

The background features a silhouette of a person riding a bicycle on a dark horizon line against a sky with soft, colorful clouds. Numerous realistic water droplets of various sizes are scattered across the scene, some appearing to be on a surface in the foreground.

EPA – Pretreatment Rule and PFAS

WYDEQ
November 17, 2023





WARNING-DANGER

WALKING OR SWIMMING

PROHIBITED

WITHIN 25 FEET

OF THIS STRUCTURE

DEPT. OF PARKS



UNSAFE
WATER
POISONED

A white rectangular sign is mounted on a dark wooden post. The sign features the words 'UNSAFE' and 'WATER' in large, bold, black capital letters, stacked vertically. In the center, the word 'POISONED' is written in a smaller, red, hand-drawn font, overlapping the space between the two larger words. The sign is set against a background of dark, dense foliage.











FLAMMABLE

CUYAHOGA
RIVER



Louisville Kentucky



Guadalajara, Mexico



U.S. Waters in 1972

- Only a third of the nation's waters were safe for fishing and swimming.
- Many of the nation's rivers were little more than open sewers and sewage frequently washed up on shore.

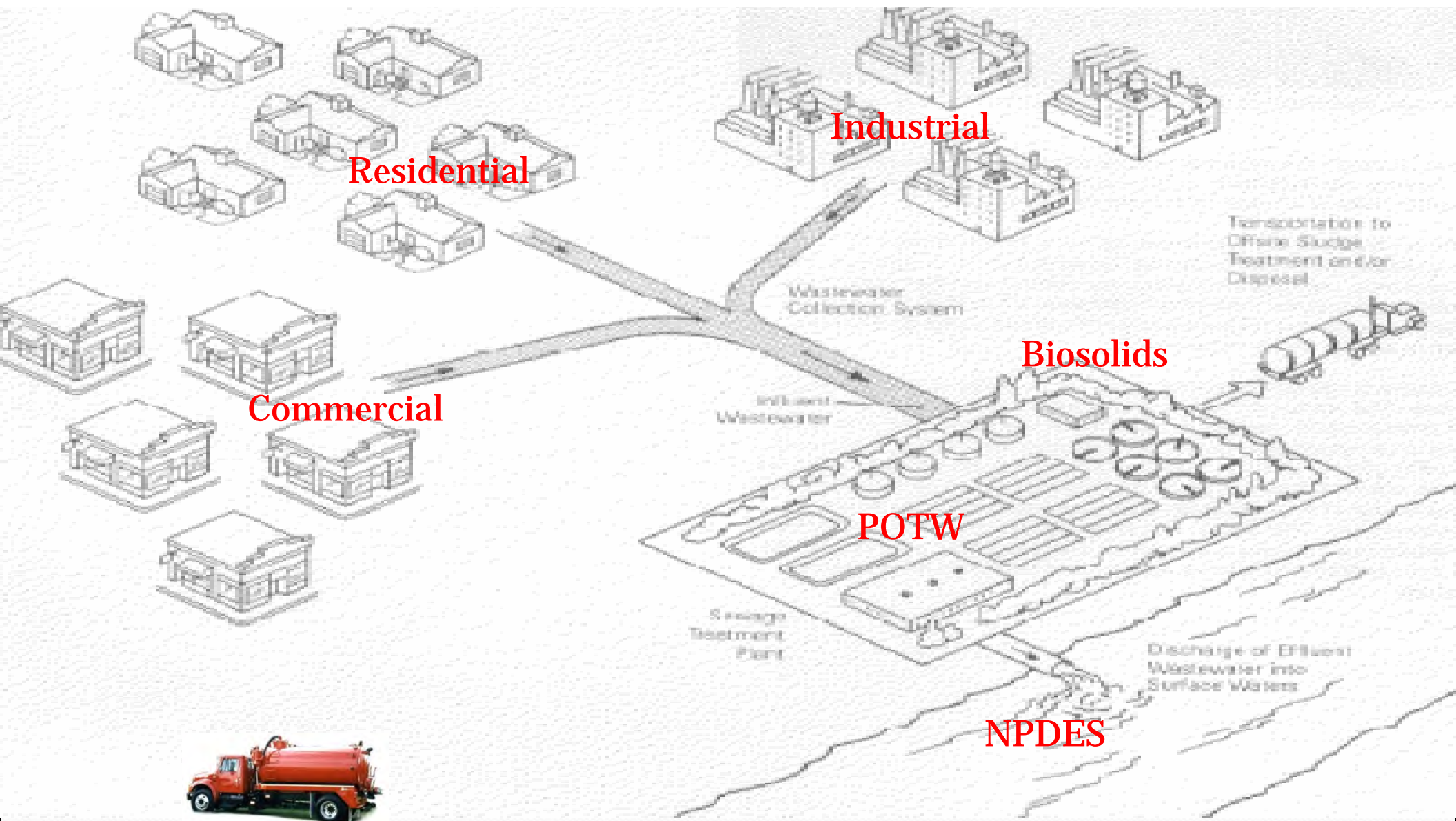


