Hazen





Paseo Real Water Reclamation Facility PFAS Sampling Overview

August 15, 2024

PRWRF background

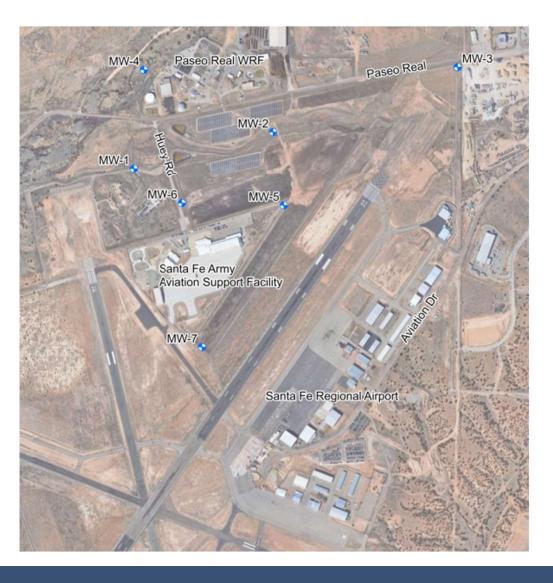
- The Paseo Real Water Reclamation Facility is the City of Santa Fe's wastewater treatment facility.
- The City historically used the site as a sludge disposal facility by land application.
- Soil and hydromulch were applied to the ground surface after land application of sludge was discontinued at the site.
- The City is currently collecting groundwater and soil samples to evaluate whether there is poly- and perfluoroalkyl substances (PFAS) contamination below the former sludge disposal facility.
- There are seven groundwater monitor wells associated with the site.

City of Santa Fe Paseo Real Water Reclamation Facility



PRWRF monitor wells

- There are 7 existing site monitor wells
 - MW-1 through MW-7



PRWRF PFAS sampling

• The current PRWRF PFAS sampling project will include

- Four quarters of groundwater monitoring: June, September, and December 2024 and March 2025
 - Depth to water will be measured in each facility monitor well during each sampling event, and the data will be used to prepare potentiometric surface maps showing the groundwater elevations and direction of groundwater flow.
 - The first groundwater sampling event was completed on June 20-21, 2024
- One soil sampling event
 - Completed on July 3, 2024
 - 11 samples from 2-3 feet below ground surface (including 1 control sample collected off site)
 - 1 sample and a duplicate of the surface materials
 - 1 aqueous field blank
- All samples will be analyzed using EPA Method 1633.
 - This method includes 40 PFAS analytes.

PRWRF potentiometric surface map, June 2024



PFAS groundwater sampling, June 2024

- In June 2024, all seven PRWRF monitor wells were sampled
 - No PFAS analytes were detected in 5 monitor wells.
 - Two field blanks were collected and neither had any PFAS detections.
 - The MW-4 sample had one PFAS detection (PFBS, 2.67 ng/L).
 - The MW-1 sample had 8 PFAS detections (ranging from 2.24 to 21.7 ng/L)
 - The detected concentrations were less than the applicable screening levels provided in the New Mexico Environment Department's November 2022 risk assessment guidance document (NMED, 2022).
 - The MW-1 PFOA concentration (7.03 ng/L) exceeded the EPA's primary drinking water standard of 4.0 ng/L.
- Additional groundwater sampling events will be conducted in September and December 2024, and March 2025.

PRWRF Groundwater Sampling Results, June 2024				
Analyte	U.S. EPA National Primary Drinking Water Standard (ng/L)	NMED Human Health Screening Level Tap water, noncancer (ng/L)	Concentration (ng/L)	
			MW-1	MW-4
			6/21/2024	6/21/2024
PFBA	NS	NS	10.6	<6.12
PFPeA	NS	NS	21.7	<3.06
PFHxA	NS	NS	21.1	<1.53
PFHpA	NS	NS	4.13	<1.53
PFOA	4.0	60.2	7.03	<1.91
PFNA	10	60.2	<1.58	<1.53
PFBS	NS	6,020	14.2	2.67
PFPeS	NS	NS	2.24	<1.43
PFHxS	10	401	7.16	<1.40
PFOS	4.0	60.2	<1.47	<1.42
HFPO-DA (Gen X)	10	NS	<6.58	<6.39
Hazard index (unitless)	1.0	NS	0.7	0.0

NS = No standard/screening level Samples were analyzed by Enthalpy Analytical using EPA Method 1633.

PRWRF monitor wells



Questions?