

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



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY  
Region IV

**Subject:** POLREP #25  
Residential Removal Actions Continue  
Southside Chattanooga Lead  
  
Chattanooga, TN  
Latitude: 35.0333793 Longitude: -85.3057271

**To:**  
**From:** Perry Gaughan, On Scene Coordinator  
**Date:** 11/1/2013  
**Reporting Period:** Sept 30th through Oct 12th, 2013

## 1. Introduction

### 1.1 Background

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

#### 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**

##### **Sept 30th through Oct 4th**

On Sept 30th, START conducted additional screening of the front yards of 1613 and 1615 Mitchell to further delineate the degree of lead contamination. The back yard of 1615 MA was also further screened to delineate the area to determine where the crew needed to focus their efforts. Removal began at the front yards of 1613 and 1615 MA. Removal at these two yards was completed by the end of the day.

On 10/1/13, the crew began backfill operations at 1613 and 1615 MA front yards. This was completed at approximately 1300 hours and the crew then began removal work at 1613 MA back yard. Due to the lead excavator operator having outpatient surgery on his elbow, and the second in command excavator operator having a doctor appointment that day, the ERRS PM operated the excavator for the remainder of the day.

10/2/13, the crew began removal at the back yard of 1615 MA. Access was obtained by removing a section of the wooden fence, utilizing the back yard of 1613 MA as an entrance way/exit. This task was completed the same day and backfill commenced at approximately 1500 hours. The crew worked their way from 1615 MA back yard into 1613 MA back yard. Sod was also delivered on this day.

On 10/3/13, the crew placed sod at the back yards of 1703 MA, 1701 MA, and at the front yards of 1615 MA and 1613 MA. Once this was completed, the crew continued backfilling operations at the back yard of 1613 MA.

START screened the back yard of 1609 MA at the request of the owner. Initially when this back yard was screened, the majority of the area was a zero-scape, with only a small area (appx. 5 x 7) of grass. The small grassy area was screened in two places and no exceedances for lead were observed, however upon relaying this information to the new owner of the property, she expressed concern and stated that she wished to remove the zero scape area and put in a vegetable garden. START screened the far right side of this back yard and each location that was screened had an exceedance for lead. START relayed this information to the OSC, and it was determined that the 1609 MA back yard would be removed.

The crew also began removal at a small area just outside of the fence at 1609 MA adjacent to the alley way, while still backfilling top soil at 1615 and 1613 MA. Once excavation was completed behind 1609 MA, the excavator operator moved over to the back yard of 1605 MA. This back yard was primarily small gravel and asphalt; however the strips of grass on both the left and right of the parking area, and in front of the parking area next to the residential structure had exceedances for lead at ground surface.

At approximately 1500 hours, START and ERRS received notice that a local reporter, Pam Sohn and her associate Mary Helen Miller from the Chattanooga Times Free Press would be on site within fifteen minutes. The OSC and ERRS PM were on site, as the reporter and camera girl wished to get footage of the crew conducting operations. The reporter interviewed the OSC, asking general questions about the removal work and affected properties, interviewed START to get a demonstration of how the XRF functions, collected footage of the crew conducting backfill operations, and conducted a quick face-to-face interview with a local resident. Other residents the reporter wished to speak with were not home at the time.

On October 4th, the ERRs crew placed sod at a small section of yard at 1613 MA and at half of the back yard of 1615 MA. They also reconstructed the fence at 1615 MA. All of the crew with the exception of two crewmen at Staging left for the day. The two crewmen at the Staging yard remained on site to load out contaminated soil into dump trucks and to receive manifests. START demobilized from the site at 1230.

##### **Oct 7th through Oct 12th 2013**

On Oct 7th, the ERRs crew began hand digging a small strip of grass alongside 1615 Mitchell. Once this area was addressed, the crew backfilled the area with topsoil. The crew then moved on to conduct removal at the back yard of 1609 MA. This task was completed by the end of the day.

10/8/13, the crew continued and backfill at the back yard of 1613 MA, began backfill at 1609 MA back yard, and began conducting removal at the back yard of 1605 MA. At the request of the owner, in the back yard of 1605 MA, the areas that once had grass were now covered with crush-n-run and tamped, making the entire area a parking pad. Backfill at both 1613 MA and 1609 MA were completed by the end of the day.

10/9/13, the crew placed sod at 1615 MA side yard, 1613 MA back yard, and 1609 MA back yard. Once the sod was placed, the crew reconstructed fences at the back yards of 1613 MA, 1609 MA and 1703 MA. START obtained screening and removal access from the property owner of 1729 Mitchell Avenue.

On 10/10/13, the crew began removal at the small front yard of 1609 MA. The crew backfilled the area with

top soil, compacted the soil and then placed sod. In addition, the ERRs foreman and START travelled to a local nursery to purchase several plants that had died after removal efforts had been completed. Plants that were purchased were placed at 1703 MA back yard and at 1601 Rossville (Hart Gallery property).

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

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.