U.S. ENVIRONMENTAL PROTECTION AGENCY
POLLUTION/SITUATION REPORT
Bonair Avenue Vapor Intrusion Investigation - Removal Polrep

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
Region III

Subject: **POLREP #3**
Bonair Avenue Vapor Intrusion Investigation
A35J
Hatboro, PA

To:
From: Kelley Chase, On-Scene Coordinator
Date: 8/7/2017
Reporting Period: 8/3/16 through 8/7/17

1. Introduction

1.1 Background

Site Number:	A35J	**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:**	
Mobilization Date:		**Start Date:**	3/16/2016
Demob Date:		**Completion Date:**	
CERCLIS ID:		**RCRIS ID:**	
ERNS No.:		**State Notification:**	
FPN#:		**Reimbursable Account #:**	

1.1.1 Incident Category

1.1.2 Site Description

EPA's Removal Program is conducting sampling to further evaluate the potential for vapor intrusion (VI) at properties located on or near Bonair Avenue in Hatboro, Montgomery County, PA.

VI is the term used to describe the migration of volatile chemicals from subsurface contaminated soils and groundwater into the indoor air spaces of overlying buildings through openings in the building foundation. Common sources of VI include petroleum products, dry cleaning solvents, and other industrial solvents and degreasers.

Groundwater in the area has historically been contaminated with trichloroethylene (TCE) and other volatile organic compounds (VOCs) due to the nearby Raymark Superfund Site, Hatboro, PA (Raymark Site) and other potential sources in the surrounding area.

EPA is coordinating with the Borough of Hatboro, the Pennsylvania Department of Environmental Protection (PADEP) and the Centers for Disease Control and Prevention (CDC)/Agency for Toxic Substances and Disease Registry (ATSDR).

1.1.2.1 Location

The Site is located in Hatboro, Montgomery County, Pennsylvania.

1.1.2.2 Description of Threat

Certain residential properties were initially sampled in 2013 as part of investigations by EPA's Remedial Program at the Raymark Site and found to have elevated levels of TCE in sub-slab vapor. Based on the results of the initial sampling of indoor air, ambient (outdoor air) and sub-slab vapor, further investigation was recommended. EPA's Removal Program is conducting sampling to determine whether VI is occurring, and if so, whether any of the chemicals detected present a potential health risk to the residents.

1.1.3 Preliminary Removal Assessment/Removal Site Inspection Results

2. Current Activities

2.1 Operations Section

2.1.1 Narrative

Activities for reporting period beginning March 15, 2016 through April 11, 2016 included the following:

Based on previous VI sampling efforts at the Raymark Site, five homes on Bonair Avenue were targeted for re-sampling during the 2016 heating season. Access was granted to sample three homes.

On April 5, 2016, with the permission of the property owners, OSC Chase, a representative from EPA's Environmental Response Team (ERT) and ERT's Scientific, Engineering, Response & Analytical Services (SERAS) contractor personnel visited three residences on Bonair Avenue to install new sampling ports for the upcoming sub-slab vapor sampling. One home still had sub-slab ports that were installed during the previous sampling event. The ports were checked and cleaned and were found to be in good condition. EPA oversaw the installation of sub-slab sampling ports at the other two residences by SERAS personnel. In addition, a pre-sampling walkthrough was conducted at each residence to identify and document potential indoor air background sources of VOCs. Where possible, identified potential sources were removed prior to sampling of each location.

On April 7, 2016, OSC Chase, EPA ERT and SERAS personnel returned to the residences to set up SUMMA canisters to collect 24-hour samples of sub-slab vapor, indoor air and ambient (outdoor) air. Air monitoring was conducted to evaluate conditions at the time of the sampling and to identify any potential indoor sources of volatile organic compounds (VOCs). No elevated levels of VOCs were detected during the air monitoring of the residences.

On April 8, 2016, EPA ERT and SERAS personnel returned to pick up the Summa canisters. The samples were later prepared for shipment to an approved laboratory for analysis.

Activities the reporting period beginning April 12, 2016 through August 2, 2016 included the following:

The samples were analyzed by ALS Laboratory in Simi Valley, CA. The samples were analyzed for a reduced list of VOCs, based on the results of previous sampling conducted in at the nearby Raymark Site.

