



# PFAS in Drinking Water Camanche, Iowa

Environmental Protection Agency - Region 7

April 20, 2023

Scott Marquess, Compliance Officer

## Why is EPA in Camanche?

**PFAS contamination has been detected in shallow groundwater used for private drinking water wells and the Camanche Public Water System.**

**PFAS are widely used, long-lasting chemicals, which break down very slowly. Studies have shown that exposure to some PFAS may be linked to harmful health effects.**

**EPA, 3M, and Camanche are working to take initial actions to address PFAS-related drinking water concerns.**

# Introductions

## City of Camanche

- Austin Pruett, Mayor
- Andrew Kida, City Administrator

## Environmental Protection Agency - Region 7

- Pamela Houston, Community Involvement Coordinator
- Ben Washburn, Section Chief, Public Engagement and Communications Services
- Nicole Moran, Section Chief, Drinking Water Enforcement and Inspections
- Mike Beringer, Branch Chief, Groundwater and Drinking Water
- Todd Phillips, PFAS Coordinator
- Shane McCoin, Attorney
- Scott Marquess, Compliance Officer

## Iowa Department of Natural Resources

- Aaron Pickens, Environmental Specialist Senior

## 3M

- Dr. Rebecca Teeters, SVP Chemical Operations
- Jim Kotsmith, VP Corporate Environmental
- David Andrews, Cordova Plant Director

# Agenda

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**Background**

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**What is PFAS?**

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**Proposed EPA Regulation of PFAS**

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**PFAS in Camanche Drinking Water**

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**What is being done about PFAS in Camanche's drinking water?**

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**Actions to Address PFAS in Private Water Wells**

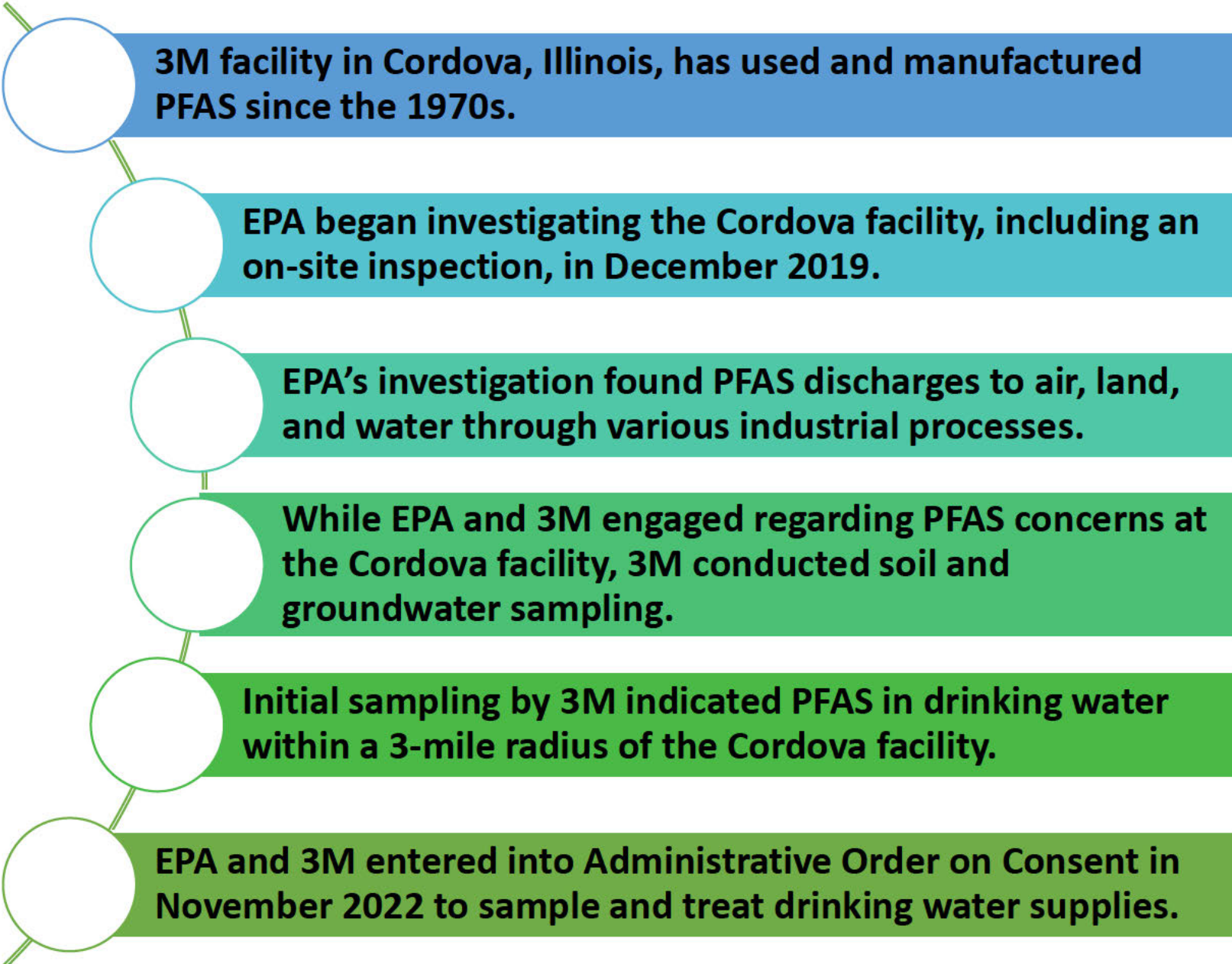
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**Actions to Address PFAS in Camanche Public Water System**

