

EPA's Office of Water, Office of Science and Technology, PFAS Updates

2023 ACWA National Pretreatment Workshops
May 15-16th, 2023

Outline

- Overview of ELG Program & Planning Process
- Effluent Guidelines (ELG) Program Plan 15
- Clean Water Act Analytical Methods for PFAS
- PFAS Health Advisories
- Water Quality Criteria for PFAS
- Biosolids

What are Effluent Guidelines?

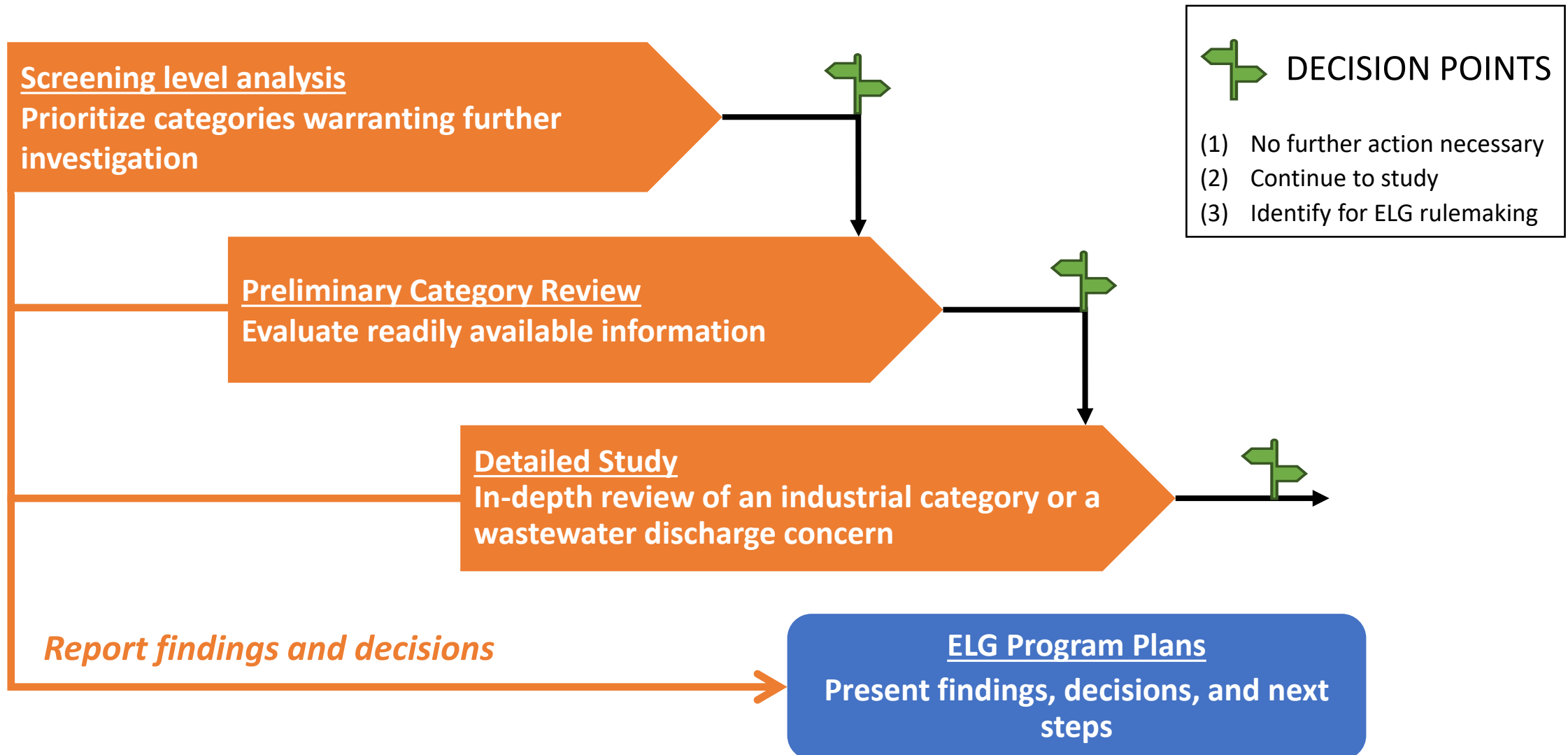
- Effluent Guidelines are national regulatory standards for wastewater discharged to surface waters and municipal sewage treatment plants. EPA issues these regulations for industrial categories, based on the performance of treatment and control technologies.
- The Clean Water Act Section 304(m) requires EPA to annually review existing effluent guidelines and pretreatment standards to determine if revisions are warranted.
- The Clean Water Act does not describe what activities must be included in the review and EPA's current process has evolved over the years, incorporating feedback from the public on how best to conduct these reviews.
- EPA publishes the results of these reviews in the

Effluent Guidelines Program Plan.

