

U.S. ENVIRONMENTAL PROTECTION AGENCY
POLLUTION/SITUATION REPORT
Boarhead Farms - Removal Polrep
Initial Removal Polrep



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
Region III

Subject: POLREP #206
Removal Site Evaluation
Boarhead Farms
03Y2
Bridgeton Township, PA
Latitude: 40.5458310 Longitude: -75.1250000

To: Christopher Sklaney, HSCD
John Epps, HSCD
Mike Towle, HSCD
Dustin Armstrong, PADEP
Alex Mandell, HSCD

From: Chris Sklaney, RPM

Date: 5/31/2018

Reporting Period: 03/21/16-05/31/18

1. Introduction

1.1 Background

Site Number:	03Y2	Contract Number:	
D.O. Number:		Action Memo Date:	
Response Authority:	CERCLA	Response Type:	
Response Lead:	EPA	Incident Category:	Removal Assessment
NPL Status:	NPL	Operable Unit:	
Mobilization Date:		Start Date:	2/17/2016
Demob Date:		Completion Date:	5/31/2018
CERCLIS ID:	PAD047726161	RCRIS ID:	
ERNS No.:		State Notification:	
FPN#:		Reimbursable Account #:	

1.1.1 Incident Category

This removal site evaluation relates to a suspected release of TCE and other organic vapors to indoor air of an occupied residence.

1.1.2 Site Description

The Site consists of approximately 124 acres of land currently owned by a Boarhead Corporation, an inactive private entity. The Site is on the National Priorities List and performance of a long-term remedial response action to address contaminated groundwater is on-going. The focus of this removal action is a single-family residence located on the Site in areas where numerous releases of hazardous substances, including VOCs, occurred. The residence is located over a cut-stone, loosely mortared foundation that is

believed to have been constructed in the late 18th or 19th century, and may be the remnants of a root cellar. A spring enters the basement in the western corner and is connected to a sump located in the southern corner through a trench drain. A second sump located in the north corner does not appear to be connected to the spring. Pumps in both sumps prevent groundwater accumulation in the basement. Staining on the basement walls indicates that water may seasonally rise as high as approximately 2 feet above the floor if not regularly pumped out. The basement is separated from the upper floors by floor doors and is not currently used as a living space.

1.1.2.1 Location

The Site is located in Bridgeton Township, Bucks County, Pennsylvania, southwest of the intersection of Lonely Cottage Road and Birch Road. The approximate street address of the Site is 1310 Lonely Cottage Road. Access to the Site by vehicle is obtained solely through an unpaved road located an estimated 2,000 feet south of the intersection of Lonely Cottage Road and Bridgton Hill Road.

1.1.2.2 Description of Threat

The residence is located within an area of the Site where releases of hazardous substances, primarily VOCs and inorganic elements, historically occurred. The releases occurred through leaking from drums or containers stored on the ground surface or buried underground. While all known sources were removed from the Site during past removal and remedial response actions, residual contamination in groundwater remains. No monitoring wells are located in close proximity to the residence, although several sources known to contain VOCs were located within 100 feet up gradient of the residence. TCE in groundwater in basement sumps has been recorded at concentrations as high as 3,300 µg/L and in basement air as high as 1,200 µg/m³.

