

U.S. ENVIRONMENTAL PROTECTION AGENCY
POLLUTION/SITUATION REPORT
Newark South Groundwater Plume (formerly Newark South Wellfield) - Removal Polrep
Final Removal Polrep



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
Region III

Subject: POLREP #5
Final POLREP
Newark South Groundwater Plume (formerly Newark South Wellfield)
A3XL
Newark, DE

To:
From: Kelley Chase, On-Scene Coordinator
Date: 6/11/2018
Reporting Period: 4/5/2018 through 6/11/2018

1. Introduction

1.1 Background

Site Number:	A3XL	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:	10/5/2016
Demob Date:		Completion Date:	6/11/2018
CERCLIS ID:		RCRIS ID:	
ERNS No.:		State Notification:	
FPN#:		Reimbursable Account #:	

1.1.1 Incident Category

Removal Assessment

1.1.2 Site Description

The Newark South Groundwater Plume Site includes approximately 164 acres located in southeast Newark, New Castle County, Delaware. The Site is located in a mixed industrial, commercial and residential area.

Groundwater in the area has been found to be contaminated with volatile organic compounds (VOCs) including tetrachloroethene (PCE) and trichloroethene (TCE). Investigations conducted by the Delaware Department of Natural Resources and Environmental Control (DNREC) have identified several potential source areas.

The City of Newark has reported the presence of low levels of the contaminants in the untreated/raw groundwater from several of its public supply wells since 2000. The public drinking water supplied by the City is treated to remove the contaminants from the untreated/raw water and continues to meet Federal and State Safe Drinking Water Act standards.

Several communities in the area receive their drinking water from SUEZ Delaware Water (formerly United Delaware Water). The water provided by SUEZ draws surface water from the White Clay & Red Clay Creeks and is not affected by the local groundwater contamination. The drinking water supplied by SUEZ meets Federal and State Drinking Water Standards.

DNREC recommended additional investigations be conducted to determine the source(s) and extent of the contamination. The State of Delaware has referred the Site to EPA for further consideration. In August 2017, EPA proposed the Site to the National Priorities List (NPL). The Site was formally added to the NPL in January 2018. The NPL is a list of sites that are eligible for cleanup financed under the Federal Superfund program.

1.1.2.1 Location

The Site includes approximately 164 acres located in southeast Newark, generally west of Route 72 (South Chapel Road), between Bellevue Road and Route 4 (East Chestnut Hill Road) in New Castle County, Delaware.

1.1.2.2 Description of Threat

EPA's Removal Program is evaluating the potential for vapor intrusion at the Site. 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. The chemicals may present health risks to residents if they accumulate in buildings. Common sources of VI include petroleum products, dry cleaning solvents, and other industrial solvents and degreasers including those found at the Site.

1.1.3 Preliminary Removal Assessment/Removal Site Inspection Results

While EPA was considering the Site for potential inclusion on the NPL, EPA Region 3 management asked the Removal Program to evaluate whether VI is a concern at the Site. The OSC subsequently reviewed available information and environmental sampling data included in DNREC's 2015 Site Investigation (SI) report.

As part of the SI, 68 groundwater samples were collected from multiple depths at 15 locations. Permanent monitoring wells were installed at eight of the locations. PCE was detected in seven of the eight monitoring wells. During the SI, Delaware's Division of Public Health Office of Drinking Water sampled three municipal wells and confirmed low levels of groundwater contamination in the untreated/raw groundwater. The SI summarizes the Preliminary Assessment (PA) that was conducted at the Site by DNREC. The PA identified multiple areas of potential environmental concern in the area.

The OSC initiated a removal site evaluation in accordance with Section 300.410 of the National Oil and Hazardous Substances Pollution Contingency Plan (NCP). As part of the preliminary assessment activities, the OSC conducted several site visits, met with DNREC representatives and EPA site assessment staff. The OSC also met with the EPA Region 3 vapor intrusion team and the Agency for Toxic Substances and Disease Registry (ATSDR) to review existing groundwater sampling data and discuss the potential for VI occurring at the Site.

2. Current Activities

2.1 Operations Section

2.1.1 Narrative

Activities conducted during the reporting period beginning October 5, 2016 through January 12, 2017 included the following:

In October 2016, to assist with conducting the removal site evaluation, the OSC issued a work assignment to EPA's Superfund Technical Assessment and Response Team (START) contractor, Weston Solutions, Inc. (Weston).

In November 2016, the OSC conducted a site visit with a Weston representative. Later the same day, the OSC attended a public meeting held by DNREC. DNREC held the meeting to provide information regarding site investigations and to let the community know that Delaware has requested assistance from EPA in addressing the contamination at the Site.

In January 2017, EPA mailed fact sheets to the surrounding community to let them know about EPA's upcoming activities.

