

SITE CLEANUP SUBACCOUNT PROGRAM

Craig J. Sanchez, MS, PE

State Water Resources Control Board



25th California Unified Program
Annual Training Conference
March 20 – 23, 2023

Site Cleanup Subaccount Program

Purpose:

- Section [25299.50.6](#) of the Health & Safety Code
- Continuous application process – no application deadlines

Eligible projects include:

- Investigations of the source of surface or groundwater contamination
- Remediating the harm or threat of harm to human health, safety, and the environment caused by existing or threatened surface or groundwater contamination



25th California Unified Program
Annual Training Conference
March 20 - 23, 2023

Site Cleanup Subaccount Program

Grant Requirements:

- Site must be subject to regulatory directive or order
- Responsible party lacks sufficient financial resources



Funding Factors:

- Whether location is in small or financially disadvantaged community (DAC)
- Degree to which human health and environment are threatened by contamination
- Cost and potential environmental benefit of cleanup
- Whether there are other potential sources of funding
- Any other information the Board identifies as necessary for consideration including environmental justice (EJ) community status



Funding Summary and Projections

Funding Summary and Projections:

\$34M each year in funding

~\$100M funded to date (fiscal year (FY) 15/16) to include:

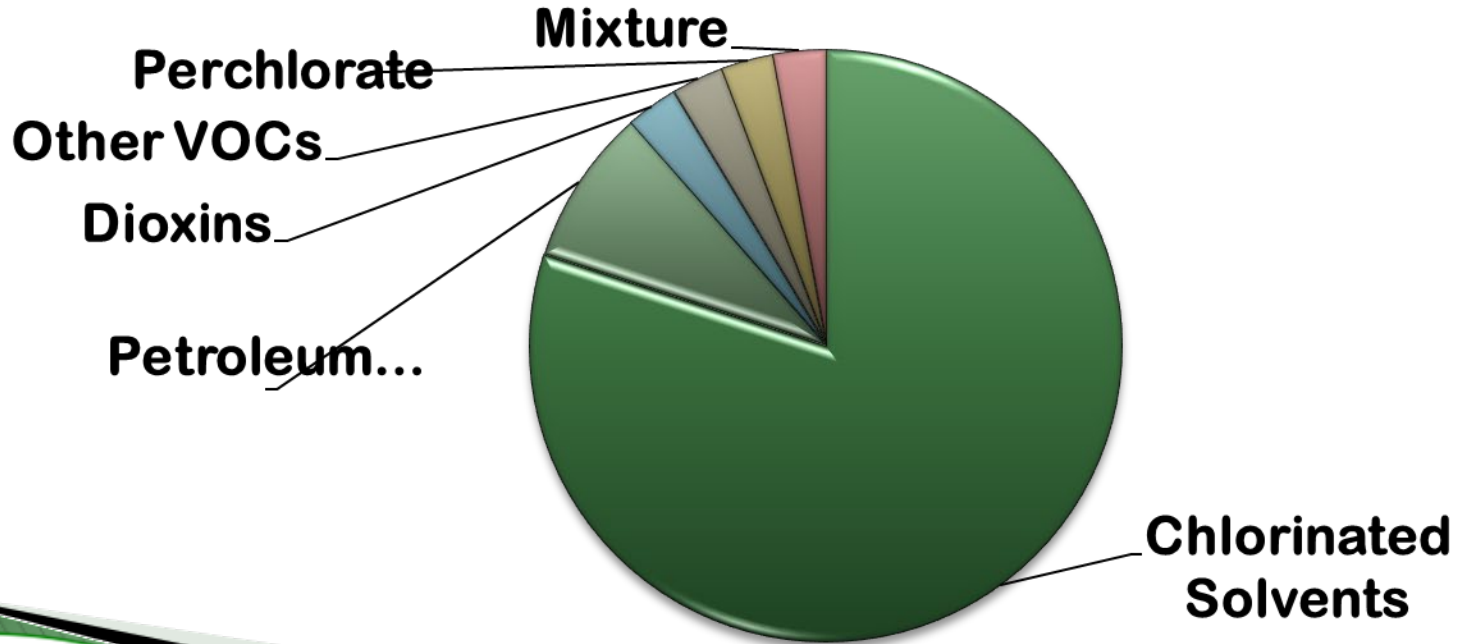
- 76 grant-funded sites
- 14 contract-funded sites

