

U.S. ENVIRONMENTAL PROTECTION AGENCY
POLLUTION/SITUATION REPORT
Capen Street - Removal Polrep
Final Removal Polrep



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
Region I

Subject: POLREP #2
Final
Capen Street
01GT
Milton, MA
Latitude: 42.2675933 Longitude: -71.0872632

To:
From: Gary Lipson, On-Scene Coordinator
Date: 9/22/2011
Reporting Period:

1. Introduction

1.1 Background

Site Number:	01GT	Contract Number:	EP-W-08-062
D.O. Number:	0022	Action Memo Date:	3/7/2011
Response Authority:	CWA	Response Type:	Time-Critical
Response Lead:	EPA	Incident Category:	Removal Action
NPL Status:	Non NPL	Operable Unit:	
Mobilization Date:	6/27/2011	Start Date:	6/27/2011
Demob Date:	9/21/2011	Completion Date:	9/21/2011
CERCLIS ID:	MAN000106022	RCRIS ID:	
ERNS No.:		State Notification:	
FPN#:		Reimbursable Account #:	

1.1.1 Incident Category

Time Critical Removal Action

1.1.2 Site Description

Ten (10) residential properties on Capen Street in Milton, MA were identified to EPA by the Massachusetts Department of Environmental Protection (MassDEP) as being impacted by lead and arsenic. Most of the properties are approximately 1/2 acre in size. The MassDEP investigation consisted of samples collected at the center points of 20' x 20' grids throughout the neighborhood. Based on a number of depth samples, the lead and arsenic concentrations of concern appeared to be limited to the top one foot of surface soil. This was the case in most of the excavations and in no instance did an excavation exceed 3' below grade.

1.1.2.1 Location

Capen Street is a small dead end street that abuts land owned by the Massachusetts Department of Conservation and Recreation (MA DCR). Approximately one month prior to EPA mobilizing to the site, MA DCR and their contractors began a removal of contaminated soil on their property which is adjacent to and north/northeast of Capen St. Access to this MA DCR property is via a long driveway off of the midpoint of Capen St that separates 75 and 69/71 Capen St. To avoid impacting a number of mature trees that line this driveway, MA DCR received permission from the 75 Capen St homeowner to shift the driveway onto the 75 Capen St property which entailed removing a fence and covering the existing soil with gravel to allow for the passage of numerous tractor trailers. Portions of this MA DCR property, once it was cleared of contaminants of concern, also served as a contaminated soil and clean fill staging area for both MA DCR and EPA. As part of this arrangement, EPA agreed to assist in restoring this driveway area upon completion of the removal action.

This neighborhood is bordered by wooded land and the Neponset River to the north and west, more woods to the east and the river to the northeast, continuing residences to the south, and a limited commercial/industrial area further to the west. Just to the west of the industrial

section is heavily traveled Route 28 (Blue Hills Avenue). The latitude and longitude of roughly the midpoint of Capen Street is 42°16'06"N and 71°05'17"W respectively.

According to the ArcGIS mapping tool, there are 1,025 individuals living within ¼ mile of the site center, and 4,911 individuals, 4 daycare centers, 2 nursing homes, and 4 public or private schools within ½ mile of the approximate site center.

1.1.2.2 Description of Threat

Arsenic and/or lead have been detected in surface soils at residential properties in the Capen Street neighborhood of Milton, MA. Although both of these elements are naturally occurring, the concentrations detected in this neighborhood exceed background concentrations. According to the Massachusetts Contingency Plan, the concentrations of either or both of these contaminants on ten properties meet or exceed potential Imminent Hazard levels (As: 40 mg/kg (parts per million- PPM), Pb: 1,000 mg/kg (PPM)).

Lead and arsenic are among the constituents listed in 40 CFR §302.4, table 302.4, CERCLA List of Hazardous Substances, as well as the MCP.

1.1.3 Preliminary Removal Assessment/Removal Site Inspection Results

During the summer of 2010, MassDEP and their contractor collected samples from 14 private properties on a 20' x 20' grid layout. Surface samples were collected at every location and intermittently at depth to determine vertical extent of contamination. The samples were all field screened for arsenic and lead via X-Ray Fluorescence (XRF) and 20% were sent off site for laboratory analysis. The data presented to EPA by MassDEP indicates that the contamination is limited to surface soils: 3 properties contain lead and arsenic above MCP potential imminent hazard levels, 6 properties contain only arsenic above the potential imminent hazard level, and 1 property contains only lead above the potential imminent hazard level. The remaining 4 properties did not contain any chemicals of concern at concentrations equal to or exceeding imminent hazard concentrations.

