U.S. ENVIRONMENTAL PROTECTION AGENCY
POLLUTION/SITUATION REPORT
SE 115th Ave Residential Yard Lead Removal - Removal Polrep

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
Region X

Subject: **POLREP #2**
SE 115th Ave Residential Yard Lead Removal
10PM
Portland, OR
Latitude: 45.5018010 Longitude: -122.5447550

To:
From: Daniel Heister, On-Scene Coordinator
Date: 5/20/2016
Reporting Period: 5/3/16 to 5/20/16

1. Introduction

1.1 Background

Site Number:	10PM	**Contract Number:**	
D.O. Number:		**Action Memo Date:**	4/3/2016
Response Authority:	CERCLA	**Response Type:**	Time-Critical
Response Lead:	EPA	**Incident Category:**	Removal Action
NPL Status:	Non NPL	**Operable Unit:**	
Mobilization Date:	4/22/2016	**Start Date:**	4/22/2016
Demob Date:		**Completion Date:**	
CERCLIS ID:	10PM	**RCRIS ID:**	
ERNS No.:		**State Notification:**	
FPN#:		**Reimbursable Account #:**	

1.1.1 Incident Category

CERCLA PRP lead removal action with EPA oversight.

1.1.2 Site Description

The Site is the location of a former unpermitted auto scrapping business that ceased operation on or about 2005 (Figure 1). The Site use is presently residential. There is substantial information indicating that human health impacts are present at the Site because of the presence of elevated concentrations of lead (Pb) in surface and subsurface soils at the Site. On 19 November 2015 USEPA, Region 10 began a Removal Site Assessment (RSA) at the Site. The RSA confirmed extremely elevated concentrations of Pb throughout the Site.

1.1.2.1 Location

1.1.2.2 Description of Threat

The Contaminant of Concern at the site is Lead (Pb). A 14 month old child living at the property had elevated blood Pb levels resulting in a notification to the Multnomah County Health being notified.

1.1.3 Preliminary Removal Assessment/Removal Site Inspection Results

A Pb screening of the inside of the residence as well as the yard was conducted by Multnomah Co. Health Lead Program, that detected elevated levels of Pb in both locations. ODEQ was notified who in turn contacted USEPA. On 11/27/15 to 11/30/15 USEPA conducted a removal assessment which also indicated elevated Pb especially in the backyard. Some of the levels detected were extremely elevated.

USEPA carried out negotiations with the Trust (Potentially Responsible Party, PRP) that owned the property. On 4/30/16 the trust signed an Administrative Order on Consent (AOC) which allowed them to carry out the time critical removal action with USEPA oversight.

2. Current Activities

2.1 Operations Section

2.1.1 Narrative

Site prep for the PRP's contractors began on Friday 4/22/2016. Removal work began in earnest on Mon. 4/25. There is a lot of local interest from neighbors. Multnomah Health has also visited twice and is very interested in the removal actions progress. I put there PIO in touch with Judy Smith to coordinate, the two already know each other from past work.

Approximately 15 yards of low level/ pre cleared soil has been taken off site for disposal at a Sub. D landfill in Hilsboro OR. Stockpiles of more contaminated soil remain covered on site awaiting Tclp results before they can be shipped to Arlington (Sub C). Approximately 55% of the site has been excavated to the depths prescribe by the work plan. The PRP contractor has taken confirmatory samples and shipped them for analysis. START have screened these sample locations as well as done basic grids on the larger excavations. All the screening has come in well below the 400 PPM action levels (ranging from 20- 145 ppm with the vast majority below 50). These excavated areas include the most contaminated areas of the site. Walls of excavations were screened the walls of the excavation along bordering properties in ten foot intervals and came up with results in the 20 to 50 PPM range well below the 400 PPM action level.

