

U.S. ENVIRONMENTAL PROTECTION AGENCY
POLLUTION/SITUATION REPORT
PCE Chestnut RV001 - Removal Polrep



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
Region VII

Subject: POLREP #3
Progress
PCE Chestnut RV001

Atlantic, IA
Latitude: 41.4036007 Longitude: -95.0138776

To:
From: Susan Fisher, OSC
Date: 8/4/2015
Reporting Period: July 2 - 24, 2015

1. Introduction

1.1 Background

Site Number:	A7B4	Contract Number:	
D.O. Number:		Action Memo Date:	5/18/2015
Response Authority:	CERCLA	Response Type:	Time-Critical
Response Lead:	EPA	Incident Category:	Removal Action
NPL Status:	Non NPL	Operable Unit:	
Mobilization Date:	6/4/2015	Start Date:	6/4/2015
Demob Date:		Completion Date:	
CERCLIS ID:	IAN000703467	RCRIS ID:	
ERNS No.:		State Notification:	
FPN#:		Reimbursable Account #:	

1.1.1 Incident Category

Inactive Production Facility

1.1.2 Site Description

1.1.2.1 Site Location

The PCE Chestnut Site is located in Cass County, Atlantic, Iowa (41.407881 latitude, -95.013053 longitude). The Site is located in downtown Atlantic, Iowa, and consists of at least four former dry cleaning operations.

The Site borders the East Nishnabotna River. Approximately 7,000 people reside in Atlantic, Iowa.

The suspected sources of contamination are former dry cleaning operations, including 317 Chestnut Street, 500 Chestnut Street, 320 Chestnut Street, and 410 Poplar Street. Research of the city of Atlantic, Iowa, was conducted, including reviewing former city directories available in the Cass County Genealogical Society office of the Atlantic Public Library. Results of the search are:

317 Chestnut – A dry cleaning operation at 317 Chestnut began to advertise dry cleaning services starting in 1946 and operated into the 1990s.

500 Chestnut – It appears that dry cleaning operations began at this site in the late 1990s and closed sometime before 2014.

320 Chestnut – Dry cleaning operations began in the early 1990s and ended in a fire in the late 1990s.

410 Poplar – Advertisements for dry cleaning operations at this site were from 1972 to 1991.

These sites are surrounded by business and residential properties.

1.1.2.2 Description of Threat

The contaminants of concern at the Site are tetrachloroethene (PCE) and its degradation products. These contaminants are hazardous substances as defined by Section 101(14) of the Comprehensive

Environmental Response, Compensation and Liability Act (CERCLA), and are designated as hazardous substances in 40 C.F.R. § 302.4.

During a vapor intrusion assessment conducted in March 2015 by the EPA for the PCE Former Dry Cleaners Site, the EPA discovered another former dry cleaner site (PCE Chestnut Street) to the west of the PCE Former Dry Cleaners Site. The levels of PCE vapors found in buildings at the Site present a significant health threat due to inhalation hazards.

1.1.3 Removal Preliminary Assessment/Removal Site Inspection Results

On March 30, 2015, the EPA collected subslab soil gas and indoor air samples from three properties along Chestnut Street in downtown Atlantic, Iowa. Samples were collected during a vapor intrusion assessment for the PCE Former Dry Cleaner Site. Locations for the sampling were determined from past dry cleaners operating in the area.

On Scene Coordinator (OSC) Susan Fisher met with Keith Wilken, Iowa Department of Natural Resources (IDNR) from the Atlantic IDNR field office, during the week of March 30, 2015. The meeting was to explain to Keith how vapor intrusion samples were collected.

The levels of PCE vapors found in buildings at the Site present a significant health threat due to the inhalation hazards. PCE in the soil gas was found as high as 2,300,000 micrograms per cubic meter ($\mu\text{g}/\text{m}^3$) and PCE in the indoor air as high as $550 \mu\text{g}/\text{m}^3$. The elevated levels of PCE present an immediate human health risk and exceed the established indoor air and subslab soil gas screening and removal action levels for PCE.

The levels of PCE vapors found in buildings at the Site during removal assessment present a significant health threat due to inhalation hazards. Therefore, a time-critical removal action and 12-month emergency exemption Action Memorandum was signed on May 18, 2015.

2. Current Activities

2.1 Operations Section

2.0 Current Activities

2.1 Operations

2.1.1 Narrative

2.1.1.1 Current situation

The levels of PCE vapors found in buildings at the Site present a significant health threat due to inhalation hazards. (See POLREP #1 for more detailed site information.) The EPA conducted vapor intrusion sampling in this reporting period.

2.1.2 Response activities to date

July 20, 2015

EPA and START personnel mobilized to the site. The EPA mobile lab was also brought to the site. Personnel arrived late in the afternoon. The mobile lab was set up and preparations made for air sample collection.

July 21, 2015

Thirty-six samples were collected for analysis in the mobile lab.

July 22, 2015

Twenty-one samples were collected for analysis in the mobile lab. START demobilized

July 23, 2015

EPA personnel demobilized except for OSC Fisher. OSC Fisher met with property owners to discuss sample results. Mobile lab results for PCE were as high as $4,700 \mu\text{g}/\text{m}^3$ for subslab gas and $243 \mu\text{g}/\text{m}^3$ for indoor air. For TCE, mobile lab results were as high as $104 \mu\text{g}/\text{m}^3$ for indoor air and $31 \mu\text{g}/\text{m}^3$ for subslab soil gas.

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

PRPs have not been identified.

2.1.4 Progress Metrics

See the Documents section for a table of the progress metrics.

2.2 Planning Section

2.2 Planning

2.2.1 Anticipated activities for next reporting period

2.2.1.1 Planned Response Activities

See initial POLREP #1.

2.2.1.2 Next Steps

Analyze mobile lab and EPA lab sample results and determine which properties need vapor mitigation systems. Schedule groundwater sampling.

2.2.1.2 Issues

No issues at this time.

2.3 Logistics Section

No information at this time.

2.4 Finance Section

No information available at this time.

2.5 Other Command Staff

No Information at this time.

3. Participating Entities

3.0 Participating Entities

3.1 Unified Command

Environmental Protection Agency

3.2 Cooperating and Assisting Agencies

Iowa Department of Natural Resources
City of Atlantic, Iowa

4. Personnel On Site

4.0 Personnel On Site and Off Site

Susan Fisher, EPA OSC and Project Manager START Personnel
Lorenzo Sena - ENSV
OSC John Frey
OSC Megan Schutte
OSC Mike Davis
OSC Laura Webb

5. Definition of Terms

5.0 Definition of Terms

µg/m³ - Micrograms per cubic meter
PRP - Potential Responsible Party
ND - Non Detect
SS - Subslab
IA - Indoor Air
PCE - Tetrachloroethene
TCE - Trichloroethene
APA - Abbreviated Preliminary Assessment
OSC - On Scene Coordinator
ATSDR - Agency for Toxic Substance Disease Registry
IDNR – Iowa Department of Natural Resources

6. Additional sources of information

6.0 Source of Additional Information

PCE (Tetrachloroethylene):

- A man-made chemical that is widely used for dry cleaning clothes
- It evaporates easily into the air
- A colorless liquid with a mild, chloroform-like odor - has a sharp, sweet odor.

TCE (Trichloroethylene):

- Remove grease from fabricated metal parts and in the production of some textiles.
- PCE degrades to TCE under certain circumstances
- A colorless or blue liquid with a chloroform-like odor - has a sharp, sweet odor.

For more information about these chemicals go to:

<http://water.epa.gov/drink/contaminants/basicinformation>

7. Situational Reference Materials

7.0 Situational Reference Material