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**Questions**

# Background PFAS in Drinking Water in Camanche



**3M facility in Cordova, Illinois, has used and manufactured PFAS since the 1970s.**

**EPA began investigating the Cordova facility, including an on-site inspection, in December 2019.**

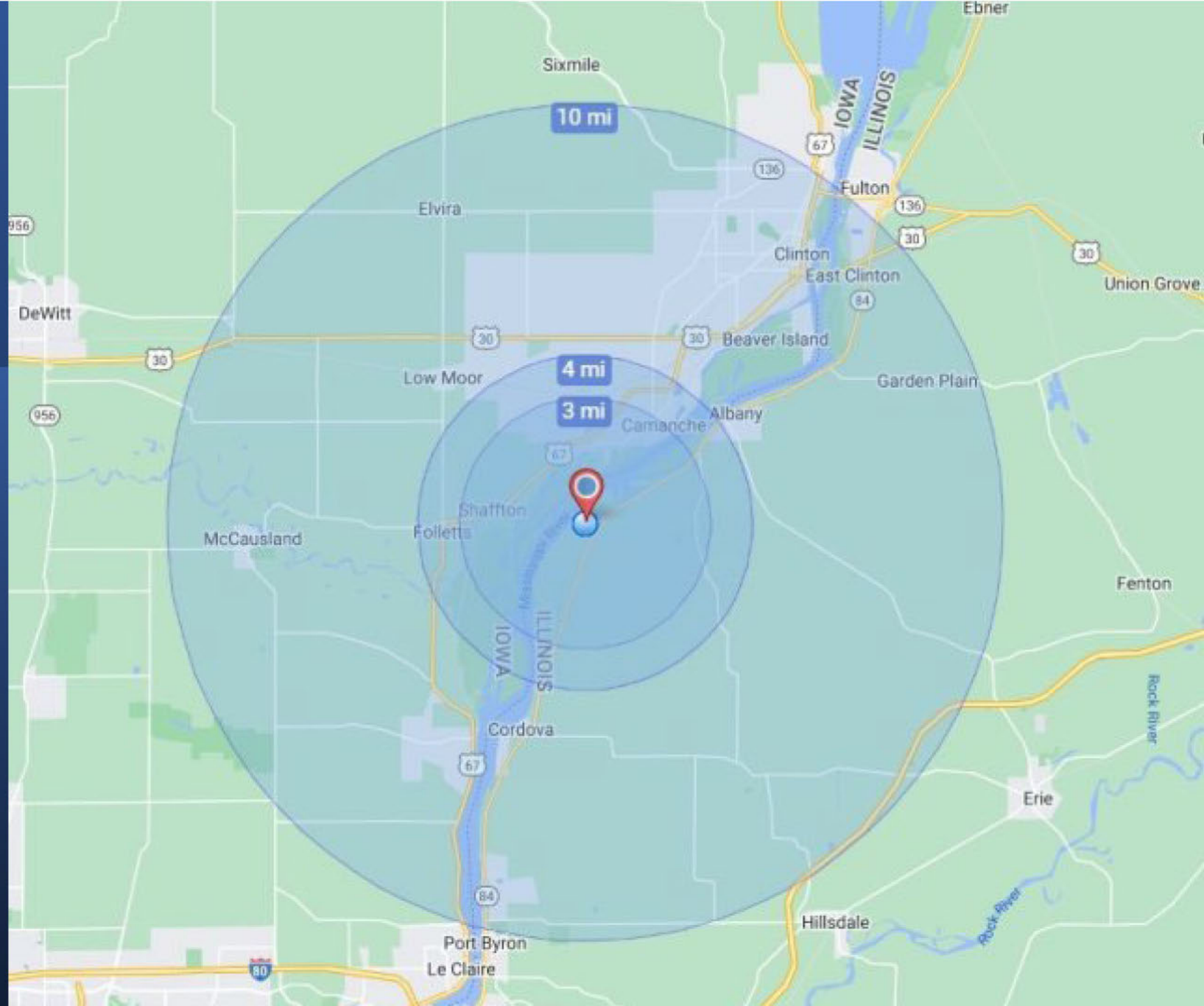
**EPA's investigation found PFAS discharges to air, land, and water through various industrial processes.**