~\$160M in spending authority through FY 23/24

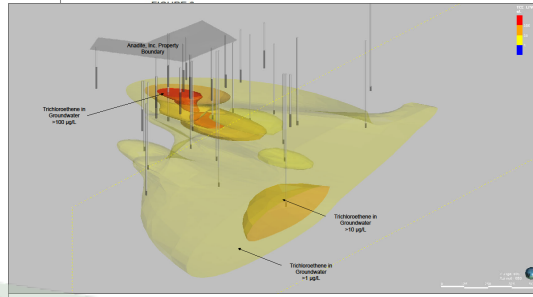
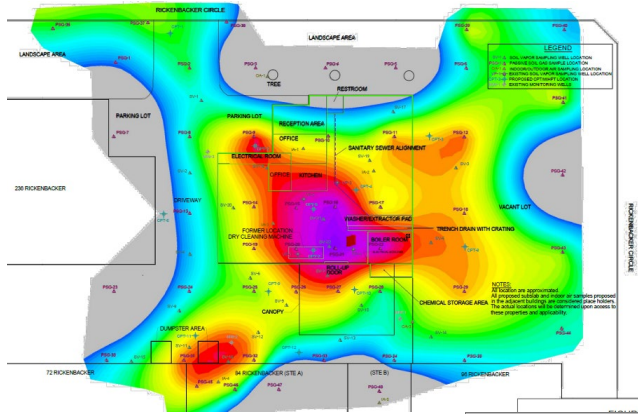


25th California Unified Program
Annual Training Conference
March 20 - 23, 2023

Projects by Contaminant Class

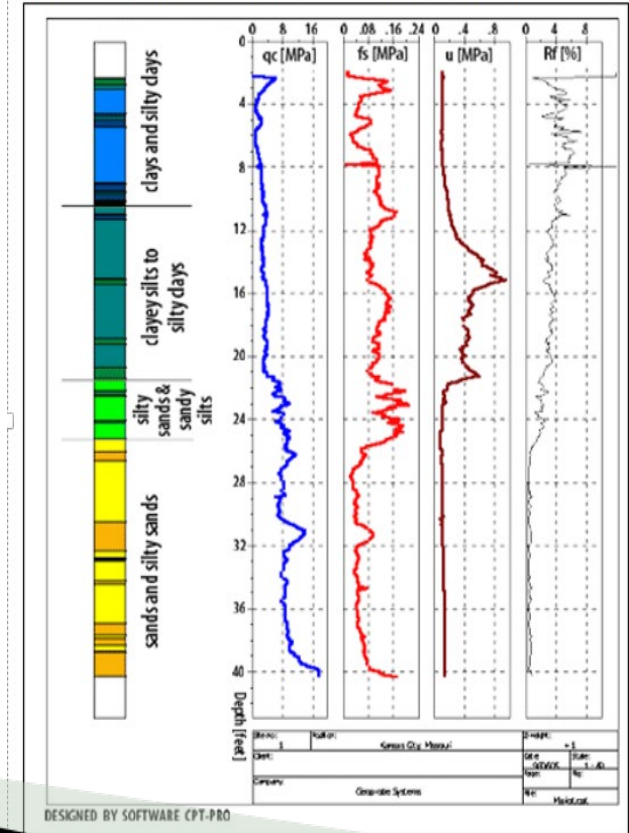


High Resolution Site Characterization



NOTE: View is from the southeast. Vertical exaggeration: 1x

Asiatic, Inc.
18847 S. Guilford Avenue, South Gate, California
Groundwater Plume - 3D Model Representation
Trichloroethene
Figure 21



Site Cleanup Subaccount Program

An Evolving Program

Board Policies:

- SCAP Resolution needs updating – reflect current practices/Board priorities: [Resolution 2016-0032](#)
- [Racial Equity Resolution](#) race no longer predicts the access to or quality of water resources a person receives; we consistently apply a racial equity lens to our decision-making processes
- [Racial Equity Action Plan](#) – assess race/ethnicity; demographic data of communities benefiting from funding administered by DFA
- [2023 Strategic Work Plan](#) – Action 1.3.1 - Prioritize Funding of SCAP projects in disadvantaged communities/environmental justice communities

Statutory Requirement:

“At least annually, the board shall review grant applications and adopt a list of applicants to be awarded grants...”



