

U.S. ENVIRONMENTAL PROTECTION AGENCY
POLLUTION/SITUATION REPORT
Southside Chattanooga Lead - Removal Polrep



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
Region IV

Subject: POLREP #28
Residential Removal Actions Continue
Southside Chattanooga Lead

Chattanooga, TN
Latitude: 35.0333793 Longitude: -85.3057271

To:
From: Perry Gaughan, On Scene Coordinator
Date: 12/15/2013
Reporting Period: 11/11/13 through 11/21/13

1. Introduction

1.1 Background

Site Number:	B4J4	Contract Number:	
D.O. Number:		Action Memo Date:	8/19/2012
Response Authority:	CERCLA	Response Type:	Time-Critical
Response Lead:	EPA	Incident Category:	Removal Action
NPL Status:	Non NPL	Operable Unit:	
Mobilization Date:	9/17/2012	Start Date:	9/24/2012
Demob Date:		Completion Date:	
CERCLIS ID:		RCRIS ID:	
ERNS No.:		State Notification:	
FPN#:		Reimbursable Account #:	

1.1.1 Incident Category

Lead contaminated soil on 80 properties being removed as a time critical removal under CERCLA.

1.1.2 Site Description

The Tennessee Department of Environmental Conservation (TDEC) requested the EPA Region 4 Emergency Response and Removal Branch's (ERRB's) assistance after discovering that the lawns of one residence and potentially several more were contaminated with lead along Read Avenue near downtown Chattanooga. Initially, one resident along Read Avenue presented to the emergency room with severe fatigue and abdominal pain. Emergency room blood work indicated lead levels approaching 20 micrograms per deciliter (ug/dl) which alerted TDEC to conduct follow up assessments. TDEC requested assistance from ERRB to characterize the soil around the home and an initial assessment was conducted with SESD (Science and Ecosystem Support Division) Athens in which three homes were assessed as well as a public park and playground area at 1700 Mitchell Avenue. Ten samples were collected and two samples showed elevated lead levels exceeding 400 ppm.

1.1.2.1 Location

The Southside Chattanooga Lead Site is located along Read, Mitchell and Carr Avenues south of Main Street in Chattanooga, Hamilton County, Tennessee (Latitude: 35.0456, Longitude: -85.3097). The area is a blend of young, middle income couples who are renovating older constructed homes and low to middle income retired couples who have resided in the area for 20 plus years. The vast majority of homes were built in the early 1900's.

The Southside Chattanooga area is immediately adjacent to downtown Chattanooga and was prone to flooding during the early 1900's and prior to the development of damming and flood control measures by the Tennessee Valley Authority (TVA). Several of the homes along Read and Mitchell Avenues appear to have been built on 4-5 feet of clay fill.

1.1.2.2 Description of Threat

1.1.3 Preliminary Removal Assessment/Removal Site Inspection Results

In response to a request from TDEC, the EPA Region 4 ERRB with assistance from SESD Athens, conducted two follow up assessments of the Read and Mitchell Avenue area in January and April 2012. Of the 81 homes (162 front and back yards) assessed near downtown Chattanooga, 68 lawns (42 %) have lead

levels exceeding 400 ppm. Lead levels range from 400 – 4000 ppm. The 4000 ppm sample was collected from a lawn along the 1600 block of Read Ave and the sample contained very dark fine material, most likely a high concentration of bag-house dust.

In addition, the Battle Academy Elementary School which neighbors the site was sampled in mid June 2012. A 20' by 20' grid was laid over the school property and 140 grids were screened using X-ray fluorescence spectroscopy (XRF). No significant lead contamination was found and all lead levels were below 55 ppm.

2. Current Activities

2.1 Operations Section

2.1.1 Narrative

Nov 11th through Nov 15th

On November 11th, the ERRs crew began removal efforts at 1611 Mitchell Avenue. This small area of yard was excavated by approximately 1130 hours. The crew installed a french drain extension on the existing french drain to aid in the owner's construction of a small paved patio. Once the drain extension was attached, the crew began backfill with clay and top soil, and the soil was tamped. The small area where the patio was to be constructed was backfilled with crush-n-run rather than top soil.

On 11/12/13, the crew began removal at 1620 Underwood Street, where the Trinity Baptist Church annex is located. Once contaminated soil was removed, the crew backfilled the area with clay and topsoil. A load of crush-n-run was also placed along the gravel parking area that was utilized during removal efforts.

On 11/13/13, heavy rains washed out removal activities.

