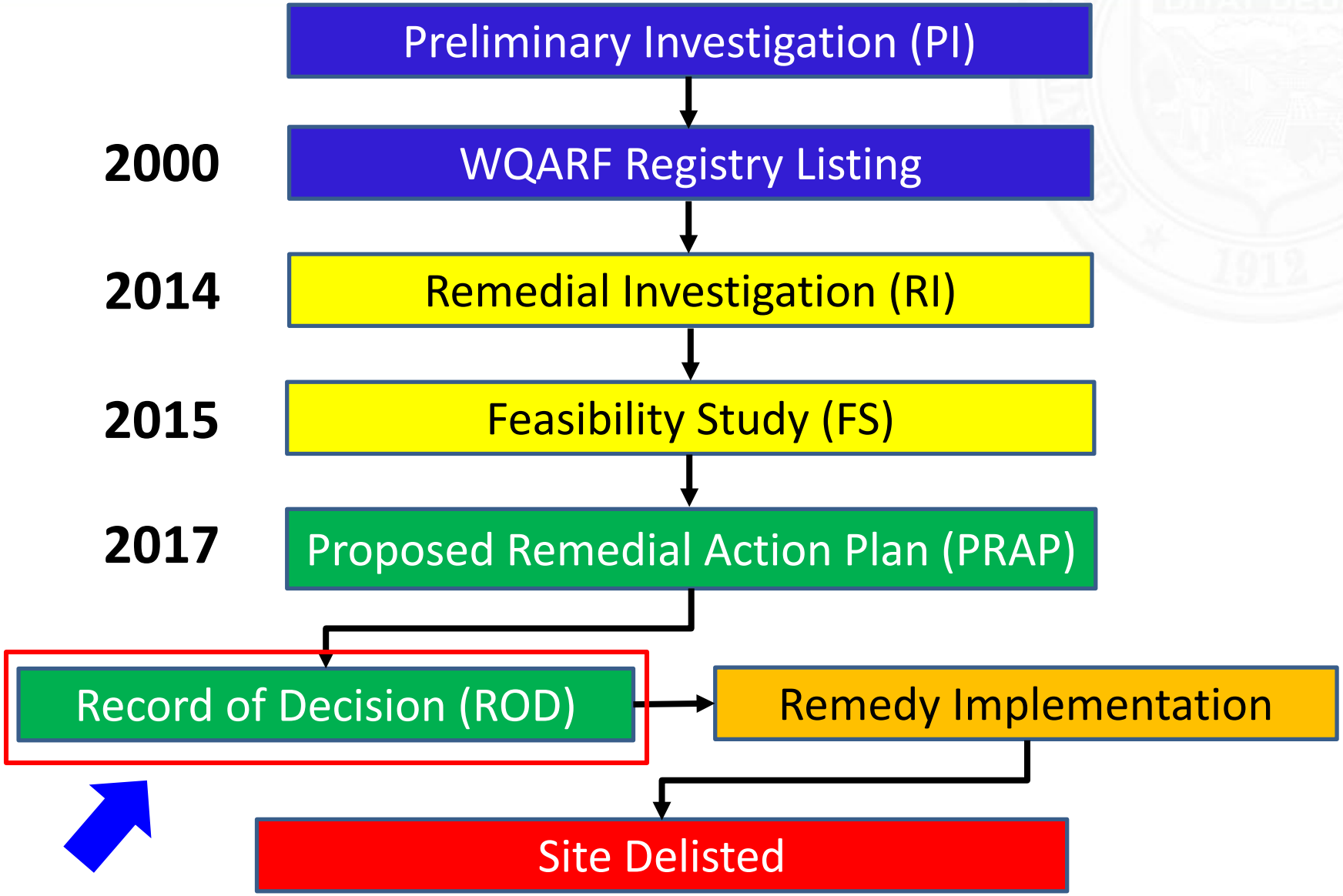
Central & Camelback Water Quality Assurance Revolving Fund (WQARF) Registry Site Community Advisory Board (CAB) Presentation