Clean Water Act

- Passed by Congress in 1972 to **restore** and **maintain** the integrity of the nation's waters.
- Provided billions of dollars for construction of new wastewater treatment plants and to upgrade existing plants.
- Makes illegal the discharge of pollutants without a permit.

Clean Water Act - 1972

- Establishes regulations for commercial and industrial process wastewaters.
- **Direct Dischargers** - National Pollution Discharge Elimination System
- **Indirect Dischargers** – National Pretreatment Program



Residential

Industrial

Commercial

Wastewater
Collection System

Transportation to
Off-site Sludge
Treatment and/or
Disposal

Biosolids

Influent
Wastewater

POTW

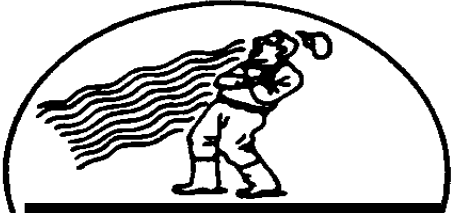
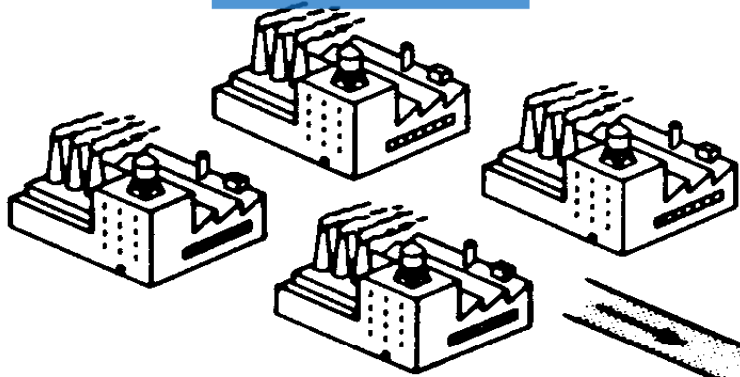
Sludge
Treatment
Plant

Discharge of Effluent
Wastewater into
Surface Waters

NPDES

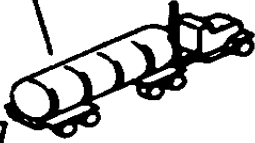


TOXIC POLLUTANTS



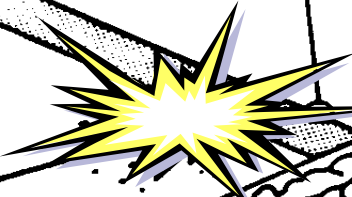
Injury to Workers from Hazardous Fumes

Limitations on Sludge Disposal Options and/or Greater Expense



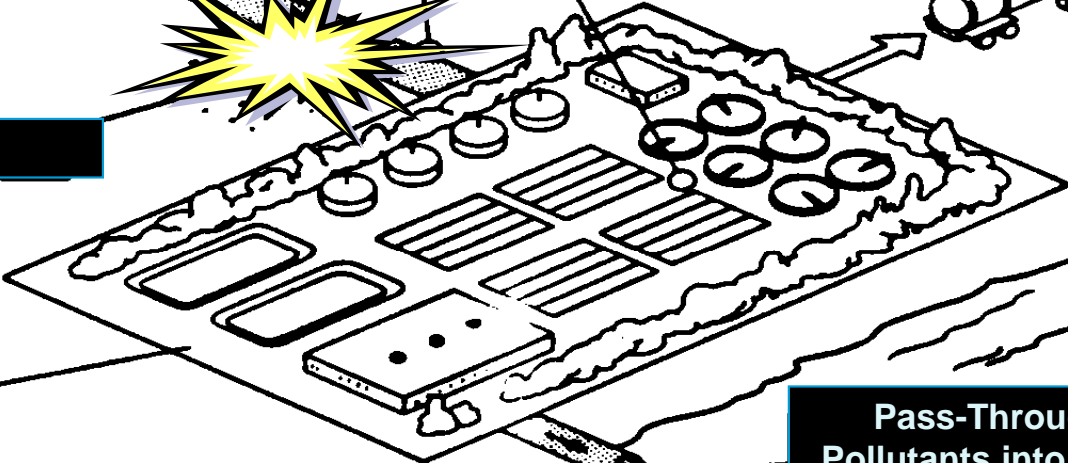
Damage to Collection System and/or Treatment Plant

