

U.S. ENVIRONMENTAL PROTECTION AGENCY
POLLUTION/SITUATION REPORT
Passyunk Soil Gas Site - Removal Polrep
Final Removal Polrep



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
Region III

Subject: POLREP #3
Final POLREP (Completion of Removal Site Evaluation)
Passyunk Soil Gas Site
A3WC
Philadelphia, PA
Latitude: 39.9219126 Longitude: -75.1936874

To: Bonnie Gross, Office of Preparedness and Response

From: Ruth Scharr, On-Scene Coordinator

Date: 4/27/2018

Reporting Period: May 2014 to April 27, 2018

1. Introduction

1.1 Background

Site Number:	A3WC	Contract Number:	
D.O. Number:		Action Memo Date:	
Response Authority:	CERCLA	Response Type:	
Response Lead:	EPA	Incident Category:	Removal Assessment
NPL Status:	Non NPL	Operable Unit:	00
Mobilization Date:		Start Date:	6/20/2013
Demob Date:		Completion Date:	4/27/2018
CERCLIS ID:		RCRIS ID:	
ERNS No.:		State Notification:	
FPN#:		Reimbursable Account #:	

1.1.1 Incident Category

Removal Assessment

1.1.2 Site Description

It is a residential neighborhood bounded by the Philadelphia Gas Works (PGW) Passyunk facility on the west, the Sunoco Refinery to the south, and the Schuylkill Expressway to the East/Northeast. The neighborhood is residential with a local tavern, a playground and a mummer's hall. There are no daycares or schools. PGW completed an environmental investigation of its facility which included an off-site soil vapor study in the Passyunk residential neighborhood. The Pennsylvania Department of Environmental Protection (PADEP) oversaw this investigation. PGW detected elevated levels of chloroform in the soil vapor within the residential neighborhood at levels above standards established by the PADEP. The Agency for Toxic Substances and Disease Registry (ATSDR) assisted the Pennsylvania Department of Health with the review and evaluation of PGW's soil vapor data. ATSDR referred the site to EPA's removal program.

1.1.2.1 Location

Residential Neighborhood in the vicinity of S. 28th Street and Passyunk Ave, Philadelphia, PA 19145

1.1.2.2 Description of Threat

Potential for exposure to Chloroform in indoor air due to vapor intrusion pathway. The source of the chloroform in the subsurface is unknown at this time. This is a small community of about 60 homes. Chloroform was detected at elevated levels in soil gas implants installed by PGW as part of a site characterization which PADEP required under ACT II.

1.1.3 Preliminary Removal Assessment/Removal Site Inspection Results EPA ERT assisted the OSC with a vapor intrusion study for chloroform in the Point Breeze residential neighborhood in southwest Philadelphia. Activities included:

1. Cleaning out lifestyle products that may potentially interfere with the analysis of target compounds
2. Installation of sub-slab soil gas wells in the basement of the properties
3. Indoor air monitoring using the TAGA MS/MS prior to setting the indoor air canisters
4. Collection of sub-slab soil gas samples using Tedlar bags and Twenty-four hour collection of sub-slab soil gas, indoor air and ambient air samples using SUMMA[®] canisters and,
5. Collection of sub-slab soil gas samples in Tedlar bags and Onsite MS/MS analysis from pre-existing outdoor ports, during first and second mobilization.

EPA originally received access to sample ten properties. However access was rescinded at four properties following the government shutdown in October 2013. EPA conducted three rounds at the remaining six properties over a 17-month period. All six of these properties had the same owner. EPA conducted the first mobilization event January 21 - 23, 2014; the second mobilization event September 29 - October 1, 2014 and the third mobilization event March 30-31, 2016 .

2. Current Activities

2.1 Operations Section

2.1.1 Narrative

2.1.2 Response Actions to Date

Three rounds of vapor intrusion sampling were conducted at six units: four residential properties and a bar/restaurant property that was comprised of two units for sampling purposes. ERT used the TAGA to survey or screen the indoor air in all units prior to placing the 24-hour summa canisters in the structures. ERT conducted TAGA screening air monitoring for the following analytes: Tetrachlorethene, (PCE), Trichlorethene (TCE), total-dichlorethene (DCE), vinyl chloride, chloroform, benzene, toluene, and total-xylenes. In addition Tedlar grab samples were collected at pre-existing outdoor soil gas points installed by PGW. There were 22 pre-existing outdoor soil gas points, however, at many of the locations the technicians were unable to obtain a sample - mostly likely do to the vadose zone being saturated. Tedlar bag samples were analyzed onsite using the GC/MS on the TAGA bus.

At the request of the U.S. Environmental Protection Agency (EPA), the Pennsylvania Department of Health (DOH) prepared a health consultation letter to evaluate potential public health issues and to provide relevant conclusions and recommendations based on data collected from the three sampling events conducted at the site. The full Health Consultation Letter is found in the Document Section of the EPA website: https://response.epa.gov/site/site_profile.aspx?site_id=8789. The Health Consultation letter was finalized in January 2018. The EPA OSC agrees with and supports the conclusions and recommendations from the DOH. These are:

1. Exposures to indoor air contaminants at the levels detected are not expected to result in adverse health effects.
2. Most indoor air detections did not exceed background levels common in urban environments.
3. The data do not indicate that the contaminants detected in the indoor air originated entirely from the sub-slab soil gas. Elevated detections of first-floor and basement indoor air contaminants did not correspond to elevated levels of that chemical in the sub-slab in the same unit during the same sampling period. Additionally, when elevated levels of contaminants were detected in the sub-slab, there was not a corresponding and proportionally elevated detection in the basement indoor air.
4. Contaminants detected in the indoor air likely originated from sources of contamination other than vapor intrusion.
5. To protect the current and future health of individuals, DOH recommends that EPA provide health education to these residents to limit their chemical exposure from indoor sources.

2.1.3 Enforcement Activities, Identity of Potentially Responsible Parties (PRPs)

None at this time.

2.1.4 Progress Metrics

<i>Waste Stream</i>	<i>Medium</i>	<i>Quantity</i>	<i>Manifest #</i>	<i>Treatment</i>	<i>Disposal</i>

2.2 Planning Section

2.2.1 Anticipated Activities

EPA OSC to provide the property owner with an electronic copy of the revised Final reports.

2.2.1.1 Planned Response Activities

Removal action is not recommend by OSC.

2.2.1.2 Next Steps

None at this time.

2.2.2 Issues

During the course of the Pennsylvania Department of Health's review of the three trip reports some transcriptions errors were noted in some of the data tables in the previously finalized Trip Reports. In addition, the site description was inaccurate as well. EPA OSC requested that EPA ERT reissue revised Trip Reports with errors corrected. The reports were revised and have the following completion dates:
January 2014 Mobilization Trip Report revised and reissued Feb 2018;
Sept- October 2014 Mobilization Trip Report revised and reissued Feb 2018
March 2016 Mobilizations Trip Report finalized May 2017.

2.3 Logistics Section

No information available at this time.

2.4 Finance Section

2.4.1 Narrative

N/a

2.5 Other Command Staff

2.5.1 Safety Officer

N/A

2.5.2 Liaison Officer

N/A

2.5.3 Information Officer

3. Participating Entities

No information available at this time.

4. Personnel On Site

No information available at this time.

5. Definition of Terms

No information available at this time.

6. Additional sources of information

No information available at this time.

7. Situational Reference Materials

No information available at this time.