June 11, 2020

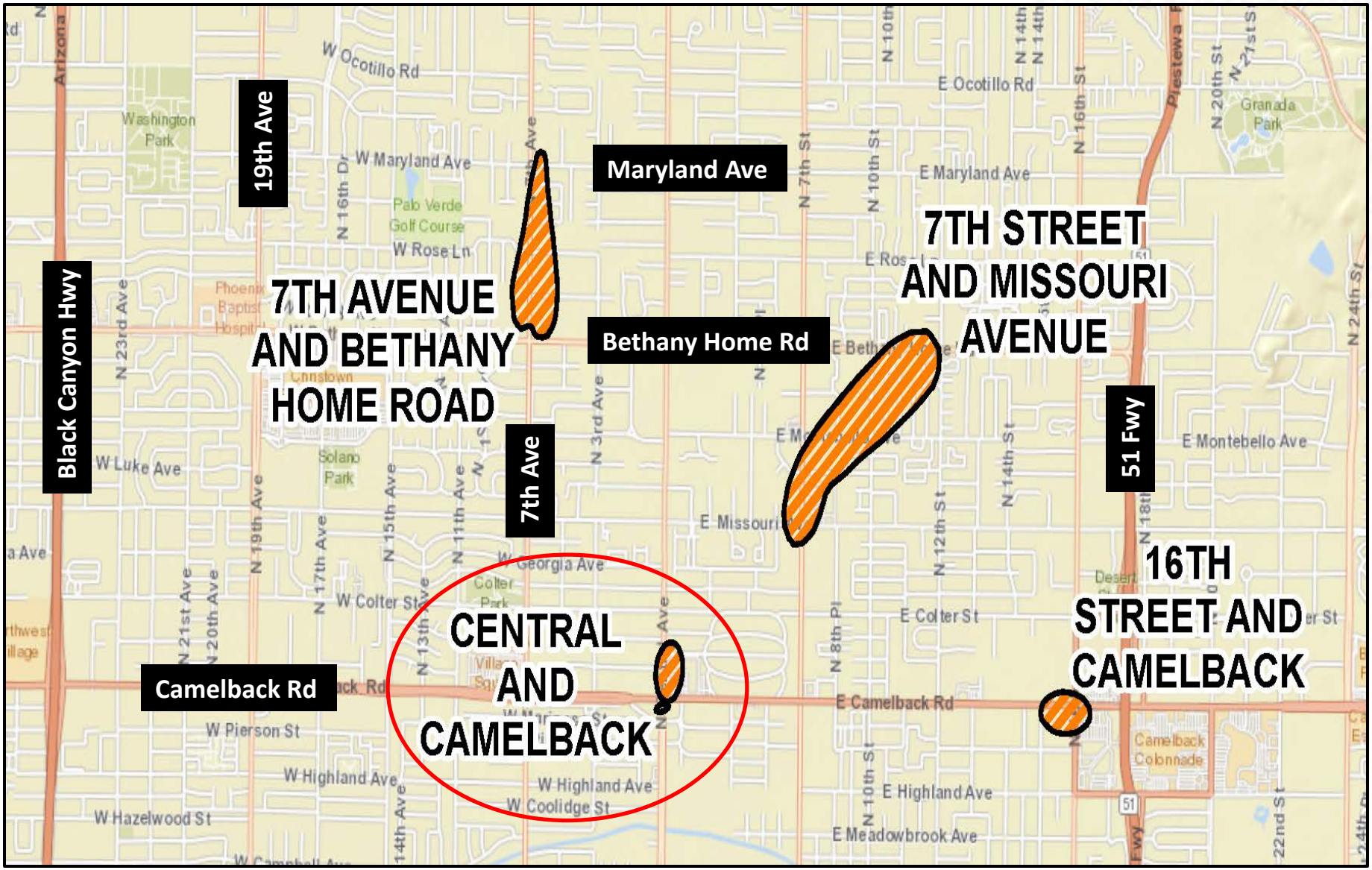
Mikel Morales, Project Manager

ADEQ
Arizona Department of Environmental Quality

WQARF Process



Central Phoenix WQARF Sites



Recent Groundwater Monitoring Activities

- Semiannual groundwater monitoring conducted in March 2020.
  - Three detections above the Aquifer Water Quality Standard (AWQS).

