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



# UNITED STATES ENVIRONMENTAL PROTECTION AGENCY Region IV

Subject: POLREP #22

**Residential Removal Actions Continue** 

Southside Chattanooga Lead

Chattanooga, TN

Latitude: 35.0333793 Longitude: -85.3057271

To:

From: Perry Gaughan, On Scene Coordinator

**Date:** 9/3/2013

Reporting Period: Aug 5th through Aug 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

#### Aug 5th through Aug 9th

On Monday, August 5th, ERRs the crew placed a small gravel walkway at the front yard of 1716 Mitchell. Once the sidewalk was completed, the crew began removal operations at the back yard of 1714 Mitchell. It was determined upon further screening that the only area requiring removal was the back half of the back yard. This property was a newly constructed home and clay was observed closest to the foundation and front of the home. In addition to soil laden with lead, the back yard contained quite a bit of trash (broken glass bottles, worker gloves, clothing, plastic pieces, etc). Once the material was removed, the crew backfilled the area with clay, followed by a layer of top soil.

On Tuesday, August 6th, the crew began removal at the front yard and south side yard of 1708 Mitchell. During soil removal, a broken clean-out line was observed. The removal area was backfilled with clay and top soil, leaving the clean-out exposed for repair. Sod arrived this day, and the crew placed sod at the 1708 Mitchell front yard.

On Wednesday, August 7th, sod was placed at 1716 Mitchell front yard, 1718 Mitchell back yard, 1720 Mitchell back yard, and 1726 Mitchell back yard. The crew removed a section of fence at the 1706/1708 Mitchell property line to make access to the 1706 back yard. The crew also reinstalled a fence at the 1718/1720 Mitchell property line. The crew began removal at the 1708 Mitchell north side yard, however at approximately 1530 hours, heavy rainfall ended work in the early afternoon.

On Thursday, August 8th, START contractor R Stubbs substituted for START A Miolen. The crew began work at the back yard of 1706 Mitchell utilizing the back yard of 1708 as access. The crew also removed contaminated soil from the back yard of 1708 Mitchell near the concrete pad. The removal area was backfilled with clay and straw was placed. Heavy rainfall began at approximately 1530 hours and work ceased.

No operations were conducted on Friday, August 9th because of rainfall.

# Aug 12th through August 16th 2013

Because of overcast skies and the threat of rain on Monday, August 12th, the ERRs crew completed a "punch list" of site items. The crew reconstructed the fence at the 1716/1718 Mitchell property line and corrected a grade issue at the back yard of 1718 Mitchell where the fence gate closed. The crew painted the decorative rocks at the back yard of 1720 Mitchell, fixed an equipment rub spot on a house panel at 1705 Mitchell. The panel was filled with wood putty, sanded and the entire lower side panel was painted with paint provided by the owner. In addition, ERRs fixed the small concrete pad at the back yard of 1724 Mitchell by filling these areas in with quikrete, and placed clay and a layer of topsoil at the north side and partial back yard of 1706 Mitchell. The crew placed a layer of straw just before heavy rainfall began at approximately 1500 hours.

On Tuesday, August 13th removal operations were cancelled because of rain.

On Wednesday, August 14th, the ERRs crew placed sod at the back yards of 1714 and 1716 Mitchell. The crew also placed a crush-n-run gravel driveway at 1708 Mitchell and along the alley way to widen this path (vehicles frequently drive over sod in these areas). The crew replaced broken pieces of board on fences at 1714 and 1716 Mitchell and corrected the sidewalk at 1727 Read Ave, per request of the property owner. The correction was made by pulling the rock sidewalk a foot away from the paved driveway, adding a piece of garden trim to hold the rock in place, and adding a strip of topsoil and sod along the rock sidewalk between the walk and the driveway. Top soil and compost was placed at the side yard of 1708 Mitchell. This area was compacted and covered with straw.

On Thursday, August 15th, the ERRs crew installed fence posts at the back yard of 1730 Mitchell. The cement at the base of the posts was allowed to dry overnight. A subcontracted fence company installed a fence at the back yard of 1713 Mitchell. In addition, the OSC presented a draft powerpoint to EPA Region 4 management for additional funding to complete the project. Some minor suggestions and edits were made by management.

On Friday, August 16th, the crew placed sod at 1706 and 1708 Mitchell and installed fencing at the back yard of 1730 Mitchell.

During the week of August 19th, operations were temporarily suspended pending additional funding approval from EPA Region 4 management.

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.