

U.S. ENVIRONMENTAL PROTECTION AGENCY  
POLLUTION/SITUATION REPORT  
Fay Street Site - Removal Polrep  
Initial Removal Polrep



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY  
Region I

**Subject:** POLREP #1  
Initial  
Fay Street Site  
  
Lowell, MA  
Latitude: 42.6233265 Longitude: -71.3042681

**To:**

**From:** Elsbeth Hearn, OSC - Environmental Engineer

**Date:** 7/22/2014

**Reporting Period:** 7/14/2014 - 7/23/2014

## 1. Introduction

### 1.1 Background

<b>Site Number:</b>	01LH	<b>Contract Number:</b>	EP-W-08-061 TO #0062
<b>D.O. Number:</b>		<b>Action Memo Date:</b>	4/14/2014
<b>Response Authority:</b>	CERCLA	<b>Response Type:</b>	Time-Critical
<b>Response Lead:</b>	EPA	<b>Incident Category:</b>	Removal Action
<b>NPL Status:</b>	Non NPL	<b>Operable Unit:</b>	
<b>Mobilization Date:</b>	7/17/2014	<b>Start Date:</b>	7/22/2014
<b>Demob Date:</b>		<b>Completion Date:</b>	
<b>CERCLIS ID:</b>	MAN000106163	<b>RCRIS ID:</b>	
<b>ERNS No.:</b>		<b>State Notification:</b>	
<b>FPN#:</b>		<b>Reimbursable Account #:</b>	

#### 1.1.1 Incident Category

Time-Critical Removal Action

#### 1.1.2 Site Description

The Fay Street Site (the "Site") is centered at 86 Fay Street, Lowell, Middlesex County, Massachusetts (MA). The geographic coordinates, as measured from the approximate center of the 86 Fay Street property, are 42° 37' 26.3" north latitude and 71° 18' 10.2" west longitude. The site is comprised of three residential parcels surrounding 86 Fay Street. These three lots consist of the Swede Village Condominium Complex (106 Lundburg Street), a single family residence (74 Fay Street), and an empty lot that is owned by the same owner of the single family residence (78 Fay Street). The 86 Fay Street property is a completed Brownfields grant project that is city-owned. This property contains a clean soil cap installed by the City of Lowell.

Residential properties are located to the south and west of the site. A baseball field and Shaughnessy Elementary School are located to the north of the site, and railroad tracks owned by Massachusetts Bay Transportation Authority (MBTA) are located immediately east of the site.

##### 1.1.2.1 Location

The Site is located at properties including 74 Fay Street, 78 Fay Street, 86 Fay Street, and 106 Lundburg Street. These are all located in Lowell, MA 01852.

##### 1.1.2.2 Description of Threat

From the late 1800's through the early 1900's, areas of the site were reportedly utilized as a dumping ground for ash from the J.A. Ready Boiler Works and the Middlesex North Agricultural Fairgrounds.

Inspection of the Site would support this history, as a large amount of ash has been located at and below the ground surface, and trash such as bottles can be seen emerging from parts of the Site. In some areas of the Site, boreholes have proven that this ash can be as thick as 15 feet and extremely concentrated, even preventing vegetation from growing in certain areas. Heavy metals such as lead and arsenic, and polycyclic-aromatic hydrocarbons (PAHs) are present in the ash and pose a threat to the local population.

### 1.1.3 Preliminary Removal Assessment/Removal Site Inspection Results

A number of sampling events have been conducted on this Site since presence of ash was first determined in the 1988 Site Assessment Report for the Merrimack Valley Housing Partnership prior to the construction of the Swede Village Condominiums. Subsurface boring logs confirming that ash and urban fill up to 15 feet thick are present at the 106 Lundburg Street were completed during this assessment phase.

Between 2006 and 2012, assessment work for the Brownfields Project at 86 Fay Street indicated that the extent of contamination in this area was not bounded by the initial Brownfields grant proposal. The Site was then referred to the EPA Removal Program to assess and determine whether a time-critical removal action was required.

In late July 2013, EPA and START personnel collected samples from all potentially contaminated parcels to determine whether a removal was necessary. All of the soil samples were collected for on-site metals screening via XRF and 10% of the samples were selected for confirmatory metals analysis at the EPA Office of Environmental Measurement and Evaluation (OEME) laboratory located in North Chelmsford, Massachusetts.

Concentrations of lead and arsenic were over the EPA Removal Management Levels (RMLs) and the Massachusetts Contingency Plan (MCP) levels. Table 1 and Table 2 summarize the sample results from the July 2013 sampling investigation.

