

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



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
Region III

Subject: POLREP #8
Progress
Bonair Avenue Vapor Intrusion Investigation
A35J
Hatboro, PA

To:
From: Kelley Chase, On-Scene Coordinator
Date: 10/10/2022
Reporting Period: February 16, 2019 through October 11, 2022

1. Introduction

1.1 Background

Site Number:	A35J	Contract Number:	
D.O. Number:		Action Memo Date:	8/15/2017
Response Authority:	CERCLA	Response Type:	Time-Critical
Response Lead:	EPA	Incident Category:	Removal Action
NPL Status:	Non NPL	Operable Unit:	
Mobilization Date:	2/19/2018	Start Date:	12/28/2017
Demob Date:		Completion Date:	
CERCLIS ID:		RCRIS ID:	
ERNS No.:		State Notification:	
FPN#:		Reimbursable Account #:	

1.1.1 Incident Category

Removal Assessment/Removal Action

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.

The Raymark Site includes a 7-acre facility located at 220 Jacksonville Road in Hatboro (approximately 500 feet east/southeast of Bonair Avenue) where TCE and other VOCs were released. Metal-fabrication operations, including rivet manufacturing and electroplating, began at the Raymark Site in 1948. Historically, solvents containing TCE were used in the manufacturing process to clean and degrease metal parts. Over a period of several decades, TCE reportedly leaked or spilled in areas where it was used and/or stored at the former Raymark facility.

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.

Additional information regarding site threats is included in the August 15, 2017 Action Memorandum.

1.1.3 Preliminary Removal Assessment/Removal Site Inspection Results

A summary of the initial Removal Site Evaluation activities conducted from March 2016 through August 2017 is included in POLREPs 1 through 6 and in the August 15, 2017 Action Memorandum.

2. Current Activities

2.1 Operations Section

2.1.1 Narrative

Based upon information obtained during the Removal Site Evaluation and upon consideration of the factors in the NCP, the OSC recommended a response action be conducted to mitigate potential threats posed by the TCE contamination at the Site. The OSC participated in meetings with management and staff regarding the proposed response action. The OSC coordinated with management, attorneys and other staff to help finalize a decision document and compile documents that supported the selection of a response action.

On August 15, 2017, an Action Memorandum was signed by Region 3 which selected a response action for the Site and approved the necessary funding. The selected response action calls for mitigation of vapor intrusion at several residential structures located on or near Bonair Avenue in Hatboro, PA. Mitigation is expected to include installation of vapor-abatement systems, such as sub-slab depressurization systems and/or other appropriate measures (i.e., sealing cracks in basements, sealing sump pumps, etc.). The August 15, 2017 Action Memorandum includes a detailed description of activities conducted during the Removal Site Evaluation and the selected response action.

In February and April 2018, vapor-abatement mitigations systems were installed at two residences. The Removal Site Evaluation is ongoing. Additional monitoring and sampling was conducted in April and July 2018.

Because some of the original threats existing at the time of the August 15, 2017 Action Memorandum still exist, on December 18, 2018, an Action Memorandum was signed approving an exemption from the 12-Month Statutory Limit for the ongoing Time-Critical Action at the Site. The response activities, intended to mitigate the threats posed by TCE contamination were unchanged from those selected and funded in the August 15, 2017 Request for Funding Action Memorandum. There is some uncertainty regarding the full extent of contamination, as the Removal Site Evaluation is ongoing. Estimated costs assume up to ten vapor-abatement mitigation systems, including the two installed in 2018, may be installed.

See POLREPs 6 and 7 for a discussion of previous site activities.

Activities for this reporting period beginning February 16, 2019 through October 11, 2022 included the following:

In December 2021, the OSC along with EPA's ERRS contractor and their subcontractor conducted inspections of the vapor-abatement mitigation systems installed in 2018 at two residences to ensure the systems continue to operate properly. The systems were found to be operating. No issues were identified during the inspection.

