

U.S. ENVIRONMENTAL PROTECTION AGENCY
POLLUTION/SITUATION REPORT
Bonanza Mine and Mill - Removal Polrep



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
Region X

Subject: POLREP #7
Final PolRep
Bonanza Mine and Mill
10NE
Sutherlin, OR
Latitude: 43.3899870 Longitude: -123.1845630

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From: Earl Liverman, On-Scene Coordinator

Date: 2/3/2015

Reporting Period: November 10 to December 6, 2014

1. Introduction

1.1 Background

Site Number:	10NE	Contract Number:	START 14-06-0006
D.O. Number:	ERRS 0013/030309.0013	Action Memo Date:	6/4/2014
Response Authority:	CERCLA	Response Type:	Time-Critical
Response Lead:	EPA	Incident Category:	Removal Action
NPL Status:	Non NPL	Operable Unit:	
Mobilization Date:	8/4/2014	Start Date:	8/4/2014
Demob Date:	12/6/2014	Completion Date:	12/6/2014
CERCLIS ID:	ORN001001174	RCRIS ID:	
ERNS No.:		State Notification:	6/4/14
FPN#:		Reimbursable Account #:	

1.1.1 Incident Category

Abandoned historical mercury mine and mill.

1.1.2 Site Description

1.1.2.1 Location

The Bonanza Mine and Mill Site is located 6 miles east of Sutherlin, Douglas County, Oregon.

1.1.2.2 Description of Threat

Elevated concentrations of mercury, arsenic, and other metals from historical mercury mining operations. For additional information and details, please see PolReps 1 through 6.

1.1.3 Preliminary Removal Assessment/Removal Site Inspection Results

Data regarding the nature and extent of the contaminants of concern found at the Site include elevated levels of mercury, arsenic, and other metals in soils, mill tailings, road surfaces, and other media. For additional information and details please refer to PolReps 1 through 6.

2. Current Activities

2.1 Operations Section

2.1.1 Narrative

2.1.2 Response Actions to Date

2.1.2.a Removal actions were undertaken by the Oregon Department of Environmental Quality (ODEQ) in 2000 and 2014. For additional information and details please see PolReps 1 through 6.

2.1.2.b. The following removal actions have been undertaken by EPA as part of this ongoing removal action for the current reporting period: **November 10 - December 6, 2014**

The primary activities during this period included the following tasks:

- Completion of the repository soil cover to include final seed, straw, and slash placement.
- Installation of the southern portion of the repository toe drain trench.
- Installation of the septic effluent lines between the residences and the drain field.
- Completion of drainage channels in Area 1.
- Finalization of the purchase of manufactured home located in Klamath Falls.
- Transportation and placement of Klamath Falls manufactured home at Residence 1.
- Connection of water, power, and phone utilities to both residences.
- Completion of Maintenance, Monitoring, and Repair (MM&R) plan.
- Demobilization of work trailers and other equipment from the site.
- Demobilization of EPA, START and ERRS personnel from the site.
- Perform final grading, reclamation, and surface restoration of disturbed areas.

Rain showers and wet site conditions resulted in intermittent delays during the current operational period. Task scheduling was assessed daily based on current conditions and weather forecasts in consideration of site safety, and to avoid damage to the site from working in unsuitable conditions. The work crews were not on site during the week of November 23 – 30 in recognition of the Thanksgiving holiday.

ERRS used the bulldozer to trackwalk the repository slope to create texture prior to application of pellet fertilizer and turfgrass seed mix. Slash was placed on the repository cover for erosion control using the mini-excavator. The excavator placed logs perpendicular to the slope and dispersed stumps, light slash, and brushweed in-between the logs.

The southern toe of the repository was reshaped and connected to the anchor trench. A START engineer was on site to observe and document the installation of a French drain along a select section of the southern toe. The engineer also met with the EPA OSC and ERRS RM to discuss and optimize drainage features on the north side of the repository near the Mill Site, former Residence 2, and Residence 6.

On November 12, OSC Franklin met with Mr. Smith to review restoration efforts on the borrow source area located behind the work trailers. The property owner expressed satisfaction with the restoration which included grading, seeding, and placement of slash and straw.

The septic system was completed during the operational period. The mini-excavator was used to dig a trench in the road for the PVC effluent line to connect the drain field to septic tanks located at both residences. The drain field near the property owner's residence was covered with straw and slash.

Prior to the current operational period, EPA and ERRS negotiated the purchase of a manufactured home located in Klamath Falls. On November 15, one START member and one ERRS member traveled to Klamath Falls to screen the home for mercury vapors using the Lumex mercury vapor analyzer. The results of the survey identified indoor air concentrations of mercury vapor similar to outdoor (background) concentrations, approximately 15 ng/m³. For reference, the indoor air concentration of mercury vapor for residential settings as recommended by the ATSDR is 10,000 ng/m³.

