

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

Date: Tuesday, October 21, 2008

From: Michelle Rogow

Subject: Restoration of Creek continues, Capping of Repository Begins

Altoona Mine Site

Shasta -Trinity National Forest, Castella, CA

Latitude: 41.1367000

Longitude: -122.5475000

POLREP No.:	15	Site #:	09PC
Reporting Period:	10/13/08-10/19/08	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

10/13/08 – EPA:1, USFS: 7, USCG: 1, ERRS: 16, START: 3, Aramark: 6. ERRS continued excavation of the ready-line area and the USFS upper segment of stream. The temporary culvert was removed and work began in that area. Approximately 2200 cubic yards of tailings from the ready-line and 1868 cubic yards of waste from USFS lands 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. USFS Abandoned Mine Lands (AML) team arrived on site to assist with restoration activities. They began laying jute mat and straw wattles on the lowermost segment of stream. USFS Shipley oversaw stream restoration in the lower segment. START set up PDRs, collected 1 confirmation sample in the Mine Waste Area and 18 confirmation samples from USFS lands. START also began sampling of roads. START conducted field analysis of 36 samples with the XRF. PST assisted with site safety, and sample collection and preparation. One water truck and the compactor were decontaminated and called off rent. Aramark brought in 3 new camp staff, who began their orientation and overlap with existing camp staff.

10/14/08 – EPA:1, USFS: 6, USCG: 1, ERRS: 16, START: 3, Aramark: 6, NWL: 6. ERRS continued excavation of the ready-line area. Work also continued on USFS lands, with excavations of the upper segment of creek and the roads. Approximately 2300 cubic yards of tailings from the ready-line and 1028 cubic yards of waste from USFS lands were placed in the repository. Compactor and water truck were picked up. Screen plant operations continued. USFS AML crew continued placement of jute and wattles in the middle segment of USFS lands. START set up PDRs, collected 27 confirmation samples in the Mine Waste Area and 50 confirmation samples from USFS. START also collected a number of samples from the stockpile areas. START conducted field analysis of 31 samples with the XRF. PST assisted with site safety, and sample collection and preparation. USFS Shipley oversaw stream restoration in middle segment. The garbage dumpster was swapped out. Supplies were picked up from town, including the gates to be installed around the repository. The Aramark staff which had been with the operation since the beginning we demobilized and new staff took over operations.

10/15/08 – EPA:1, USFS: 5, USCG: 1, ERRS: 17, START: 3, Aramark: 3, NWL: 6. Work continued on USFS lands, with excavation on the road. Once that was completed, ERRS began removal of the haul road to USFS and the creek channel on private lands. The outlet of the Castella Drain, which was used to drain water from the mine, was discovered, and an attempt to clean out this area was made. Water flow from the drain increased, since the drain was plugged with material. Approximately 1800 cubic yards of tailings from the ready-line and 188 cubic yards of waste from USFS lands were placed in the repository. Screen plant operations continued. Additional upgrading of the USFS 25 was conducted. The NWL crew was on site filling sandbags and preparing for work to begin tomorrow. USFS AML crew assisted with installation of BMPs and continued placement of jute and wattles in the middle segment of USFS lands. They performed lop and scatter on areas which had been jute matted. START set up PDRs, collected 34 confirmation samples in the Mine Waste Area and 14 confirmation samples from USFS. START conducted field analysis of 69 samples with the XRF. PST assisted with site safety, sample collection and preparation, and pickup of groceries from Castella. USFS Shipley oversaw stream restoration in middle segment. Supplies were picked up from town, including culverts and seed. A new RM came in to relieve RM Wooford.

10/16/08 – EPA:1, USFS: 5, USCG: 1, ERRS: 15, START: 3, URS: 1, Aramark: 3, NWL: 6. Work continued in the mine waste area with excavation of the former haul road. Approximately 2500 cubic yards of tailings from the former haul road were placed in the repository. Screen plant operations continued. Backfilling of the mine waste area began with the ready-line and approximately 1700 cubic yards of material were placed. Geotextile and liner were relocated to the east side of the berm and the liner crew began installation of the geotextile with the assistance of a loader/forklift. URS construction and quality control engineer was on site to oversee the installation of the liner and inspected the subgrade prior to the geotextile installation. By the end of the day approximately 30% of the installation of geotextile and liner was completed, including seaming of the liner panels. The final shipment of geocomposite arrived and the extra GCL was transferred off site. USFS AML crew assisted with movement of liner and restoration materials and preparation of the berm for the liner crew. START set up PDRs, collected 30 confirmation samples in the Mine Waste Area and 11 samples from various operating areas, including roads and the water tower area. START conducted field analysis of 61 samples with the XRF. PST took one of the USFS crew to the clinic due to poison oak from another job site and went to Yreka to get a new tire for the ranger. At the beginning of the day two ERRS crew were demobilized and RM Wooford left at the end of the day after transitioning with RM Lawrence.

10/17/08 – EPA:1, USFS: 4, USCG: 1, ERRS: 14, START: 3, URS: 1, Aramark: 3, NWL: 6. Work continued in the mine waste area with excavation of the former haul road. Approximately 3300 cubic yards of tailings from the former haul road were placed in the repository. Screen plant operations continued. Backfilling of the readyline continued with approximately 2700 cubic yards of material placed in the area. Geotextile and liner were relocated to the east side of the berm and the liner crew began installation of the geotextile with the assistance of a loader/forklift. URS construction and quality control engineer was on site to oversee the installation of the liner and inspected the subgrade prior to the geotextile installation. The final shipment of geocomposite arrived and the extra GCL was transferred off site. USFS AML crew assisted with movement of liner and restoration materials and preparation of the berm for the liner crew. USFS crew also mixed and spread seed on USFS slopes that had been jute matted earlier in the week. START set up PDRs, collected 30 confirmation samples in the Mine Waste Area. START conducted field analysis of 59 samples with the XRF. 2 USFS personnel demobilized at the beginning of the day and brought a load of metal to the recycler and dropped off liner seam samples to be sent to the laboratory. Remaining USFS crew demobilized in the afternoon.

10/18/08 – EPA: 1, USCG: 1, ERRS: 15, START: 3, URS: 1, Aramark: 3, NWL: 6, SHN: 2. Excavation continued on the upper Mine Waste Area and approximately 3650 cubic yards of contaminated material was placed in the repository. Backfilling of the ready-line area was also conducted

with the placement of 1588 cubic yards of material. Northwest Linings crew placed 4 geomembrane panels for repository liner cap and completed all the panel welds. URS conducted QA/QC of the panels and associated welds. Also, ERRS conducted improvements of areas of the USFS Road 25. START set up PDR's and collected 13 samples from the Mine Waste Area. Samples were prepped and 27 samples were analyzed by XRF. USCG provided site safety and assisted with sample prep. START completed preparation of a shipment of samples to Region 9 Laboratory and the OSC transported the samples back to the Bay Area.

10/19/08 –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. 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

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