What's New for SCAP?

Annual Board adoption of:

- Comprehensive and fundable grant and contract lists
- New ranking methodology to increase weight of DACs and EJ sites
- Delegation of fundable list revisions to deputy director or designee

Proposed Resolution adoption of:

- DAC/EJ 50% weight in new ranking
- Human health and environment 50% weight in new ranking
- Updated funding considerations



25th California Unified Program
Annual Training Conference
March 20 - 23, 2023

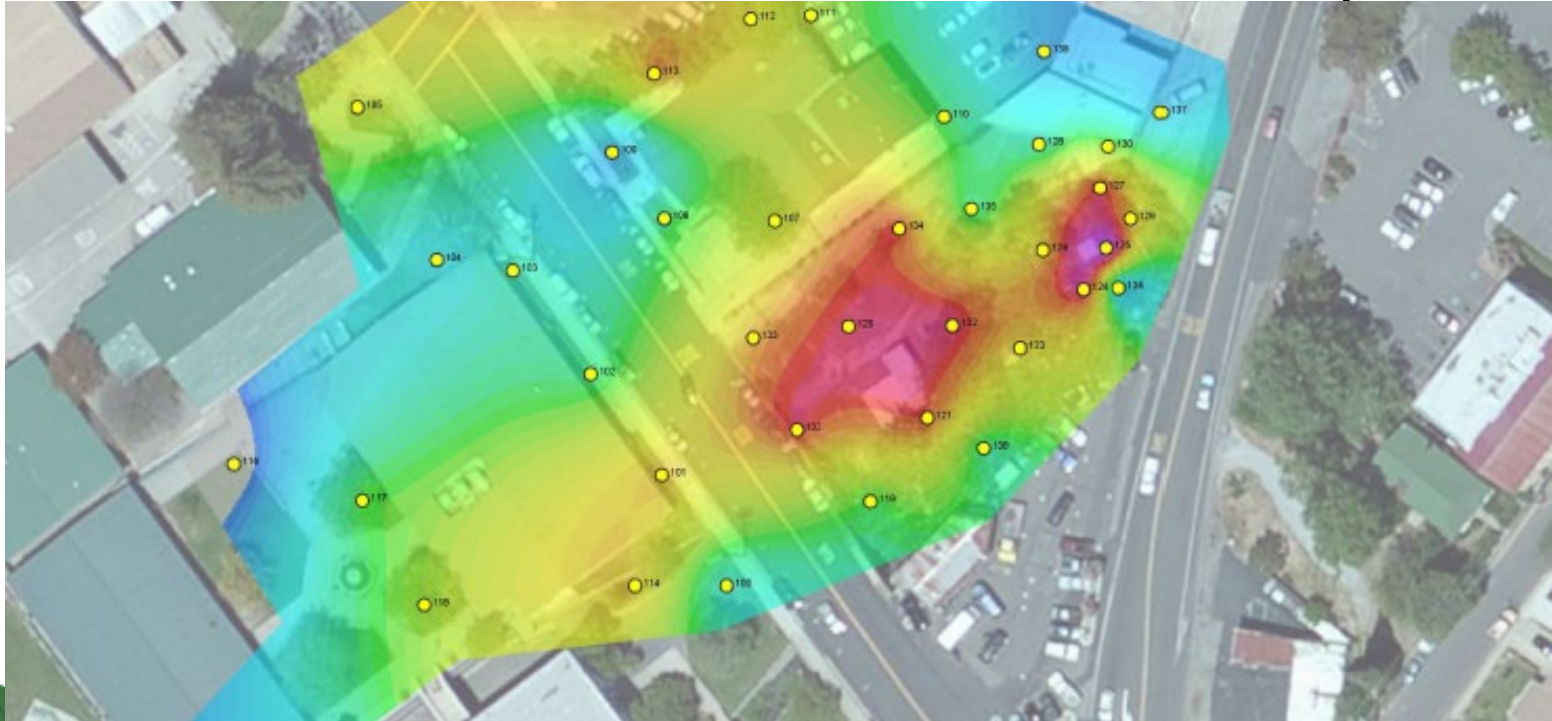


Sierra Launderers & Cleaners, Sonora, CA



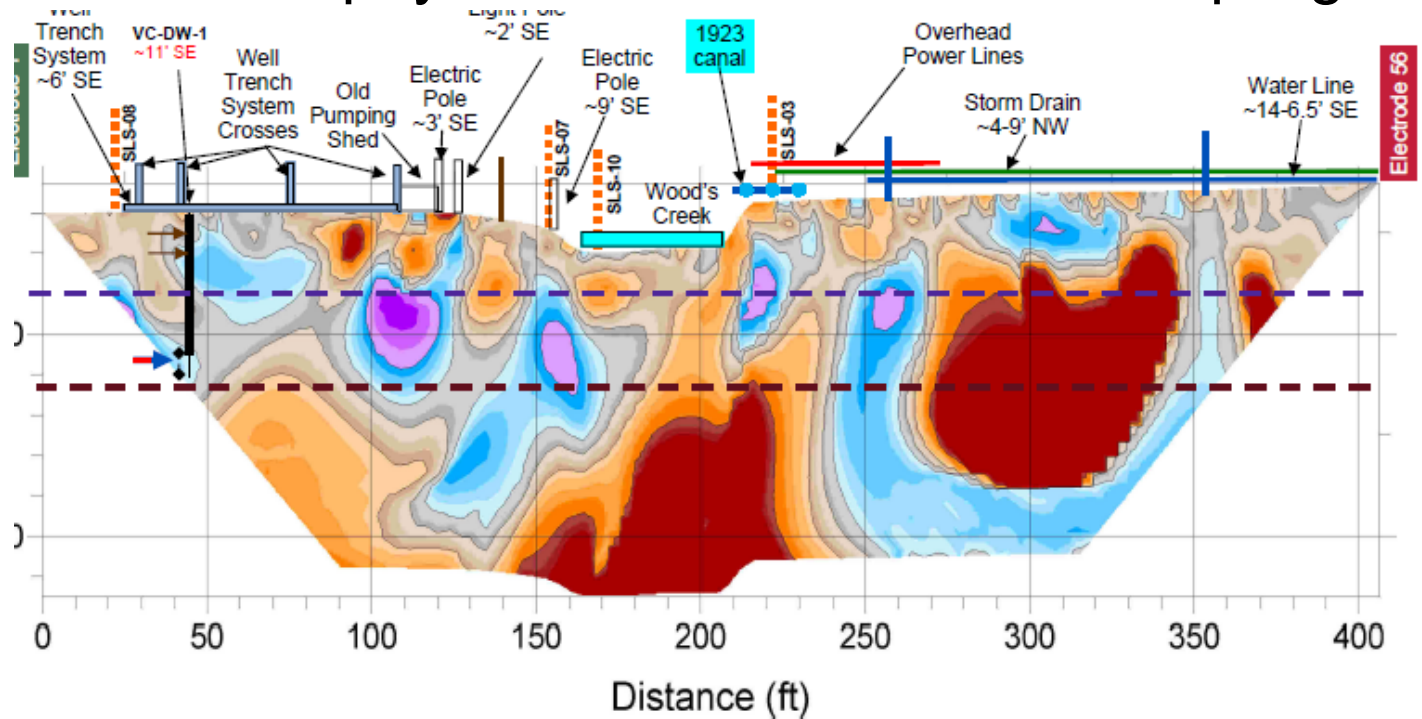
- Chlorinated solvents in fractured bedrock with dense non-aqueous phase liquid
- Passive soil vapor survey to identify source areas
- High density soil sampling to delineated source area vertically
- High resolution geophysics and confirmation sampling
- Short-term vapor mitigation measures
- Thermal remedy design in progress