Contaminant	Well ID	Collection Date	AWQS [µg/L]	Concentration [µg/L]
Tetrachloroethene (PCE)	CC-4	27-Mar-20	5	**6.88**
Trichloroethene (TCE)	CC-18	26-Mar-20	5	**7.28**
Ethylbenzene	CC-18	26-Mar-20	700	**804**

µg/L - Micrograms per Liter

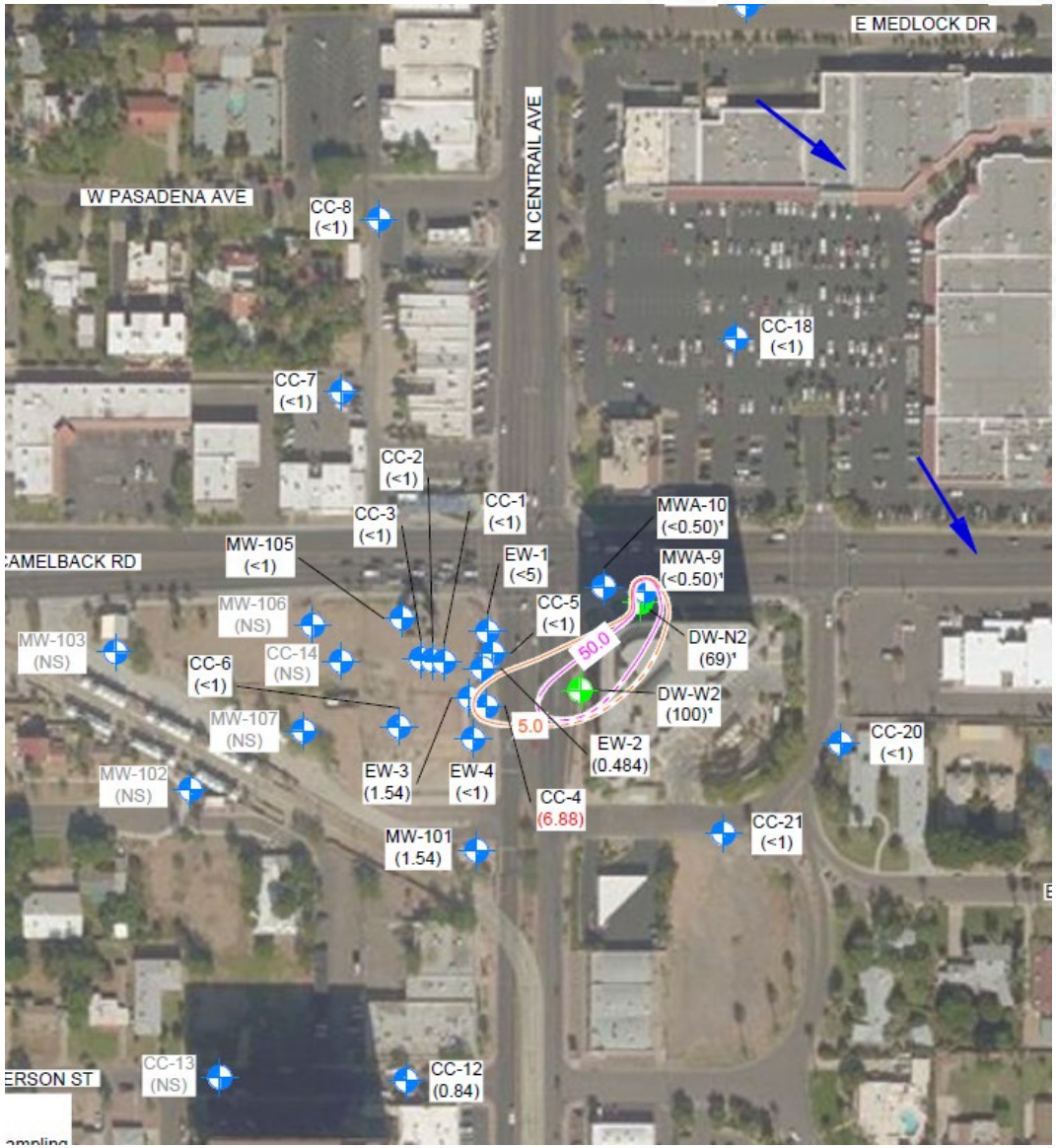
  - Ethylbenzene is not a contaminant of concern (COC) at the Site.
  - Not able to access dewatering wells located at the One East Camelback property for sample collection.
  - Depth to water measured between 66.8 feet below ground surface (bgs) and 97.4 feet bgs.
- Groundwater Extraction Treatment System (GETS) remains offline.

