

U.S. ENVIRONMENTAL PROTECTION AGENCY
POLLUTION/SITUATION REPORT
Lower Darby Creek Area - Clearview Landfill - Removal Polrep



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
Region III

Subject: POLREP #3
OU1 Residential Area Removal Action Update
Lower Darby Creek Area - Clearview Landfill
0305521
Darby Township, PA
Latitude: 39.9035470 Longitude: -75.2551460

To: Colin Wade, PADEP

From: Joshua Barber, RPM

Date: 10/7/2016

Reporting Period: 9/24/16 through 10/7/16

1. Introduction

1.1 Background

Site Number:	0305521	Contract Number:	EP-S3-12-03
D.O. Number:	0026	Action Memo Date:	7/21/2016
Response Authority:	CERCLA	Response Type:	Time-Critical
Response Lead:	EPA	Incident Category:	Removal Action
NPL Status:	NPL	Operable Unit:	OU1
Mobilization Date:	8/8/2016	Start Date:	8/8/2016
Demob Date:		Completion Date:	
CERCLIS ID:		RCRIS ID:	
ERNS No.:		State Notification:	
FPN#:		Reimbursable Account #:	

1.1.1 Incident Category

The Lower Darby Creek Area - Clearview Landfill Site Operable Unit 01 (Residential Area) is the location of a release of hazardous substances in soils within a residential neighborhood. A Removal Action will address certain contaminated residential soils posing an unacceptable risk to human health.

1.1.2 Site Description

The LDCA Site includes two landfills: 1) the Clearview Landfill and 2) the Folcroft Landfill and Annex. The Clearview Landfill is located along the eastern bank of both Darby Creek and Cobbs Creek, near the intersection of 83rd Street and Buist Avenue. The footprint of Clearview Landfill is much larger than the area now subject to a Removal Action and lies primarily within Darby Township, Delaware County, PA, but partially within the limits of the City of Philadelphia. OU1 includes the Clearview Landfill, the Eastwick Regional Park (a/k/a "City Park" or "Park") which abuts the eastern limits of the present-day landfill footprint, and a portion of the Eastwick neighborhood (a residential area) located generally east of the present-day landfill area and the Park. The Removal Action involves the removal of soil from the residential area of Philadelphia once within the footprint of the landfill and then staging of that soil on a portion of the landfill located in adjacent Delaware County. A Remedial Action will be conducted in the future to address those aspects of the Site not addressed by the Removal Action.

NOTE: A Removal Action was previously conducted in a different area of the Clearview Landfill between November 2011 and September 2012 relating to the removal of PCBs-contaminated soil from the Southern Industrial Area of the Clearview Landfill. See POLREPs 01 through 23 relating to that response action and POLREP 24 which is the Final POLREP for that response action. Since the present Removal Action in the residential area relates to PAHs in an entirely separate area of the former landfill, this Removal Action will be documented in a new series of POLREPs beginning with POLREP 01 for the residential area dated 9/9/16.

1.1.2.1 Location

The Removal Action involves the removal of soil from residential properties in the Eastwick neighborhood of Philadelphia and storage of that soil upon a portion of the Clearview Landfill in Darby Township. The locations of individual homes will not be reported in this POLREP.

1.1.2.2 Description of Threat

A group of compounds called polycyclic aromatic hydrocarbons (PAHs) present the majority of the threat posed by the Site. Benzo[a]pyrene (B[a]P) is the primary risk driver among the detected PAH compounds. Elevated concentrations of B[a]P and other PAHs are detected in soils within the residential properties of Eastwick neighborhood and adjacent City Park. The levels of PAHs pose an unacceptable risk to residential human receptors (residents of the Eastwick neighborhood exposed to contaminated soils). Elevated lead concentrations are also found within the PAH-contaminated soils. Incidental ingestion of lead in the soil may also result in increased blood lead levels. Lead is known to adversely affect the central nervous system. The threats are more fully described in the July 21, 2016 Action Memorandum.

1.1.3 Preliminary Removal Assessment/Removal Site Inspection Results

The Site is an NPL Site. The RPM for the Site and the OSC relied upon existing soil sample information (e.g., data collected during remedial investigation or preliminary design activities) and newly collected soil analytical results to comprise a Removal Site Evaluation (RSE). The RSE indicated that elevated levels of hazardous substances are located in residential soils within the OU1 Residential Soil Area. The hazardous substances are present at levels which pose an unacceptable excess cancer risk to exposed human receptors.

The maximum concentration of PAHs in the surface (0 to 12 inches) soil of the residential properties in the Eastwick neighborhood are 118 mg/kg (ppm or parts per million). The maximum concentration of B[a]P within these soils is 8.6 mg/kg which is well above the 1×10^{-4} excess cancer risk level for this compound. Elevated PAH concentrations are also found in subsurface soils well above the 1×10^{-4} excess cancer risk level. Based upon on-scene observation, some of the contaminated soils are poorly vegetated or mixed into garden or play areas allowing an increased chance of unacceptable exposure to elevated PAHs. Elevated lead is also found in a limited area of the Eastwick neighborhood. The area of elevated lead contamination is believed to exist within the area of elevated PAHs contamination described above.

