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

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
Region IV

Subject: **POLREP #18**
Residential Soil Removal Continues
Southside Chattanooga Lead

Chattanooga, TN
Latitude: 35.0333793 Longitude: -85.3057271

To:
From: Perry Gaughan, On Scene Coordinator
Date: 6/28/2013
Reporting Period: June 3 through June 16th 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

June 3rd through June 7th 2013

On Monday, June 3rd 2013, the ERRs crew began removing overgrowth along the fence line between 1711 and 1713 Mitchell Avenue. Excavation of contaminated soils started at 1300 hours at the 1711 Mitchell Ave back yard area near the small shed adjacent to the driveway. Once this area was remediated, the crew then moved operations to the front yard to work around the large garden boxes at 1711 Mitchell. The crew also conducted removal at the front yard of 1713 Mitchell, and also the shared yard between 1711 and 1713 Mitchell. On this day, a damaged water line was observed in the front yard of 1713 Mitchell. The local plumber was contracted to repair the line.

On Tuesday, June 4th, contaminated soil from the staging area was transported offsite. Crew sodded the front and side yard of 1701 and 1709 Mitchell and began backfill operations at 1711 Mitchell. The site plumber arrived at approximately 1115 hours to repair the line at 1713 Mitchell. The crew continued excavation operations in the front yard and side yard of 1713 Mitchell.

On Wednesday, June 5th, the crew began removal efforts at the back yard of 1713 Mitchell. During operations, a damaged ground wire was observed. An electrician was called to repair the ground wire the same day. The crew backfilled the front yard of 1713 Mitchell and sodded half of the area. Remaining bare areas were covered with straw and work was ended for the day due to incoming inclement weather.

On June 6th, the ERRs crew re-seeded and placed straw at the 1611 Read Avenue and the south side of 1609 Read Ave. The crew constructed a small garden box area at the front yard of 1709 Mitchell replacing the garden box removed during operations, and constructed a sidewalk of rock and pavers at the front yard of 1713 Mitchell, replacing the paver sidewalk removed during operations. The crew also planted flowers at 1703 Mitchell, replacing flowers that died after removal efforts were completed at the property.

Operations were cancelled on Friday, June 7th because of heavy rainfall.

June 10th through June 15th 2013

Removal actions were cancelled on June 10th and 11th because of heavy rainfall.

On Wednesday, June 12th 2013, the ERRs crew continued removing contaminated soil from the back yard of 1713 Mitchell Avenue. Once removal was completed, START collected a 5-point composite soil sample, which will be sent to a lab for analysis at a later date. The crew then backfilled the area with clay, followed by a layer of topsoil, and compacted the material. Sod was placed at the front and back yards of 1711 and 1713 Mitchell Avenue.

On Thursday, June 13th, the crew placed a gravel driveway at the back yards of 1711 and 1713 Mitchell, and began soil removal in the back yard of 1715 Mitchell. The crew completed approximately 75% of the back yard this day.

Soil removal was cancelled on June 14th because of heavy showers.

Work began again on Saturday, June 15th, the crew continued removing the small amount of remaining contaminated material from the back yard of 1715 Mitchell and began backfilling operations with clay and topsoil the same day.

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

Waste Stream	*Medium*	*Quantity*	*Manifest #*	*Treatment*	*Disposal*

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.