7<sup>th</sup> Avenue and Bethany Home Road Water Quality Assurance Revolving Fund (WQARF) Registry Site

Community Advisory Board (CAB)

Presentation

October 11, 2023

Project Manager: Mikel Morales

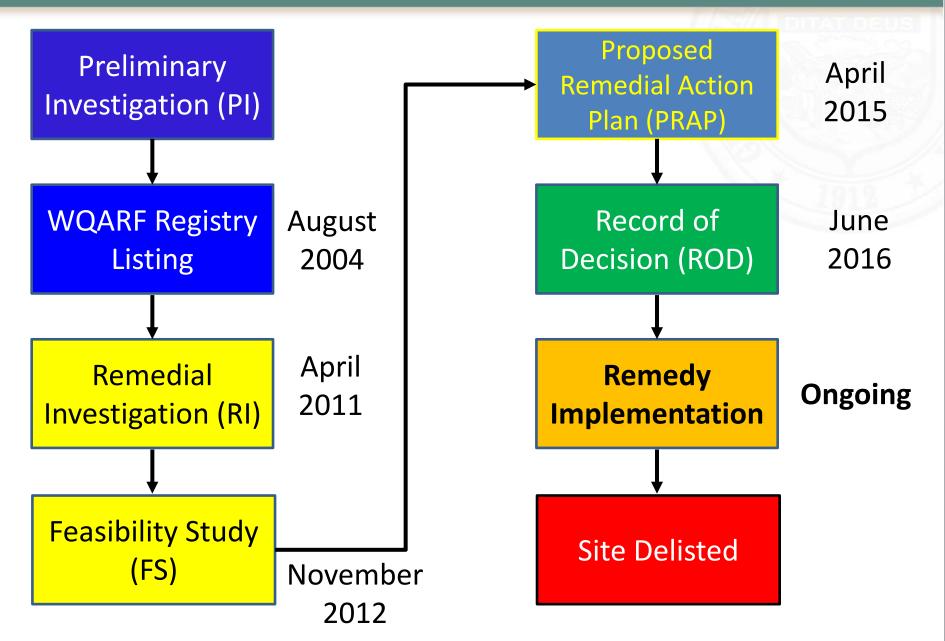


Clean Air, Safe Water, Healthy Land for Everyone



#### **WQARF** Process





## Background



- Contaminants of Concern = Tetrachloroethene (PCE), Trichloroethene (TCE), Vinyl Chloride (VC), and Cis-1,2-Dichloroethene (Cis-1,2-DCE)
- Source of Contamination = Former dry-cleaning facilities
- Current Impacted Media = Groundwater
- Potential Receptors = Salt River Project (SRP)
   water supply well

#### Site Location



#### 7th Ave and Bethany Home Road







Estimated WQARF Plume
Counties

(WQARF) Water Quality Assurance Revolving Fund Site

Publication Number: M 22-01 Plume Data Update: 6/10/2022

Plume boundaries depicted on the site map represent ADEGs interpretation of data available at the time the map was constructed. The map is intended to provide the public with basic information as to the estimated geographic extent of known contamination as of the date of map production. The actual extent of contamination may be different. Therefore, the plume for this site may change in the future as new information becomes available.



Date Saved: 10/7/2022

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# Selected Remedy\*



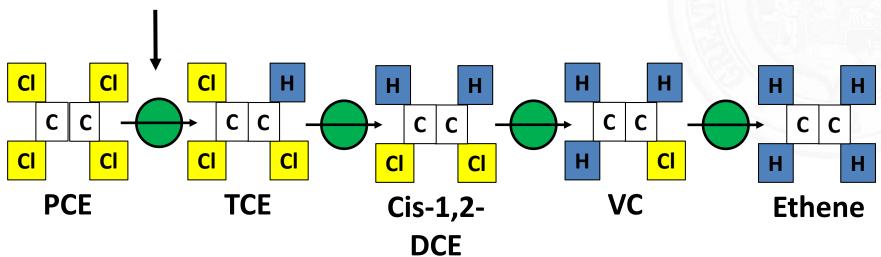
- In-Situ Enhanced Reductive Dechlorination (ERD)
  - Injections
  - Performance Monitoring
- Monitored Natural Attenuation (MNA)
  - Natural Degradation of Plume
- Contingency for Wellhead Treatment at SRP Well