The removal site evaluation ad threats posed are more fully described in the July 21, 2016 Action Memorandum.

2. Current Activities

2.1 Operations Section

2.1.1 Narrative

An Action Memorandum approving response actions to address the contaminated soil in the residential Eastwick neighborhood was signed July 21, 2016. The RPM conducted several outreach sessions to inform the residents and community groups about the Removal Action. EPA also mailed information to residents of the community. The RPM also gained access from and discussed response actions with residents and property owners to be directly affected by the Removal Action.

The OSC and RPM first convened with ERRS (ER) and START (Weston) contractors on the Site on August 8, 2016 (Mobilization Date). This meeting and subsequent meetings were conducted to assure a proper plan of action and that proper personnel, equipment, and materials could be identified to implement the response action. Between 8/8/2016 and 9/6/2016, the OSC and RPM continued preparation activities inclusive of coordination with residents and contractors and development of air monitoring and other actions to enhance safety in the community during the Removal Action.

2.1.2 Response Actions to Date

ERRS contractors began excavation of residential yards on 9/26/16. Rear and side yards were excavated to a depth of 24 inches below ground surface (bgs). Front yards were excavated to a depth of 6 inches bgs in the vicinity of utilities and 24" where no utilities were present. Brick, concrete, asphalt and other construction and demolition debris (C&D) were commonly found throughout the excavated areas. An area of dark stained soil with a faint odor was identified in the rear yard of several properties at a depth of approximately 18 inches bgs. A sample was collected from this area and analyzed PAHs, PCBs, volatiles and metals. Results from this sample were above Removal Trigger Levels and generally consistent with historic sample results collected during the OU1 PDI, but deeper than the limits of the excavation identified in the scope of the response action.

Excavated areas left open overnight were fenced off. Once targeted excavation depths were achieved, high visibility fencing was placed in the bottom of the excavated area. Approximately 18 inches of clean back fill was placed in lifts and compacted with a vibratory roller. Six inches of topsoil were then placed and graded back to pre-excavation elevations. Four yards were completely excavated and backfilled between 9/26/16 and 9/30/16. Between 10/3/16 and 10/7/16, the remaining 4 properties on the first set of eight rowhomes were also excavated and backfilled in the same manner. A total of approximately 615 cubic yards of contaminated soil was removed from these yards. Approximately 700 cubic yards of clean fill and topsoil were needed to backfill excavated areas due to compaction of the new material. Restored sod, shrubbery, gardens and mulch were installed on 10/6/16 and 10/7/16. Watering of sod and vegetation will be conducted by ERRS for two weeks after installation after which time the maintenance is the responsibility of the property owner.

Excavated soil from yards was placed in the soil staging area on the top of the landfill. Dust suppression activities with garden hoses and water truck were conducted as needed to control dust.

The START contractor conducted air monitoring using Dust Trak units to monitor dust levels upwind and downwind of the work areas. Air monitoring data did not identify any exceedances of Total Dust Action Limits. Daily air monitoring charts are being uploaded to the EPA OSC website. Data from the Dust Trak units is being uploaded in real-time to the the EPA ERT VIPER website. Total Dust Action Limits that are protective for residents and workers have been established in the HASP. One Dust Trak unit experienced

malfunctions during the week of 10/3/16 that caused to report incorrect data. This malfunction was resolved by restarting and recalibrating the instrument.

The EPA Remedial Project Manager (RPM) and START contractor met with the property owner representatives and tenants of the next five yards to be addressed. Inventory was taken of all items to be removed prior to excavation. A restoration plan and the expectations for the work to be performed was developed and agreed to by EPA, property owners and tenants. The RPM has explained to the property owners and tenants the process that will be followed during yard excavation and restoration. Although dust suppression will be ongoing, EPA has recommended that all doors and windows remain closed during excavation to minimize any dust entering the homes and to dampen any loud noises. Excavation of these yards will start on 10/10/16.

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

Activity related to identification of PRPs is still ongoing.

2.1.4 Progress Metrics

NOTE: contaminated soil is removed from the yards and staged on the Clearview Landfill.

<i>Waste Stream</i>	<i>Medium</i>	<i>Quantity</i>	<i>Manifest #</i>	<i>Treatment</i>	<i>Disposal</i>
Residential Yards	Soil	615 cu yds.	N/A	N/A	615 cu yds.

2.2 Planning Section

2.2.1 Planned Response Activities Next Period

Continue excavation of contaminated soils from residential yards.

Backfill excavated yards with clean soil and restore surface vegetation.

Continue dust suppression.

Continue air monitoring upwind and downwind of work areas.

Conduct surveys and inventories of next set of yards to be addressed.

Continue coordination with residents.

2.2.2 Issues

Extensive coordination with residents will be required before and during soil removal in yards.

2.3 Logistics Section

The ERRS contractor is responsible for logistics.

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.