EPA ERT SERAS contractor performed a Quality Assurance / Quality Control review of the laboratory data and prepared a final analytical report for EPA.

EPA reviewed the results of the April 2016 sampling and provided those results to ATSDR.

EPA provided the final validated sampling results to PADEP and to the property owners.

In summary, VOCs were found in the samples collected from the ambient (outdoor) air, indoor air and sub-slab vapor. VOCs, including TCE, were detected in the sub-slab vapor and indoor air of all three homes. TCE levels were elevated in the sub-slab vapor of all three homes. EPA did not identify TCE or other VOCs at concentrations in indoor or ambient air that present a health concern to adult or children occupants of the residences sampled. In general, the results were lower than those reported by EPA's Remedial Program in 2013.

Activities for this reporting period beginning August 3, 2016 through August 7, 2017 included the following:

Efforts were made to expand sampling to other homes on Bonair Avenue and to homes on North Penn Street, to the west of Bonair Avenue. A total of fourteen homes were targeted for sampling during the 2017 heating season. Access was granted to sample five additional homes.

On February 15, 2017, with the permission of the property owners, EPA and SERAS personnel visited five residences to install sub-slab sampling ports. In addition, a pre-sampling walkthrough was conducted at each residence to identify and document potential indoor air background sources of VOCs. Where possible, identified potential sources were removed prior to sampling of each location.

On February 16, 2017, EPA and SERAS returned to the residences to set up SUMMA canisters to collect 24-hour samples of sub-slab vapor, indoor air and ambient (outdoor) air. Air monitoring was conducted. No elevated levels of VOCs were detected during the air monitoring of the residences.

On February 17, EPA and SERAS personnel returned to pick up the Summa canisters. The samples were prepared for shipment to an approved laboratory for analysis. The samples were analyzed by ALS Laboratory in Simi Valley, CA. The samples were analyzed for a reduced list of VOCs, based on the results of the sampling conducted in 2016.

The laboratory later reported that one of the SUMMA canisters containing a sub-slab vapor sample had lost pressure. The sample was analyzed and found to have elevated levels of TCE. The home was re-sampled to confirm results. On April 5, 2017 through April 6, 2017, EPA and SERAS personnel returned to re-sample the home. The samples were sent to the SERAS Laboratory in Edison, NJ for analysis.

EPA ERT SERAS contractor performed a Quality Assurance / Quality Control review of the laboratory data and prepared a final analytical report for EPA.

EPA reviewed the results of the 2017 sampling and provided those results to ATSDR, PADEP, and to the property owners.

Sampling conducted in 2017 identified VOCs, including TCE, in the sub-slab vapor and indoor air of all five homes. TCE levels were elevated in the sub-slab of two of the five homes. TCE found in the air sample collected from the unfinished basement of one of the two homes slightly exceeded the residential indoor air health-based level. The sampling did not identify TCE of other VOCs at concentrations in the indoor living spaces or in the ambient air that present an immediate health concern to adult or children occupants of the residences sampled.

2.1.2 Response Actions to Date

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

2.1.4 Progress Metrics

Waste Stream	*Medium*	*Quantity*	*Manifest #*	*Treatment*	*Disposal*

2.2 Planning Section

2.2.1 Anticipated Activities

2.2.1.1 Planned Response Activities

2.2.1.2 Next Steps

EPA is considering taking an action to mitigate elevated levels of TCE in sub-slab vapor in certain residences.

Sampling of additional residences and commercial properties is anticipated to occur in the next heating season (pending access by property owners).

EPA has not made a final determination whether the TCE in sub-slab vapor is directly related to the Raymark Site. EPA will continue to evaluate data collected as part of the investigation of the Raymark Site and conduct additional investigations, as needed, to attempt to locate the source of the TCE in sub-slab vapor.

2.2.2 Issues

2.3 Logistics Section

No information available at this time.

2.4 Finance Section

No information available at this time.

2.5 Other Command Staff

No information available at this time.

3. Participating Entities

3.1 Unified Command

3.2 Cooperating Agencies

Hatboro Borough
Pennsylvania Department of Environmental Protection (PADEP)
Centers for Disease Control and Prevention (CDC) /Agency for Toxic Substances and Disease Registry (ATSDR)

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.