

U.S. ENVIRONMENTAL PROTECTION AGENCY
POLLUTION/SITUATION REPORT
Former Custom Cleaners - Removal Polrep



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
Region IV

Subject: POLREP #2
Continuation of Removal Action
Former Custom Cleaners
B45Y
Memphis, TN
Latitude: 35.1150104 Longitude: -89.9450191

To: Ken Johnson, TDEC

From: Steve Spurlin, OSC

Date: 9/19/2016

Reporting Period: September 02, 2016 to September 19, 2016

1. Introduction

1.1 Background

| | | | |
|----------------------------|--------------|--------------------------------|----------------|
| Site Number: | B45Y | Contract Number: | EP-S4-14-03 |
| D.O. Number: | 20 | Action Memo Date: | 8/10/2016 |
| Response Authority: | CERCLA | Response Type: | Time-Critical |
| Response Lead: | EPA | Incident Category: | Removal Action |
| NPL Status: | NPL | Operable Unit: | |
| Mobilization Date: | 8/18/2016 | Start Date: | 8/18/2016 |
| Demob Date: | | Completion Date: | |
| CERCLIS ID: | TNN000402275 | RCRIS ID: | |
| ERNS No.: | | State Notification: | |
| FPN#: | | Reimbursable Account #: | |

1.1.1 Site Description

The FCC site operated as a laundry or dry cleaner from approximately 1950 until the mid-1990s. In 2013, the Tennessee Department of Environment and Conservation (TDEC) conducted investigation activities that indicated tetrachloroethylene, also known as perchloroethylene (PCE), was used during Custom Cleaners tenure at the site. In March 2015, the EPA supported TDEC Site Inspection (SI) sampling activities at the FCC site that included the collection of subsurface soil samples, soil gas samples, and groundwater samples. Analytical results for samples collected during the SI indicated the presence of a PCE source.

The Site is part of a larger parcel listed on the Shelby County Register's website as 3523 Southern Avenue. This property, which includes the Site, was most recently comprised of Sharri's Discount Arts at 3517 Southern Avenue, a small portion of the strip mall to the west, and a separate, vacant commercial building to the east at 3523 Southern Avenue. The entire property is approximately 0.62 acres in area. The Site is located in an area with high pedestrian traffic due to the proximity of the University of Memphis. The nearest residential properties are apartment complexes approximately 375 feet to the east of the Site and single family residential properties approximately 360 feet to the south of the Site.

1.1.2.1 Location

The FCC Site is a commercially zoned property located at 3517 Southern Avenue in Memphis, Shelby County, Tennessee and is situated in a residential and commercial area of east Memphis. The area is undergoing significant redevelopment, including the development of the property adjoining the western boundary of the Site into a popular fast food restaurant.

The FCC Site is bordered to the north by Southern Avenue, to the east by Minor Road, to the south by Spottswood Avenue, and to the west by South Highland Avenue. Existing Site structures consist of a parking lot and one building along Southern Avenue.

1.1.2.2 Description of Threat

The EPA Scientific Support Section (SSS) reviewed the Site data and information to evaluate potential threats to drinking water and ambient air via vapor intrusion. Groundwater samples in the vicinity of FCC confirmed that the groundwater is contaminated with PCE. Elevated concentrations of PCE in subsurface soil indicate that the PCE contaminated soil could be the source for the groundwater contamination. The Site is up gradient from municipal drinking water wells for the City of Memphis. There is no confining clay

between the shallow, intermediate and the deeper drinking water aquifer. Lack of a confining layer is called a "window". A window is an area where the confining clay is thin, sandy and/or absent. This window increases the potential for contamination in the shallow groundwater to threaten the deeper drinking water aquifer. The potentiometric-surface maps for the aquifers near the Site indicate groundwater is flowing eastward towards the window and towards the Sheahan Well Field, a source of drinking water for the City of Memphis.

All twenty-two wells in the Memphis Light, Gas and Water (MLGW) Sheahan Well Field are within two miles of the Site. Twelve of the 22 wells are within one mile of the Site. Since the Cockfield aquifer is interconnected with the Memphis aquifer within two miles of the Site, there is a potential for the PCE contaminated groundwater at the Site to impact the municipal drinking water wells within MLGW's Sheahan Well Field.

1.1.3 Preliminary Removal Assessment/Removal Site Inspection Results

In March 2015, the Tennessee Department of Environment and Conservation (TDEC) conducted Site Inspection (SI) sampling activities at the Site. Results for subsurface soil, soil gas and groundwater samples collected during the SI revealed the presence of tetrachloroethylene, also known as perchloroethylene (PCE). Due to the elevated concentrations of PCE, and the proximity of the Site to the City of Memphis drinking water supply, TDEC and the U.S. Environmental Protection Agency's Remedial program referred the Site to the Emergency Response, Removal and Prevention Branch (ERRPB).

On January 18, 2016, On-Scene Coordinator (OSC) Steve Spurlin and Tetra Tech START mobilized to the Site to conduct a Removal Site Evaluation (RSE). The RSE focused on delineating potential subsurface contamination source areas by expanding the subsurface sampling conducted during the March 2015 TDEC SI sampling event. During the RSE, 15 soil borings were completed. Seventy-five soil samples were collected from the boring locations during the RSE field activities. Typically, five samples were collected from each boring (4-foot intervals). Every sample contained PCE with concentrations ranging from 99 µg/kg to 1,330,000 µg/kg.

2. Current Activities

2.1 Operations Section

2.1.1 Narrative

EPA's removal action is addressing the source of PCE soil contamination that has impacted ground water and therefore represents a potential threat to drinking water. This action will be performed under EPA's time-critical removal authorities as defined in the 40 CFR 300.

The following major activities will take place on Site over the duration of the removal action:

- Demolition of building in order to access contaminated soil
- Transport and dispose of construction debris
- Excavate, stage, treat, and dispose of contaminated soil
- Backfill excavation with non-contaminated soil

2.1.2 Response Actions to Date

Activities conducted at the Site from 09/02/16 to 09/19/16 include:

- Conducted site walk with ERRS & START
- Initiated Site set-up bringing in trailers and equipment
- Reached out to public surrounding the immediate area with fact sheets and discussions on removal activities
- Started demolition of building
- Performed dust suppression using a water truck
- Disconnected gas line from building
- Demolished building and reduced/disposed of construction debris
- Cleaned up Site area and concrete slab
- 16 tandem truck loads of concrete were removed from the site
- Preparation for excavation activities (sampling backfill soil, testing air monitoring equipment, preparation of staging area)
- Segregation of excavation soil
- Waste characterization sampling of excavated soil deemed for disposal

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

See Enforcement Addendum

2.1.4 Progress Metrics

- 23 truckloads of non hazardous construction debris went to a nearby landfill.
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2.2 Planning Section

2.2.1 Anticipated Activities

2.2.1.1 Planned Response Activities

Upcoming removal activities will include:

- ERRS will backfill the excavated areas with clean soils and compact the soils in place.
- START will continue to collect samples from the stockpiled waste soils and continue air monitoring.
- ERRS will begin load out of the waste material.

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

Not applicable

3.2 Cooperating Agencies

Tennessee Department of Environment and Conservation (TDEC)

Memphis Light, Gas and Water (MLGW)

4. Personnel On Site

2 OSCs

6 ERRS Contractors

1 START Contractor

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.