We observed a gritty grey metallic layer about 2-3 inches below the sod around the edge of the back patio and along the south side of the house. When screened with the XRF this material was very contaminate reaching 60K PPM Pb or higher. The material appears to have been generated from grinders used to chop the cars and composed of a combination of metal shavings, paint, and particles from the carbide grinding discs. This layer somewhat mirrored our hotspots and was about .5 inches thick in any given spot. It appears the material was generated as a by product of the automotive dismantling operation and was swept off the concrete patio routinely and through wind and rain deposition was spread to the low point on the south side of the house and in time formed this semi-uniformed layer.

2.1.2 Response Actions to Date

Friday April 22 - Martin S. Burke Associates (MSBA) met at the site with EPA and START, Munitor Construction, and the attorney and manager for the Trust (Trustee). The following organizational and preparatory tasks were performed:

1) Site meeting and introductions followed by an initial Health Safety Meeting. Logistics and general expectations were discussed and established between McKallip Trust and EPA;

2) Onsite locating was performed to identify underground utility locations and depths relative to the excavation cleanup areas;

3) The Contaminant Reduction Zone was staged in preparation for the pending excavation cleanup and sampling;

4) Site markings and measurements were obtained and points/locations of interest were marked/flagged for reference:

5) Privacy screening was affixed to existing fencing;

6) Temporary security fencing was staged on the west side of the property and around the “save tree” (SE corner).

Monday April 25 - The excavation cleanup was initiated with the following primary tasks and/or observations:

1) EPA set up air monitoring stations;

2) The far west side of the property adjacent to 115th Avenue was excavated for removal to a depth of 6 inches within cleanup areas.

3) Discrete and composite samples were collected for laboratory analysis from these areas;

4) XRF screening indicated that the immediate area around a large Locust tree within area 5a had elevated concentrations of lead exceeding the 400 ppm regulatory threshold;

5) After presenting/discussing the alternatives to address the soil around a Locust tree, the Trustee approved the option to remove soil with the excavator requiring root removal to a depth of up to 12-18” based on his belief that the tree might survive. The option to remove the tree was discussed and declined by the Trustee;

6) 27.74 tons of soil were disposed at the Hillsboro landfill from area 3a, 4, and 5a;

Tuesday April 26 - The excavation cleanup continued with the following primary tasks and/or observations:

1) Areas 3a, 4, and 5a were cleared, and covered with imported crushed rock to establish a clean staging area;

2) The pedestrian access zone was delinated;

3) The upper 12 inches of soil (0”-12”) in area 5b and part of area 6 were excavated and stockpiled on area 6;

4) A grey silty appearing layer was noted at various locations throughout area 5b and 6 and is believed to contain lead. The origin of this material has not been determined but is believed to be related to the automotive activities performed at the site. A sample was retained and preserved for possible investigative testing;

5) The area 5b stockpiled soil was sampled for analysis to determine the most cost effective disposal option;

6) The remaining deeper in situ soil within area 5b (12”-24”) was sampled in place for laboratory analysis and preliminary disposal option assessment;

7) 15.41 tons of soil from area 3a, 4, and 5a and surficial wood, vegetation, and debris from various other areas were disposed collectively at the Hillsboro landfill;

Wednesday April 27 – The excavation cleanup continued with the following primary tasks and/or observations:

1) The area 6 stockpiling (0”-12”) was completed;

2) Area 7 stockpiling was initiated (0”-18”);

3) Various metal objects and debris were observed in area 7 but none were immediately distinguishable or identifiable with respect to age or origin;

4) The area 6 stockpile (0”:-12”) was sampled for analysis to determine the most cost effective disposal option;

5) The remaining deeper in situ soil within area 6 (12”-24”) was sampled for analysis and disposal option assessment;

6) Surface soil was sampled within the tree protection zone for laboratory analysis in accordance with the work plan;

7) No soil was transported offsite for disposal.