2. Current Activities

2.1 Operations Section

2.1.2 Response Actions to Date

June 27 – July 1, 2011

- EPA and their contractors mobilized to the Capen Street neighborhood . Since the residential properties were unique regarding access and egress points, amount of soil to be excavated, and present landscaping, different types of equipment including two loaders, a mini-excavator, and a skid steer were brought on site to be used on each property in the most efficient manner possible;
- A support zone was constructed at the end of the street on MA DCR owned property. Process gravel was used to grade the area after contaminated soil was removed by MA DCR and their contractor(s). At that time, EPA agreed to restore this area upon completion ;
- Two staging areas for contaminated soil were constructed in a wooded area on MA DCR property so the arsenic and lead contaminated soils could be segregated for the greatest efficiency related to transportation and disposal costs;
- A arborist was brought to the site to identify trees, bushes, and plantings on individual residential properties where excavation was anticipated;
- Excavation began at 83 Capen St. (Analysis of the samples which guided all of the ensuing excavations was conducted on-site by x-ray fluorescence. A minimum of 10% of field samples are being sent to the EPA New England Regional Laboratory in Chelmsford,MA);

July 5-8, 2011

- The excavation at 83 Capen St was completed;
- Preparatory work and excavations at 33, 39, 69, and 79 Capen St began and were

completed. With the permission of the 39 Capen St homeowner, access to 33 Capen St was through the yard of 39 Capen St;

July 11-15, 2011

- Preparatory work and the excavation and completion at one of two pre-identified areas at 112 Capen St was completed. This excavation led to stone wall border between 112 and 102 Capen St. EPA began pursuing access from the 102 Capen St homeowner to collect samples from that property and follow-up with a removal if warranted;
- Preparatory work and excavation began at 105 Capen St;

July 18-22, 2011

- The excavation at 105 Capen St continued. Since 105 is adjacent to MA DCR property, excavation was halted in a northerly direction when imminent hazard levels were encountered in surface soils at the 105/MA DCR border. Officials with MA DCR were informed of the situation and they continued with the excavation of contaminated soils on their property;

July 25-29, 2011

- The excavation at 105 continued. This excavation led to the border of 105/109 Capen St in the westerly direction and was halted while EPA pursued access from the 109 Capen St homeowner;
- Preparatory work and the excavation at 95 Capen St began and was completed. With the permission of the 105 Capen St homeowner, access to 95 Capen St was through the yard of 105 Capen St;
- The first 10 tractor trailer loads of arsenic contaminated soil were transported off site for disposal at the Turnkey Landfill in Rochester, NH;

August 1-5, 2011

- The excavation at 105 was completed;
- After access was received from the 109 Capen St homeowner, the excavation began and was completed on this property;
- Preparatory work and the excavation at the second location at 112 Capen St began and was completed. This excavation led onto the adjacent property at 108 Capen St. Access from the 108 Capen St homeowner was received, the arborist visited this property to document the vegetation that would be removed, and the excavation of this property began and was completed;
- After access was received from the 102 Capen St homeowner, this property was sampled. Results indicated levels of concern, so the excavation of this property began and was completed;
- Backfilling with loam began at 83 Capen St, began and completed at 102 Capen St, and loam was used at 108 and 112 Capen St to cover exposed roots prior to the remainder of these excavations being backfilled;

August 8-12, 2011

- Preparatory work and the excavation began and was completed at 71 and 75 Capen St;
- Backfilling began and was completed at 71, 75, and 83 Capen St. During the backfilling of 83 Capen, the driveway was inadvertently damaged. This was discussed with the homeowner and EPA agreed to make the necessary repairs;

August 15-19, 2011

- Backfilling began and was completed at 69, 79, 95, and 105 Capen St;
- Two tractor trailer loads of arsenic contaminated soil was transported off site for disposal;
- Access to 77 Capen St was received from the homeowner and sampling was conducted. Arsenic and lead were detected above imminent hazard levels. The arborist was brought back onsite to inventory the vegetation as it was anticipated that much of it will be removed during the ensuing excavation;

August 22-26, 2011

- Excavation at 77 Capen St began;
- Backfilling began and was completed at 33 and 39 Capen St;
- Backfilling was completed at 108 and 112 Capen St;
- As 75 Capen St was the only property where the entire yard had been excavated and since the resident is an elderly woman who is known to regularly use the yard, the EPA On-Scene Coordinator made the decision to lay sod on top of the loam as opposed to hydroseed which the other properties were to receive;

August 29-September 2, 2011

- Excavation was completed and backfill begun and completed at 77 Capen St;
- Hydroseeding began at 69, 83, 95, and portions of 105 and 112 Capen St;
- Additional restoration activities occurred at 108 and 112 Capen St including the rebuilding of two patios and the installation of a flag pole which had been removed during the excavations;
- Loadout of contaminated soil was completed with ten tractor trailer loads of arsenic contaminated soil transported off site to Turnkey and two tractor trailer loads of lead contaminated soil transported to Greenwood Street Landfill in Worcester, MA. The footprints of both soil staging areas were tested and found to be below any levels of concern;

