

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 #3  
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:** 7/19/2011  
**Reporting Period:** June 10 through July 19, 2011

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 on-going time-critical removal action at the Central Middle School Sub-Site (Site) and consists of high concentrations of lead contamination from mining and the use of mine waste 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, Mo.

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 storm-water 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 to be exposed.

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 Florescence 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

The EPA continued excavation of properties where the lead in the soil exceeded 1,200 parts per million. During this reporting period crews have completed excavation of contaminated soil at 18 properties.

#### 2.1.2 Response Actions to Date

To date, crews have completed excavation of contaminated soil at a total of 38 properties.

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

#### 2.1.4 Progress Metrics

<i><b>Waste Stream</b></i>	<i><b>Medium</b></i>	<i><b>Quantity</b></i>	<i><b>Manifest #</b></i>	<i><b>Treatment</b></i>	<i><b>Disposal</b></i>
Lead	Soil	5,501 Cubic Yards			Re-Use

### 2.2 Planning Section

#### 2.2.1 Anticipated Activities

Continue excavation of contaminated soil, weather permitting.

##### 2.2.1.1 Planned Response Activities

Continue excavation of contaminated soil, weather permitting.

##### 2.2.1.2 Next Steps

Continue excavation of contaminated soil, weather permitting.

#### 2.2.2 Issues

None identified to date.

### 2.3 Logistics Section

na

### 2.4 Finance Section

No information available at this time.

### 2.5 Other Command Staff

#### 2.5.1 Safety Officer

No safety issues have been identified. Site safety briefings are conducted at the beginning of each work day.

#### 2.6 Liaison Officer

There are no Liaison activities to report.

#### 2.7 Information Officer

na

##### 2.7.1 Public Information Officer (PIO)

PIO functions are being performed by the Community Involvement Coordinator.

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

No specific community activities to report this period.

### **3. Participating Entities**

#### **3.1 Unified Command**

The EPA is the lead agency. All response command roles are being performed by the On-Scene Coordinator. Staff roles are being filled by Superfund Technical Assessment and Response Team (START) or Emergency and Rapid Response Services (ERRS) contract staff.

#### **3.2 Cooperating Agencies**

EPA  
Missouri Department of Natural Resources  
community group leaders

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

EPA OSC  
START contract staff  
ERRS contract staff

### **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.