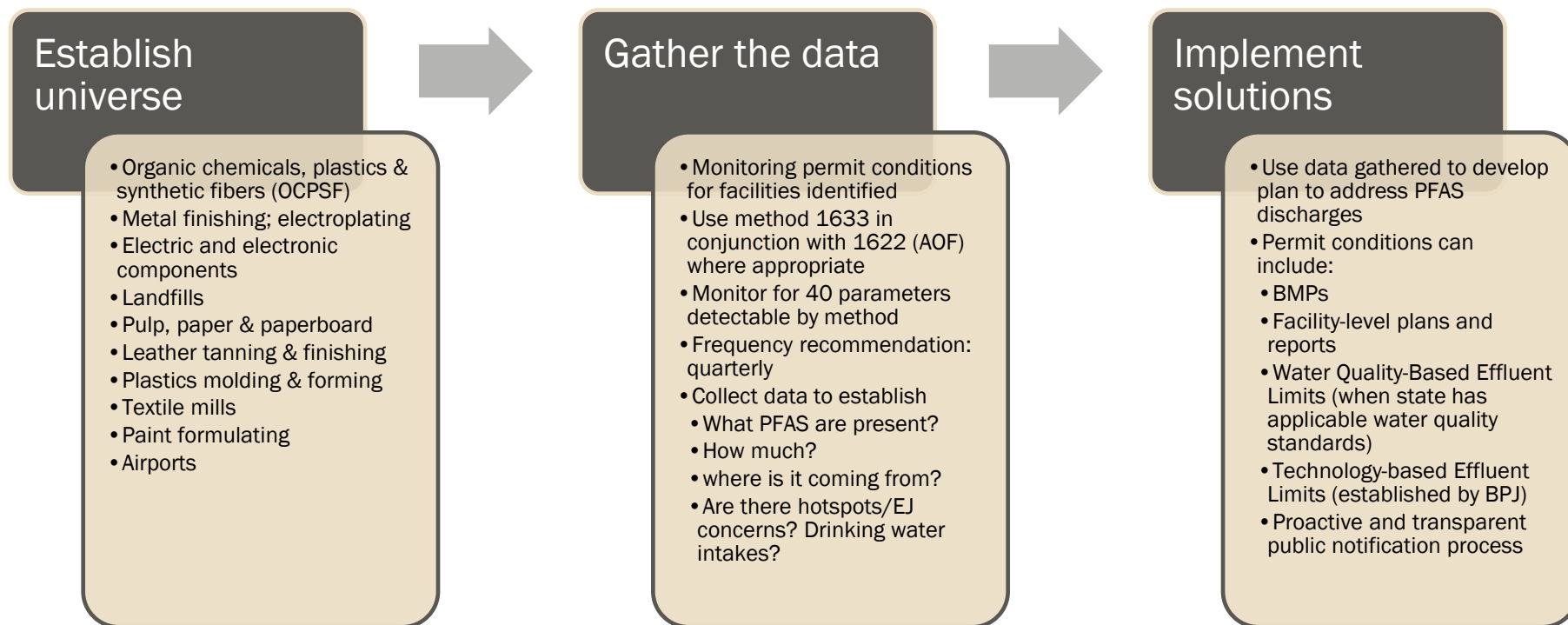
Evaluate risks of PFAS in biosolids (*winter 2024*)

LEVERAGE NPDES PERMITS TO REDUCE PFAS DISCHARGES

- December 2022 – EPA issued [Addressing PFAS Discharges in NPDES Permits and Through the Pretreatment Program and Monitoring Programs](#)
- This memo integrates previous policies into a holistic NPDES response for all NPDES permitting authorities, replacing earlier versions that were targeted at federally-issued permits only
- Describes steps permit writers and pretreatment authorities can implement under existing authorities, in the absence of final criteria/ELGs/methods
- Includes recommendations for NPDES permitting authorities as well as pretreatment program recommendations