Explosions



Interference with Wastewater Treatment Facility

Pass-Through of Pollutants into Surface Waters





Goals of the National Pretreatment Program

Pretreatment Regulations are designed to prevent:

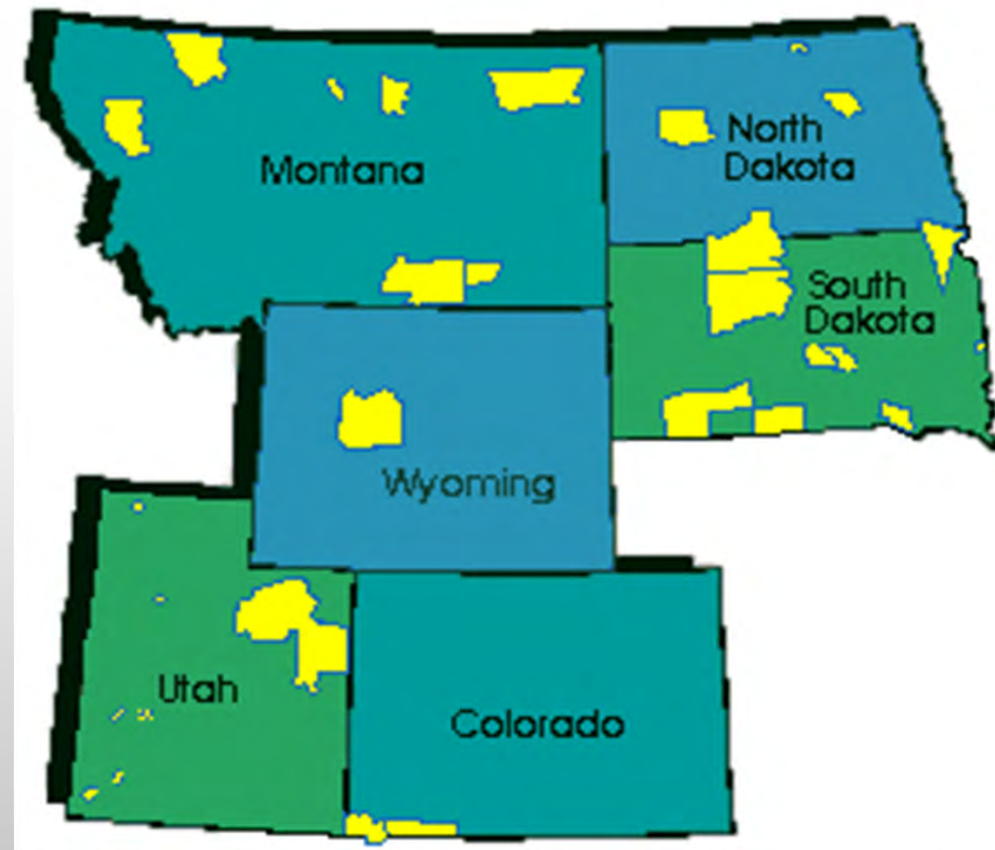
- Pass Through of Pollutants
- Interference of the POTW operations
- Contamination of the treatment sludge
- Impact to worker health and safety

Industrial Pretreatment Program

- Only Environmental Program where EPA has authorized local governments (POTWs) directly to implement and enforce Federal Regulations.
- Protect POTW by regulating Significant Industrial Users that discharge toxic pollutants.

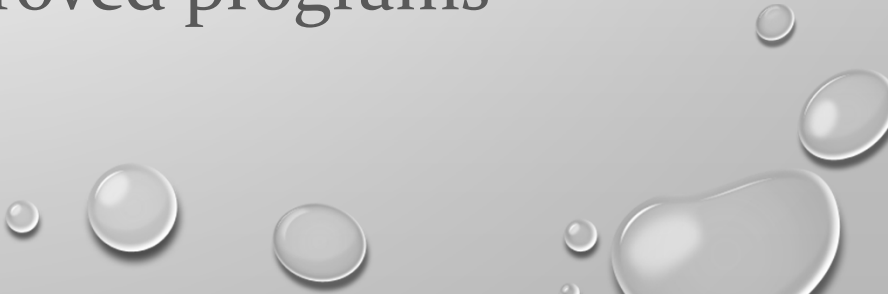
EPA Region 8

- Rocky Mtn States - CO, MT, ND, SD, UT, WY
- 3 States for direct implementation - CO, MT, WY
- Oversight - UT, SD, ND