Thursday April 28 – The excavation cleanup continued with the following primary tasks and/or observations:

1) Gravel was imported to fill part of area 7 and prevent a tripping hazard;

2) Access to area 8 for loading soil was established through area 7 using imported gravel. Plastic was placed on the excavated surface of area 7 to prevent contact with soil from area 8 during the loading process;

3) The excavation cleanup of area 8 was initiated and soil was excavated and transported offsite to the Hillsboro landfill;

4) EPA moved the stationary air monitoring (EBAM) equipment within area 8 to an excavated location;

5) Collect confirmation samples from the east side of area 8 for laboratory analysis in accordance with the Work Plan;

6) Analytical results were obtained for the area 7 stockpile. Two composite samples were collected and analyzed for total and TCLP lead in accordance with the Work Plan. Total lead was detected at 43.4 ppm and 44.8 ppm and TCLP lead was not detected at <0.05 mg/L;

7) The area 7 soil stockpile has been approved for disposal at Hillsboro landfill;

8) 12.96 tons of soil were disposed at the Hillsboro landfill from area 8.

Friday April 29 – [Projected] The excavation cleanup will continue with the following primary tasks:

1) Load and transport soil from areas 7 and 8 for disposal at the Hillsboro landfill;

2) Natural gas line service will be disconnected near the property line prior to deeper excavation (12 – 24") at area 5b and 6;

3) Begin limited stockpiling of soil from area 5b and 6 at 12 – 24".

4) Collect confirmation soil samples from any/all cleanup areas for laboratory analysis in accordance with the Work Plan as locations become accessible;

5) Close up site for the weekend. Secure indispensible items in job trailer.

Based on disposal records (see attached), a total of 56.11 tons of soil from cleanup areas 3a, 4, 5a, and 8, with some minor debris, were transported and disposed at the Hillsboro landfill by the end of the day Thursday, April 28th. MSBA estimates that a total of approximately 700 tons of soil may require removal from this site. The soil appears to be lighter than estimated, therefore, the 1.3 tons per cubic yard used by MSBA to estimate the total removal tonnage at the site, may be biased high. MSBA will evaluate this factor and may revise the total estimated removal tonnage accordingly. Using the initial estimate whether biased high or not, the removal process is approximately 10% complete. With three trucks running and areas 7 and 8 cleared for disposal at Hillsboro, we anticipate that up to 130 tons may be transported offsite upping the estimated disposal completion to near 30% by the end of the day. However, taking all factors into account including preparatory work and stockpiling, the project is currently 30% complete as of this morning and likely to be 50% or more complete by the end of the day assuming all goes well.

Based on the lab data we obtained late yesterday, the lower lift within areas 5b and 6 (12"-24") may also qualify for Hillsboro. Therefore, this material will be stockpiled and resampled for analysis to assess the most cost effective disposal option. We plan to submit all confirmation soil samples from area 8 to the laboratory today with expedited results by midday next Tuesday. I will be in contact with you regarding verbal approval to begin backfilling area 8 Tuesday afternoon or Wednesday provided favorable results are obtained. The confirmation soil samples collected from areas 3a, 4, and 5a are expected today.

Monday May 2 – The excavation cleanup continued with the following primary tasks and/or observations:

1) Conduct site health safety meeting and set up CRZ;

2) Load and transport soil from areas 7 and 8 for disposal at the Hillsboro landfill. All soil from area 8 was removed and the area 7 stockpile was started. Tomorrow will resume with the removal of soil from stockpile 7;

3) The warmer weather is drying the soil much more quickly and water has been added to moisten the soil to prevent dust. MSBA will be paying very close attention to this aspect of the cleanup. As before, no dust generation will be permitted:

4) A general agreement has been reached allowing the deeper soil between 12" and 24" within areas 5b and 6 to remain in place provided confirmation sample analytical results are favorable. At the request of EPA, an additional 4 discrete soil sample locations have been added to the sample network (see attached email);

5) The remaining confirmation soil samples were collected from the west side of area 8 and from the entire area 5b. These samples were shipped to the lab with expedited analysis requested for sometime Thursday;