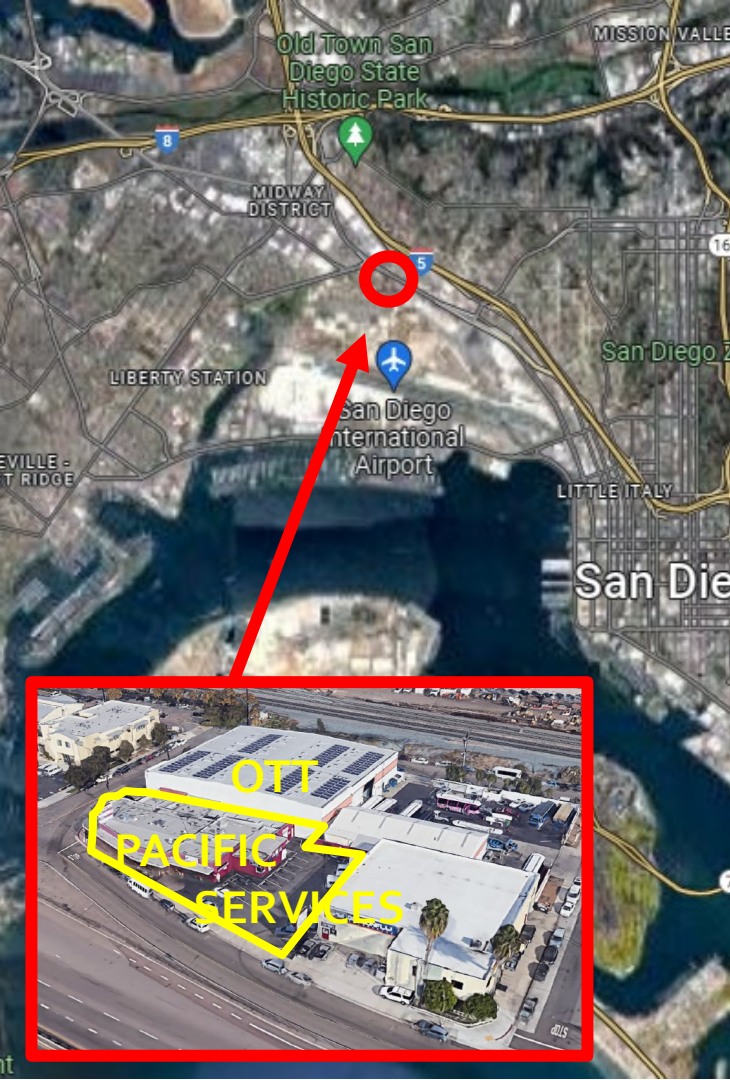
Sierra Launderers - Passive Soil Vapor



25th California Unified Program
Annual Training Conference
March 20 - 23, 2023

High Resolution Geophysics and Confirmation Sampling



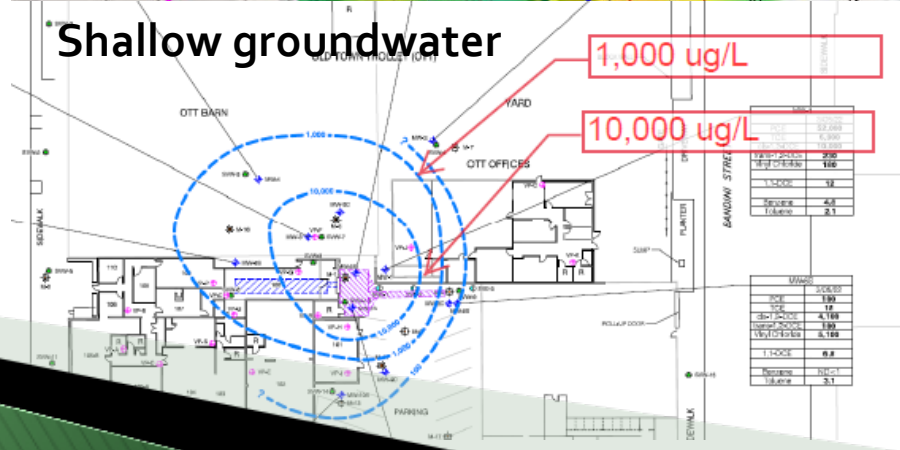
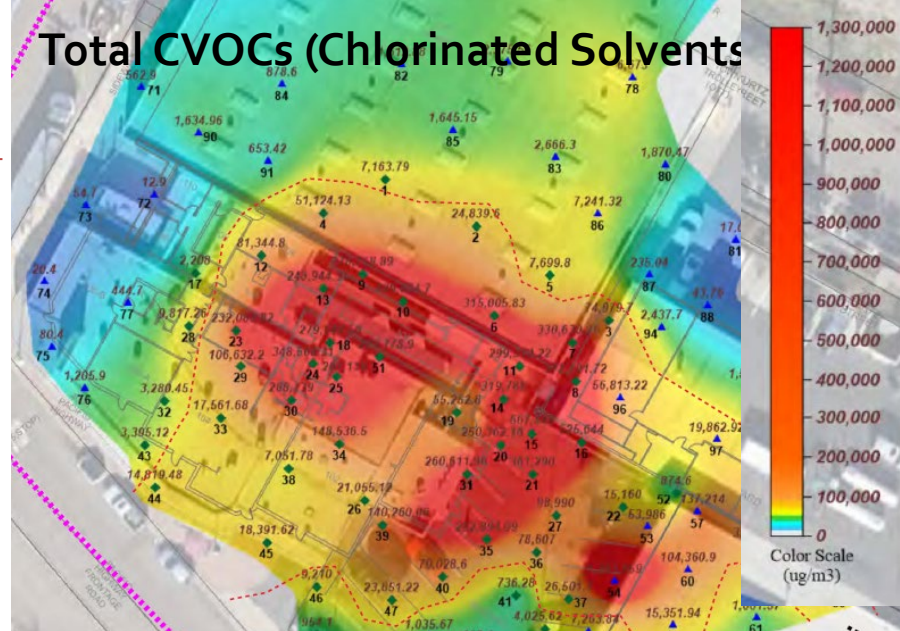


Backstory – Before the Site Cleanup Subaccount Program work

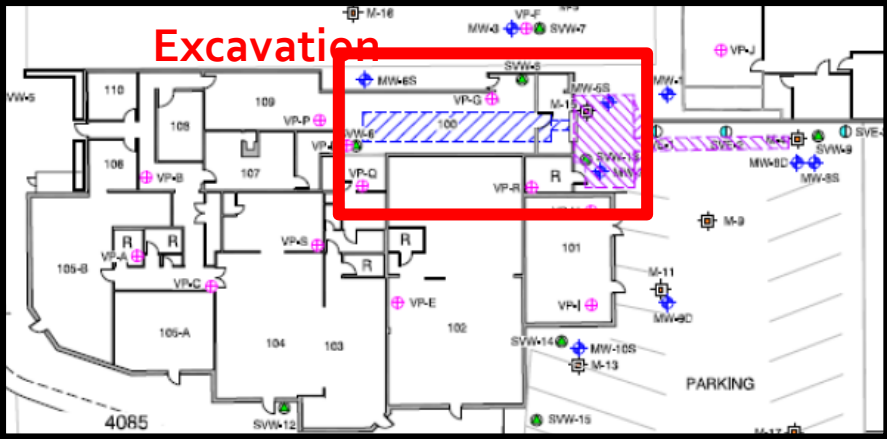
- Site was dry cleaner from 1950s to ~2002
- 100-gallon above ground storage tank contained tetrachloroethene (PCE)
- Investigation work began in the early 1990s with Pacific Services and Old Town Trolley (OTT) site
- Current grantee purchased site in 2012 and began doing investigation and indoor air mitigation work
- Work became too expensive to continue
- Qualified for SCAP funding, grant executed in 2020

