

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

**Date:** Tuesday, August 26, 2008

**From:** Michelle Rogow

**Subject:** Liner installation begins!

Altoona Mine Site

Shasta-Trinity National Forest, Castella, CA

Latitude: 41.1367000

Longitude: -122.5475000

<b>POLREP No.:</b>	7	<b>Site #:</b>	09PC
<b>Reporting Period:</b>	8/18/08-8/14/08	<b>D.O. #:</b>	9015
<b>Start Date:</b>	7/8/2008	<b>Response Authority:</b>	CERCLA
<b>Mob Date:</b>	7/7/2008	<b>Response Type:</b>	Time-Critical
<b>Demob Date:</b>		<b>NPL Status:</b>	Non NPL
<b>Completion Date:</b>		<b>Incident Category:</b>	Removal Action
<b>CERCLIS ID #:</b>		<b>Contract #</b>	EP-W-07-022
<b>RCRIS ID #:</b>			

#### **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**

8/18/08 – EPA:2, USCG: 1, ERRS: 15, URS: 1, Aramark: 3, NWL: 5, SHN: 1. All day ERRS conducted excavation of clean material from the eastern side of the repository. ERRS also worked on grading of the repository bottom and dug the trench along the southern edge of the repository. The berm of the western side was built up and completed. A trench was excavated in the western side berm and repository was prepared for lining on the western and northern sides. Screen plant operations continued, working on clean material brought in from the repository. The surveyor was on site to collect points for the as built drawing and provide information for the completion of grade in the repository bottom. URS continued oversight of excavation and preparation for lining. Water was used for dust control in the repository and along roads. A 135 foot manlift was delivered and a mountaineering expert was on site to provide guidance on safety measures to implement during work around the northern slope. The expert met with NWL, EQM and the OSC and provided advice and recommendations, as well as rigging the safety line for the north slope. PO Brown was on site to observe operations and meet with the OSC regarding contracts issues.

8/19/08 – EPA:2, USCG: 2, ERRS: 15, URS: 1, Aramark: 3, NWL: 10. All day ERRS conducted excavation of clean material from the eastern side of the repository and hauled material to the screen plant. ERRS completed grading of the repository bottom and the leachate trench along the southern edge of the repository. A ramp was installed into the east side of the repository and materials began to be transported into the repository bottom for lining. Sandbags were moved from the screen plant to the repository trench. The manlift was brought into the repository. An additional crew (5 people) from Northwest Linings arrived on site. URS continued oversight of excavation and preparation for lining. Water was used for dust control in the repository and along roads. EPA OSC informed Roseburg Resources of change in operations to lining of the repository and the limited access that would be occurring on State Road 133 in the vicinity of the site. The OSC requested notification from Roseburg of activities which would require access to the 133 over the next few weeks. PO Brown was on site to observe operations and meet with the OSC regarding contracts issues. PO Brown demobed. USCG PST Fairburn was relieved by PST Thomas who arrived on site. PST Fairburn demobed.

8/20/08 – EPA:1, USCG: 1, ERRS: 15, URS: 1, Aramark: 3, NWL: 11. All day ERRS conducted excavation of clean material from the eastern side of the repository and hauled material to the screen plant. Northwest Linings began installing liner on the western side of the repository (Woohoo!) ERRS crew assisted by providing heavy equipment support for deployment of the liner. By days end, GCL and HDPE were placed over approximately 100 linear feet on the west side. NWL had a mountaineering expert on site to assist with safety measures during liner installation. URS conducted QA/QC of the liner installation and testing of the seams. Water was used for dust control in the repository and along roads. A load of HDPE liner arrived and was transloaded to the site and was staged at the repository bottom. D65 Dozer was demobed. I-5 Rentals was on site to perform maintenance on equipment. PST and Aramark went to town to fetch the week's supply of groceries.

8/21/08 – EPA:1, USCG: 1, ERRS: 15, URS: 1, Aramark: 3, NWL: 11. All day ERRS conducted excavation of clean material from the eastern side of the repository and hauled material to the screen plant. Northwest Linings continued installation of liner on the western side and northwest face of the repository. ERRS crew assisted by providing heavy equipment support for deployment of the liner. By days end, GCL and HDPE were placed over approximately 100 linear feet on the north side. NWL had a mountaineering expert on site to assist with safety measures during liner installation. URS conducted QA/QC of the liner installation and testing of the seams. Air testing of the liner seams that were conducted on Wednesday was performed. The first set of liner seam samples were sent to the laboratory. Work resumed on laying material on USFS 25 and grading the road towards Castella. Water was used for dust control in the repository and along roads. Peterson Equipment was on site to perform maintenance on equipment. PST set up PDRs and assisted with site safety during liner installation. Hitchcock Construction, a roads contractor for Roseburg Resources, began work on Altoona Mine lands without any notice to the OSC. The OSC spoke with the owners and requested communication on activities on Altoona Mine lands and use of State Road 133 so that equipment would not have an issue.

8/22/08 – EPA:1, USCG: 1, ERRS: 14, URS: 1, Aramark: 3, NWL: 10. All day ERRS conducted excavation of clean material from the eastern side of the repository and hauled material to the screen plant. Northwest Linings continued installation of liner on the north face of the repository. ERRS crew assisted by providing heavy equipment support for deployment of the liner. By days end, GCL and HDPE were placed over approximately 120 linear feet on the north side and continued seaming liner. URS conducted QA/QC of the liner installation and testing of the seams. Air testing of the liner seams that were conducted on Thursday was performed. Work continued on laying material on USFS 25 and grading roads. Water was used for dust control in the repository and along roads. I-5 Rentals was on site to perform maintenance on equipment. The D6 LGP Dozer and a 4000 gallon water truck were switched out. PST set up PDRs and assisted with site safety during liner installation.

8/23/08 – USCG: 1, ERRS: 14, URS: 1, Aramark: 3, NWL: 10. All day ERRS conducted excavation of clean material from the eastern side of the repository and hauled material to the screen plant. Northwest Linings continued installation of liner on the southwestern face of the repository. ERRS crew assisted by providing heavy equipment support for deployment of the liner. By days end, GCL and HDPE were placed over approximately 280 linear feet on the southwestern side. URS conducted QA/QC of the liner installation and testing of the seams. Air testing of the liner seams continued and repairs of the liner seams also began. Grading of USFS 25 continued. Water was used for dust control in the repository and along roads. ERRS fused the pipe for the leachate collection system in anticipation of horizontal drilling on Monday. A notch was excavated in the outside of the berm in the southwest side for leachate collection pipe. PST set up PDRs and assisted with site safety during liner installation.

8/24/08 – USCG: 1, URS: 1, Aramark: 3, NWL: 10. Northwest Linings continued repairing seams and patching the HDPE liner. Crews worked half a day or less.

### **Planned Removal Actions**

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

### **Next Steps**

Complete excavation of the repository. Complete installation of liner.

### **Key Issues**

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

[epaosc.org/Altoona](http://epaosc.org/Altoona)