

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



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
Region VII

Subject: POLREP #1
Initial POLREP
Big River Mine - Lake Timberline Area
07CRRV01
Bonne Terre, MO
Latitude: 37.9901241 Longitude: -90.5357385

To:
From: Jeff Weatherford, OSC
Date: 5/16/2011
Reporting Period: 12/22/2010 through 5/13/2011

1. Introduction

1.1 Background

Site Number:	07CRRV01	Contract Number:	EP-R7-07-12
D.O. Number:	0086	Action Memo Date:	9/24/2010
Response Authority:	CERCLA	Response Type:	Time-Critical
Response Lead:	EPA	Incident Category:	Removal Action
NPL Status:	NPL	Operable Unit:	OU1
Mobilization Date:	12/22/2010	Start Date:	12/22/2010
Demob Date:		Completion Date:	
CERCLIS ID:		RCRIS ID:	
ERNS No.:		State Notification:	
FPN#:		Reimbursable Account #:	

1.1.1 Incident Category

Time Critical Removal Action

1.1.2 Site Description

The Lake Timberline Sub-site (Site) 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 Lake Timberline Sub-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]) 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, 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 lead104
 Drinking Water Wells Exceeding 15 parts per billion lead..... None

2. Current Activities

2.1 Operations Section

2.1.1 Narrative

On December 22, 2010, EPA mobilized to the site and completed removal of approximately 9 cubic yards of contaminated soil from a property being developed for a residence. The owner requested action to avoid spreading of the contaminated materials during construction.

On April 18, 2011, EPA remobilized back to the site to begin excavation of properties where the lead in the soil exceeded 1200 parts per million. During this reporting period crews have completed excavation of contaminated soil at 11 properties.

2.1.2 Response Actions to Date

To date, crews have completed excavation of contaminated soil at a total of 11 properties.

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

2.1.4 Progress Metrics

Waste Stream	Medium	Quantity	Manifest #	Treatment	Disposal
Lead	Soil	1061.40 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 functions are being performed by the CIC.

2.7.2 Community Involvement Coordinator

A public meeting was held on May 2, 2011. EPA has met on several occasions with the community group.

3. Participating Entities

3.1 Unified Command

EPA is the lead agency. All response command roles are being performed by the OSC. Staff roles are being filled by START or ERRS contract staff.

3.2 Cooperating Agencies

EPA
MDNR
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.