

United States Environmental Protection Agency
Region IX
POLLUTION REPORT

Date: Thursday, September 11, 2008

From: Michelle Rogow

Subject: Installation of liner and filling of repository continues

Altoona Mine Site

Shasta -Trinity National Forest, Castella, CA

Latitude: 41.1367000

Longitude: -122.5475000

POLREP No.:	9	Site #:	09PC
Reporting Period:	9/2/08-9/7/08	D.O. #:	9015
Start Date:	7/8/2008	Response Authority:	CERCLA
Mob Date:	7/7/2008	Response Type:	Time-Critical
Demob Date:		NPL Status:	Non NPL
Completion Date:		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 linear feet.

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

9/2/08 –USCG: 1, ERRS: 16, URS: 1, Aramark: 3, NWL: 5. Crews remobilized to camp after holiday weekend.

9/3/08 – USCG: 2, ERRS: 16, START: 1, URS: 1, Aramark: 3, NWL: 5. Northwest Linings returned with only half of the people they had previously. NWL conducted repairs on the liner placed on the northeast side of the repository prior to break. ERRS crew assisted by providing heavy equipment support for deployment. URS conducted QA/QC of the GCL and liner installation. URS determined that there was damage to both the geocomposite and the liner and that 2 panels of liner needed to be replaced. Excavation of the ramp on the east side was completed and material was stockpiled at the screen plant. The mini-excavator continued to be used to dig out the tailings along the west slope of the repository. Grader and haul trucks continued to lay material on USFS 25 to improve the road. Water trucks were used for dust control and road grading. Screen plant was operated to screen material. START set up PDRs and reviewed data from sampling events collected prior to START

demobe. New staff that arrived were provided site and camp orientations and health and safety briefings.

9/4/08 – USCG: 2, ERRS: 16, START: 1, URS: 1, Aramark: 3, NWL: 5. Northwest Linings performed repair of the liner and geocomposite which needed to be replaced on the west side. ERRS crew assisted by providing heavy equipment support for deployment. Leachate collection pipe was perforated and installed. GCL was moved to the bottom of the repository. URS conducted QA/QC of the geocomposite and liner installation. Grader and haul trucks continued to lay material on USFS 25 to improve the road. Water trucks were used for dust control and road grading. Material was moved from old screen plant to new screen plant and screen plant operations continued. START set up PDRs and worked on GPS issues.

9/5/08 – EPA:1, USCG: 1, ERRS: 16, START: 1, URS: 1, Aramark: 3, NWL: 5. Northwest Linings completed work on the west side repair and began laying GCL and liner on the northeast face. Work was slow due to a smaller crew and beginning to lay around the corner. The OSC expressed concern with the NWL schedule and performance with EQM. ERRS crew assisted NWL by providing heavy equipment support for deployment. ERRS also assisted NWL with ground labor support. URS conducted QA/QC of the GCL and liner installation. ERRS began to haul tailings into the west side of the repository again. This time tailings were dumped outside the repository and placed in with the excavator until a ramp was built. The dozer was used to build the ramp. Trucks were then used to dump on the ramp. By the end of the day, tension had built up in the west side again, and the liner trench was excavated to relieve tension in the liner and geocomposite. Approximately 1900 cubic yards of tailings were placed in the repository. The screen plant was running, processing material. Material was moved from the old screen plant to the new screen plant. START set up PDRs.

9/6/08 – EPA:1, USCG: 1, ERRS: 16, START: 1, URS: 1, Aramark: 3, NWL: 4. Northwest Linings conducted a minor repair on the geocomposite on the west side of the repository. NWL then continued to lay GCL and liner on the northeast face of the repository. Work was slow due to an even smaller crew and working around the corner. Seaming was conducted at the end of the day, but was not completed. ERRS crew assisted NWL by providing heavy equipment support for deployment. ERRS also assisted NWL with ground labor support. URS conducted QA/QC of the GCL and liner installation. ERRS continued to move tailings into the repository. When the liner seated on the west side, the mini-excavator was used to backfill the trench to secure the liner in place. Once that was completed, tailings were moved into the northwest corner of the repository to secure that side. Tailings were hauled into the repository bottom and compacted in 2-3 foot lifts. Approximately 3,000 cubic yards of tailings were placed in the repository. ERRS completed excavation of the liner trench on the east side. START set up PDRs and collected samples from the USFS Soda Gulch area. The samples were prep'd and analyzed with the XRF.

9/7/08 – EPA:1, USCG: 1, ERRS: 16, START: 1, URS: 1, Aramark: 3, NWL: 7. Northwest Linings continued to lay GCL and liner on the eastern face of the repository. Seaming was performed at the end of the day. ERRS crew assisted NWL by providing heavy equipment support for deployment. ERRS also assisted NWL with ground labor support. URS conducted QC of the GCL and liner installation. ERRS began by moving stockpiled tailings onto edges and slopes of the repository while the liner was cool and taught. Haul trucks brought drain rock for the filling of the leachate collection trench which was lined and covered with filter fabric. Tailings were placed over the drain rock and filter fabric and then ERRS continued to move tailings into the repository again. Tailings were hauled into the repository bottom and compacted in 2-3 foot lifts. After multiple lifts of tailings were installed, waste rock began to be hauled into the repository. At the end of the day, tailings were brought in and dumped at the edges to fill the trench and edges of the liner while the liner was cool. Approximately 2,400 cubic yards of tailings and waste rock were placed in the repository. START set up PDRs and collected samples from the tailings pile area. The samples were prep'd and analyzed with the XRF. PST assisted with site safety and sample preparation. URS QC personnel demobed and replacement arrived that evening.

Planned Removal Actions

1. Install liner
2. Fill repository with mine waste
3. Sample to confirm cleanup goals
4. Cap repository
5. Restore site and repository area

Next Steps

Complete installation of liner. Excavate contaminated material. Fill repository with excavated material.

Key Issues

1. The size of the repository
2. Defining the boundaries of contamination
3. Installation of the liner
4. Time

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