Site Investigation Work

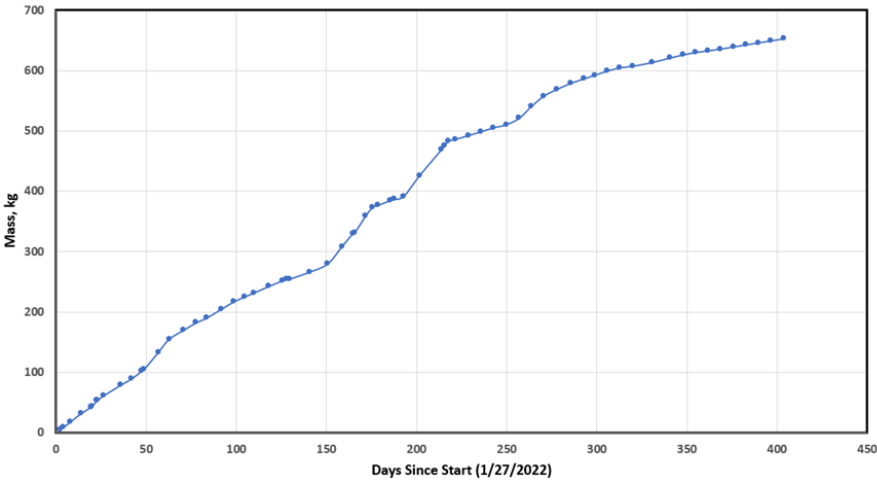
- Performed passive soil gas survey
- Soil and groundwater investigation in source area to determine depth of contamination
- Groundwater concentrations currently up to 52,000 µg/L of PCE in MW-1
- Evaluated indoor air – 370 µg/m³ PCE



Excavation



Cumulative SVE Mass, in kg
1/27/22 to 3/7/2023



Remediation/Mitigation Activities

- Conducted over-excavation during installation of soil vapor extraction (SVE) system
- Performed “quick fixes” including installing vent and exhaust fan on roof of building, adjusting makeup air units
- Reduced concentrations in indoor air from 370 $\mu\text{g}/\text{m}^3$ of PCE to 8.5 $\mu\text{g}/\text{m}^3$ of PCE in March 2022 (below Non-Cancer Hazard)
- SVE system has removed about **50 gallons**



new ceiling vent
and exhaust



vent to roof



25th California Unified Program
Annual Training Conference
March 20 - 23, 2023

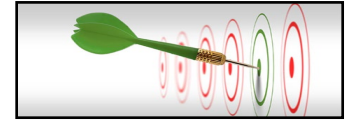
Future work

- Additional site investigation
- Continue SVE in source area
- Additional excavation in source area
- Interim groundwater treatment to include fracturing with zero valent iron, colloidal carbon, and enhanced biological amendments



Moving Forward - More Work To Do!

- Ongoing collaboration with Regional Boards and Local Agencies
- Continue focus on high-resolution site characterization
- ~5,400 existing sites contaminated by other types of hazardous pollutants (solvents, pesticides, and heavy metals)
- Additional 17,000 contaminated sites suspected
- About half of contaminated sites within disadvantaged communities
- ~\$75B to \$100B to cleanup all hazardous substance contaminated sites



SCAP Information

Visit our website:

http://www.waterboards.ca.gov/water_issues/programs/grants_loans/scap

Sign up for email alerts for Groundwater Quality Funding Assistance:

http://www.waterboards.ca.gov/resources/email_subscriptions/swrcb_subscribe.shtml

Encourage responsible parties to apply, using the Financial Assistance Application Submittal Tool (FAAST) -

<https://faast.waterboards.ca.gov>

Contact **Craig Sanchez** at craig.sanchez@waterboards.ca.gov





Any Questions?

Craig J. Sanchez, MS, PE
State Water Resources Control Board
Senior Water Resource Control Engineer