September 6-9, 2011

- Continued restoration activities at 75 and 77 Capen St with the addition of river stone (along the side of the house at 75 and in a walkway through a garden at 77);
- Began and completed planting vegetation to replace plantings removed during the removal at 39, 71, 75, 105, and 112 Capen St;
- Cut out impacted driveway areas at 83 Capen St in preparation for new asphalt;
- Began to decontaminate and demobilize equipment that was no longer necessary for site operations ;
- Began to excavate portions of the gravel used in the staging area. Under a previous agreement with the Milton Department of Public Works, this clean gravel was transported to the DPW yard at no cost;

September 12-16, 2011

- Continued and completed moving excess gravel to the DPW yard;
- Began and completed transporting and grading a compost like fill per the MA DCR to complete the restoration of the equipment staging area;
- Completed the restoration of the asphalt driveway at 83 Capen St;
- Continued hydroseeding and completed the yards at 33, 39, 71, 77, 102, 105, 108, 109, and 112;
- Backfilled an approximate 100' stretch of the driveway between 75 and 69/71 Capen St that had been used as the passageway to allow for the movement of contaminated soil and clean fill to and from the staging area. MA DCR had previously removed the gravel that allowed for truck passage;
- Continued decontaminating and demobilizing equipment;

September 19-23, 2011

- Began and completed the installation and/or repair of fencing around 75, the driveway between 75 and 69/71, 33, 39, and the area at the end of Capen St that had been used by EPA for equipment and personnel staging;
- Final hydroseeding was completed around the equipment staging area and the driveway between 75 and 69/71 Capen St;
- Final demobilization of equipment and personnel was completed.

Waste Disposition

DISPOSAL FACILITY	DESCRIPTION OF WASTE	WEIGHT (IN TONS)	DATE SHIPPED
Turnkey Landfill 90 Rochester Neck Road Rochester, NH 03839	Non-Hazardous Soil Containing Primarily Arsenic (Shipped on Non-Hazardous Manifest)	30.95	7/27/11
		30.15	
		32.35	
		33.34	
		30.11	7/28/11
		32.22	
		33.84	
		29.40	7/29/11
		33.89	
		29.14	
		29.10	8/16/11
		29.25	
		29.22	8/30/11
		29.93	
		31.02	
		30.66	
		29.62	
		31.27	8/31/11
		31.40	
		29.73	
		31.66	
		29.04	

Greenwood Street Landfill 30 NippNapp Trail Worcester, MA 01607	Non-Hazardous Soil Containing Primarily Lead (Shipped on Bill of Lading)	677.29 TOTAL 30.00 (approx)	9/1/11
		30.00 (approx)	
		60.00 (approx TOTAL)	

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

There have been no potentially responsible parties identified to date.

2.2 Planning Section

2.2.1.1 Planned Response Activities

During the course of the removal action, an arborist was brought out to the site to identify any vegetation that would be removed along with the contaminated soil. These lists were shared with the homeowners with the understanding that the plantings would be replaced with the same or with vegetation of equivalent value. If only a few plantings were involved, EPA replaced them once the hydroseeding was completed. Since the majority of homes had multiple plantings removed, the lists were sent out to a number of local plant nurseries to bid on the plantings and installation. The nursery that was selected will be providing the homeowner a gift certificate which will allow the homeowner to select plantings of their choosing up to the amount specified on the certificate.

Hydroseeding has been completed at all of the properties (with the exception of 75 Capen St that was sodded). The subcontractor will continue to hydrate those properties and provide fertilization per the subcontract.

EPA will also be providing each homeowner with a property specific report that details the actions taken and will include diagrams and photographs.

2.3 Logistics Section

No information available at this time.

2.4 Finance Section

Estimated Costs *

	Budgeted	Total To Date	Remaining	% Remaining
Extramural Costs				
ERRS - Cleanup Contractor	\$500,000.00	\$425,000.00	\$75,000.00	15.00%
TAT/START	\$150,000.00	\$105,000.00	\$45,000.00	30.00%
Intramural Costs				
USEPA - Direct	\$100,000.00	\$75,000.00	\$25,000.00	25.00%
USEPA - InDirect	\$145,000.00	\$109,000.00	\$36,000.00	24.83%
Total Site Costs	\$895,000.00	\$714,000.00	\$181,000.00	20.22%

* The above accounting of expenditures is an estimate based on figures known to the OSC at the time this report was written. The OSC does not necessarily receive specific figures on final payments made to any contractor(s). Other financial data which the OSC must rely upon may not be entirely up-to-date. The cost accounting provided in this report does not necessarily represent an exact monetary figure which the government may include in any claim for cost recovery.

2.5 Other Command Staff

2.5.1 Safety Officer

On-Scene Coordinator Gary Lipson

2.6 Liaison Officer

2.7 Information Officer

2.7.1 Community Involvement Coordinator

Emily Zimmerman

zimmerman.emily@epa.gov

3. Participating Entities

3.1 Unified Command

3.2 Cooperating Agencies

Massachusetts Department of Environmental Protection

Massachusetts Department of Conservation and Recreation

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.

POLREP #2 Last Updated 9/26/2011