Perspective

- Collaborate to Protect Local Communities
 - Compliance Assistance/Outreach
 - Evaluation
 - Follow up/Accountability
 - Municipalities with non-approved programs
- 

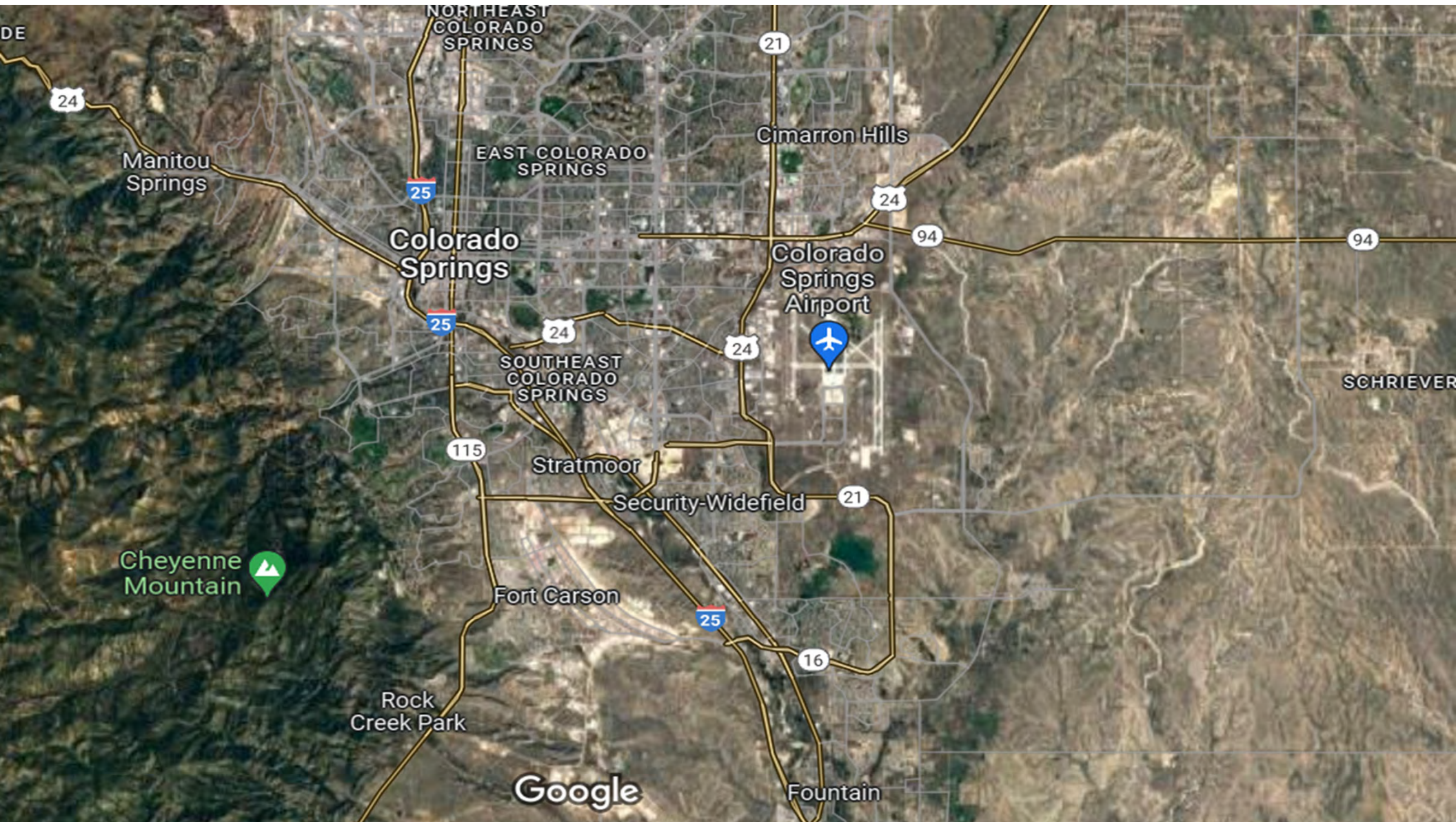
