

U.S. ENVIRONMENTAL PROTECTION AGENCY
POLLUTION/SITUATION REPORT
Big River Mine Tailings Site, OU1 -- Area of Response - Removal Polrep



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
Region VII

Subject: POLREP #22
FINAL POLREP
Big River Mine Tailings Site, OU1 -- Area of Response
07CR
Park Hills, MO
Latitude: 37.8625800 Longitude: -90.5087260

To: Adam Ruiz, US EPA

From: Jason Gunter, RPM

Date: 10/15/2019

Reporting Period: December 2014 - October 2019

1. Introduction

1.1 Background

Site Number:	07CR	Contract Number:	ERRS:EPS71305
D.O. Number:	ERRS:0036	Action Memo Date:	12/6/2010
Response Authority:	CERCLA	Response Type:	Time-Critical
Response Lead:	EPA	Incident Category:	Removal Action
NPL Status:	NPL	Operable Unit:	01
Mobilization Date:	4/21/2014	Start Date:	4/28/2014
Demob Date:	12/20/2018	Completion Date:	10/15/2019
CERCLIS ID:	MOD98112689	RCRIS ID:	
ERNS No.:		State Notification:	
FPN#:		Reimbursable Account #:	

1.1.1 Incident Category

Comprehensive Environmental Response, Compensation and Liability Act of 1980 (CERCLA) incident category: Inactive Production Facility (Mining-Metals [Pb]).

1.1.2 Site Description

1.1.2.1 Location

The 2014 Big River Mine Tailings Site, OU-1 (Site) action consists of excavation at residential properties where lead in soil exceeds screening levels of 800 milligrams/kilogram (mg/kg) and children younger than 84 months of age reside. The Site is within the boundaries of St. Francois County, Missouri. This response action does not include ongoing actions at other sub-sites (e.g., the Lake Timberline sub-site and the Iron Mountain Lake sub-site). The primary focus of this action lies within the "Area of Contamination" established in the 2004 Administrative Order on Consent between the EPA and the Doe Run Company.

The Site exists within an area of approximately 436 square miles and includes all of St. Francois County with the exception of the former Mine La Motte tract that extends into St. Francois County's southern border just north of the community of Mine La Motte, Missouri. St. Francois County is the location of a former mining region known as the "Old Lead Belt." The area is still referred to as the "Mineral Area." The population center of the area is located approximately 70 miles south of St. Louis. Seven large areas of mine waste covering an area of approximately 110 square miles are present within the Site. The areas included are the Bonne Terre Mine Tailings Site, the Leadwood Mine Tailings Site, the Elvins Mine Tailings Site, the Federal Mine Tailings Site, the Desloge Mine Tailings Site, the National Mine Tailings Site and the Doe Run Mine Tailings Site. Migration of lead-contaminated mine waste from these large tailings piles through human and environmental mechanisms has occurred. This response is not limited to these mine waste areas.

1.1.2.2 Description of Threat

See POLREP #1 (Initial POLREP).

1.1.3 Preliminary Removal Assessment/Removal Site Inspection Results

See POLREP #1 (Initial POLREP).

2. Current Activities

2.1 Operations Section

2.1.1 Narrative

The Site consists of residential properties in St. Francois County and within the "Area of Contamination" established in the 2004 Administrative Order on Consent between the EPA and the Doe Run Company, Missouri. The EPA discovered surface soils at the Site to have elevated concentrations of lead.

2.1.2 Response Actions to Date

As access agreements are signed, site walks with the EPA On Scene Coordinator, property owner, START and ERRs Contractor are conducted on the properties prior to the excavation. During the site walk, any utility lines and landscaping issues are discussed with the property owner. Also, an instruction sheet on how to care for the sod is discussed and provided to the property owner. Once the sod is placed, the sod is watered by ERRS until it takes root, and then the care of the sod and any hydroseeded areas is turned over to the property owner.

Excavations began on April 29, 2014, at residential properties on the Site. The excavated soil in Bonne Terre is hauled to the Bonne Terre East Repository. Starting on November 10, excavated soil from Park Hills and Desloge was hauled to the Dix Repository in Park Hills. As of December 15, 2014, 136 properties have been excavated:

