U.S. ENVIRONMENTAL PROTECTION AGENCY POLLUTION/SITUATION REPORT Lovers Lane Lead - Removal Polrep Final Removal Polrep



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY Region V

Subject: POLREP #4

Lovers Lane Lead

C5A8

Plainfield Township, MI

Latitude: 43.0438290 Longitude: -85.6552600

To: Mark Johnson, ATSDR

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From: Jeffrey Lippert, On-Scene Coordinator

Date: 6/9/2012

Reporting Period: 6/4/2012-6/12/2012

1. Introduction

1.1 Background

Site Number:C5A8Contract Number:EP-S5-08-04D.O. Number:046Action Memo Date:4/13/2012Response Authority:CERCLAResponse Type:Time-CriticalResponse Lead:EPAIncident Category:Removal Action

NPL Status: Non NPL Operable Unit:

Mobilization Date: 5/7/2012 Start Date: 5/7/2012 Demob Date: 6/12/2012 **Completion Date:** 6/12/2012 **CERCLIS ID:** MIN000510664 RCRIS ID: N/A **ERNS No.: State Notification:** Yes FPN#: Reimbursable Account #:

1.1.1 Incident Category

Time-Critical Removal

1.1.2 Site Description

During the excavation for the installation of a water main, contractors for Plainfield Township encountered a large quantity of buried, crushed, lead-acid battery casing fragments (battery casings) in the right-of-way (ROW) adjacent to the site. Plainfield Township contacted the Michigan Department of Environmental Quality (MDEQ) who oversaw the excavation, removal, and proper disposal of the battery casings in the ROW. Based on MDEQ's observations, the battery casings extended beyond the ROW and onto the residential property. MDEQ contacted EPA in a letter dated November 4, 2011, and requested assistance with the site.

EPA met MDEQ on site on November 22, 2011, to conduct a walk-through of the site. EPA observed numerous pieces of battery casings throughout the residential property that had made their way to the surface from below. The owner of the home was in ill-health and going through cancer treatment. She was unable to speak and has since died. Her son informed both MDEQ and EPA Staff that he had observed pieces of battery casings throughout the property his whole life and had encountered them when digging a fire pit in the back yard. The son, his pregnant wife, and two small children have inherited the home and are in the process of moving in.

1.1.2.1 Location

The site is located at 4407 Lovers Lane, Plainfield Township, Kent County, Michigan. It is in a residential neighborhood.

1.1.2.2 Description of Threat

The MDEQ Direct Contact Criteria (DCC) for lead in residential soil is 400 milligrams per kilogram (mg/kg) and surface soils at the site were as high as 7,100 mg/kg. The Agency for Toxic Substances and Disease Registry (ATSDR) fact sheet for lead states that "Children are more vulnerable to lead poisoning than adults. A child who swallows large amounts of lead may develop blood anemia, severe stomachache, muscle weakness, and brain damage." With the new occupants of the residence on site, including a pregnant woman and two small children, the high level of lead in surface soils had the potential to be ingested by the children and their pregnant mother.

1.1.3 Preliminary Removal Assessment/Removal Site Inspection Results

EPA conducted an assessment of the site on December 20, 2011 and documented the presence of a seam of crushed lead-acid battery casings one inch to three feet below the ground surface. The seam was one foot to two feet thick throughout the 0.39-acre property. Pieces of battery casings were also observed in the spoils from a newly drilled drinking water well and on the surface throughout the front and back yard.

2. Current Activities

2.1 Operations Section

2.1.1 Narrative

During the excavation for the installation of a water main, contractors for Plainfield Township encountered a large quantity of battery casings in the ROW adjacent to the site. Plainfield Township contacted MDEQ who oversaw the excavation, removal, and proper disposal of the battery casings in the ROW. Based on MDEQ Staff observations, the battery casings extended beyond the ROW and onto the residential property. MDEQ requested EPA assistance with the site.

2.1.2 Response Actions to Date

On 6/4/12 - 6/12/12, Plainfield Township Water Department tapped the water main to connect the site to city water. EPA connected the tap to the site property and installed a water meter. EPA laid plastic sheeting underneath house in the crawlspace. EPA continued site restoration by placing grass seed, fertilizer, and hay on top of the clean imported topsoil. Shrubs, trees, and plants were purchased and planted by EPA to replace those lost during removal activities.

2.1.3 Enforcement Activities, Identity of Potentially Responsible Parties (PRPs) PRP search is on-going.

2.1.4 Progress Metrics

Waste Stream	Medium	Quantity	Manifest #	Treatment	Disposal
Lead Contaminated Solids	Solid	43.14 Tons	009077001JJK		EQ Detroit
Lead Contaminated Solids	Solid	46.03 Tons	009077002JJK		EQ Detroit
Lead Contaminated Solids	Solid	39.51 Tons	009077004JJK		EQ Detroit
Lead Contaminated Solids	Solid	43.58 Tons	009077005JJK		EQ Detroit
Lead Contaminated Solids	Solid	37.95 Tons	009077006JJK		EQ Detroit
Lead Contaminated Solids	Solid	35.61 Tons	009077007JJK		EQ Detroit
Lead Contaminated Solids	Solid	45.64 Tons	009077008JJK		EQ Detroit
Lead Contaminated Solids	Solid	48.20 Tons	009077009JJK		EQ Detroit
Lead Contaminated Solids	Solid	41.84 Tons	009077010JJK		EQ Detroit
Lead Contaminated Solids	Solid	39.91 Tons	009077011JJK		EQ Detroit
Lead Contaminated Solids	Solid	40.35 Tons	009077012JJK		EQ Detroit
Lead Contaminated Solids	Solid	43.58 Tons	009077013JJK		EQ Detroit
Lead Contaminated Solids	Solid	50.79 Tons	009077014JJK		EQ Detroit
Lead Contaminated Solids	Solid	46.66 Tons	009077015JJK		EQ Detroit
Lead Contaminated Solids	Solid	45.66 Tons	009077016JJK		EQ Detroit
Lead Contaminated Solids	Solid	48.63 Tons	009077017JJK		EQ Detroit
Lead Contaminated Solids	Solid	47.53 Tons	009077018JJK		EQ Detroit
Lead Contaminated Solids	Solid	46.87 Tons	009077019JJK		EQ Detroit
Lead Contaminated Solids	Solid	45.10 Tons	009077020JJK		EQ Detroit