Activities conducted during the reporting period beginning January 13, 2017 through April 5, 2017 included the following:

Beginning the week of January 30, 2017, with EPA's oversight, Weston and a drilling subcontractor (Eichelbergers Inc.) installed and developed 9 new groundwater monitoring wells in the Brookside Park and Scottfield residential developments located east of South Chapel Street (Route 72). With the permission of the Delaware Department of Transportation (DelDOT), the wells were installed in State right-of-ways. The soil borings from the wells were logged and screened in the field for the presence of volatile organic compounds (VOCs). EPA and DNREC also collected soil samples from the borings which were further screened for VOCs at DNREC's laboratory. No significant detections of VOCs were found in any of the soil samples.

On February 14 and 15, 2017, with EPA's oversight, Weston collected water samples from the newly installed wells. With the permission of the property owner, EPA and Weston also sampled an existing monitoring well previously installed by DNREC on a commercial property located west of Route 72. The samples were sent to a lab and analyzed for the presence of VOCs. Weston also collected water level data from new and existing monitoring wells.

While homes in these developments do not rely on private drinking water supply wells, the groundwater data was collected to evaluate whether groundwater contamination could contribute to vapor intrusion (VI).

In March, EPA received and reviewed the final validated results of the monitoring well sampling. All of the wells sampled had either no detections of VOCs or very low concentrations of VOCs that are below EPA VI screening levels. The results of the groundwater sampling indicate that VI is not a concern at this time.

Activities conducted during the reporting period beginning April 6, 2017 through November 2, 2017 included the following:

During the week of September 25, 2017, with EPA's oversight and the permission of property owners, Weston collected water samples from existing groundwater monitoring wells. Wells sampled included the nine EPA recently installed in residential areas, eight wells previously installed in

commercial/industrial areas by DNREC, and two wells installed by a commercial property owner as part of an earlier investigation. The samples were sent to a laboratory and analyzed for the presence of VOCs.

The OSC received and reviewed the preliminary groundwater data for the sampling conducted in September. The preliminary data were consistent with the results from previous sampling efforts. The majority of the samples collected from the monitoring wells located in residential areas had little or no detections of VOCs. When detected, VOC concentrations were below levels that would present a concern with respect to VI. Neither PCE or TCE were detected above the laboratory's reporting limits. VOC concentrations, including levels of PCE and TCE, in samples collected from the monitoring wells located on commercial/industrial properties were similar to the levels reported in previous sampling events.

Activities conducted during the reporting period beginning November 3, 2017 through April 5, 2018 included the following:

The OSC received and reviewed the validated final groundwater data for the sampling conducted in September 2017. There were no significant changes from the preliminary data. The majority of the samples collected from the monitoring wells located in residential areas had little or no detections of VOCs. Neither PCE or TCE were detected above the laboratory's reporting limits. VOC concentrations, including levels of PCE and TCE, in samples collected from the monitoring wells located on commercial/industrial properties were similar to the levels reported in previous sampling events. The results of the groundwater sampling conducted in February and September 2017 indicate that VI is not a concern at this time.

The final groundwater sampling results were provided to DNREC, ATSDR and the members of the EPA Region 3 VI Workgroup. Final results were also provided to the community.

Activities conducted during this reporting period beginning April 6, 2018 through June 11, 2018 included the following:

No additional sampling activities were conducted during this reporting period. The OSC coordinated with DNREC representatives and other EPA programs to determine whether additional evaluation of vapor intrusion was needed at commercial/industrial properties where groundwater monitoring wells were initially installed and sampled as part of DNREC's 2015 Site Investigation. While VOCs, including PCE and TCE, were detected in samples collected from monitoring wells on these commercial/industrial properties, the reported levels of VOCs in groundwater indicates that further evaluation of vapor intrusion under this removal site evaluation is not necessary.

Previous investigations conducted under Delaware's Voluntary Cleanup Program by the property owner at the Pencader Cleaners Site, located within the limits of the Newark South Groundwater Plume Site, had found that vapor intrusion was a potential concern at this property. After finding the dry-cleaning business had recently ceased operations and removed all process equipment from the building, the OSC considered the need for additional evaluation of vapor intrusion at this location. However, after further discussion with DNREC representatives, the OSC found that the property owner had entered into a Long-Term Stewardship plan and Environmental Covenant restricting use of the property and agreeing to protect the integrity of the foundation/slab to prevent vapor intrusion. Concerns about the integrity of the slab and any follow-up actions, if needed, are expected to be addressed by the owner under DNREC's oversight.

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 are planned.

2.2.1.1 Planned Response Activities

No response activities are planned.

2.2.1.2 Next Steps

The Removal Assessment will be closed out.

The Newark South Groundwater Plume Site was formally added to the NPL in January 2018. Future activities at the Site are expected to be addressed by EPA's Remedial Program.

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

City of Newark

Delaware Department of Natural Resources and Environmental Control (DNREC)

Delaware Division of Public Health Office of Drinking Water (DPH ODW)

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.