Property ID	Date Excavation Completed	Cubic Yards Excavated
9001	05/06/2014	543
9313	05/02/2014	402
9136	05/08/2014	210
9288	05/12/2014	298
9481	05/12/2014	140
2689	05/19/2014	487
9120	05/16/2014	160
9331	05/20/2014	265
9006	05/22/2014	348
9401	05/22/2014	280
9225	05/29/2014	194
9380	06/02/2014	432
9399	06/03/2014	239
9498	06/06/2014	390
9398	06/05/2014	100
9459	06/09/2014	254
9054	06/12/2014	172
9105	06/12/2014	283
9104	06/18/2014	720
9460	06/13/2014	148
2929	06/17/2014	312
9436	06/18/2014	193
9466	06/23/2014	342
2600	06/26/2014	304
2640	06/27/2014	211
9013	07/03/2014	740
9448	07/02/2014	491
1409	07/09/2014	128
9265	07/10/2014	608
9272	07/10/2014	148
1827	07/15/2014	433
1399	07/15/2014	328
1871	07/16/2014	162
9291	07/24/2014	1,714
9214	07/17/2014	162
9431	07/21/2014	245
9204	07/22/2014	224
9507	07/23/2014	159
9167	07/22/2014	228
9161	07/22/2014	166
9390	07/29/2014	672
9160	07/28/2014	234
9158	07/29/2014	126
9453	07/28/2014	366
9454	07/28/2014	235
9505	07/30/2014	168
9220	07/31/2014	294
3453	07/31/2014	238
9504	07/31/2014	132
9467	08/01/2014	102
9322	08/01/2014	222
3456	08/13/2014	434
1880	08/04/2014	168
1814	08/06/2014	202
9069	08/06/2014	114
9515	08/15/2014	924
9546	08/13/2014	246
9516	08/18/2014	222
9531	08/15/2014	300
1804	08/19/2014	384
9506	08/19/2014	294

1544	08/21/2014	584
9539	08/20/2014	90
9179	08/25/2014	912
9451	08/25/2014	168
9499	08/25/2014	246
9452	08/22/2014	162
9511	08/25/2014	114
9512	08/26/2014	168
9520	08/29/2014	426
9535	08/27/2014	252
9025	08/28/2014	196
9513	08/28/2014	162
9558	08/29/2014	114
9503	09/04/2014	406
9561	09/08/2014	318
9550	09/04/2014	198
9556	09/03/2014	134
1201	09/05/2014	252
9557	09/04/2014	128
9548	09/08/2014	288
9567	09/08/2014	344
9510	09/12/2014	624
9540	09/12/2014	300
9141	09/17/2014	1,148
244	09/14/2014	426
9063	09/15/2014	162
9536	09/17/2014	398
9077	09/17/2014	276
9226	09/22/2014	438
9560	09/19/2014	522
9056	09/19/2014	144
9065	09/23/2014	936
9057	09/24/2014	300
9554	09/23/2014	226
9421	09/24/2014	102
41	09/26/2014	504
1280	09/26/2014	364
9055	09/25/2014	150
9391	09/26/2014	300
9081	09/29/2014	210
9502	10/08/2014	994
9020	10/01/2014	216
9374	10/01/2014	198
9495	10/02/2014	222
9563	10/02/2014	78
9514	10/22/2014	840
9509	10/22/2014	574
9326	10/22/2014	438
9582	10/20/2014	274
9500	10/23/2014	732
9297	10/30/2014	552
9572	10/20/2014	502
9570	10/27/2014	336
9501	10/31/2014	1,168
158	10/29/2014	318
1545	10/31/2014	140
9579	11/03/2014	300
9379	11/06/2014	396
1710	11/12/2014	1,156
213	11/11/2014	902
9205	11/07/2014	258
2295	11/10/2014	202
9568	11/11/2014	234
9595	11/19/2014	498
9059	11/14/2014	823
9131	11/19/2014	834
128	11/25/2014	1,372
1131	11/21/2014	502
1833	11/21/2014	270
9153	11/25/2014	408
9605	11/25/2014	584
9585	12/04/2014	258
9599	12/04/2014	330
9621	12/11/2014	264

In addition to excavation activities, numerous properties required maintenance and restoration activities. The contractor was tasked with additional restoration activities at 13 properties which were completed in fiscal year 2019. The site has remained active to ensure no additional restoration activities were needed.

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

See POLREP #6.

2.1.4 Progress Metrics

Waste Stream	Medium	Quantity	Manifest #	Treatment	Disposal
Lead-Contaminated Soil (ERRS contract; excavations conducted during 2014)	Solid	45,764 yd	N/A	N/A	Bonne Terre East (Tailings Pile) Repository
Lead-Contaminated Soil (ERRS contract; excavations conducted during 2014)	Solid	5,563 yd ³	N/A	N/A	Dix Repository (Tailings) Park Hills
Lead-Contaminated Soil (ERRS contract; excavations conducted prior to 2014)	Solid	128,706 yd ³	N/A	N/A	Desloge Tailings Pile
Lead-Contaminated Soil (Site-specific contract; excavations conducted prior to 2014)	Solid	62,583 yd ³	N/A	N/A	Bonne Terre East Tailings Pile
Total		242,616 yd ³			

NOTE: The "Lead-Contaminated Soil (Site-specific contract; excavations conducted prior to 2014)" was previously reported as 42,531 cubic yards in POLREPs numbered 1-17; the correct amount is 62,583 cubic yards. The correction is made in the table above.