On November 18, the manufactured home from Eugene arrived on site and was placed at Residence 6. This home includes 2 bedrooms, 1 bathroom, a living room, kitchen and other amenities. The property owner, Mr. Smith, was accompanied by OSC Liverman, ERRS and START on a tour of the home.

On November 19, a four-person ERRS crew traveled to Klamath Falls to prepare the second manufactured home for transport to the site. This home has 3 bedrooms, 2 bathrooms, a living room, kitchen and other amenities. On November 21st the home arrived on site and was placed at Residence 1.

The electric utilities were connected during the operational period. At Residence 6, the power company connected the transformer to the service pole and the electrician placed conduit from the service pole to the home. At Residence 1, the power company connected the transformer to the power pole. Upon siting and placement of both residences, electrical connections were finalized to the homes and approved by county inspectors. Telephone and septic utilities were also connected to the residences. During this time, ERRS installed new smoke detectors and carbon monoxide detectors, and ensured that neither residence contained mercury thermostats. Because many original household items were contaminated and/or could not be reclaimed, each manufactured home was furnished with basic furniture items such as a kitchen table and chairs, couch, and bed frames with mattresses that were purchased locally from a used furniture store in nearby Sutherlin.

December 20, OSC Liverman and OSC Heister met with Mr. Smith to review the transfer agreement for the manufactured homes. ERRS and START were also present for the meeting. ODEQ Thoms arrived on site to join the discussion regarding requirements of the MM&R plan. This plan was prepared by EPA to clearly identify the property owner's responsibility of maintaining, monitoring, and repairing site features under ODEQ oversight. The MM&R plan includes tasks such as monitoring vegetation, ditches, culverts, repository cover, and gravel backfill along with a list potential warning signs such as heavy precipitation that may disturb the site. The MM&R plan also described reporting requirements, best management practices, exposure reduction measures, and precautions for digging or subsurface work. ODEQ Thoms also described planned deed restrictions with Mr. Smith, and expressed concern regarding open adit(s) related to the Bonanza Mine workings on adjacent property.

ERRS coordinated demobilization of site assets during the current operational period. The EPA work trailer was moved off site on November 14, and the second work trailer was moved on November 20. The 30 ton haul truck was decontaminated and demobilized on November 15. OSC Franklin confirmed with Lone Rock Timber, the adjacent property owner, to leave in place the gravel parking area prepared for the work trailers. ERRS deployed seven signs at various locations throughout the site to warn residents, visitors, and other personnel of remaining hazards on the property.

Prior to demobilization of personnel from the site, ERRS installed three check dams downstream of the pond, deployed straw wattles around Area 1, and placed rock along the road in Areas 1 and 2 for erosion control. By December 6, all EPA assets and contractor personnel had demobilized from the site.

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

EPA has initiated a PRP search for this Site.

2.1.4 Progress Metrics (as of 12/6/14)

Waste Stream	Medium	Quantity	Manifest #	Treatment	Disposal
Mercury, soil waste	Soil and other debris	One 55-gallon drum (150 lbs)	007851712FLE	Retirement via sulfide treatment	Bethlehem Apparatus Co., Hellertown, PA
Mercury, wood debris	Soil, wood, and other debris	Two 55-gallon drums (1000 lbs)	007851711FLE	Macro-encapsulation	Clean Harbors Grassy Mountain, Grantsville, UT

2.2 Planning Section

2.2.1 Anticipated Activities

2.2.1.1 Planned Response Activities

No planned response activities anticipated.

2.2.1.2 Next Steps

No additional steps anticipated.

2.2.2.1 Issues

N/A

2.3 Logistics Section

2.3 Logistics Section

N/A

2.5.1 Safety Officer

N/A

2.4 Finance Section

No information available at this time.

2.5 Other Command Staff

2.5.1 Safety Officer

Daily safety meetings were held at the beginning of each day. During the reporting period, site personnel were in Level D PPE based on the results of previous air monitoring and/or sampling.

2.5.2 Liaison Officer

Outreach activities were addressed by key project personnel on an as needed basis.

2.5.3 Information Officer

See 2.5.2. Additionally, a Community Involvement Coordinator (CIC) was assigned to the project and available to assist with outreach activities on an as needed basis.

3. Participating Entities

3.1 Unified Command

While UC was not established, ODEQ was integrated into the project organization, as appropriate.

3.2 Cooperating Agencies

N/A

4. Personnel On Site

EPA – 1

START – 1

ERRS – 11

5. Definition of Terms

N/A

6. Additional sources of information**6.1 Internet location of additional information/report**

www.epaosc.org/BonanzaMineandMill

6.2 Reporting Schedule

No additional PolReps anticipated.

7. Situational Reference Materials

No information available at this time.

POLREP #7 Last Updated 10/21/2016