Perspectives

EPA



Local Programs

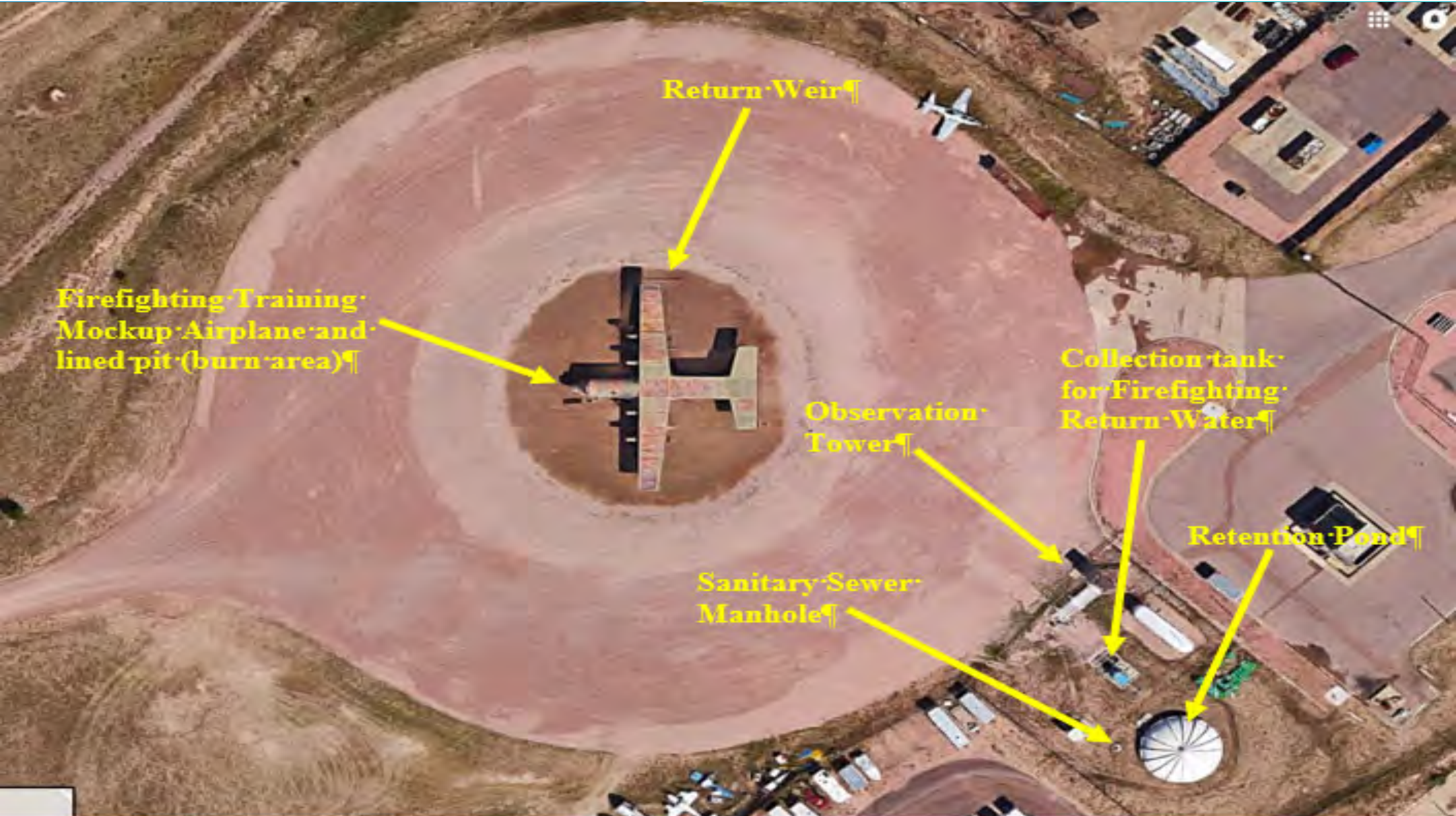




Peterson AFB October 27, 2016



Google



Return Weir

Firefighting Training Mockup Airplane and lined pit (burn area)

