

U.S. ENVIRONMENTAL PROTECTION AGENCY
POLLUTION/SITUATION REPORT
Birchly Court - Removal Polrep
Initial Removal Polrep



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
Region II

Subject: POLREP #1
Initial Pollution Report
Birchly Court
A26Q
West Deptford, NJ
Latitude: 39.8581790 Longitude: -75.1567840

To:
From: David Rosoff, OSC
Date: 9/16/2016
Reporting Period: August 15, 2016 - September 16, 2016

1. Introduction

1.1 Background

Site Number:	A26Q	Contract Number:	EP-S2-15-02
D.O. Number:	0042	Action Memo Date:	7/25/2016
Response Authority:	CERCLA	Response Type:	Time-Critical
Response Lead:	EPA	Incident Category:	Removal Action
NPL Status:	Non NPL	Operable Unit:	
Mobilization Date:	8/15/2016	Start Date:	8/15/2016
Demob Date:		Completion Date:	
CERCLIS ID:	NJN000202726	RCRIS ID:	
ERNS No.:		State Notification:	
FPN#:		Reimbursable Account #:	

1.1.1 Incident Category

Battery Casing Disposal in residential neighborhood

1.1.2 Site Description

On March 14 2016, EPA received a request from the New Jersey Department of Environmental Protection (NJDEP) to evaluate the Site for a CERCLA removal action. Buried crushed battery casings were discovered at the Site during a sewer lateral repair in the front yard of 35 Birchly Court in West Deptford, New Jersey on November 19, 2015. Title search information indicated that the Matteo family owned the property on which the Birchly Court Site is located until 1986. The crushed battery casings found at the site are similar to that found on the Matteo Superfund Site located at 1692 Crown Point Road less than one mile away to the south west.

During EPA assessment activities in May 2016 crushed battery casing material was found buried in the front yard of 35 Birchly Court and in the backyard of 1411 Woodlane Drive. Lead concentrations associated with these battery casings and the comingled soil were significantly elevated on these two properties.

1.1.2.1 Location

The battery casing disposal area on 35 Birchly Court and 1411 Woodlane Drive is in a residential neighborhood. Both properties are less than one-quarter of an acre and are typical landscaped residential yards with lawns, plantings, and asphalt driveways. 1411 Woodlane has an in-ground pool in the back yard.

1.1.2.2 Description of Threat

Crushed battery casings containing significantly elevated concentrations of lead have been found on the surface of the ground and buried in the yards of 35 Birchly Court and 1411 Woodlane Drive. TCLP testing of this material reveals it is a RCRA characteristic hazardous waste. Some of the battery casing samples were also contaminated with PCBs. Soil in contact with the battery casings is also contaminated with lead. Concentrations of both lead and PCBs exceed EPA RMLs. Lead was detected as high as 68,000 ppm in samples sent to the laboratory. PCBs were detected as high as 32 ppm in laboratory results. Surface soil (0-1 inch bgs) lead contamination is as high as 7,000 ppm. Residents and visitors who utilize these residential yards could be exposed to these unacceptable levels of these hazardous substances.

1.1.3 Preliminary Removal Assessment/Removal Site Inspection Results

In May 2016, EPA conducted soil sampling to determine the nature and extent of soil contamination on the 35 Birchly Court property and on adjacent residential properties at 33 and 37 Birchly Court, and 1411 Woodlane Drive. A total of 568 discrete soil samples were collected from more than 50 boring locations advanced on these four properties. Discrete soil samples were collected from the 0-1, 1-6, 6-12, 12-18, 18-24, 24-30, 30-36, 36-42, 42-48 inch depth intervals below ground surface (bgs). Samples from each interval sample were field screened using an x-ray fluorescence (XRF) elemental analyzer. Approximately 23 percent of the samples were submitted for laboratory confirmation (TAL metals analysis). The XRF and lab result statistical correlation was evaluated for lead for the full data set and the R-squared (R^2) value calculated is 0.87. Crushed battery casing material was found buried in the front yard of 35 Birchly Court and in the backyard of 1411 Woodlane Drive. Lead concentrations associated with these battery casings and the comingled soil were significantly elevated on these two properties. Lead concentrations in samples sent to the laboratory were as high as 68,000 parts per million (ppm) on 35 Birchly Court and as high as 25,000 ppm on 1411 Woodlane Drive. The other two properties investigated (33 and 37 Birchly Court) did not have significant amounts of battery casing material or significantly elevated lead concentrations in the samples collected.