Recent Groundwater Monitoring Activities

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

AWQS – Aquifer Water Quality Standard
µg/L – micrograms per liter

PCE Concentration Figure – March 2020



Recent Groundwater Monitoring Activities

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

AWQS – Aquifer Water Quality Standard
µg/L – micrograms per liter

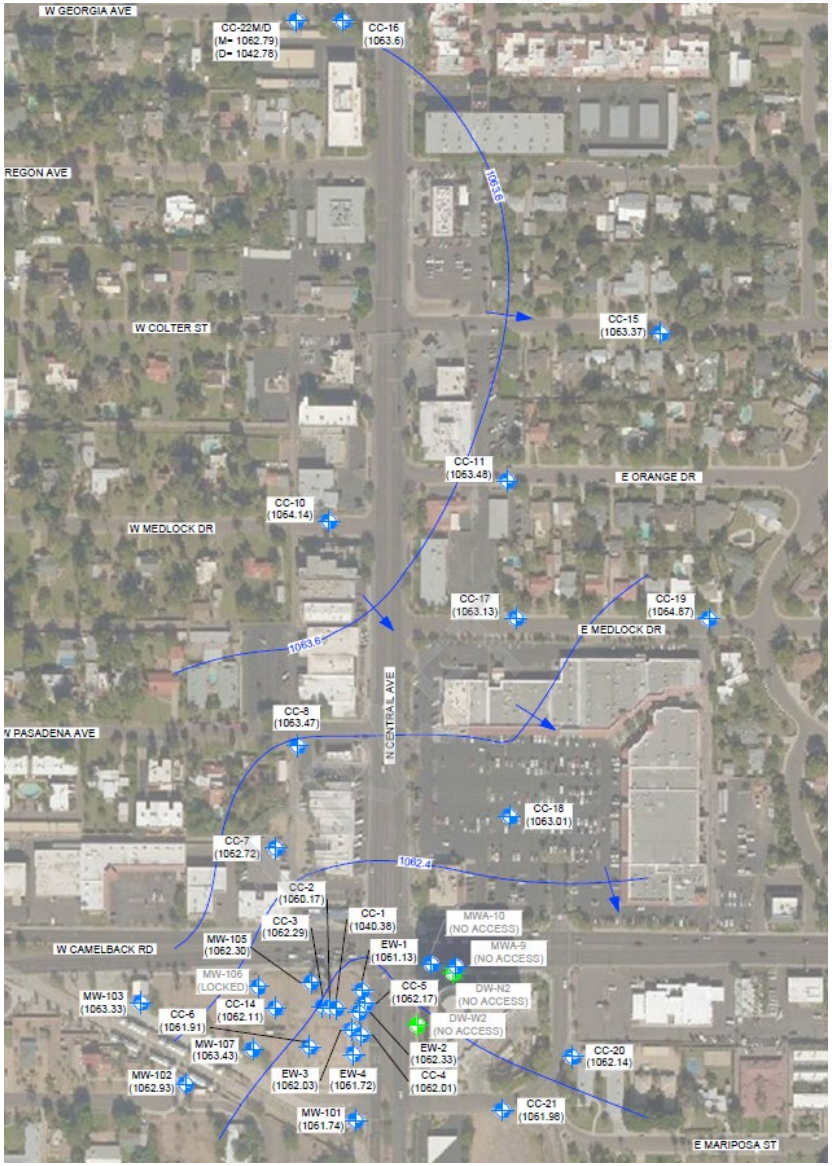
TCE Concentration Figure – March 2020

Recent Groundwater Monitoring Activities