Observation Tower

Collection tank for Firefighting Return Water

Retention Pond

Sanitary Sewer Manhole





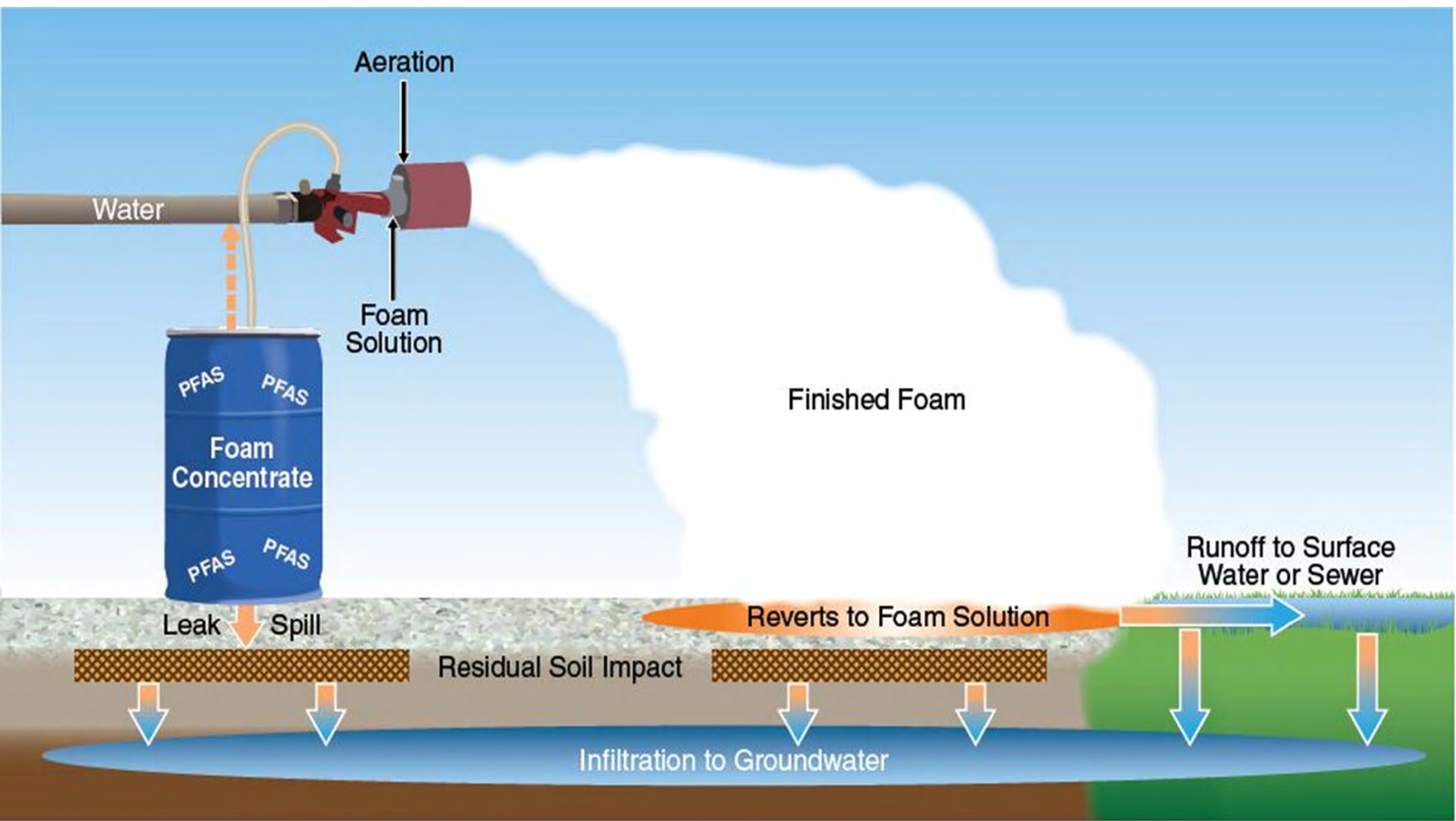
Hangar210

Oil-Water Separator

Hangar214

146,000 gallon underground storage tanks









Hangar210

Oil-Water Separator

146,000 gallon underground storage tanks

Hangar214



PFAS Community Event

- Colorado Springs – Fountain, Widefield, Security municipalities south of Peterson AFB.
- Developed site-specific groundwater quality standard of 70 ppt for combined PFOA/PFAS
- Drinking water wells above 70 ppt, max – 7.910 ppt

PFAS Community Event

Stakeholder Recommendations

- Regulate PFAS as a class
- Stop producing all PFAS chemicals
- National MCL of 1 ppt
- Include wastewater for data analysis

EPA and PFAS

National Leadership Summit and PFAS Management Plan

- National Leadership Summit (May 22 - 23, 2018) and 4 Community Engagements (June-August, 2018)
- Develop a PFAS Management Plan (**Fall 2018**)

Recommendations for POTWs

Establish universe in the service area & downstream of the POTW

- 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

EPA PFAS Memo issued December 5, 2022

Addressing PFAS Discharges in NPDES Permits and Through the Pretreatment Program and Monitoring Programs



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
WASHINGTON, D.C. 20460

OFFICE OF WATER

December 5, 2022

MEMORANDUM

SUBJECT: Addressing PFAS Discharges in NPDES Permits and Through the Pretreatment Program and Monitoring Programs

FROM: Radhika Fox
Assistant Administrator

A handwritten signature in black ink, appearing to be "Radhika Fox".

