

**700s 1600e PCE Plume Community Advisory Group  
(CAG)**

**Meeting Minutes**

**December 8 2022**

**Virtual Meeting via Microsoft Teams**

<b>Members Present:</b>	<b>Organization:</b>	<b>Members Present:</b>	<b>Organization:</b>
Rebecca Gerhart	EPA Region 8 RPM	Mike Brehm	University of Utah
Scott Everett	Utah DEQ Project Manager	Shannon Smith	VA CERCLA Program Manager
Maureen Petit	Utah DEQ Project Manager	Wynn John	VA CERCLA Technical Manager
Dave Allison	Utah DEQ, Division of Environmental Response Community Involvement Coordinator	Susanne Fairclough	VA CERCLA Contracts Manager
Teresa Gray	SLC Public Utilities		
Briana Kistler	University of Utah Environmental Health and Safety Department		
Dave Berry	EPA Region 8 Risk Assessor		
Catherine Wyffels	Salt Lake City Sustainability		

**Welcome (Slide 1)**

Community Advisory Group  
Update

700S 1600E PCE PLUME SUPERFUND SITE

8 Dec 2022

The Department of Veterans Affairs (VA) helped facilitate the 700S 1600E Superfund Site Community Advisory Group (CAG) meeting on December 8, 2022. The subject of the discussion was an update from VA on the progress of the site investigation and the information gathered and documented in the Remedial Investigation Report (RI) which was finalized and approved by EPA Region 8 and the Utah Department of Environmental Quality in September 2022.

**VETERANS HEALTH ADMINISTRATION – SLC VA MEDICAL CENTER**  
SHANNON SMITH – PROGRAM MANAGER  
WYNN JOHN – TECHNICAL MANAGER  
SUSANNE FAIRCLOUGH – CONTRACT MANAGER



## Background (Slide 2)

### Introduction

- The SLC VAMC operated a drycleaning operation that used tetrachloroethylene (abbreviated as PCE) in the late 1970s and early 1980s.
- During this period, drycleaning residuals were likely disposed of into the sanitary sewer system which leaked into the ground.
- PCE-contaminated groundwater is present beneath the VAMC property and in areas downgradient, extending to approximately 1100 East.

#### PCE

- PCE is a colorless liquid used for dry cleaning fabrics and degreasing metals.
- Long-term exposure (longer than one year) to low levels of PCE may cause damage to the nervous system (neurotoxicity), vision issues, and cancer.

The meeting started with a safety presentation provided by Teresa Gray from Salt Lake City Public Utilities.

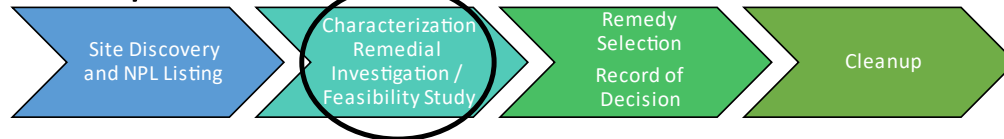
Ms. Smith began by giving a summary of the Superfund site, an explanation of the VA's involvement and a brief description of PCE and potential health concerns from long-term exposure.

Ms. Smith mentioned that there are many PCE plumes across the country as it is widely used in the dry-cleaning process. VA's work with this project is to clean up the site to prevent the potential health effects.

## Remedial Investigation Overview (Slide 3)

# Remedial Investigation Overview

## CERCLA/SUPERFUND Process



The site **Remedial Investigation** was conducted from 2015-2022. It involved:

- collecting over 900 environmental samples to evaluate the extent of PCE, and
- assessing the potential risks to human health.

The *Remedial Investigation Report (RI)* was finalized in Sep 2022 and is available at [www.PCEPlume.org](http://www.PCEPlume.org) in the Administrative Record.

Ms. Smith stated VA is currently within the Remedial Investigation (RI) / Feasibility Study (FS) phase ongoing since 2015.

VA has collected over 900 environmental samples, including groundwater, surface water, soil, soil gas, and indoor air samples.

Data collected from these sampling events have been compiled into a Remedial Investigation Report and submitted to EPA and UDEQ for review. The RI report was finalized and approved in September 2022. The RI Report is available on the [www.pceplume.org](http://www.pceplume.org) website under the Administrative Record tab.

Ms. Smith indicated that the extensive RI data collection process determines the nature and extent of contamination (where it is and how much is there). The RI Report also evaluated the fate and transport of contamination (what's it doing? and where's it going?).

## Remedial Investigation Findings

- The RI identified two potential health risks
  - Indoor Air Vapor Intrusion(*inhalation*) – vapor intrusion from soil gas or groundwater into structures
  - Groundwater ingestion– potential future use of untreated groundwater for domestic purposes

The **Feasibility Study (FS)** will evaluate cleanup options that address these two risks.

Ms. Smith then shared a copy on the screen of the *Table of Contents* of the *RI Report*, and identified in the Index the *Executive Summary*, which is a short (10 page) overview of the project. Ms. Smith stated that the *Executive Summary* presents how far the project has come and what has been accomplished. Ms. Smith stated this would be the best section for the community to read to quickly learn more about the investigation and the *RI Report*.

Ms. Smith then scrolled through the remainder of the *Table of Contents* highlighting specific sections – site history and description, data collection efforts, computer simulation model and the human health and ecological risk assessments. .

The human health risk assessment, completed as part of the *RI*, identified two potential future risks to human health, indoor air vapor intrusion and potential future use of untreated groundwater for domestic purposes.

The next step in the *CERCLA* process is to complete a *Feasibility Study*, which evaluates the effectiveness of various cleanup actions at addressing the potential health risks. Ms. Smith then turned the presentation over to Mr. John to discuss the *Feasibility Study*.

