

U.S. ENVIRONMENTAL PROTECTION AGENCY
POLLUTION/SITUATION REPORT
Meadowbrook Avenue Vapor Intrusion Site - Removal Polrep
Final Removal Polrep



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
Region III

Subject: **POLREP #5**
Meadowbrook Avenue Vapor Intrusion Site
Hatboro, PA

To:
From: Kelley Chase, On-Scene Coordinator
Date: 6/22/2016
Reporting Period: March 5, 2016 through June 22, 2016

1. Introduction

1.1 Background

Site Number:	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: 2/2/2015
Demob Date:	Completion Date: 6/22/2016
CERCLIS ID:	RCRIS ID:
ERNS No.:	State Notification:
FPN#:	Reimbursable Account #:

1.1.1 Incident Category

1.1.2 Site Description

EPA is conducting sampling to evaluate the potential for vapor intrusion at the Crooked Billet Elementary School. Given the school's relative proximity to the Raymark Superfund Site and potential sources of contamination in the surrounding area, Hatboro officials asked EPA to consider evaluating the school for VI as a precautionary measure.

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

Vapor intrusion (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.

1.1.2.1 Location

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

1.1.2.2 Description of Threat

Given the school's relative proximity to the Raymark Superfund Site and potential sources of contamination in the surrounding area, Hatboro officials asked EPA to consider evaluating the school for VI as a precautionary measure.

1.1.3 Preliminary Removal Assessment/Removal Site Inspection Results

On February, 16, 2015, OSC Chase and representatives from EPA's Environmental Response Team (ERT) toured the Crooked Billet Elementary School with school personnel to identify sampling locations for evaluating the potential for VI at the school. EPA plans return to the school in March to collect sub-slab vapor, indoor air and ambient (outdoor) air samples to determine whether VI is occurring in the school, and if so, whether any of the chemicals detected present a potential health risk to students or staff.

2. Current Activities

2.1 Operations Section

2.1.1 Narrative

On March 11, 2015, representatives from the EPA, the Agency for Toxic Substances and Disease Registry (ATSDR) and the Hatboro-Horsham School District met with school faculty and later with parents to discuss EPA's plans to evaluate whether vapor intrusion is concern at the Crooked Billet Elementary School.

On March 12, 2015, EPA returned to the school to install sampling ports for upcoming sub-slab vapor sampling. OSC Chase and representatives from EPA's Environmental Response Team (ERT) oversaw the installation of sub-slab sampling ports by ERT's Scientific, Engineering, Response & Analytical Services (SERAS) contractor. The Director of Hatboro-Horsham School Operations and the Crooked Billet Facilities Coordinator were also on-site.

On March 14, 2015, EPA and SERAS returned to the school to set up Summa canisters to collect 24-hour samples of sub-slab vapor, crawl space air, indoor air and ambient (outdoor) air. The Director of Hatboro-Horsham School Operations and the Crooked Billet Facilities Coordinator were also on-site to oversee activities. A total of 37 Summa canisters were deployed to collect samples.

On March 15, 2015, EPA and SERAS returned to the school to pick up the Summa canisters. The samples were transported to EPA's SERAS contractor's laboratory in Edison, NJ.

On April 17, 2015, the EPA OSC received a copy of the final validated results of the sampling conducted at the school in March by the SERAS contractor. EPA and ATSDR reviewed the sampling results. Volatile organic compounds (VOCs) were detected in samples from ambient air, indoor air, crawl space air and sub-slab vapor. However, the review by EPA and ATSDR found that exposure to the VOCs at the levels reported in indoor air and ambient air are not expected to result in adverse health effects in children or adults.

On May 20, 2015, EPA and ATSDR representatives attended a meeting held at the Crooked Billet Elementary School for the Raymark Superfund Site and answered questions from the public regarding the recent sampling of the school.

On May 29, 2015, the EPA OSC received the Final Trip Report for the sampling conducted in March by the SERAS contractor.

On July 2, 2015, EPA ERT provided the OSC with a Supplement to the Trip Report which included additional information regarding the chemicals detected and the concentration and frequency of the detections.

On July 21, 2015, EPA OSC provided a letter to the Hatboro-Horsham School District and Crooked Billet School Officials summarizing the activities conducted at the school and the sampling results. The Final Trip Report and Supplement were attached.

While vapor intrusion concerns are limited and initial results did not identify VOCs in indoor air at levels that present a health concern, EPA and ATSDR recommend that a second round of sampling be conducted to confirm results and further evaluate the potential for vapor intrusion at the school.

Activities for the reporting period from July 23, 2015 through March 4, 2016 included the following:

In February 2016, EPA made arrangement to conduct a second round of air and vapor sampling at the school.

On February 20, 2016, EPA and SERAS set up Summa canisters to collect 24-hour samples of sub-slab vapor, crawl space air, indoor air and ambient (outdoor) air. A representative of Crooked Billet school was on-site to oversee activities. A total of 37 Summa canisters were deployed to collect samples.

On February 21, 2016, EPA and SERAS returned to the school to pick up the Summa canisters. The samples were transported to EPA's SERAS contractor's laboratory in Edison, NJ.

Activities for this reporting period (March 5, 2016 through June 22, 2016) included the following:

In April 2016, the EPA OSC received a copy of the final validated results of the second round of sampling conducted at the school in February 2016 by the SERAS contractor. EPA and ATSDR reviewed the sampling results. The February 2016 results were consistent with and confirmed the results of the sampling conducted in March 2015. Volatile organic compounds (VOCs) were detected in samples from ambient air, indoor air, crawl space air and sub-slab vapor. However, the review by EPA and ATSDR found that exposure to the VOCs at the levels reported in indoor air and ambient air are not expected to result in adverse health effects in children or adults.

In June 2016, the EPA OSC received the Final Trip Report and Supplemental Memo for the sampling conducted at the school in February 2016 by the SERAS contractor. The report summarized the activities conducted and included the final sampling results. The memo included additional information regarding the chemicals detected at the school.

On June 7, 2016, the EPA OSC provided a letter to the Hatboro-Horsham School District and Crooked Billet School Officials summarizing the activities conducted at the school and the results of the February 2016 sampling. The Final Trip Report and Supplemental Memo were attached.

The letter indicated that under current conditions vapor intrusion is not a concern at the school. The two rounds of sampling conducted by EPA did not identify VOCs at concentrations in indoor air that present a health concern. As such, no further sampling was recommended. EPA recommended that the school consider vapor intrusion mitigation measures if major renovations and/or new construction takes place in the

future.

2.1.2 Response Actions to Date

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

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

No further activities by EPA are anticipated.

2.2.1.1 Planned Response Activities

2.2.1.2 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

Hatboro Borough

Hatboro-Horsham School District

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.