<sup>\*</sup>Record Of Decision (ROD) dated June 28, 2016

#### **Enhanced Reductive Dechlorination**



#### **Electron Donor & Bacteria**

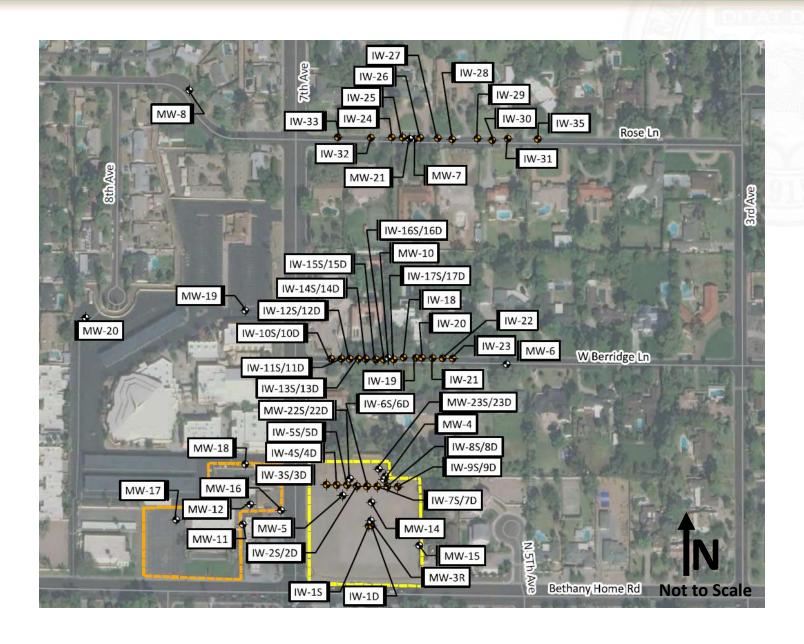


#### **General Process:**

- Biostimulation: Injection of Carbon Substrate (Food & Hydrogen) to Create the Right Conditions
- Bioaugmentation: Injection of Specialized Bacteria (Dehalococcoides [DHC]) to Facilitate Degradation of Chlorinated Compounds
- Performance Monitoring: Assess Conditions (Total Organic Carbon [food] and volatile organic compounds [VOCs])

### Monitor and Injection Well Locations





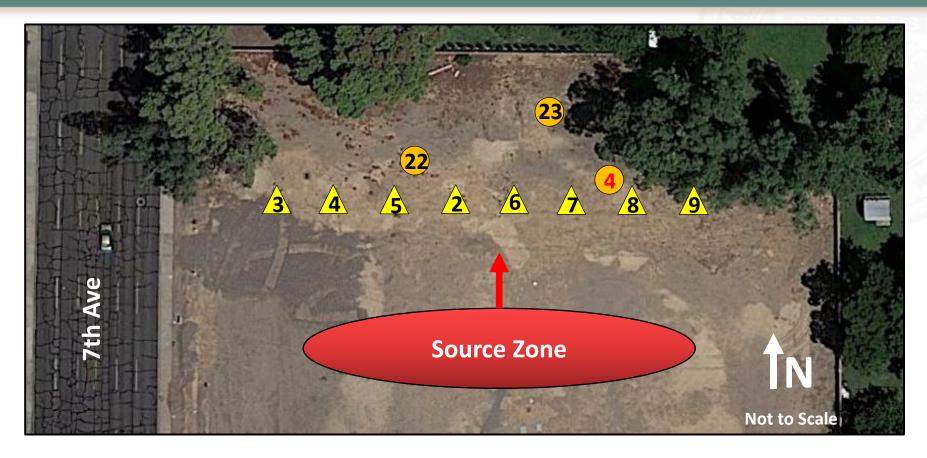
#### Fiscal Year 23 Remedial Activities



- October 2022
  - Limited Groundwater Performance Monitoring
- November 2022
  - Site-wide ERD Injections
- March 2023
  - Site-wide Annual Monitoring
- April and May 2023
  - Site-wide ERD Injections
  - Limited Groundwater Performance Monitoring

# **Bayless Property Detail Map**





Injection Well

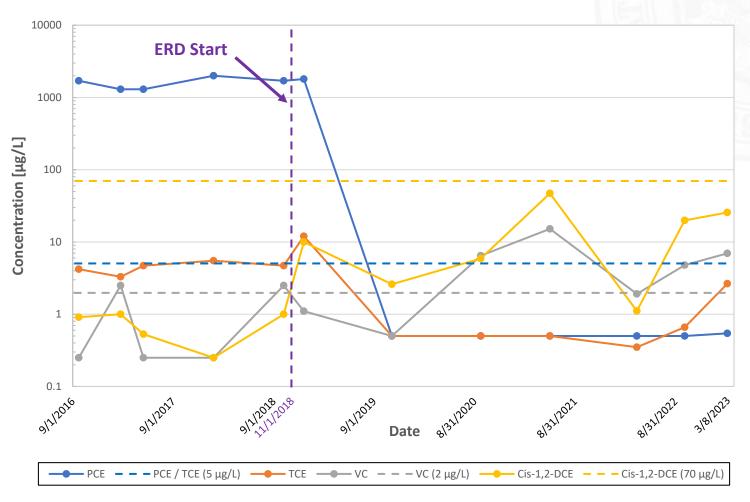
Monitoring Well

<sup>\*</sup>Red numbered wells discussed on next slides

### Groundwater Concentrations Trend – Bayless Property







µg/L – micrograms per liter
Dashed Horizontal Line – Aquifer Water Quality Standard (AWQS) for respective constituent

