Central and Camelback Water Quality Assurance Revolving Fund (WQARF) Registry Site

Community Advisory Board (CAB) Presentation

October 11, 2023

Project Manager: Mikel Morales



Clean Air, Safe Water, Healthy Land for Everyone

WQARF Process







Central and Camelback WQARF Site





- Contaminants of Concern = Tetrachloroethene (PCE) and trichloroethene (TCE)
- Source of Contamination = Former dry-cleaning facility
- Current Impacted Media = Groundwater and soil
- Potential Receptors = Salt River Project water supply well



- Ozone Sparge System
 - In Situ Chemical Oxidation (ISCO) Technology
 - Six injection wells installed in the vadose zone
 - Commissioned in November 2022
 - Intermittent operation due to operational challenges
 - Restarted in September 2023 3-month operation period



- Soil Vapor Extraction (SVE)
 - Pulse Operation
 - System restarted November 2022
 - Minor downtime during operational period
 - Scheduled to shutdown at end of current ozone sparge operation period
 - Soil Gas Sampling
 - October 2022 [Rebound Monitoring]
 - December 2022 [Performance Monitoring]
 - March 2023 [Performance Monitoring]
 - April 2023 [Performance Monitoring]

Soil Gas PCE Concentration Trends





October 2022 Rebound Monitoring







Semiannual Groundwater Monitoring

COC Concentrations			
Constituent	Detection Range [µg/L]	AWQS [µg/L]	Wells Above AWQS
PCE	0.45 – 5.3	5	CC-4
TCE	0.217 – 5.39	5	CC-18

* Semiannual sampling performed in October 2022 and

April 2023

COC – Contaminant of Concern

 $\mu g/L$ – micrograms per liter

AWQS – Aquifer Water Quality Standard

System Decommissioning

Decommissioned Groundwater Extraction
Treatment System in September 2022

Recent Groundwater Monitoring Activities



- PCE detected above the AWQS of 5 µg/L in one monitoring well (CC-4).
- Concentrations and contours presented in units of µg/L.
- March 2019 dewatering well concentrations used for contouring.

PCE Concentration Figure – April 2023





- TCE detected above the AWQS of 5 μg/L in one monitoring well (CC-18).
- Concentrations and contours presented in units of µg/L.
- March 2019 dewatering well concentrations used for contouring.

TCE Concentration Figure – April 2023





- Soil Remediation
 - Continued Pulse SVE Operation
 - Complete Ozone Sparge Pilot Study
- Groundwater Remediation
 - Routine Semiannual Groundwater Monitoring
- Finalize Record of Decision

Thank you! Questions?



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ADEQ Community Involvement Coordinator

- **Barbara Boschert**
- Boschert.Barbara@azdeq.gov
- 602.771.8007
- **ADEQ Project Manager**
- **Mikel Morales**
- Morales.Mikel@azdeq.gov
- 602.771.4182