2.2 Planning Section

2.2.1 Anticipated Activities

2.2.1.1 Planned Response Activities

No additional response activities under this Action Memo are anticipated.

2.2.1.2 Next Steps

All actions under this Action Memo are complete. No further actions are required.

2.2.2 Issues

All properties have been closed out. No additional issues remain.

2.3 Logistics Section

All logistical issues are being addressed by the EPA and EPA contractors.

2.4 Finance Section

2.4.1 Narrative

The total EPA costs for this removal action are based on full cost accounting practices.

Estimated Costs *

	Budgeted	Total To Date	Remaining	% Remaining
Extramural Costs				
2014 ERRS - Cleanup Contractor	\$4,065,254.00	\$4,065,254.00	\$0.00	0.00%
START (RPM tracking these costs)	\$740,000.00	\$732,000.00	\$8,000.00	1.08%
Intramural Costs				
2014 USEPA - Direct	\$111,000.00	\$52,612.00	\$58,388.00	52.60%
2014 USEPA - InDirect	\$330,000.00	\$58,604.00	\$271,396.00	82.24%
Total Site Costs	\$5,246,254.00	\$4,908,470.00	\$337,784.00	6.44%

* The above accounting of expenditures is an estimate based on figures known to the OSC at the time this report was written. The OSC does not necessarily receive specific figures on final payments made to any contractor(s). Other financial data which the OSC must rely upon may not be entirely up-to-date. The cost accounting provided in this report does not necessarily represent an exact monetary figure which the

government may include in any claim for cost recovery.

2.5 Other Command Staff

2.5.1 Safety Officer

No significant safety issues were reported during this operational period.

2.6 Liaison Officer

2.7 Information Officer

2.7.1 Public Information Officer

At this time there is no PIO assigned to this site.

2.7.2 Community Involvement Coordinator

At this time there is no CIC assigned to this site. See POLREP #6 for information on previous Public Availability Sessions and other details on community outreach.

3. Participating Entities

3.1 Unified Command

The limited scope of the response does not warrant a full Incident Management Team (IMT) or Unified Command. Operations, safety, logistics, planning and finance functions are primarily being handled by contractor staff.

3.2 Cooperating Agencies

City of Park Hills
City of Leadwood
City of Bonne Terre
City of Doe Run
City of Desloge
Missouri Department of Natural Resources
Missouri Department of Health and Senior Services

4. Personnel On Site

EPA
ERRS
START

5. Definition of Terms

AOC	Area of Contamination / Administrative Order on Consent
AOR	Area of Response
ATSDR	Agency for Toxic Substances and Disease Registry
CAMU	Corrective Action Management Unit
CERCLA	Comprehensive Environmental Response, Compensation, and Liability Act
EPA	Environmental Protection Agency
ERRS	Emergency & Rapid Response Services Contract
MDHSS	Missouri Department of Health and Senior Services
MDNR	Missouri Department of Natural Resources
mg/L	milligrams per Liter
mg/kg	milligrams per kilogram
NCP	National Contingency Plan
ng/m3	nanograms per cubic meter
NPL	National Priorities List
OSC	On-Scene Coordinator
OSHA	Occupational Safety and Health Administration
OU	Operable Unit
Polrep	Pollution Report
PPE	Personal Protective Equipment
PPM	Part Per Million
PRP	Potentially Responsible Party
RCRA	Resource Conservation and Recovery Act
RPM	Remedial Project Manager
Sitrep	Situation Report
START	Superfund Technical Assessment and Response Team
SS	Site Specific
SU	Sample Unit
TCLP	Toxicity Characteristic Leaching Procedure
XRF	X-Ray Fluorescent Spectrometer
yd3	Cubic Yard

6. Additional sources of information

6.1 Internet location of additional information/report

For additional information, please refer to <http://www.epaosc.org/BRAOR>.

6.2 Reporting Schedule

The Pollution Report (POLREP) serves as the record of the response actions, notifications and decisions made to support the response action. This is the final POLREP anticipated for this site.

7. Situational Reference Materials

Please refer to the documents section of <http://www.epaosc.org/BRAOR> for maps, data, diagrams, etc.

POLREP #22 Last Updated 10/28/2019