

U.S. ENVIRONMENTAL PROTECTION AGENCY  
POLLUTION/SITUATION REPORT  
Big River Mine - Lake Timberline Area - Removal Polrep



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY  
Region VII

**Subject:** POLREP #14  
Site Progress Report  
Big River Mine - Lake Timberline Area  
07CRRV01  
Bonne Terre, MO  
Latitude: 37.9901241 Longitude: -90.5357385

**To:**  
**From:** Jeff Weatherford, OSC  
**Date:** 8/1/2013  
**Reporting Period:** 6/20/2013 through 7/31/2013

1. Introduction

1.1 Background

<b>Site Number:</b>	07CRRV01	<b>Contract Number:</b>	EP-R7-07-12
<b>D.O. Number:</b>	0086	<b>Action Memo Date:</b>	9/24/2010
<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>	NPL	<b>Operable Unit:</b>	OU1
<b>Mobilization Date:</b>	12/22/2010	<b>Start Date:</b>	12/22/2010
<b>Demob Date:</b>		<b>Completion Date:</b>	
<b>CERCLIS ID:</b>	MOD981126899	<b>RCRIS ID:</b>	
<b>ERNS No.:</b>		<b>State Notification:</b>	
<b>FPN#:</b>		<b>Reimbursable Account #:</b>	

1.1.1 Incident Category

Time-Critical Removal Action

1.1.2 Site Description

The Big River Mine - Lake Timberline Area is an ongoing time-critical removal action at the Central Middle School Subsite (Site), consisting of high concentrations of lead contamination from mining and the use of mine wastes as construction materials. The primary problem areas at this Site which require action are lead-contaminated soils in yards and gravel in driveways.

1.1.2.1 Location

The Site is located in northern St. Francois County and is a stand-alone lake development community north of the city of Bonne Terre and south of Valle Mines, Missouri.

1.1.2.2 Description of Threat

According to the Incidents of Mines, Occurrences and Prospects (IMOP) database created by the state of Missouri, there was only limited mining within the current boundaries of Lake Timberline. However, the Mississippi River and Bonne Terre Railway (MR&BTR) runs through the development. This railway (now abandoned) is comprised of mine waste (chat, tailings, smelter slag, etc.) based on visual observations and sample results. Three lakes within the development are adjacent to and receive stormwater runoff from the MR&BTR. In addition, based on documented conversations with some Lake Timberline residents, it appears lead-contaminated soil and gravel has been brought in from the surrounding areas. The soil was used as fill and the gravel was used for driveways throughout the community.

Elevated concentrations, greater than 400 parts per million (ppm), of lead have been found throughout the Site. Children playing in and around the contaminated areas have the highest potential for exposure.

1.1.3 Preliminary Removal Assessment/Removal Site Inspection Results

In September 2005, the U.S. Environmental Protection Agency conducted screening of a portion of the MR&BTR, which runs through the development, along with soil from a nearby playground and sediment from Kiddie Lake. The screening was conducted with an X-Ray Fluorescence Spectrometer (XRF), and the results detected lead contamination in the pond sediments at levels ranging from 1,383 to 2,793 ppm.

Results from soil screened in the park ranged from 213 to 3,390 ppm, and results from screening of the abandoned railroad ballast ranged from 646 to 2,080 ppm.

In March 2010, the EPA began a removal assessment which included soil and groundwater sampling in the Lake Timberline area. During this sampling event, the EPA contractors screened the soil at 362 residences and sampled 226 private drinking water wells. The results of this sampling effort revealed the following information:

Properties with Soil Levels greater than 400 ppm lead.....209  
Properties with Soil Levels greater than 1,200 ppm lead .....104  
Drinking Water Wells Exceeding 15 parts per billion lead..... None

## 2. Current Activities

### 2.1 Operations Section

#### 2.1.1 Narrative

During this reporting period, crews have completed excavation of contaminated soil at ten properties.

#### 2.1.2 Response Actions to Date

To date, crews have completed excavation of contaminated soil at a total of 196 properties.

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

#### 2.1.4 Progress Metrics

<b><i>Waste Stream</i></b>	<b><i>Medium</i></b>	<b><i>Quantity</i></b>	<b><i>Manifest #</i></b>	<b><i>Treatment</i></b>	<b><i>Disposal</i></b>
Lead	Soil	42,722 Cubic Yards			Re-Use

### 2.2 Planning Section

#### 2.2.1 Anticipated Activities

Property excavations will continue.

##### 2.2.1.1 Planned Response Activities

Crews will continue to excavate contaminated properties.

##### 2.2.1.2 Next Steps

As noted above.

#### 2.2.2 Issues

None identified to date.

### 2.3 Logistics Section

All logistics are being conducted by the EPA contractors.

### 2.4 Finance Section

No information available at this time.

### 2.5 Other Command Staff

#### 2.5.1 Safety Officer

SO functions are being conducted by the EPA contractors.

#### 2.6 Liaison Officer

LO functions are being conducted by the OSC.

#### 2.7 Information Officer

##### 2.7.1 Public Information Officer

There is no need for a PIO at this time.

#### **2.7.2 Community Involvement Coordinator**

The OSC and CIC are coordinating with private and public community leaders as needed.

### **3. Participating Entities**

#### **3.1 Unified Command**

N/A

#### **3.2 Cooperating Agencies**

MDNR  
MDHSS

### **4. Personnel On Site**

EPA  
START  
ERRS

### **5. Definition of Terms**

No information available at this time.

### **6. Additional sources of information**

#### **6.1 Internet location of additional information/report**

<http://www.epaosc.org/>

#### **6.2 Reporting Schedule**

Monthly

### **7. Situational Reference Materials**

No information available at this time.