

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

**Date:** Tuesday, October 14, 2008

**From:** Michelle Rogow

**Subject:** Winter Wonderland

Altoona Mine Site

Shasta -Trinity National Forest, Castella, CA

Latitude: 41.1367000

Longitude: -122.5475000

<b>POLREP No.:</b>	14	<b>Site #:</b>	09PC
<b>Reporting Period:</b>	10/6/08-10/12/08	<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**

10/6/08 – EPA:2, USCG: 1, ERRS: 16, START: 3, Aramark: 3. Excavation of tailings from the center and re-excavation of the Mine Waste Area continued and hauled into the repository and compacted in alternating lifts. Excavation of the upper portion of the stream was also conducted. Approximately 3000 cubic yards of tailings and waste rock and 829 cubic yards from the USFS stream were placed in the repository. One of the excavators and two haul trucks were decontaminated and switched to restoration operations in the USFS stream area. ERT Johnson conducted oversight of the stream restoration which began in the lowermost segment which was excavated. Screen plant operations continued. START set up PDRs, collected 3 confirmation samples in the USFS stream area and 27 samples in the Mine Waste Area. START conducted field analysis of 25 samples with the XRF. PST assisted with site safety, and work in the stream.

10/7/08 – EPA:2, USFS: 2, USCG: 1, ERRS: 16, START: 3, Aramark: 3. Tailings from the center of the site continued to be excavated and hauled into the repository and compacted in alternating lifts. ERRS

continued excavation of the upper segment of the USFS stream and the segment of the stream on private lands. Approximately 2582 cubic yards of tailings and 960 cubic yards from the USFS stream were placed in the repository. ERRS continued restoration of the lowermost segment of USFS stream. ERT Johnson continued oversight of stream restoration and worked with USFS Shipley on stream restoration in lower segment. Screen plant operations continued. START set up PDRs, collected 21 confirmation samples in the USFS stream area and conducted field analysis of 33 samples with the XRF. PST assisted with site safety, and sample collection and preparation. USFS Van Susteren was on site to observe restoration and coordinate of USFS resources for restoration.

10/8/08 – EPA:2, USFS: 1, USCG: 1, ERRS: 16, START: 3, Aramark: 3. Tailings from the center of the site in the vicinity of the former drainage channel continued to be excavated and hauled into the repository and compacted in alternating lifts. The road to USFS was re-aligned which allowed for the old roadbed to be excavated. Approximately 3600 cubic yards of tailings and waste rock were placed in the repository. ERRS began restoration of the island segment of stream on USFS lands. ERT Johnson and USFS Shipley continued oversight of restoration in the USFS stream. Screen plant operations continued. START set up PDRs, collected 2 confirmation samples in the USFS stream area and 31 samples in the Mine Waste Area. START conducted field analysis of 37 samples with the XRF. PST assisted with site safety, and sample collection and preparation. A septic leak was found at camp, most likely due to the change in temperatures, and was repaired. Roofing contractor repaired roof at camp. The motor for the EPA satellite was delivered by USCG and was replaced. Operation of the satellite was still unsuccessful. Straw bales for BMPs were delivered. PST assisted Aramark with pick up of groceries from Castella.

10/9/08 – EPA:2, USFS: 2, USCG: 2, ERRS: 16, START: 3, Aramark: 3. Tailings from the center of the site in the vicinity of the former haul road was excavated and hauled into the repository and compacted in alternating lifts. Additional work was conducted to remove more of the cemented tailings from the upper portion of the USFS segment of stream. Approximately 2830 cubic yards of tailings and waste rock from the mine waste area and 436 cubic yards of material from the USFS stream area were placed in the repository. ERRS began restoration of the middle segment of stream on USFS lands. USFS Shipley and Weaver met with ERT Johnson regarding the stream restoration on USFS lands. Screen plant operations continued. START set up PDRs, collected 18 confirmation samples in the USFS stream area and 5 samples in the Mine Waste Area. START conducted field analysis of 33 samples with the XRF. START began collecting a daily composite sample of the stockpile being used for restoration of the USFS area. PST assisted with site safety, and sample collection and preparation. The motor for the EPA satellite was delivered by USCG and was replaced. Operation of the satellite was still unsuccessful. USCG Varela was replaced by USCG Hallingstad. Pine-Gri-La owners were on site for a tour of operations and restoration.

10/10/08 – EPA:1, USFS: 1, USCG: 1, ERRS: 16, START: 3, Aramark: 3. Morning greeted us with snowfall. Once we recovered from shock and awe, tailings from the center of the site in the vicinity of the former drainage channel and haul road continued to be excavated and hauled into the repository and compacted in alternating lifts. Additional excavation was performed in the USFS stream area. Approximately 2540 cubic yards of tailings and waste rock and 323 cubic yards of material from USFS lands were placed in the repository. ERRS continued restoration of the middle segment of stream on USFS lands. USFS Weaver oversaw stream restoration in middle segment. In the morning, additional material was placed in the repository berm around the leachate transfer pipe. Screen plant operations continued. START collected 9 confirmation samples in the USFS stream area and 33 samples in the Mine Waste Area. START conducted field analysis of 5 samples with the XRF. START began documentation of fill areas on USFS lands. PST assisted with site safety, and sample collection and preparation. ERT Johnson demobilized from site after meeting with the OSC and ERRS crew involved in restoration. Restoration materials arrived on site. OSC Rogow attempted to get additional assistance with repair of the EPA satellite. Office trailer roof was repaired.

10/11/08 – EPA:1, USFS: 1, USCG: 1, ERRS: 16, START: 3, Aramark: 3. Tailings from the center of the site in the vicinity of the former drainage channel continued to be excavated and hauled into the repository and compacted in alternating lifts. ERRS began excavation of the ready-line area. Approximately 3030 cubic yards of tailings and waste rock were placed in the repository. ERRS continued restoration of the middle segment of stream on USFS lands. Screen plant operations continued. START set up PDRs, collected 49 samples in the Mine Waste Area and conducted field analysis of 65 samples with the XRF. PST assisted with site safety, and sample collection and preparation. USFS Shipley oversaw stream restoration in middle segment. OSC Rogow continued trouble-shooting of the EPA satellite with Hughes representative. One of the water trucks was called of rent and decontaminated for demobilization.

10/12/08 – EPA:1, USFS: 1, USCG: 1, ERRS: 16, START: 3, Aramark: 3. ERRS continued

excavation of the ready-line area which appeared to have remnants of processing structures. Approximately 1380 cubic yards of tailings from the ready-line were placed in the repository. ERRS continued restoration of the middle segment of stream and backfilling of areas on USFS lands. Screen plant operations continued. Restoration materials were staged for deployment. START set up PDRs, collected 30 confirmation samples in the Mine Waste Area. START conducted field analysis of 61 samples with the XRF. PST assisted with site safety, and sample collection and preparation. USFS Shipley oversaw stream restoration in middle segment.

#### **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. Complete excavation in the stream channel. Find the end of the tailings!

#### **Key Issues**

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

[www.epaossc.org/Altoona](http://www.epaossc.org/Altoona)