\*\*In the original Action Memo, the MassDEP Unrestricted Residential Use value was reported as 300 ppm. This changed to 200 ppm in May 2014.\*\*

Table 1: Fay Street Site - 74 Fay St Property Contaminant Concentrations in mg/kg (ppm)			
Field Screening Results		Lead	Arsenic
Maximum (lab result)		1500	30
Number of Samples/ % > Residential RML		49/50%	7/0%
RML – Industrial/Commercial		800	240
RML – Residential		400	61
MassDEP, Unrestricted Residential Use		200	20
EPA/ATSDR, Unrestricted Residential Use		--	–

Table 2: Fay Street Site – 106 Lundberg Street Contaminant Concentrations in mg/kg (ppm)			
Field Screening Results		Lead	Arsenic
Maximum (lab result)		7300	160
Number of Samples/ % > Residential RML		38/29%	6/25%
RML – Industrial/Commercial		800	240
RML – Residential		400	61
MassDEP, Unrestricted Residential Use		200	20
EPA/ATSDR, Unrestricted Residential Use		--	–

An extent of contamination survey was conducted in June 2014 for all impacted properties. The results of this investigation indicated that some contamination still needs to be mapped out prior to determining the extent. However, the majority of ash on the 106 Lundburg Street property tends to mirror the "Approx extent of ash fill" line from the 1988 assessment report. The extent of contamination survey will continue once excavation activities begin.

## 2. Current Activities

### 2.1 Operations Section

### 2.1.1 Narrative

ERRS began mobilizing to the Site on 14 July 2014. A work trailer, storage box, and equipment were mobilized to prepare the site for removal activities beginning on 23 July 2014.

### 2.1.2 Response Actions to Date

EPA has conducted removal assessment events in July 2013, June 2014, and again in early July 2014 to determine the extent of contamination at the Site. No removal activities have begun to date but are scheduled to begin on 23 July 2014.

EPA has organized two public meetings for the impacted community. One was held in December 2013 and the second, a community meeting for the Swede Village residents, was held on 14 July 2014. The July meeting addressed the concerns of the residents as removal activities begin.

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

Access agreements have been distributed to all impacted parties.

Enforcement activities are ongoing.

### 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

- Removal activities will begin on 24 July 2014;
- Soil with contamination above a level of concern will be excavated and stockpiled;
- A permeable soil cap will be placed over the excavated area;
- Engineers will develop a grading plan for the site to connect to the Brownfields Site soil cap;
- Work will begin at 106 Lundburg Street once the two Fay Street properties are completed.
- Each property will be graded according to a grading plan and restored;

#### 2.2.1.1 Planned Response Activities

See "Anticipated Activities."

#### 2.2.1.2 Next Steps

EPA will begin removal activities on 24 July 2014.

### 2.2.2 Issues

Excavation Issues:

The condominium complex located at 106 Lundburg Street will be a complicated excavation. A number of underground utilities are located adjacent to stand-alone condo buildings. Excavation will require small equipment and hand-digging to prevent damage to underground utilities and permanent structures.

Dust Control Issues:

EPA will continuously monitor for contaminated dust and employ dust control measures to ensure that no contamination leaves the site. Up to four (4) DataRAMs will be deployed surrounding excavation operations and the EPA VIPER system will be used to continuously monitor for dust. Dust monitoring operation concentrations were developed in conjunction with the Massachusetts Department of Public Health (MA DPH) and the Agency for Toxic Substances and Disease Registry (ATSDR).

## 2.3 Logistics Section

ERRS mobilized to the site with :

Cat 321C Excavator (1)  
Skidsteer (1)  
Command Trailer (1)  
Storage Container (1)  
Personnel Trucks (1-3)

## **2.4 Finance Section**

No information available at this time.

## **2.5 Other Command Staff**

### **2.5.1 Safety Officer**

The Site Safety Officer is the on-site OSC.

Daily safety meetings are conducted before commencement of work.

### **2.5.2 Liaison Officer**

On-Scene Coordinator is working with coordinating agencies as necessary.

### **2.5.3 Information Officer**

Community outreach is on-going. There have been two community meetings, and the On-Scene Coordinator in conjunction with the Community Involvement Coordinator are available to answer any community concerns. The community has been made aware that the EPA Command Post is open for community members to have their questions answered by the EPA OSC and contact information for all agencies has been made widely available.

## **3. Participating Entities**

### **3.1 Unified Command**

### **3.2 Cooperating Agencies**

- Massachusetts Department of Environmental Protection (MassDEP)
- Massachusetts Department of Public Health (MA DPH)
- Agency for Toxic Substances and Disease Registry (ATSDR)
- The City of Lowell

## **4. Personnel On Site**

Personnel on-Site:

One (1) EPA OSC  
One to Five (1-5) ERRS  
One (1) START

## **5. Definition of Terms**

EPA = U.S. Environmental Protection Agency  
MassDEP = Massachusetts Department of Environmental Protection  
MA DPH = Massachusetts Department of Public Health  
ATSDR = Agency for Toxic Substances and Disease Registry  
START = Superfund Technical Assistance Response Team (EPA Contractor)  
ERRS = Emergency & Rapid Response Services (EPA Contractor)  
PAH = Polycyclic Aromatic COmpounds  
bgs = Below ground surface

## **6. Additional sources of information**

### **6.1 Internet location of additional information/report**

[www.epasoc.org/faystreet](http://www.epasoc.org/faystreet)

### **6.2 Reporting Schedule**

Polreps will be distributed monthly.

## **7. Situational Reference Materials**

No information available at this time.