Toxic Characteristic Leaching Procedure (TCLP) analysis of battery casing material reveals that it is a Resource Conservation and Recovery Act (RCRA) characteristic hazardous waste based on toxicity. Lead TCLP results were as high as 415 milligrams per liter (mg/l), well above the 5 mg/L threshold for hazardous waste. In addition, poly chlorinated biphenyl (PCB) analysis of the battery material indicates that the waste has been contaminated with PCBs (Aroclor 1254). PCB concentrations of up to 32 ppm were detected in battery casing samples from 35 Birchly Court.

2. Current Activities

2.1 Operations Section

2.1.1 Narrative

The objective of this removal action is to address the threat from hazardous substances within buried waste and associated contaminated soils at the Site. The following response actions will be implemented to achieve this objective:

- Develop and implement a Site health and safety plan, quality assurance project plan, and community air monitoring plan.
- Mobilize an Emergency and Rapid Response Services (ERRS) contractor to establish support zones, contaminant reduction zones, and exclusion zones. Initial work would include marking out any underground utilities and establishing excavation and staging areas.
- Establish engineering controls to assure proper management of excavated materials (i.e. dust suppression, soil staging areas, erosion and sedimentation control).
- Conduct perimeter air monitoring in order to monitor Site management of excavated soil.
- Excavate and dispose of approximately 1,200 tons of hazardous waste and contaminated soil off-site.
- Restore excavated areas with certified clean backfill material. Backfill material will be consistent with existing Site soil and meet the NJDEP residential soil cleanup standards. Site will be re-landscaped and restored to original condition after backfill is placed. This will include seeding or sodding, replacement of plants or trees removed during the excavation, replacement of hard surfaces removed or damaged during the work and replacement of utilities removed during the excavation.
- Temporary Relocation of residents as needed.

Excavation depths will range from six inches to six feet bgs in the proposed excavation area. Depths and horizontal extents have been estimated based on the data collected by EPA in May 2016. Post excavation sampling will be conducted to document lead concentrations in the soil remaining. Reasonable attempts will be made in the deeper excavation area to meet EPA's residential clean up goal of 400 ppm. All off-site disposal facilities utilized will be in compliance with the EPA Off-Site Rule.

2.1.2 Response Actions to Date

Excavation and backfilling on 1411 Woodlane Drive are complete as of August 24th. Sod was placed on the backfilled topsoil in the backyard on August 25th. Excavation of the yard at 35 Birchly Court is approximately 60% complete as of September 16th. 19 loads (~ 350 tons) of id-27 (non-hazardous soil) have been sent to Gloucester County Subtitle D landfill as of this date. 29 loads (~ 500 tons) of Hazardous waste have been sent to Stericycle in Hatfield PA for treatment prior to disposal at GROWS landfill (Subtitle D) in PA.

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

104E letters are being generated to be sent to potentially responsible parties and parties of interest.

2.1.4 Progress Metrics

<i>Waste Stream</i>	<i>Medium</i>	<i>Quantity</i>	<i>Manifest #</i>	<i>Treatment</i>	<i>Disposal</i>
ID-27	Soil	350 tons		None	Gloucester County Muni LF
Hazardous	Soil	500 tons		Stabilization	GROWS LF

2.2 Planning Section

2.2.1 Anticipated Activities

Excavation and backfilling activities will continue at 35 Birchly Court. Expected excavation completion is early October.

2.2.1.1 Planned Response Activities

Upon completion of excavation and backfilling, sub-contracted landscaping services will be brought in to re-landscape 35 Birchly Court. The asphalt driveway and sidewalks will be replaced.

2.2.1.2 Next Steps

2.2.2 Issues

Relocation of the residents at 35 Birchly Court is ongoing until excavation activities are complete and utilities can be re-established.

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

6 ERRs and 2 RST

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.