## United States Environmental Protection Agency Region IX POLLUTION REPORT

Date: Wednesday, November 4, 2009

From: Michelle Rogow, OSC

**Subject:** Erosion Control Completed - Final POLREP

Altoona Mine Site

Shasta - Trinity National Forest, Castella, CA

Latitude: 41.1367000 Longitude: -122.5475000

POLREP No.: Site #: 09PC 26 **Reporting Period:** 9/28/09-11/2/09 D.O. #: 9015 **Start Date:** 7/7/2008 **Response Authority: CERCLA** Mob Date: 7/6/2008 **Response Type:** Time-Critical **Demob Date:** 10/23/2009 **NPL Status:** Non NPL **Completion Date:** 11/2/2009 **Incident Category:** Removal Action **CERCLIS ID #:** Contract # EP-W-07-022 **RCRIS ID #:** 

# Site Description

The Altoona Mine is an abandoned mercury mine located approximately 11 miles (as the crow flies) west of the town of Castella in Trinity County, California. The approximate geographic coordinates of the mine are 41 E 8'12.7" north latitude, 122 E 32'51" west longitude. The mine is located on private land within the Shasta-Trinity National Forest. The Shasta-Trinity National Forest is administered by the United States Forest Service (USFS). The Altoona Mine site is comprised of an abandoned and backfilled vertical mine, with an adjacent ore processing area, former retort areas, and waste rock and tailings piles. There are collapsed remains of wooden structures at the ore processing area, and other collapsed wooden structures are scattered about the periphery of the mine site. The mine was comprised of six levels of horizontal shafts which branch out from the main vertical shaft, and two levels of horizontal shafts which branch out from the second vertical shaft. The eight horizontal shafts comprise a total of over 10,000 The mine is located on an escarpment which faces southeast. The ore processing area is located immediately southwest of the surmised location of the main adit, and tailings piles are located southeast (downhill) of the processing area. The base of the tailings piles is approximately 80 feet below the elevation of the processing area. Water from the mine flows from under the tailings piles, down Soda Creek to the east fork of the Trinity River, which is approximately one mile to the southeast of the mine. As no flowing water was found immediately upgradient of the mine, the water source of Soda Creek is assumed to be an underground source, which likely flows through mine passageways.

#### **Current Activities**

9/28/09 – EPA OSC mobilized to Dunsmuir for upcoming site work.

9/29/09 – EPA: 1; USFS: 1; RCO: 8. The USFS botanist was on site with RCO Reforestation, their revegetation contractor. USFS coordinated with the OSC and through out the day, the USFS and their contractor worked on planting, installation of willow wattles, and seeding of the USFS segment of Soda Gulch which were restored last year.

10/1/09 – EPA: 2, REAC: 1 – The OSC met with ERT and REAC on site. ERT and REAC were on site to complete installation of the hydrological and erosion control monitoring.

10/2 - 10/3/09 - EPA: 1; REAC: 2 – Erosion pins were installed to gauge effectiveness of erosion control measures in the upland and riparian areas of the site. ERT continued to work on installation of the hydrologic monitoring system, with the installation of 2 transducers and 2 turbidity monitors in Soda Gulch. ERT also gathered stream flow data and tested the systems which were installed to ensure their effectiveness.

 $10/\!4/\!09-ERT$  and REAC demobilized from site.

10/12/09 – EPA:1; ERRS: 1; USFS: 5 - EPA, ERRS and USFS Abandoned Mine Lands (AML) crew mobilized to the site to begin erosion control measures installation. The group worked on installation of

coir matting on the eastern side of the repository face, until rains began.

10/13/09 -10/14/09 – Heavy rains impacted the site, bringing approximately 6 inches of rain in a period of 36 hours. The storm and its hydrologic impacts were measured and monitored by the ERT monitoring station downstream of the site. OSC Rogow visited the site after the rains had let up and assessed the condition of the roads and site.

10/15/09 – EPA: 1; ERRS: 3; USFS: 5 – Rains were light, but work resumed with erosion control measures installation on the western side of the mine waste area. Biosol and seed were also spread on the western mine waste area. The OSC and ERRS inspected the site for storm damage. ERRS opened the repository leachate collection system and the water level was monitored.

10/16/09 - EPA: 1; ERRS: 3; USFS: 5 – EPA, ERRS and USFS continued to work on installation of erosion control measures. ERRS worked to drain the repository leachate collection systems into drums, with 7 drums of leachate water was collected. The crew began repairing water damage and installing coir matting on the repository face. Toilets were delivered.

10/17/09 - 10/18/09 - EPA: 1; ERRS: 3; USFS: 5 - EPA, ERRS and USFS continued to work on repair of storm damage and installation of erosion control measures. The crew resumed repair of water damage and installing coir matting on the repository face. The OSC and ERRS worked on repair of the hydrologic monitoring system which had been damaged in the storm.

10/19/09 - EPA: 1; ERRS: 3; USFS: 5 – The crew completed installation of erosion control measures on the repository face and began installation of measures and conducting repairs on the repository berm. The hydroseeder was on site to coordinate on work.

10/20/09 - EPA: 1; ERRS: 3; USFS: 6 – The crew continued installation of erosion control measures and conducting repairs on the repository berm. The vacuum truck was on site to remove repository leachate water from the repository and drums on site. Approximately 1500 gallons of repository leachate water was transported off site for disposal. The skidsteer was delivered to the site.

10/21/09 - EPA: 1; ERRS: 3; USFS: 6 – Work on the repository berm continued, with repair of damaged areas and installation of erosion control measures. The OSC continued to work on ERT monitoring station.

10/22/09 - EPA: 1; ERRS: 3; USFS: 5 – The crew completed installation of erosion control measures and conducting repairs on the repository berm. Application of biosol continued on the west mine area slope and straw wattle installation continued. ERRS transferred repository leachate water into drums. The hydroseeder arrived on site, set up and began application on the east side of the repository face. By the end of the day, the first application was almost complete.

10/23/09 - EPA: 1; ERRS: 3; USFS: 5 — The group completed installation of erosion control measures. The hydroseeder completed hydroseeding of the repository berm. Supplies were packed up and equipment was demobilized.

10/24/09 - Crews demobilized from site.

10/30/09 – ERT mobilized to the site.

10/31/09 - ERT: 2 - ERT worked on repair of the hydrologic monitoring station and installed 3 new transducers to the system.

11/1/09 - ERT: 2- ERT completed work on the hydrologic monitoring station and demobilized from the site.

#### **Planned Removal Actions**

- 1. Empty leachate collection system and on site containers.
- 2. Revegetation and reforestation.
- 3. Burning of wood debris pile.

### **Next Steps**

Empty leachate collection system. Reforestation and revegetation.

## **Key Issues**

Leachate management and O&M

# **Disposition of Wastes**

Leachate water disposed at US Ecology, Beatty, NV

Waste Stream	Quantity	Manifest #	Disposal Facility
Leachate water	4500	Non-Haz 1	US Ecology, Beatty, NV
Leachate water	3000	Non-Haz 1	US Ecology, Beatty, NV
Leachate water	1500	Non-Haz 1	US Ecology, Beatty, NV

www.epaosc.org/Altoona