TO: EPA Regional Water Division Directors, Regions 1-10

The National Pollutant Discharge Elimination System (NPDES) program is an important tool established by the Clean Water Act (CWA) to help address water pollution by regulating point sources that discharge pollutants to waters of the United States. Collectively, the U.S. Environmental Protection Agency (EPA) and states issue thousands of permits annually, establishing important monitoring and pollution reduction requirements for Publicly Owned Treatment Works (POTWs), industrial facilities, and stormwater discharges nationwide. The NPDES program interfaces with many pathways by which per- and polyfluoroalkyl substances (PFAS) travel and are released into the environment, and ultimately impact water quality and the health of people and ecosystems. Consistent with the Agency's commitments in the October 2021 [PFAS Strategic Roadmap: EPA's Commitments to Action 2021-2024 \(PFAS Strategic Roadmap\)](#), EPA will work in cooperation with our state-authorized permitting authorities to leverage the NPDES program to restrict the discharge of PFAS at their sources. In addition to reducing PFAS discharges, this program will enable EPA and the states to obtain comprehensive information on the sources and quantities of PFAS discharges, which can be used to inform appropriate next steps to limit the discharges of PFAS.

This memorandum provides EPA's guidance to states and updates the April 28, 2022 guidance¹ to EPA Regions for addressing PFAS discharges when they are authorized to administer the NPDES permitting program and/or pretreatment program. These recommendations reflect the Agency's commitments in the PFAS Strategic Roadmap, which directs the Office of Water to leverage NPDES permits to reduce PFAS discharges to waterways "at the source and obtain more comprehensive information through monitoring on the sources of PFAS and quantity of PFAS discharged by these sources." While the Office of Water works to revise Effluent Limitation Guidelines (ELGs) and develop water quality criteria to support technology-based and water quality-based effluent limits for PFAS in NPDES permits, this memorandum describes steps permit writers can implement under existing authorities to reduce the discharge of PFAS.

¹ Addressing PFAS Discharges in EPA-Issued NPDES Permits and Expectations Where EPA is the Pretreatment Control Authority, https://www.epa.gov/system/files/documents/2022-04/npdes_pfai-memo.pdf

2022 PFAS Memo Recommendations – IU Inventory

- Update IU Inventory to include all IUs in industry categories expected or suspected of PFAS discharges listed above.
- Utilize BMPs and pollution prevention to address PFAS discharges to POTWs.

2022 PFAS Memo Recommendations – Pretreatment Permits/Control

- Update IU permits to require quarterly PFAS monitoring.
- Where Authority exists, develop IU BMPs or local limits to control PFAS.

