

Per- and Polyfluoroalkyl Substances (PFAS)

Cochise County

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2023 Drinking Water System Testing Project

EEPA’s Unregulated Contaminant Monitoring Rule (UCMR) program requires drinking water systems with more than 3,300 customers to test for PFAS and other compounds. Complementary to the UCMR program, ADEQ has begun sampling regulated drinking water systems that serve less than 3,300 customers. To ensure all drinking water systems in Arizona are tested, ADEQ is using \$3 million of federal Safe Drinking Water Act funds to provide free PFAS testing to the drinking water systems.

Systems eligible for this project are the community and non-transient and non-community drinking water systems with less than 3,300 customers. ADEQ’s water samples are being collected at the Entry Point to the Distribution System (EPDS) and not at individual source wells unless the system has only one well. An EPDS is the point at which water pumped from several wells join together before entering the water lines leading to individual homes.

All ADEQ sampling activities are conducted following EPA testing protocols and analytical methods for 29 PFAS compounds. This early monitoring data will be used to assess the breadth of the issue in Arizona and to assist drinking water systems in satisfying future EPA compliance monitoring requirements.

County Results: The results for drinking water systems in the County are presented in Table 1 and detailed results for the systems with a PFAS detection above one of EPA’s proposed Maximum Contaminant Levels (MCLs) are listed in Table 2. Systems with a PFAS detect below EPA’s proposed MCLs include:

- Southland Utilities - Golden Acres
- Ashley Rose Mobile Home Park
- Bella Vista Water South

Table 1 Cochise County Public Water Systems		#
Total systems		104
Systems eligible for the ADEQ 2023 Testing Project (regulated and less than 3,300 customers)		56
Systems participating to date		49
Systems with PFAS detects		5
Systems with PFAS detects above EPA’s proposed MCLs*		2

* EPA has proposed MCLs for PFOA and PFOS to be 4 parts per trillion (ppt) each. PFHxS, PFNA, PFBS, and HFPO-DA (commonly referred to as GenX Chemicals) are proposed to be regulated using a Hazard Index (HI) with an MCL of 1.0.



Wastewater and Biosolids Sampling

ADEQ sampled wastewater effluent and biosolids at several locations throughout the state. Sampling locations in the county included:

- City of Bisbee San Jose Wastewater Treatment Plant
 - PFAS were detected in both wastewater and biosolids
- City of Sierra Vista Wastewater Treatment Plant
 - Sample results are pending validation

Federally-Regulated Sites

Federal sites located in the county for which ADEQ monitors clean up activities:

- **Fort Huachuca:**
 - Completed a Preliminary Assessment and Site Inspection (PA/SI) of PFAS in February 2023
 - PFAS were detected in soil, groundwater, and drinking water within the installation boundaries
 - Identified the need for further study in a Remedial Investigation
- **Apache Powder Co. Federal Superfund Site:** This site has not been sampled for PFAS

Firefighting Aqueous Film Forming Foam (AFFF) Take Back and Replace Program

Over the past year, ADEQ has been working with interested fire departments to dispose of and replace AFFF containing PFAS. Although AFFF is very effective in quenching petroleum-based fires, it is also a major source of PFAS to drinking water. ADEQ's bit.ly/AFFFInteractiveMap contains additional details regarding the program.

Participating Fire Departments in the county:

- Bisbee Fire Department
- Elfrida Fire District
- Sunsites Pearce Fire District
- Portal Rescue Inc.

Gallons of AFFF replaced in the county by ADEQ at no cost to the department

- 95 gallons



**Table 2
Cochise County Drinking Water Systems Above the EPA Proposed MCL**

EPDS Number	Analyte	EPA Test Method	Date Sampled	Result (ng/L = parts per trillion or ppt)	Detection Limit (ng/L = parts per trillion or ppt)	Proposed MCL or HI exceeded	Other PFAS Detected
AZ ELECTRIC POWER APACHE							
EPDS001	PFBS	EPA 537.1	2023-02-07	18.3	1.82	N	Y
EPDS001	PFOA	EPA 537.1	2023-02-07	22.8	1.82	Y	Y
EPDS001	PFOS	EPA 537.1	2023-02-07	208	18.2	Y	Y
EPDS001	PFHXS	EPA 537.1	2023-02-07	132	1.82	Y	Y
EPDS001	PFBS	EPA 533	2023-02-07	14.3	2.82	N	Y
EPDS001	PFOA	EPA 533	2023-02-07	21.3	3.76	Y	Y
EPDS001	PFOS	EPA 533	2023-02-07	187	3.76	Y	Y
EPDS001	PFHXS	EPA 533	2023-02-07	113	2.82	Y	Y
EAST SLOPE WATER - WEST							
EPDS006	PFHXS	EPA 533	2023-02-09	3.52	2.74	N	Y
EPDS006	PFHXS	EPA 537.1	2023-02-09	3.69	1.79	N	Y
EPDS004	PFBS	EPA 537.1	2023-02-09	5.06	1.74	N	Y
EPDS004	PFOA	EPA 537.1	2023-02-09	6.83	1.74	Y	Y
EPDS004	PFOS	EPA 537.1	2023-02-09	6.08	1.74	Y	Y
EPDS004	PFHXS	EPA 537.1	2023-02-09	1.85	1.74	N	Y
EPDS004	PFHXA	EPA 533	2023-02-09	5.50	2.78	N	Y
EPDS004	PFBS	EPA 533	2023-02-09	4.44	2.78	N	Y
EPDS004	PFOA	EPA 533	2023-02-09	6.23	3.7	Y	Y
EPDS004	PFOS	EPA 533	2023-02-09	5.12	3.7	Y	Y

