

**United States Environmental Protection Agency
Region IX
POLLUTION REPORT**

Date: Monday, September 15, 2008

From: Michelle Rogow

Subject: Bottom Liner Completed!

Altoona Mine Site

Shasta -Trinity National Forest, Castella, CA

Latitude: 41.1367000

Longitude: -122.5475000

POLREP No.:	10	Site #:	09PC
Reporting Period:	9/8/08-9/14/08	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

9/8/08 – EPA:2, USCG: 1, ERRS: 16, START: 1, URS: 1, Aramark: 3, NWL: 7. Northwest Linings laid GCL and liner on the southern face of the repository, and performed seaming throughout 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 continued to move stockpiled tailings onto the slopes of the repository in the morning, while the liner was cool and taut. ERRS hauled waste rock to the repository and compacted it in multiple lifts. At the end of the day, tailings were brought in and dumped at the edges of repository, in preparation for the next day's spreading onto the liner surface. Approximately 4700 cubic yards of tailings and waste rock were placed in the repository. Six rolls of HDPE liner were delivered to the site. START set up PDRs and collected 17 samples from the Upper Soda Gulch area. The samples were prepared and analyzed 9 with the XRF. PST assisted with site safety and sample preparation. OSC Reiner arrived on-site.

9/9/08 – EPA:2, USCG: 1, ERRS: 16, START: 1, URS: 1, Aramark: 3, NWL: 7. Northwest Linings

completed laying liner on the southern face of the repository and laid the last GCL and liner on the floor of the repository, leaving only seaming and final repairs to be done. 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 continued to move stockpiled tailings onto the slopes of the repository in the morning, while the liner was cool and taut. ERRS hauled waste rock from the piles and debris from the ore processing area to the repository and compacted it in alternating lifts. At the end of the day, tailings were brought in and dumped at the edges of the repository, in preparation for the next day's spreading onto the liner surface. Approximately 6900 cubic yards of tailings, waste rock and debris were placed in the repository. The screen plant operations continued. START set up PDRs, took 16 samples in Upper Soda Gulch, and conducted XRF analysis of 21 samples taken on previous days. START and OSC Rogow evaluated sample results from the drainage into Soda Gulch and planned the pending excavation of that area. PST assisted with site safety and sample preparation.

9/10/08 – EPA:2, USCG: 1, ERRS: 16, START: 1, URS: 1, Aramark: 3, NWL: 7. Northwest Linings completed seaming on the floor of the repository and continued repairs. ERRS crew assisted NWL by staging geocomposite for final installation the following day. ERRS also assisted NWL with ground labor support. URS conducted QC of the liner and geocomposite installation. In the morning, while the liner was cool and taut, ERRS spread stockpiled tailings onto the slopes of the repository. ERRS hauled waste rock to the repository and compacted it in alternating lifts. The concrete from the processing area was brought into the repository. At the end of the day, tailings were brought in and dumped at the edges of repository, in preparation for the next day's spreading onto the liner surface. Approximately 6000 cubic yards of tailings and waste rock were placed in the repository. Screening continued today. START set up PDRs, took 3 soil samples in the area of waste rock pile 2 and conducted XRF analysis of 19 samples taken on the previous day. PST assisted with site safety and sample preparation. PST and Aramark went to Castella to pick up groceries for the week.

9/11/08 – EPA:2, USCG: 1, ERRS: 16, START: 1, URS: 1, Aramark: 3, NWL: 7. Northwest Linings and ERRS crew installed geocomposite on the central sections of the north and south walls of the repository, moving from west to east. By the end of the day, approximately 25 panels of geocomposite were installed and seamed. NWL carried out final liner repairs on the eastern end of the repository. URS conducted QC of the liner and geocomposite installation. One of the destructive samples failed testing at the laboratory. The area was assessed by URS, a portion extrusion welded by NWL and a new destructive test sample was taken and sent to the laboratory. While geocomposite was laid throughout the day, filling of the repository could not begin until laboratory test results were received the following day. OSC Rogow, OSC Reiner, START and ERRS staff walked the USFS stretch of Soda Gulch to plan the pending excavation of that area. Maintenance of haul roads was performed. START took 7 samples in the USFS area in an attempt to continue delineation. PST assisted with site safety. OSC Reiner demobilized.

9/12/08 – EPA:1, USCG: 1, ERRS: 16, START: 1, URS: 1, Aramark: 3, NWL: 7. Northwest Linings continued installing geocomposite on the eastern side of the repository. ERRS also assisted NWL with heavy equipment and ground labor support. URS conducted QC of the geocomposite installation. In the morning, while waiting for results of the lab testing, ERRS stockpiled tailings at the edge of the fill area, staging them for pushing once lab results were received. Once test results were received and the seam passed testing, ERRS hauled waste rock to the repository and compacted it in alternating lifts. At the end of the day, tailings were brought in and dumped at the edges of repository, in preparation for the next day's spreading onto the liner surface. By the end of the day NWL had finally completed installation of the geocomposite and completed work on the bottom liner! Approximately 4300 cubic yards of tailings and waste rock were placed in the repository. Trucks were loaded with screened rock at the end of the day to install the remaining section of the leachate collection trench. START set up PDRs, conducted XRF analysis of 12 samples taken on the previous day and measured the proposed USFS area for excavation. START also collected 5 samples to the west of the tailings piles where ERRS exposed a bank of tailings. PST assisted with site safety, materials inventory and sample preparation. The mini-excavator was finally picked up, a 40-ton haul truck was delivered and maintenance on the camp generators and equipment was performed.

9/13/08 – EPA:1, USCG: 1, ERRS: 15, START: 1, Aramark: 3. In the morning, tailings which were staged in the repository were pushed across the floor and up the side slopes before the liner heated up. Screened rock was placed into the remaining section of the leachate collection trench and filter fabric was sealed over it. Throughout the day, ERRS hauled tailings and waste rock to the repository and compacted it in alternating lifts. At the end of the day, tailings were brought in and dumped at the edges of repository, in preparation for the next day's spreading onto the liner surface. Approximately 6000 cubic yards of tailings and waste rock were placed in the repository. A road into the USFS lands was scoped out and improvement of the road into USFS land began. START set up PDRs and measured the proposed USFS area for excavation. In the early afternoon OSC Rogow received word that a truck had

been involved in an accident at mile marker 8 on USFS 25. The truck was the septic hauler who was on his way down the mountain after pumping out camp. PST was sent to the accident site to coordinate with the CHP and emergency officials. The driver was Medivac'd to Mercy Hospital in Redding and was in critical condition. NWL demobilized from the site.

9/14/08 –Aramark: 3. Much needed day off.

Planned Removal Actions

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

Next Steps

Excavate contaminated material. Fill repository with excavated material. Construct access to USFS lands and begin excavation in the stream channel.

Key Issues

1. The size of the repository
2. Defining the boundaries of contamination
3. Weather cooperation
4. Time

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