

U.S. ENVIRONMENTAL PROTECTION AGENCY
POLLUTION/SITUATION REPORT
Medford Housing Authority - Removal Polrep



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
Region I

Subject: POLREP #3
Progress
Medford Housing Authority
01LU
Medford, MA
Latitude: 42.4036000 Longitude: -71.1033000

To:
From: Gary Lipson, On-Scene Coordinator
Date: 2/5/2016
Reporting Period: 11/16/15 - 1/19/16

1. Introduction

1.1 Background

Site Number:	01LU	Contract Number:	
D.O. Number:		Action Memo Date:	8/5/2015
Response Authority:	CERCLA	Response Type:	Time-Critical
Response Lead:	EPA	Incident Category:	Removal Action
NPL Status:	Non NPL	Operable Unit:	
Mobilization Date:	10/1/2015	Start Date:	10/1/2015
Demob Date:		Completion Date:	
CERCLIS ID:	MAN000100745	RCRIS ID:	
ERNS No.:		State Notification:	Yes
FPN#:		Reimbursable Account #:	

1.1.1 Incident Category

Time Critical Removal Action

1.1.2 Site Description

See POLREP 1 for details

1.1.2.1 Location

See POLREP 1 for details

1.1.2.2 Description of Threat

Lead has been detected in surface soils at the MHA Willis Avenue Apartments. Although lead is a naturally occurring element and found in higher concentrations in urban settings due to anthropogenic sources, the concentrations detected in this neighborhood are close to, and in many cases exceed, typical urban background concentrations as well as EPA Regional Removal Management Levels (RMLs). These RMLs are not meant to be action or cleanup levels but rather a starting point to determine if further action is warranted. The RML for lead in a residential setting is 400 parts per million (ppm). As a screening technology was used to identify lead levels (X-Ray fluorescence) in the field, the OSC selected a concentration of 350 ppm in his analysis of site conditions. This concentration represents a site-specific action level that accounts for the uncertainty of the screening technology. A minimum of 10% of the samples analyzed by XRF were also sent to a laboratory for confirmatory analysis.

During the PA/SI, five of the seven playground locations exceeded the 350 ppm limit within the top foot of soil. In addition, soil within some of the community raised bed gardens and one private garden exceeded the concentration of concern. Lead in surface soil is the primary contaminant at this Site. Lead is a listed CERCLA hazardous substance in 40 CFR 302.4.

Lead in surface soils in the playgrounds and some of the gardens presented a potential health threat through direct exposure to local residents, including children.

1.1.3 Preliminary Removal Assessment/Removal Site Inspection Results

See POLREP 1 for details

2. Current Activities

2.1 Operations Section

2.1.1 Narrative

Surface soil (0-1' bg) contained lead above 350 ppm, the level of concern, in five of the seven designated playground areas within the housing complex, the public raised garden bed area, and one private garden. The average concentration of lead in the five play areas was 635 ppm. In most cases, this removal action was limited to removing the top foot of contaminated soil and replacing it with clean fill in the playgrounds as well as the identified gardens. In 2 of the playground grids, the play areas were raised in a manner similar to the raised garden beds.

2.1.2 Response Actions to Date

Please refer to the map located in the documents section of the website www.epaosc.org/MedfordHousingAuthority for the locations of the specific grids.

Please refer to earlier POLREPs for response actions prior to November 16, 2016.

November 16-20, 2015:

Excavation began in grid-3 but was temporarily halted when an active gas line was discovered within 3' of the ground surface. This normally would not have been discovered as the removal is concentrating on removing the top foot of soil. A tree however had been removed from that location and the gas line was found when the stump and roots were being removed. The gas utility company was immediately called and arrived soon afterwards. The pipe was not compromised, no leaks were detected, and after the exposed section of pipe was rewrapped, the entire excavation was backfilled;

Transportation and disposal (T & D) began this week as lead-contaminated soil, which was stockpiled in the ballfield (grid 1), was transported to a Waste Management Landfill in Rochester, NH along with one roll-off box full of discarded playground equipment and one box of tree stumps;

A number of stumps from trees that had been previously removed were ground down to below grade.

November 23-December 4, 2015 (includes break for Thanksgiving):

T & D of soil continued;

Excavation of grid-3 was completed and backfilling of this grid commenced.

December 7-12, 2015:

T & D of soil continued as well as backfill in locations previously excavated. T & D was halted on December 9 however when EPA was notified that the landfill had not received the analytical to support additional tonnage. Upon investigation, the subcontracted laboratory had failed to run the samples they were supplied with and therefore, the amount of soil being transported was not supported by the appropriate data. Once the samples were run, one set of analytical indicated that the concentration of lead (11,000 PPM) had greatly exceeded the criteria for the landfill to use the soil for daily cover (2,000 PPM). As this concentration was much higher than every one of hundreds of samples previously collected and analyzed, the lab was contacted and asked to re-run that sample;

December 14-19, 2015:

The sample was re-analyzed and the concentration was once again at the expected average of approximately 600 PPM. The OSC explained the situation to the landfill and the anomalous higher concentration was attributed to a minute lead particle(s) that ended up in the aliquot used for the analysis. Subsequent samples also indicated lead concentrations well below 1,000 PPM. T&D began again on December 18;

Backfilling with loam continued.

December 21-22, 2015:

T & D continued and plans were made for EPA's contractor to return to the site after the New Year to at a minimum complete T & D of the remaining pile of contaminated soil. The site was secured in case weather conditions did not allow for a remobilization prior to the spring.

January 5 - 19, 2016:

Weather conditions remained satisfactory allowing EPA's contractor to remobilize to the site on January 4. T & D started up again on January 5 and the remaining pile was shipped off-site by January 9. The footprint of the pile was leveled out, geotech fabric layed down, and the area backfilled with a base gravel layer. The contractor demobilized for the winter although the remaining heavy equipment was not picked up until January 19.

Air monitoring has been conducted in all locations where intrusive activities involving contaminated soil occurred. This is to ensure that contaminated soil/dust is not being generated and/or released during removal activities.

None of the playground equipment located in the 4 grids could be salvaged as it had been in place for many years. The equipment had deep and expansive footings, was rusted to a point where they could not be dismantled and moved, and was no longer to the present code required for commercial playgrounds. Therefore, the equipment will eventually be replaced.

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

See POLREP 1 for details

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2.2 Planning Section

2.2.1 Anticipated Activities

EPA's contractor will re-mobilize to the site in early spring to complete this removal action. Tasks include: final grading with topsoil (loam) and hydroseeding those locations, planting a number of replacement trees, and the installation of three new sets of playground equipment to replace those that were removed and compromised during excavation activities.

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

2.5.1 Safety Officer

The OSC is serving as the site safety officer, however, it has been stressed to the crew that every individual working on-site has the authority to halt site activities if an unsafe situation is detected.

3. Participating Entities

4. Personnel On Site

The number of on-site personnel has varied depending on the current task, but at its peak: 10 total: 1 EPA OSC; 1 Weston Solutions Superfund Technical Assistance and Response Team (START) member; 5 EPA Cleanup Contractor (Guardian Environmental Services [GES]) employees: 1 response manager, 1 foreman, 2 equipment operators, 1 technician; and 3 Team Subcontractors to GES (ENPRO): 3 technicians.

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.