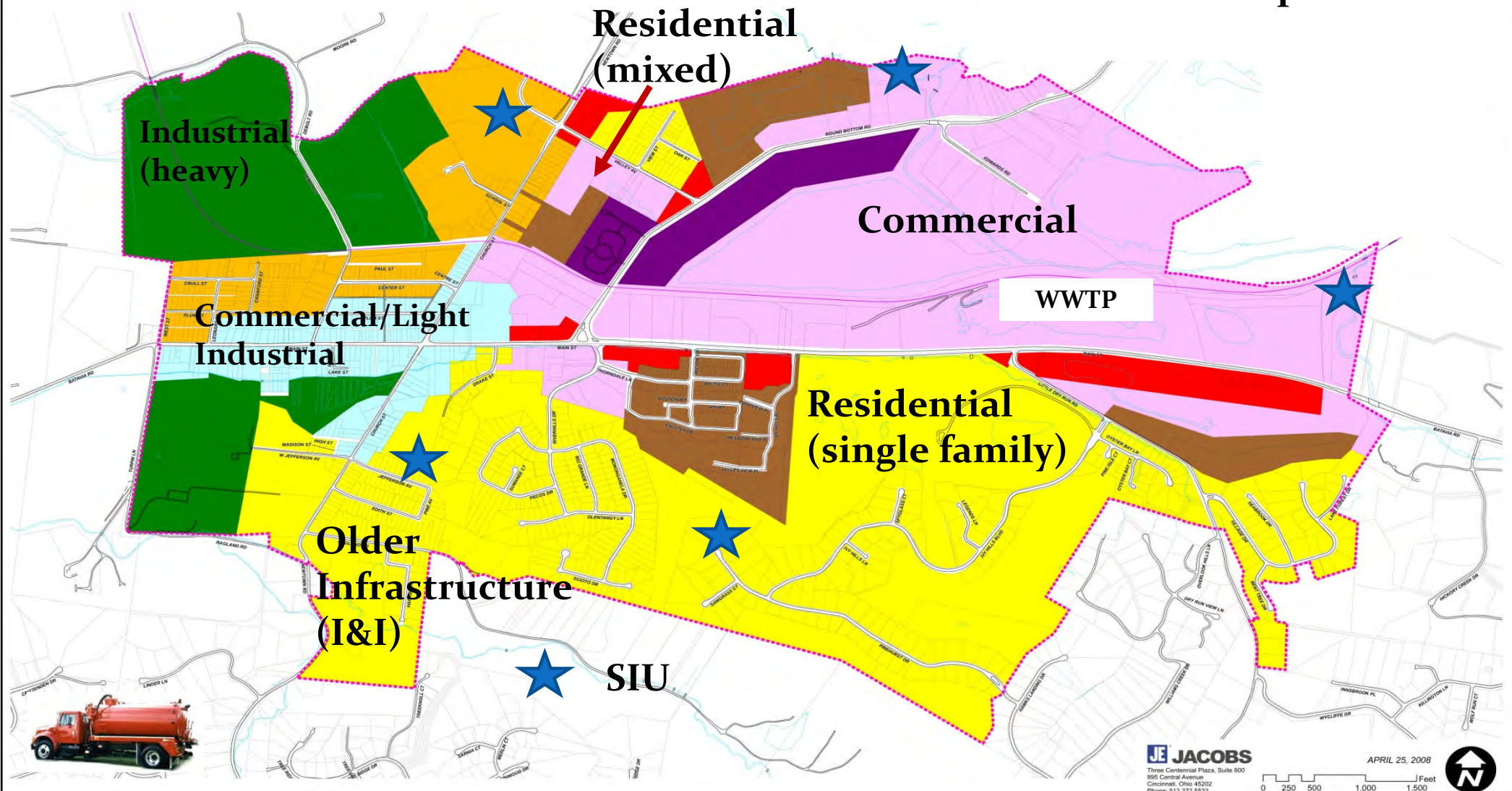
2022 PFAS Memo Recommendations – Development of BMPs

- Product elimination or substitution when available in the industrial process.
- Accidental discharge minimization by optimizing operations and good housekeeping practices.
- Equipment decontamination or replacement to prevent discharge of legacy PFAS following the implementation of product substitution.

Source Identification

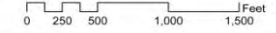
- Industrial User Inventory and Characterization
 - Service area non-domestic or industrial users
 - Yellow pages
 - Internal Municipal/County Departments
 - Surveys
 - Inspections
 - Review of MSDS
 - Information on process(es) or unit operations
 - Sampling of IUs and/or service area

Service Area Map



JE JACOBS
Three Centennial Plaza, Suite 800
895 Central Avenue
Cincinnati, Ohio 45202
Phone: 513.272.5533

APRIL 25, 2008



PFAS Non-Domestic Sources

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

Goals of a PFAS Sampling Program

- Determine the impact of industrial wastes on the POTW's collection and treatment system.
- Evaluate compliance by industrial users with applicable Pretreatment Standards and Requirements.
- Quantify PFAS loading in Service area

Source Minimization

- Outreach
- Best Management Practices
 - Product Elimination or Substitution, when available
 - Equipment decontamination or replacement to prevent discharge of legacy PFAS.
 - Operational Controls and Good Housekeeping to minimize spills/slug discharges
 - Product Substitution
 - Waste Treatment

PFAS Requirements?

- 2022 PFAS Memo – recommendations
- PFAS Rulemaking
 - Metal Finishing – 40 CFR 433
 - OCPSF 40 CFR 414 - PFAS Manufacturers
- PFAS Water Quality Criteria
- NPDES Permits



STOOL BUS

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EPA Region 8 Pretreatment Coordinator

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