**While EPA and 3M engaged regarding PFAS concerns at the Cordova facility, 3M conducted soil and groundwater sampling.**

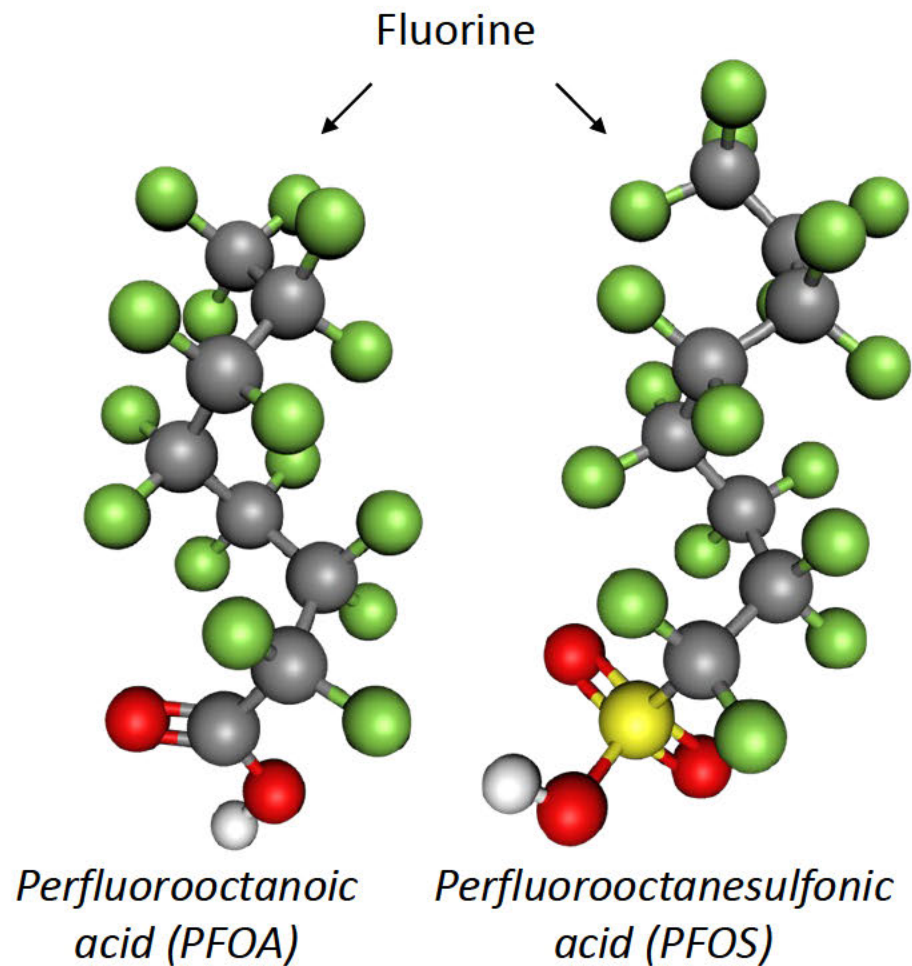
**Initial sampling by 3M indicated PFAS in drinking water within a 3-mile radius of the Cordova facility.**

**EPA and 3M entered into Administrative Order on Consent in November 2022 to sample and treat drinking water supplies.**

# 3M Cordova Area Map



# What are Per- and Polyfluoroalkyl Substances (PFAS) and why are we concerned?



## **PFAS captures a large class of synthetic chemicals**

- Chains of carbon atoms surrounded by fluorine atoms.
- Wide variety of chemical structures.