Beginning in February 2022, the OSC worked with EPA's Environmental Response Team (ERT) and EPA's START contractor to develop a plan to conduct additional assessment activities to better define the area of VOC contamination and potential source areas and/or plume patterns and migration pathways for vapor intrusion. Historically property owners have been reluctant to allow access to their homes for indoor air and sub-slab sampling. EPA developed a plan to conduct passive soil gas sampling which would be far less intrusive. EPA contacted Hatboro officials and requested the Borough's permission to install temporary passive soil gas sampling devices in the streets within the Borough right-of-way. Initial plans called for using a hand-held drill to install shallow boreholes to a depth of approximately 3 feet with a 1 – 1 ½ inch diameter. Small passive soil gas (PSG) sample collection devices would be then placed in the boreholes and the holes would be temporarily sealed with cement or soil depending on the location. The samplers would remain in the ground for two weeks and then would be retrieved and sent to a laboratory for analysis. EPA proposed installing approximately 100 – 125 sampling devices. The final locations to be selected following utility clearances, based on field visits and following any necessary approvals.

On July 15, 2022, the OSC attended a site meeting with EPA ERT representatives and the START contractor. The team walked the site to finalize plans for conducting the sampling and better defined the areas where utility mark-outs would be required. As discussed, the majority of the boreholes were to be installed within the Borough of Hatboro right-of-ways. On July 18, 2022, the START contractor called in utility tickets to PA One-Call System with planned start dates for July 25 - August 1, 2022.

On July 19, 2022, EPA conditionally approved the draft Field Sampling Plan (FSP), pending receipt of the final signed plan. On July 20, 2022, the START 6 contractor submitted the final FSP for the planned sampling.

On July 22, 2022, START personnel conducted a site visit to confirm status of the utility mark-outs.

On July 25, 2022, the OSC and EPA START contractors were on-site along with EPA ERT to begin installation of the boreholes and PSG sampling devices. After confirming that utility mark-out were completed, START began drilling the shallow boreholes and installing the samplers. Drilling through the road base was more challenging than anticipated. It was taking a great deal of effort and time to drill through the approximately 12 - 18 inch road base material as the drill bit was binding up on the rock aggregate.

On July 26, 2022, the OSC and START were on-site to continue installation of PSG samplers. Based on the issues encountered on the previous day, START brought out additional drilling equipment. Unfortunately there was no significant difference between the various handheld equipment. As a result, the OSC decided to suspend work in the roadways until different equipment could be obtained. A total of 20 boreholes and PSG samplers were installed during the initial two day effort.

During the week of August 8th, efforts to complete the installation of the remaining boreholes resumed. START subcontracted with a driller who mobilized a small drill rig to install the 1 ½ inch diameter holes through the road base to a depth of 18 inches. Once through the road material, START used a handheld drill with a 1/2 inch diameter bit to complete the hole to a depth of about 3 feet and then install the PSG samplers. An additional 97 PSG samplers were installed. Sample devices that were installed two weeks earlier during initial efforts were retrieved and sent for laboratory analysis. Following collection of the sampler devices, the boreholes were filled with asphalt cold patch.

From August 22 - 24, 2022, the OSC and START were on-site to retrieve sample devices installed two weeks earlier. The samplers were sent for laboratory analysis. The boreholes were filled with asphalt following retrieval of the sample devices.

A total of 117 PSG samplers were installed, retrieved and sent for laboratory analysis. EPA recently received the laboratory sampling results. START contractor will provide a summary of the results along with site figures to EPA shortly. EPA will evaluate the results to determine next steps.

2.1.2 Response Actions to Date

See POLREPs 6 and 7 for a summary of previous response actions at the site.

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

The OSC will continue to coordinate with EPA staff, as needed, regarding potentially responsible party (PRP) search efforts.

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 will evaluate the results of the PSG sampling to determine additional assessment efforts needed. The OSC will share the results of the investigation with area residents and Hatboro officials. The OSC will continue to coordinate with the RPM for the Raymark Superfund Site and PADEP to evaluate data collected as part of ongoing groundwater and vapor intrusion investigations at Raymark.

2.2.1.1 Planned Response Activities

EPA will continue to evaluate the need for further response activities. Additional residential structures and/or commercial properties may be included in the response action, based on the results of future sampling as assessment activities proceed.

2.2.1.2 Next Steps

EPA is evaluating the results of the PSG sampling to determine next steps.

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

EPA continues to coordinate with the following regarding the implementation of the response action:

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.