## Feasibility Study (Slide 5)

# Feasibility Study (FS)



**Feasibility Study:** The process of developing, screening, and evaluating remedial action (cleanup) alternatives

- Main objective: determine treatment technologies that will effectively reduce risks to human health in a reasonable timeframe
- Study will focus on groundwater treatment technologies based on the risks identified in RI
- Additional data collection and treatability studies (small-scale field study) may be conducted as part of the process

Mr. John introduced the next phase in the Superfund process, which is the Feasibility Study. This is the process for developing, screening, and evaluating potential cleanup alternatives and technologies that could be used to effectively reduce the identified risks within a reasonable time frame. Mr. John indicated that the study would look at groundwater treatment technologies based on the risks identified in the Remedial Investigation Report. As part of the Feasibility Study, the VA anticipates performing treatability studies across the site on a small scale that will evaluate different technologies that might be used. Mr. John stated that once the treatability studies have been conducted, there will be a remedy selection – and that selection and the process will be presented to the public as the *Proposed Plan*.

## Current Site Map (Slide 6)

### Current Understanding of PCE Contamination in Groundwater



Mr. John continued by identifying three areas of the site on the map and how different geology, groundwater, and elevation would affect the design and development of technologies to clean up each area.

The “Source” area is the VA Medical Center area where the groundwater is the deepest.

The “Mid-Plume” area is near 1300 East and 800 South. Mr. John notes that the groundwater around 1300 East and 800 South is shallower and the ground surface becomes steeper.

The “End-of-Plume” area is a dense residential area where the groundwater water is much shallower.

Mr. John states that these three areas could have three completely different treatment technologies because of their diverse geology and features, as well as logistical and property access issues.

Mr. Brehm (University of Utah) asks in the chat:

“I have a question about the mention of groundwater drawdown risk relative to the U of U wellfield. If our current operation is aggravating that pathway risk, would we be contacted before that occurs?”

Ms. Smith answered Mr. Brehm stating that in Chapter 6 of the RI Report the groundwater flow model includes the U of U wells, and based on the model, the belief is that U of U well does not have an impact on the plume. Ms. Smith then stated that if Mr. Brehm needed any information to present to his leadership, VA would be happy to assist.



## Treatment Objectives and Risks (Slide 7)

Potential Treatment Zones		
Location	Objective	Risk
<p><b>Near VA Medical Center</b> (source area)</p> <p>Deep groundwater (200 ft) contamination near SLC municipal water well (<i>not currently in use</i>).</p>	Prevent migration to SLC domestic well when/if operating, and reduce PCE groundwater concentrations	Groundwater Ingestion ( <i>future potential use</i> )
<p><b>1300 East 800 South</b> (mid-plume)</p> <p>Fault scarp area; depth to groundwater 50-100 ft.</p>	Reduce PCE groundwater concentrations	Indoor Air Vapor Intrusion (downgradient)
<p><b>1200 East 900 South</b> (end of plume)</p> <p>Very shallow (5-10 ft) groundwater, travels swiftly with upward movement</p>	Reduce PCE groundwater concentrations	Indoor Air Vapor Intrusion

Mr. John identified the potential treatment areas (zones) on the map and outlined the objective for each area as follows:

Source Area objective: Prevent contaminated groundwater from migrating to the Salt Lake City municipal water well when/if it is operating (currently not in operation).

Mid Plume Area objective: Reduce PCE concentrations in the groundwater as it migrates downgradient, which reduces the downgradient risk of indoor air vapor intrusion.

Lower Plume Area objective: Reduce PCE concentrations in the groundwater and reduce the risk of indoor air vapor intrusion in these areas.

Ms. Smith stated that the current timeline is to be in the field in the Spring/Summer of 2023, conducting treatability studies and collecting more data. This will help VA determine which treatment technologies are most likely to be effective. Ms. Smith then asks if there are any questions, and as there are none, stated that she wanted to discuss with the group the continued need for the CAG in-person or TEAMS meetings. Ms. Smith observes that there haven't been many community members attending the past few meetings, and there are only stakeholders at this meeting.



## Next Meeting To Be Determined

### Contact us:

Contact Info:

Shannon Smith  
Department of Veterans Affairs  
CERCLA Program Manager  
[shannon.smith92@va.gov](mailto:shannon.smith92@va.gov)  
801-582-1565 x2021

Wynn John  
Department of Veterans Affairs  
CERCLA Technical Manager  
[William.john@va.gov](mailto:William.john@va.gov)  
801-582-1565 x6603

Ms. Smith then suggests VA send the CAG members a semi-annual or quarterly newsletter identifying the current site progress, fieldwork, and plans for the next phases of the site.

Ms. Gerhart (EPA) stated that she has created newsletters for one of her sites and is fine with VA providing information to the CAG members using a newsletter.

Ms. Petit (UDEQ) stated that she is not opposed to putting out a pamphlet or brochure – or a webinar in lieu of a meeting.

Ms. Smith stated that perhaps when VA is in the field this Spring/Summer collecting data, it would be a good time to invite people in person to a public meeting to show the progress being made. Ms. Smith suggests that if VA sends out a newsletter bi-annually or quarterly, an annual in person CAG meeting could be held as well to keep everyone updated.

Mr. Brehm (U of U) stated that if VA has urgent information that the community needs to know, then an in-person meeting would need to be held, but other than that a newsletter would be just the right idea for sharing information. Ms. Smith noted that VA will continue to use social media and community council sites to keep the CAG members updated when necessary.

Ms. Smith mentioned that because everyone on the call is a stakeholder, meetings could be held during the day on a biannual basis, during regular business hours. The group collectively agreed to this suggestion.