6) The remaining confirmation samples will be collected from area 7 tomorrow and submitted for expedited analysis requested for Friday;

7) The hazardous waste manifests for the area 5b and 6 stockpile disposal at Arlington were recieved over the weekend by the Trustee. The documentation was signed by the Trustee and is currently in the possession of MSBA;

8) EPA determined based on XRF field screening data, that the potted plants retained at the site must be disposed and were hauled to the landfill;

9) One load of the backfill soil/dirt was transported to the site. This material was sampled for laboratory analysis and expedited for Thursday;

10) A total of 152.12 tons of soil was transported from the site and disposed at the Hillsboro landfill (see attached disposal record.

May 4-May 20

Since the last update (Polrep #1) all remaining soil containing regulatory lead concentrations were removed from the site and confirmed via laboratory analysis and supplemental XRF field screening. MSBA removed 4"-6" of surface soil immediately adjacent to the north side of the residence beside the concrete drive slab. This additional removal was performed out of an abundance of caution and was not related to any known or suspected occurrences of lead in the soil at that location. Micro-removals were performed at two locations where the regulatory lead threshold (400 ppm) was exceeded in final confirmation soil samples. This occurred at two confirmation soil sample locations including the south side surface of area 5b (sample F-7-0) and the north side surface of area 7 (sample 7-1-0). An additional 6" was removed by hand from these locations and retested by laboratory analysis. One additional removal was performed at area 5b and two removals at area 7 before compliance was achieved. The excavation cleanup was completed on May 6th however, the final load of material including plastic, soil, and miscellaneous debris, was hauled offsite on

May 12 and disposed on May 13th at the Hillsboro landfill. A total of 36 loads of non-hazardous soil were excavated and disposed at Hillsboro equaling 623.33 tons. A total of 6 loads of hazardous soil totaling 181.10 tons were excavated and disposed at CW-Arlington.

Following removal of the soil, clean replacement backfill was imported. The excess imported crushed rock used for truck access and some concrete debris was placed at the bottom of areas 5b, 6, and 7 well below the surface. The initial imported backfill source was rejected but a secondary suitable source was located and confirmed. The clean imported backfill material was screened to produce a higher quality soil and placed at the surface. After the material was graded and smoothed, the entire area of disturbed soil was hydro-seeded. The privacy screening, temporary construction fencing, CRZ, and port-a-potty have been removed from the site. Following completion of the backfilling and grading of the soil, the concrete area was pressure washed and thoroughly cleaned. The material cleaned from the cracks and surface of the concrete was placed in a 55-gal drum for disposal. All excavation equipment has been mobed offsite.

The only remaining remnant of the excavation cleanup is the tote containing decontamination (IDW) water and several drums containing solids. These materials were tested and have been profiled and approved for disposal. Waste Express of Portland Oregon is currently under contract to remove and dispose of these materials and the containers.

On May 19 OSC Heister and three START contractors conducted indoor dust sampling of six indoor window sills in the residence to ensure the house was not impacted by the removal.

On May 20 the residents moved back into the house.

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

2.1.4 Progress Metrics

Waste Stream	*Medium*	*Quantity*	*Manifest #*	*Treatment*	*Disposal*
Lead (Pb)	soil	623 tons			Sub. D
Lead (Pb)	soil	181 tons			Sub. C

2.2 Planning Section

2.2.1 Anticipated Activities

Continue removal and disposal of contaminated soil.

2.2.1.1 Planned Response Activities

2.2.1.2 Next Steps

2.2.2 Issues

none

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

MSBA staff

2.5.2 Liaison Officer

NA

2.5.3 Information Officer

Judy Smith, USEPA

3. Participating Entities

3.1 Unified Command

IC: USEPA and Trustee

3.2 Cooperating Agencies

ODEQ, Multnomah Health Lead Program

4. Personnel On Site

USEPA: 2

MSBA: 2

Munitor Construction: 3

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.