What is an Effluent Guidelines Program Plan?

- To fulfill this requirement, EPA has implemented a two-year publication cycle for the ELG Program Plan:
 - Year 1: EPA publishes a *Preliminary ELG Program Plan* which includes: the results of the most recent annual review, announcements on new studies or rulemakings, and updates on existing studies and rulemaking. EPA solicits public input on the contents of this plan.
 - Year 2: EPA publishes the *ELG Program Plan*, which includes: feedback received on the preliminary plan, the results of the most recent annual review, announcements on new studies or rulemakings, and updates on existing studies and rulemaking.

Overview of ELG Planning Process & Review



Summary of actions and discussions in ELG Program Plan 15

- [ELG Program Plan 15](#) published in January 2023.
 - Presents new findings of our 2021 annual review, summary of public comments we received, announces new rulemakings and studies while also providing updates on existing rulemakings and studies.
 - Conducted category reviews for three industrial categories: **Plastics Molding and Forming, Paint Formulating & Leather Tanning.**
- New Rules and Studies:
 - Based on limited data on numerous industrial categories reviewed, EPA is initiating a new study to gather data on industrial **PFAS discharges to POTWs.**
 - EPA is initiating a new rulemaking to revise the existing ELG for **landfills**, primarily to address PFAS in landfill leachate.
 - EPA is initiating a new study to gather (non-PFAS) data on **Concentrated Animal Feeding Operations (CAFOs)** to better understand the potential discharges and current implementation of the existing rule.
 - EPA is expanding the scope of the existing **Textile Mills detailed study** to include collecting data on PFAS use and discharge through a mandatory survey from this industry.



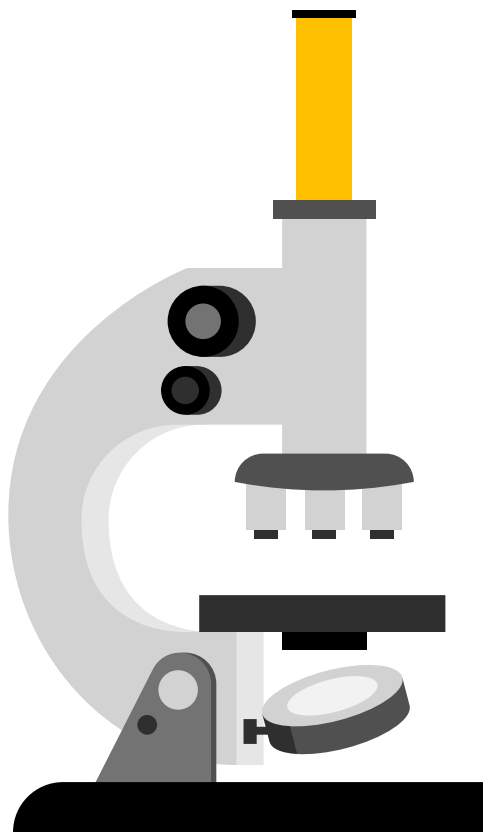
Summary of actions and discussions in ELG Program Plan 15

- Updates to existing rulemakings and studies:
 - **Steam Electric ELG** – to strengthen certain wastewater pollution from coal fired power plans, proposed in early March (public comment period closes end of May).
 - **Meat and Poultry ELG** – to address nutrient discharge from this industry and intent to propose December 2023.
 - **PFAS Manufacturers (OCPSF) ELG** – to address wastewater discharge of PFAS from PFAS manufacturing facilities, intent to propose Spring 2024.
 - **Metal Finishing & Electroplating ELG** – to address wastewater discharge of PFAS from metal finishing and electroplating operations, intent to propose end of 2024.
 - **Electrical and Electronic Component ELG detailed study** is complete with no further action pursued at this time. EPA will continue to monitor this industry through the POTW Influent Study to help identify any PFAS related issues.
 - EPA will continue to monitor and report on the PFAS phase-outs for **airports and pulp & paper manufacturing** industries until they are complete.

The commencement and pace for these activities will be a function of funding in FY23 and beyond.