## **Used in homes, businesses, and industry since the 1940s**

- Used by a number of industries and found in many consumer products.
- Detected in soil, water, and air samples.
- Most people have been exposed to PFAS.

## **Known or suspected toxicity**

- Potential developmental, liver, immune, and thyroid effects.
- Some are relatively well-understood; many others are not.
- Resist decomposition in the environment and in the human body.

# How will EPA regulate PFAS in Public Water Systems?

- In March 2023, EPA proposed to establish maximum allowable levels, called Maximum Contaminant Levels (MCLs), for six PFAS in Public Water Systems.
- MCLs apply only to PWSs, not to private drinking water wells.

Compound	Proposed MCL (enforceable levels)
PFOA	4.0 ppt*
PFOS	4.0 ppt*
PFNA	1.0 (unitless) Hazard Index
PFHxS	
PFBS	
HFPO-DA (commonly referred to as GenX Chemicals)	

The Hazard Index is a tool used to evaluate potential health risks from exposure to chemical mixtures.

\*ppt = parts per trillion (also expressed as ng/L)



# What does the proposed PFAS MCL rule require?

## The rule will require Public Water Systems to:

- Monitor for these PFAS.
- Notify the public of the levels of these PFAS.
- Reduce the levels of these PFAS in drinking water if they exceed the proposed standards.

## The rule is not yet effective

- EPA anticipates finalizing the regulation by the end of 2023.
- Once the rule is finalized, water systems will not be required to meet the MCLs until after a specified implementation time period.

# PFAS in Camanche Drinking Water

## Sampling efforts in the 3M Cordova area

Who	What	When
3M	Shallow groundwater and soils	2021 / 2022
3M	58 private wells in Iowa within 3 miles of Cordova	2022 / 2023
3M and IDNR	Camanche Public Water System	2022 / 2023

# PFAS in Camanche Drinking Water (cont.)

## Sampling Results:

- **PFAS detected in shallow groundwater in the Camanche area**
- **Private wells in Camanche impacted by PFAS**
  - **PFOS: non-detect to 25 ppt**
  - **PFOA: non-detect to 30 ppt**
  - **Other PFAS detected**
- **Camanche PWS shallow wells impacted by PFAS**
  - **PFOS: maximum of 16 ppt**
  - **PFOA: maximum of 10 ppt**
  - **Other PFAS detected**
- **No PFAS detected in Camanche PWS deep well (Well 5)**

# What is being done about PFAS in Camanche's Drinking Water?

**EPA/3M agreement in November 2022**

**3M will take or is taking the following actions:**

- Offer to sample private wells within 4 miles of 3M/Cordova.
- Offer to install and maintain treatment systems on all private drinking water systems within 3 miles of 3M/Cordova.
- Offer to provide alternate drinking water or treatment to the Camanche PWS.
- Offer to sample other public water systems within 10 miles of 3M/Cordova and Quad Cities.
- Coordinate and communicate results with EPA and IDNR.

## Actions to Address PFAS in Private Wells

**Sampling private wells within 4 miles  
underway – 3M**

**Treatment for private wells within 3  
miles underway – 3M**

**If you live within the 3 or 4 mile radius  
of the Cordova facility and want to sign  
up for sampling / treatment, contact  
Barr Engineering Co. at 1-833-227-1705  
or [Cordova3M@barr.com](mailto:Cordova3M@barr.com)**

# Actions to address PFAS in Camanche Public Water System

**Camanche PWS plans to replace contaminated shallow wells with deep wells – to be reimbursed by 3M**

**Existing deep Well 5 (no PFAS detected) rehabbed and serving water – as of April 10, 2023**

**Plan to locate and drill two new, deep wells – in service by 2026**

QUESTIONS

# Points of Contact

## Scott Marquess

- Compliance Officer, EPA Region 7
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## Andrew Kida

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## Aaron Pickens

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## 3M / Barr Engineering Co.

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