RECOMMENDED PERMIT CONDITIONS FOR DIRECT INDUSTRIAL DISCHARGERS



RECOMMENDATIONS FOR PUBLICLY OWNED TREATMENT WORKS

Establish universe upstream & downstream

- Conduct IU inventory of PFAS industries, including non-SIUs
- Collaborate with drinking water to determine downstream intakes
- Consider sludge disposal goals

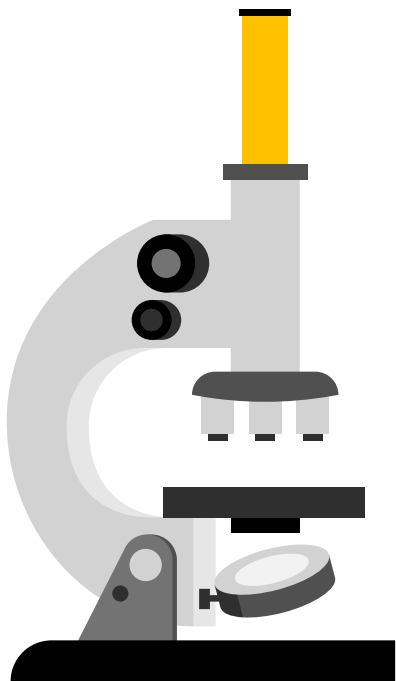
Develop sampling plan

- Use method 1633 in conjunction with 1621
- Include IUs identified in PFAS inventory
- Select collection system monitoring locations to differentiate industrial vs. domestic influent contributions where possible
- Frequency recommendation: quarterly

Implement solutions

- Incorporate monitoring requirements into IU control mechanisms
- Incorporate local limits into IU control mechanisms
- Local limits can be BMPs
- Ensure IUs are in ICIS and submitting data electronically
- Notify affected public water suppliers

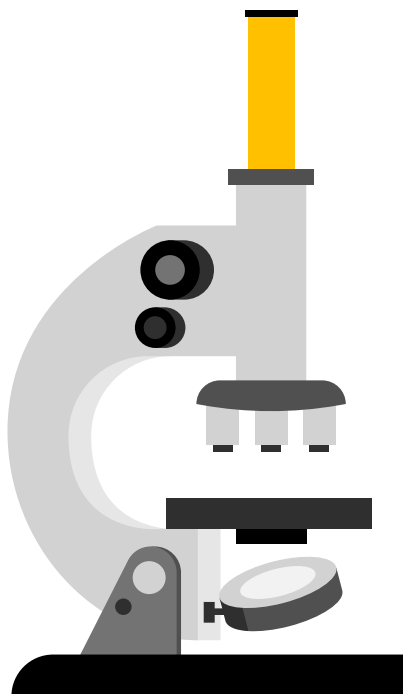
CWA Analytical Methods



- EPA's [Final Method 1633](#)

- A method to test for **40 PFAS compounds** in wastewater, surface water, groundwater, soil, biosolids, sediment, landfill leachate, and fish tissue.
- This method can be used in various applications, including NPDES permits.
- The method supports NPDES implementation by providing a consistent PFAS method that has been tested in a wide variety of wastewaters and contains all the required quality control elements in CWA method.

CWA Analytical Methods (continued)



- EPA's [Final Method 1621 for Adsorbable Organic Fluorine \(AOF\)](#)
 - A multi-laboratory validated CWA method to screen for rarely naturally occurring organofluorines in wastewaters and surface waters by Combustion Ion Chromatography.
 - The most common sources of organofluorines are PFAS and non-PFAS fluorinated compounds such as pesticides and pharmaceuticals.
 - The method is labeled as a screening method:
 - does not quantify all organofluorines with the same accuracy and
 - has some known interferences
 - tells the user that the organofluorines *are present*, but
 - *does not identify which organofluorines are present.*
 - broadly screens for thousands of known PFAS compounds at part per billion level
- [Frequently Asked Questions about PFAS methods for NPDES Permits](#)