1.1.3 Preliminary Removal Assessment/Removal Site Inspection Results

On March 22 and 23, 2016, EPA mobilized to the Site to observe conditions in the residence and collect samples from indoor air, basement air, ambient outdoor air, and groundwater in the sumps. Air samples were collected over a period of nearly 24 hours. The ambient temperature ranged from 40°F to 55°F over the 24-hour sampling period and no precipitation occurred. Analytical results indicated TCE was present in air in the living space at a maximum concentration of 3.6 µg/m³ and in basement air at a maximum concentration of 79 µg/m³. TCE was present in all five indoor air samples above the current EPA risk management benchmark of 2 µg/m³. No hazardous substances were detected in ambient outdoor air above Regional screening levels. TCE was present at concentrations of 2,200 µg/L and 350 µg/L in water samples collected from the northern and southern sumps, respectively. (The northern sump sample result was reported from the designated field duplicate sample collected at this location; TCE was present in the normal field sample collected from the northern sump at a concentration of 2,000 µg/L.) Vinyl chloride was detected in basement air at a concentration of 0.25 µg/m³ and was the only other Site-related hazardous substance detected in air above its Regional screening level. In addition to TCE, several hazardous substances were detected in the northern sump at concentrations above Site groundwater cleanup levels: PCE (13 µg/L), vinyl chloride (10 µg/L), 1,1-DCE (29 µg/L), and cis-1,2-DCE (230 µg/L).

2. Current Activities

2.1 Operations Section

2.1.1 Narrative

A removal action was conducted between 2009 and 2014 that reduced the concentrations of TCE in indoor air below a target goal of 10 µg/m³. Maximum indoor air concentrations at the end of the removal action were 6.4 µg/m³. After EPA reduced the chronic non-cancer reference concentration (RfC) to 2 µg/m³ at HQ=1, EPA initiated remedial site evaluation activities under 40 CFR § 300.420 and subsequently, 40 CFR § 300.410, to determine conditions and determine whether additional response actions were necessary and warranted.

2.1.2 Response Actions to Date

A. On February 17, 2016, EPA RPM Sklaney met the owner representative at the residence. RPM Sklaney obtained written consent to access for the purposes of performing a site evaluation and proceeded with an inspection to assess current conditions. The basement floor was dry and free of sediment, and the sumps and exhaust fan were operating and appeared to be functioning normally.

B. On March 22, 2016, EPA Environmental Response Team (ERT) contractor Tetra Tech, Inc. mobilized to the site to perform sampling. Tetra Tech collected five indoor air samples (including one field replicate), two ambient outdoor air samples, and three water samples from the basement sumps (including one field duplicate). The air samples were collected in 6-L canisters using low-flow regulators so that air would slowly collect over a full diurnal cycle. All sample canisters contained positive pressures at the time of collection on March 23, 2016. The ambient temperature ranged from 40°F to 55°F over the 24-hour sampling period and no precipitation occurred. Water samples were collected on March 23, 2016 in pre-preserved using a grab method.

C. Analytical results indicated that TCE was present at concentrations of 3.5 µg/m³ in air on the first floor, 3.6 µg/m³ in air on the second floor, 79 µg/m³ in air in the basement, 2,200 µg/L in water of the northern sump, and 350 µg/L in water of the southern sump. The indoor air concentrations are above the risk management benchmark, and a substantial threat of exposure to human health exists if the exhaust fan fails to continue to operate.

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

A. In a May 25, 2017 memorandum, EPA used the data described in Section 2.1.2 to make a determination of an imminent and substantial endangerment.

B. On January 29, 2018, EPA issued a draft Administrative Settlement Agreement and Order on Consent (ASAOC) to Boarhead Corporation and several parties which performed or are performing the remedial action at the Site. The additional parties were Cytec Industries Inc (d/b/a Cytec Solvay Group), Ford Motor Company, SPS Technologies LLC, and TI Group Automotive Systems LLC. The endangerment determination accompanied the ASAOC.

C. On February 13, 2018, all parties except for Boarhead Corporation declined to perform the work outlined in the ASAOC.

D. On April 20, 2018, Boarhead Corporation declined to perform the work outlined in the ASAOC.

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

PADEP has been notified of the results from the removal site evaluation. EPA will continue to coordinate with and update PADEP as activities are known.

2.2.1.1 Planned Response Activities

In early June 2018, EPA plans to prepare an action memorandum outlining response actions to be taken.

2.2.1.2 Next Steps

The next steps are to receive approval to proceed with a response action and begin implementation of the action.

2.2.2 Issues

No issues to report at this time.

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

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.