On 11/14/13, the crew began removal at the small fenced in back yard at 1635 Rossville Avenue. A section of fence was dismantled to obtain access to the back yard. The garden block was moved aside and the crew began removing contaminated soil. Removal was completed by approximately 1100 hours. The crew placed a layer of clay, followed by a layer of top soil, and the soil was tamped. The small remediated area just outside of the fence received a layer of clay and medium sized rock, per request of the owner. The garden block was restored and one pallet of sod was placed. The crew reconstructed one section of fence.

On 11/15/13, the crew completed placing sod at 1635 Rossville Avenue and reconstructed the remaining panel of fence. The crew then placed sod at 1611 Mitchell A, 1700 Underwood, and at 1620 Underwood. Once all the sod was placed, the crew then moved to the back yard of 1722 Mitchell A to conduct removal at a small area where a large shed was formerly located. Once this task was completed, the crew moved to 1627/1626 Underwood to reconstruct a section of fence and gate to the back yard.

Nov 18th through Nov 21st

On November 18th, the ERRs crew continued construction of a wooden, metal reinforced fence and gate at 1620/1621 Underwood Street. Once this task was completed, the crew moved on to complete other small site clean up items, which included replacing two boards on a fence at 1600 Mitchell, and grouting a block sidewalk at 1723 Read Ave.

11/19/13, the crew drove around the Southside neighborhood to look for any remaining trash to pick up – caution tape, pallets, bags of PPE, etc. Once this task was completed, the crew addressed an area behind 1612 Mitchell A. The vegetation and soil at the surface was removed, and the crew collected pieces of flagstone and brick already present at the location, and stacked this material above the existing, low brick wall in preparation for cement to be placed in this area. The damaged vehicle at 24 E. 16th Street was picked up by a tow truck and carried to Diaz Repair Shop, located one block from the neighborhood.

11/20/13, the crew placed sod at 1620 Underwood Street, 1705 Mitchell, 1708 Underwood, 1722 Mitchell, 1727 Read A, 1609 Read A, 1611 Mitchell A and 1729/1731 Read A. Fence installation took place at 1709 Mitchell A and at 1727 Read A. The cement truck arrived at approximately 1310 and began turning the cement mix while the crew continued to prepare the "cubby" area for cement. The task took approximately an hour to complete. The crew utilized tools to smooth the cemented area and also placed a small amount of cement on the concrete pad to repair a broken area/hole.

11/21/13, the crew utilized an aerator for the day to aerate and seed several yards. A broken dryer vent hood was replaced at 1721 Read A. The crew also added metal stripping reinforcement where wooden boards were previously located at the base of the cemented cubby area. The field supervisor purchased three replacement plants for 1703 Mitchell A. These plants were placed in locations at the request and supervision of the property owner.

In addition, the ERRs crew continued to conduct cleanup efforts at the Staging Area. A location initially observed to have exceedances for lead and arsenic at the Staging Area where magenta colored slag was observed was addressed by the crew. This area appears to have been filled with the magenta colored, slag material in an effort to fill a hole in the concrete pad. START continued to screen various suspect locations with an XRF. Some areas of the concrete pad had been chipped away/weathered over time and there were divots throughout the concrete pad. It was in these small divots where pockets of dirt were observed to have some exceedances for lead and/or arsenic at the residential action level. The crew will utilize shovels to clean out these divots.

The OSC continues to coordinate clean up efforts and assessments with Tenn Dept of Environmental Conservation (TDEC) and Tenn Dept of Health as well as Hamilton County health officials. TDEC and the

OSC plan to update Chattanooga City Council during November 2013. A specific date has not been set by City Council.

The OSC, Tenn Dept of Health and Tenn Dept of Environmental Conservation (TDEC) are currently preparing an assessment strategy for Chattanooga City Council addressing future lead assessments in the downtown area.

2.1.2 Response Actions to Date

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

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

No information available at this time.

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

No information available at this time.

3. Participating Entities

3.1 Unified Command

3.2 Cooperating Agencies

The OSC continues to coordinate clean up efforts and assessments with Tenn Dept of Environmental Conservation (TDEC) and Tenn Dept of Health as well as Hamilton County health officials. TDEC and the OSC plan to update Chattanooga City Council during February 2013. A specific date has not been set by City Council.

The OSC, Tenn Dept of Health and Tenn Dept of Environmental Conservation (TDEC) are currently preparing an assessment strategy for Chattanooga City Council addressing future lead assessments in the downtown area.

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.