Groundwater Elevation Figure – March 2020

- DTW ranged between 66.8 feet bgs and 97.4 feet bgs.
- Calculated groundwater elevations ranged between 1,060 feet amsl and 1,065 feet amsl.
- Groundwater flow direction towards the south-southeast.
- Elevations provided in feet amsl.

DTW – depth to water
bgs – below ground surface
amsl – above mean sea level



Recent Vadose Zone (Soil) Activities

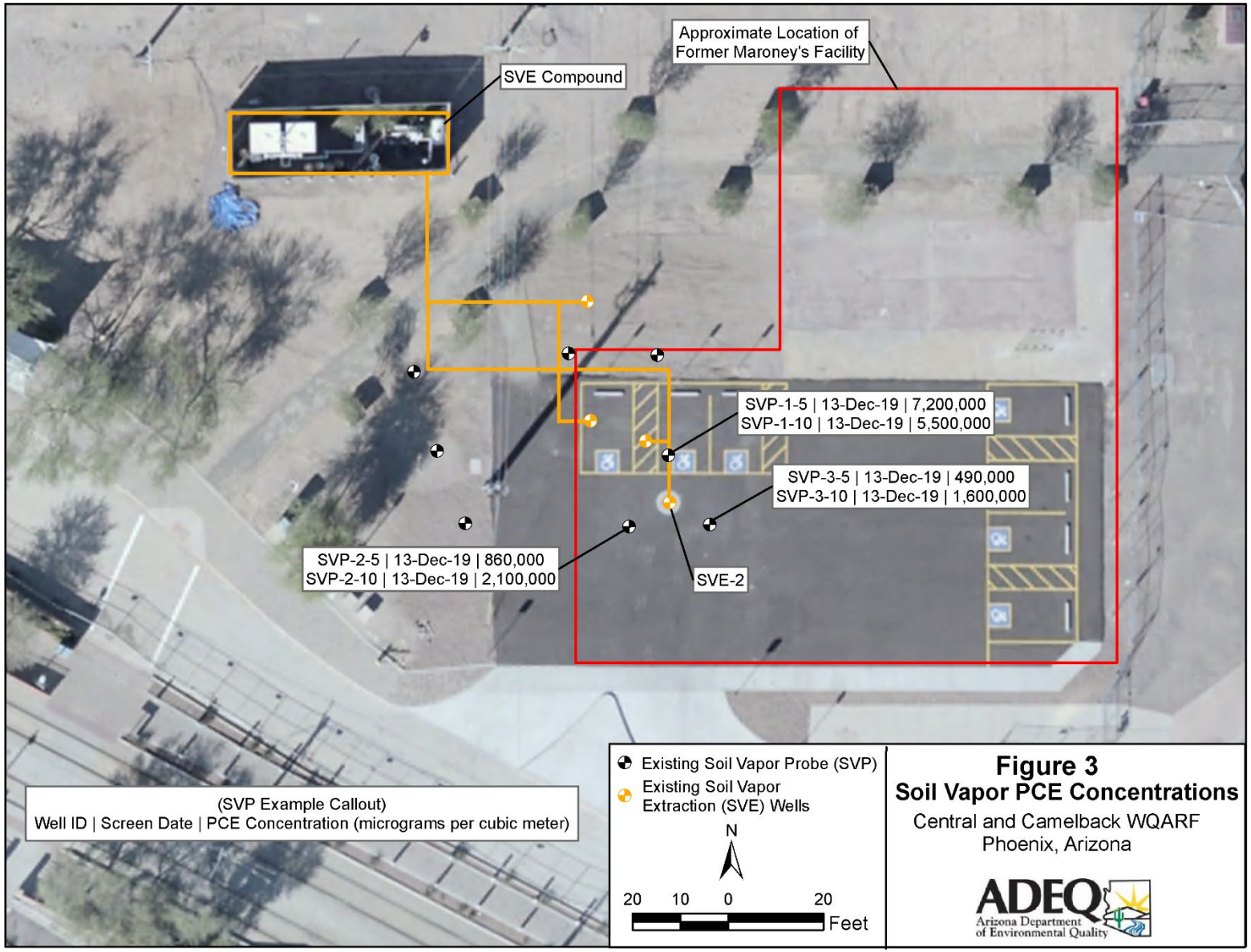
- Soil vapor probe sampling conducted in December 2019.

