

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



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
Region IV

Subject: POLREP #20
Residential Soil Removal Continues
Southside Chattanooga Lead

Chattanooga, TN
Latitude: 35.0333793 Longitude: -85.3057271

To:
From: Perry Gaughan, On Scene Coordinator
Date: 7/23/2013
Reporting Period: July 1st through July 19th 2013

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 52 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

July 1st through July 3rd

On Monday July 1st, the ERRs crew continued contaminated soil excavation at 1733 Mitchell. Heavy rains the following day cancelled operations and the crew was permitted to demobe for the holiday weekend.

July 8th through July 13th 2013

On Monday July 8th 2013, the ERRS crew

July 15th through July 19th 2013

On Monday July 15th 2013, the ERRs crew continued removing contaminated soil from the back yard of 1732 Mitchell and completed soil removal in the back yard of 1730 Mitchell. The majority of the 1730 Mitchell was a shallow removal because of a high concentration of trees and corresponding root systems. The fence surrounding the back yard of 1730 Mitchell had to be removed because it obstructed soil removal. Once contaminated soil was removed, the areas were backfilled with clay and a layer of topsoil. The areas were thoroughly compacted and a straw layer was placed for erosion control.

On Tuesday July 16th, the ERRs crew began removal in the back yard of 1726 Mitchell. Earlier in the day, START contractors double checked assessment findings in the front yard with XRF and no areas exceeding 400 ppm were observed. However the north and south side yards of the home did have elevated lead levels. The south side yard of this property only received a shallow removal due to several old, large trees along the property line. The north side yard between 1726 and 1724 Mitchell along with the remaining back yard of 1726 Mitchell were excavated down to a depth of one foot. Once contaminated soil removal was completed the areas were backfilled with clay, topsoil and covered with straw.

On Wednesday July 17th, the crew placed sod at 1731, 1732, 1733 and the west half of 1730 Mitchell. The crew also dug several holes in the back yard of 1728 MA. START also further assessed the back yard of 1728 Mitchell and no exceedances for lead were observed. Once this task was completed, the ERRs crew began debris, overgrowth and obstruction removal from the back yard of 1724 Mitchell. Region 4 ERRB's Monty Bates was also on site to conduct a field audit of ERRs costs to date.

On Thursday, July 18th, the ERRs crew completed contaminated soil removal to a depth of one foot in the back yard of 1724 Mitchell. Once contaminated soil was removed, the area was backfilled with clay, covered with a topsoil layer and straw was placed for erosion control. In addition Region 4 ERRB's Jim McGuire was on site to review site removal progress and to meet with TDEC's Troy Keith to review future assessment areas.

On Wednesday July 17th, EPA ERRB finance officer, Monty Bates arrived on site to conduct a field audit of all expenditures to date. The following day he was joined by section chief Jim McGuire who was given an update on site activities. McGuire also met with TDEC's Troy Keith and the OSC to review potential future assessment activities.

START contractors continue to assist with technical support, daily operations, post-excavation confirmation sampling using X-ray fluorescence spectroscopy (Xrf) and air sampling during excavation and staging of contaminated soils.

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.

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

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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.