

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

**Date:** Monday, August 24, 2009

**From:** Michelle Rogow, OSC

**Subject:** Leachate, leachate, leachate

Altoona Mine Site

Shasta-Trinity National Forest, Castella, CA

Latitude: 41.1367000

Longitude: -122.5475000

<b>POLREP No.:</b>	22	<b>Site #:</b>	09PC
<b>Reporting Period:</b>	8/17 - 8/23/09	<b>D.O. #:</b>	9015
<b>Start Date:</b>	7/7/2008	<b>Response Authority:</b>	CERCLA
<b>Mob Date:</b>	7/6/2008	<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**

8/17/09 - EPA: 1; ERRS: 11

Work continued backfilling the ready line area with top soil. ERRS continued work on the southwestern repository berm channel and the berm on the south west side. Work was completed on restoration and ripping of the camp area to the specifications of the land owner. Restoration work also began at the new screen plant, with grading of areas where materials were removed and slashing the areas with debris that was removed prior to EPA operations. Dust control operations continued. The screen plan was walked to the USFS 25 by the vendor. The approved final Action Memo Ceiling Increase was delivered to the Director of OEM for transmittal to the AA for OSWER.

8/18/09 - EPA: 1; ERRS: 11

ERRS continued work on the southwestern repository berm channel and the berm on the south west side. Work began on armoring the southwest repository slope, keying large rock into toe of slope and lining above and below the boulders with smaller rock. ERRS continued creek restoration in Soda Gulch. Work at the new screen plant continued, with restoration being conducted where materials had been removed. Work resumed laying material on the USFS 25, from mile marker 14 towards Castella. Dust control operations continued. The 345 excavator was picked up by the vendor. FCA was in town to retrieve materials and run errands.

8/19/09 - EPA: 1; ERRS: 11

Work continued on armoring the southwest repository slope, keying large rock into toe of slope and lining

above and below the boulders with smaller rock. ERRS continued creek restoration in Soda Gulch. ERRS placed rock in a drainage on the 133 above the repository. Last winter, the area eroded and was sloughing into the upper repository drainage, so rock was placed in the area to armor it and provide additional stability for the 133 and the repository. The piping and materials arrived for the leachate collection system. The leachate collection pipe was excavated to expose the stubbed end. Restoration of the new screen plant continued. The drainage channel from the bypass road was connected into the east repository channels and large woody debris was placed to prevent access to the eastern side of the repository. Coir mat began to be installed on the western side of the repository berm. Dust control operations continued. The OSC continued to coordinate with the Region and HQ regarding the AM Ceiling Increase and ERRS regarding the dwindling funding.

8/20/09 - EPA: 1; ERRS: 11

ERRS resumed work on the installation of the repository berm drainage channel. Work continued laying material on the USFS 25, from mile marker 14 towards Castella. ERRS also continued work on restoration at the new screen plant. Work began on the leachate collection system pipe. The leachate collection pipe was tapped and drums were filled with leachate from the system. By the end of the day, 7 drums of leachate were collected. The OSC corresponded with URS engineers who provided information that thousands of gallons of leachate was likely to be drained from the system. Authorization for Ceiling Increase was signed by EPA headquarters, and the OSC and contracts office worked to get funding into the ERRS task order to continue operations. The OSC met with California Conservation Commission (CCC) supervisor regarding installation of erosion control measures and logistics for their operations. The OSC and CCC met with Pine-Gri-La owners about logistics of the CCC crew staying at their campground. The OSC coordinated with the USFS, who has agreed to sponsor and fund the CCC to conduct the erosion control work at the Site.

8/21/09 - EPA: 1; ERRS: 11

ERRS resumed work on installation of Soda Gulch. ERRS also worked on separation of debris in the mine shaft area and breaking up of timber to be used for lop and scatter. ERRS also continued work on restoration at the new screen plant. By mid morning, the 3 remaining drums of leachate were collected and it was apparent that additional capacity would be necessary. The water truck went down, and the vendor was on site to gather parts information.

8/22/09 - EPA: 1; ERRS: 5

ERRS had a small crew today to continue to remove leachate from the repository. 12 drums arrived last night and they were filled. Contents of some of the drums were transferred into the double walled tank. ERRS continued to research methods of connecting the remaining segments of the leachate collection system without fully emptying the pipe, so that the berm could be completed and vac trucks brought in to empty the system. After measuring the water head on the system, the OSC estimated that up to 7,500 gallons of leachate could still be remaining in the repository collection system. Crew was released early. The water truck was out of service.

8/23/09 – Day off!

### **Planned Removal Actions**

1. Complete restoration of the creek.
2. Complete repository berm.
3. Complete restoration of the mine waste area.
4. Install erosion control measures.
5. Empty leachate collection system and install permanent system.
6. Restore operating areas and private lands.
7. Winterize site and roads.

### **Next Steps**

Complete creek restoration. Continue construction of the repository berm and top of berm channel. Empty leachate collection system, sample leachate and prepare for disposal. Complete permanent leachate collection system. Meet with USFS regarding restoration.

### **Key Issues**

Amount of leachate in repository is greater than originally anticipated.