Lead Contaminated Solids	Solid	44.47 Tons	009077021JJK	EQ Detroit
Lead Contaminated Solids	Solid	51.14 Tons	009077022JJK	EQ Detroit
Lead Contaminated Solids	Solid	40.96 Tons	009077023JJK	EQ Detroit
Lead Contaminated Solids	Solid	46.65 Tons	009077024JJK	EQ Detroit
Lead Contaminated Solids	Solid	44.07 Tons	009077025JJK	EQ Detroit
Lead Contaminated Solids	Solid	49.80 Tons	009077026JJK	EQ Detroit
Lead Contaminated Solids	Solid	37.09 Tons	009077027JJK	EQ Detroit
Lead Contaminated Solids	Solid	42.27 Tons	009077028JJK	EQ Detroit
Lead Contaminated Solids	Solid	42.08 Tons	009077029JJK	EQ Detroit
Lead Contaminated Solids	Solid	51.65 Tons	009077030JJK	EQ Detroit
Lead Contaminated Solids	Solid	45.97 Tons	009077031JJK	EQ Detroit
Lead Contaminated Solids	Solid	48.38 Tons	009077032JJK	EQ Detroit
Lead Contaminated Solids	Solid	43.31 Tons	009077033JJK	EQ Detroit
Lead Contaminated Solids	Solid	44.43 Tons	009077034JJK	EQ Detroit
Lead Contaminated Solids	Solid	47.59 Tons	009077035JJK	EQ Detroit
Lead Contaminated Solids	Solid	49.88 Tons	009077036JJK	EQ Detroit
Lead Contaminated Solids	Solid	41.69 Tons	009077037JJK	EQ Detroit
Lead Contaminated Solids	Solid	54.27 Tons	009077038JJK	EQ Detroit
Lead Contaminated Solids	Solid	58.01 Tons	009077039JJK	EQ Detroit
Lead Contaminated Solids	Solid	49.55 Tons	009077040JJK	EQ Detroit
Lead Contaminated Solids	Solid	44.54 Tons	009077041JJK	EQ Detroit
Lead Contaminated Solids	Solid	41.76 Tons	009077042JJK	EQ Detroit
Lead Contaminated Solids	Solid	48.93 Tons	009077043JJK	EQ Detroit
Lead Contaminated Solids	Solid	47.71 Tons	009077044JJK	EQ Detroit
Lead Contaminated Solids	Solid	41.33 Tons	009077045JJK	EQ Detroit
Lead Contaminated Solids	Solid	36.02 Tons	009077046JJK	EQ Detroit
Lead Contaminated Solids	Solid	42.12 Tons	009077047JJK	EQ Detroit
Lead Contaninated Solids	Solid	50.54 Tons	009077048JJK	EQ Detroit

R5 Priorities Summary				
	Miles of river systems cleaned and/or restored	NA		
This is an Integrated River Assessment.	Cubic yards of contaminated sediments removed and/or capped	NA		
The numbers should overlap.	Gallons of oil/water recovered	NA		
	Acres of soil/sediment cleaned up in floodplains and riverbanks	0.39		
Stand Alone	Acres Protected	0.39		
	Number of contaminated residential yards cleaned up	1		
	Human Health Exposures Avoided	50		
	Number of workers on site	14		
Contaminant(s) o				
Contaminant(s) o Concern	f Lead			

2.2 Planning Section

2.2.1 Anticipated Activities

Continue collecting information on PRPs.

2.2.1.1 Planned Response Activities

N/A

2.2.1.2 Next Steps

N/A

2.2.2 Issues

N/A

2.3 Logistics Section

N/A

2.4 Finance Section

No information available at this time.

2.5 Other Command Staff

2.5.1 Safety Officer

Bryan Mullins

2.5.2 Liaison Officer

N/A

2.5.3 Information Officer

Francisco Arcaute

3. Participating Entities

3.1 Unified Command

N/A

3.2 Cooperating Agencies

Michigan Department of Environmental Quality Kent County Health Department Plainfield Charter Township

4. Personnel On Site

EPA - 1

START - 1

ERRS - 4

Plainfield Township Water Department - 6

Plumber - 1

Rapid Concrete - 3

5. Definition of Terms

EPA - United States Environmental Protection Agency

START - Superfund Technical Assessment and Response Team

ERRS - Emergency and Rapid Response Service

ppm - Parts Per Million

mg/kg - Milligrams Per Kilogram

pb - Lead

NCP - National Oil and Hazardous Substances Pollution Contingency Plan

CERCLA - Comprehensive Environmental Resource Conservation and Recovery Act

KCHD - Kent County Health Department

6. Additional sources of information

6.1 Internet location of additional information/report

www.epaosc.org/loverslanelead

6.2 Reporting Schedule

Polreps will be issued weekly or as necessary.

7. Situational Reference Materials

NCP