# Berridge Lane Detail Map







**Injection Well** 

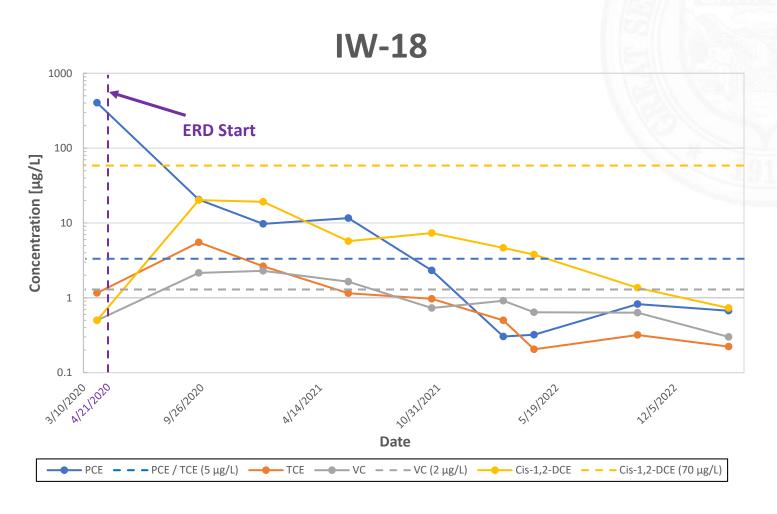


**Monitoring Well** 

<sup>\*</sup>Red numbered wells discussed on next slides

### Groundwater Concentrations Trend – Berridge Lane





μg/L – micrograms per liter
Dashed Horizontal Line – Aquifer Water Quality Standard (AWQS) for respective constituent

## Rose Lane Detail Map







**Injection Well** 



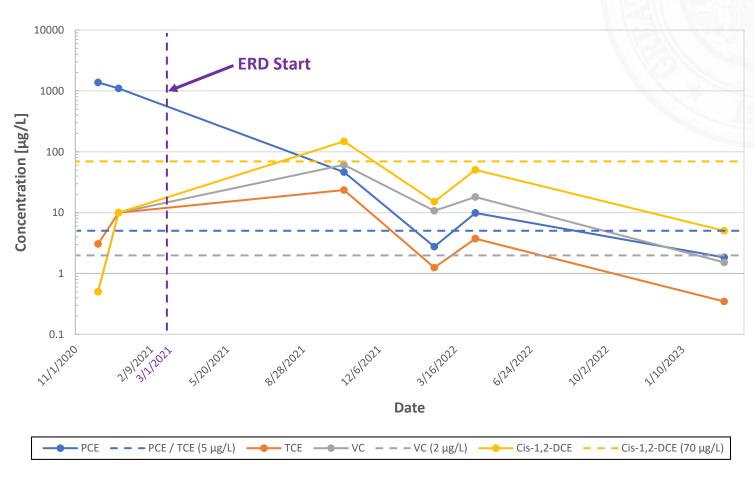
**Monitoring Well** 

<sup>\*</sup>Red numbered wells discussed on next slides

#### Groundwater Concentrations Trend – Rose Lane







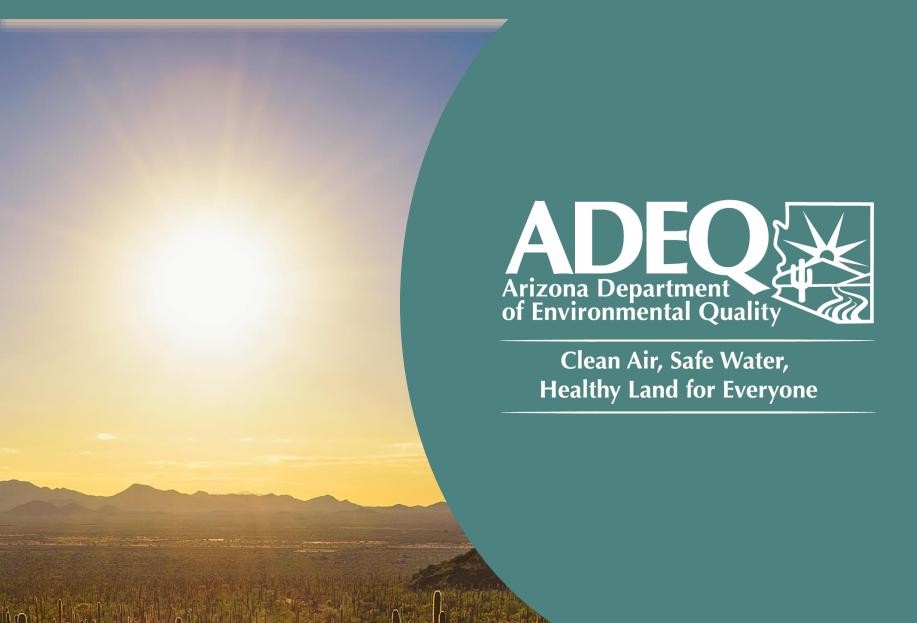
µg/L – micrograms per liter
Dashed Horizontal Line – Aquifer Water Quality Standard (AWQS) for respective constituent

## **Next Steps**



- Site-Wide Groundwater Monitoring
- Periodic Site Review

# Thank you! Questions?



#### **Contact Information**



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