PFAS CHARACTERIZATION STUDY

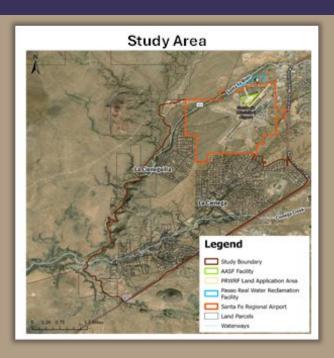
SANTA FE COUNTY

STUDY GOAL

The goal of the study is to understand the magnitude and extent of PFAS in La Cieneguilla and La Cienega and to evaluate potential PFAS sources.

STUDY PURPOSE

The purpose of the study is to determine appropriate mitigation and remediation practices that will help protect the health and welfare of the people living in affected communities.



Average PFAS Concentrations for La Cieneguilla Sampled Wells (Total PFAS: 100 ng/L) PFOS, 13.9 PFPAA, 18.5 PFBS, 9.3 PFHXA, 14.2 PFOA, 15.3

STUDY RESULTS

Location of Contamination

- Maximum Contamination Levels (MCLs) exceedances [1]
 were found in several La Cieneguilla well samples.
- While PFAS was detected in some wells in La Cienega, none exceeded MCLs.

Potential Sources of Contamination by Reported PFAS

- Aqueous film forming foam (AFFF) frequently used for firefighting purposes at the National Guard's Army Aviation Support Facility (AASF)
- Leachate from biosolids surface disposal
- Wasterwater effluent from the Paseo Real Water Reclamation Facility (PRWRF)

Possible Sources of Contamination by Unreported PFAS

- Septic tanks
- Santa Fe Regional Airport

The U.S. Environmental Protection Agency (EPA) established a <u>National Primary Drinking Water Regulation (NPDWR)</u> for six PFAS compounds on April 10, 2024. This rule sets Maximum Contaminant Levels (MCLs) of 4.0 parts per trillion (ppt) for PFOA and PFOS individually, and 10 ppt for PFNA, PFHxS, HFPO-DA (GenX) individually, and the PFBS in combination regulated through a Hazard Index. Key aspects of the NPDWR: Enforceable Standards, Monitoring Requirements, Action to Reduce Levels, and Health Protections. (https://www.epa.gov/sdwa/and-polyfluoroalkyl-substances-pfas)

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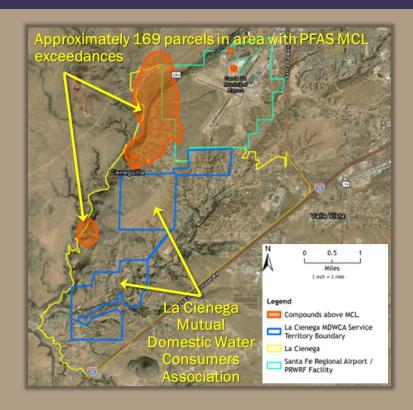
MITIGATION & REMEDIATION

Short Term Options

- Point of Use (POU)Water Treatment: POU systems focus treatment on the point where water is directly consumed (i.e. faucet or pour-through pitchers).
- Point of Entry (POE) Water Treatment:
 POE systems treat all incoming water and may be installed on the well.

Long Term Options

- Deeper wells (if feasible)
- Connect to public water system
- Remediation
- Point of Use Treatment (POU) where other options are not feasible.



DATA GAPS

	Data Gap	Potential Resolution	
1	Construction of wells in La Cieneguilla	Install monitoring wells	
2	Extent of PFAS in southwest La Cienega	Collect additional groundwater samples	
3	Extent of PFAS west of the Santa Fe River	Collect additional groundwater samples	
4	Extent of PFAS in the Santa Fe River	Collect additional surface water samples downstream	
5	Extent of perch zone at AASF	Install monitoring wells	
6	Leaching potential of PFAS in soils	Conduct vadose zone modeling*	
7	Source identification	Install monitoring wells between AASF and La Cieneguilla	
8	Single sampling event that represents one point in time	Monitor a sub-set of wells over time	

^{*}Vadose zone leaching modeling: https://www.epa.gov/water-research/vadose-zone-leaching-vleach