Well ID	Collection Date	HPC [µg/m3]	Tetrachloroethene [µg/m3]
SVP-1-5	24-Aug-18	22,800	211,900
SVP-1-5	13-Dec-19		7,200,000
SVP-1-10	24-Aug-18	44,600	610,000
SVP-1-10	13-Dec-19		5,500,000
SVP-2-5	24-Aug-18	22,800	173,000
SVP-2-5	13-Dec-19		860,000
SVP-2-10	24-Aug-18	44,600	280,000
SVP-2-10	13-Dec-19		2,100,000
SVP-3-5	24-Aug-18	22,800	323,000
SVP-3-5	13-Dec-19		490,000
SVP-3-10	24-Aug-18	44,600	237,000
SVP-3-10	13-Dec-19		1,600,000

µg/m3 - microgram per cubic meter

- Soil vapor extraction (SVE) system brought back online in February 2020. System operating intermittently (one month on, one month off). System was offline since 2017.
- One triple nested SVE well installed and connected to system in March/April 2020.
- Four double nested and one single nested soil vapor probe installed in March 2020.

Recent Vadose Zone (Soil) Activities



Future Planned Activities

- Finalize Record of Decision.
- Continue intermittent operation of the SVE system.
- Continue groundwater monitoring and sampling.

Questions?

Contacts

Mikel Morales, Project Manager
Remedial Projects Unit
Morales.mikel@azdeq.gov
(602) 771-4182, 1-800-234-5677 ext. 771-4182

Mary McGillicuddy
Remedial Projects Support Unit
Mcgillicuddy.mary@azdeq.gov
(602) 771-2336, 1-800-234-5677 ext. 771-2336

Recent Groundwater Monitoring Activities

- Semiannual groundwater monitoring conducted in March 2020.
  - Three detections above the Aquifer Water Quality Standard (AWQS).

Contaminant	Well ID	Collection Date	AWQS [µg/L]	Concentration [µg/L]
Tetrachloroethene (PCE)	CC-4	27-Mar-20	5	**6.88**
Trichloroethene (TCE)	CC-18	26-Mar-20	5	**7.28**
Ethylbenzene	CC-18	26-Mar-20	700	**804**

µg/L - Micrograms per Liter

  - Ethylbenzene is not a contaminant of concern (COC) at the Site.
  - Not able to access dewatering wells located at the One East Camelback property for sample collection.
  - Depth to water measured between 66.8 feet below ground surface (bgs) and 97.4 feet bgs. Calculated groundwater elevations ranged between 1,060 feet above mean sea level (amsl) and 1,065 feet amsl with flow direction towards the south-southeast.
- Groundwater Extraction Treatment System (GETS) remains offline.