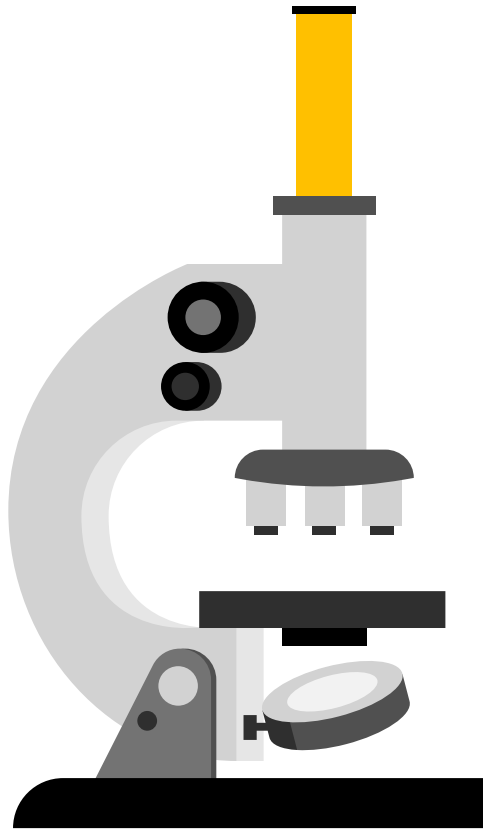


CWA Analytical Methods



- EPA's [Draft Method 1633](#)
 - A method to test for **40 PFAS compounds** in wastewater, surface water, groundwater, soil, biosolids, sediment, landfill leachate, and fish tissue.
 - Third revision of Draft Method 1633 (posted on the EPA website in December 2022) contains quality control criteria generated from the multi-laboratory validation study for wastewater.
 - This draft method can be used in various applications, including NPDES permits.
 - The method will support 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.
 - While the method is not nationally required for CWA compliance monitoring until EPA has promulgated it through rulemaking, ***it is recommended now for use in individual permits.***

CWA Analytical Methods



- EPA published [Draft Method 1621 for Adsorbable Organic Fluorine \(AOF\)](#)
 - A single-laboratory validated method to screen for organofluorines in wastewaters and surface waters by Combustion Ion Chromatography (CIC).
 - EPA is currently multi-laboratory validating this method.
- [Frequently Asked Questions about PFAS methods for NPDES Permits](#)

PFAS Health Advisories



- On June 2022, EPA issued final health advisories for GenX chemicals and PFBS.
- At the same time, EPA issued interim updated drinking water health advisories for PFOA and PFOS that replace those EPA issued in 2016. These updated health advisories levels, which are based on new science, will remain in place until EPA establishes a National Primary Drinking Water Regulation (NPDWR).
- On March 2023, EPA released [a proposed NPDWR](#) for PFOA and PFOS, as well as for four additional PFAS and their mixtures.
 - In this proposed rule, EPA presents updated noncancer toxicity values based on evaluating additional scientific information, and are different from those to calculate the 2022 interim Has.
 - EPA is accepting public comments on its proposed NPDWR, including on the proposed maximum contaminant level goals, other supporting information, and the draft 2023 toxicity values for PFOA and PFOS which are based on the best available science.

Water Quality Criteria for PFAS to protect aquatic life



- In April 2022, EPA proposed the first Clean Water Act aquatic life criteria for [perfluorooctanoic acid \(PFOA\)](#) and [perfluorooctane sulfonic acid \(PFOS\)](#)—two of the most well-studied chemicals in this group.
- The criteria are intended to protect aquatic life in the US from short-term and long-term toxic effects of PFOA and PFOS.
- Comment period closed in summer 2022 and EPA will issue final PFOA and PFOS recommended criteria after considering public comments and any new toxicity data.
- States and Tribes may use EPA-recommended water quality criteria to develop water quality standards that protect and restore waters, issue permits to address PFAS discharges, and assess the impact of PFAS pollution on local communities and the environment.

Biosolids


- Biosolids Biennial Report No.9 //Reporting Period 2020-2021 –(peer-reviewed literature) identified 13 new pollutants in biosolids (3 PFAS)
 - [April 2022](#) “Curation of a list of chemicals in biosolids from EPA National Sewage Sludge Surveys & Biennial Review Reports” published in Scientific Data: <https://doi.org/10.1038/s41597-022-01267-9>
- Research Grants:
 - In 2021, EPA awarded [research grants](#) to further assess contaminants in biosolids through the National Priorities: Evaluation of Pollutants in Biosolids Grants.
- Gathering information through December 2022 NPDES PFAS Memo – using EPA Draft Method 1633 and POTWs’ Industrial User Identification & Characterization.
 - EPA encourages states to use biosolids monitoring to aid in identifying POTWs that should look for industrial sites that need pretreatment.
- EPA is currently conducting a refined [risk assessment](#) for PFOA and PFOS in biosolids.
- Planning now: [National Sewage Sludge Survey](#), which will focus on monitoring for PFAS.

Questions

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