United States Environmental Protection Agency
Region IX
POLLUTION REPORT

Date: Saturday, September 6, 2008
From: Michelle Rogow

Subject: Liner half completed, filling of repository begins
Altoona Mine Site
Shasta -Trinity National Forest, Castella, CA
Latitude: 41.1367000
Longitude: -122.5475000

POLREP No.:	8	**Site #:**	09PC
Reporting Period:	8/25/08 - 9/1/08	**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

8/25/08 – EPA: 2, USCG: 1, ERRS: 15, URS: 1, Aramark: 3, NWL: 10; SHN: 1. Northwest Linings continued installation of geocomposite on the northern face of the repository. ERRS crew assisted by providing heavy equipment support for deployment of the geocomposite. NWL seamed the geocomposite. URS conducted QA/QC of the geocomposite installation. The second set of seam samples were sent to the laboratory. The result of the first set of seams was received and all passed testing. Grading of USFS 25 continued. One of the haul trucks broke down on USFS 25 and could not be moved. I-5 Rentals came out and attempted repair, but was unsuccessful. Another hauk truck developed a hydraulic leak and was set aside for repair. Water was used for dust control in the repository and along roads. The horizontal drilling contractor was on site in the afternoon, after problems with this equipment were resolved. The driller had a very specific way that he wanted his equipment set up and the set up took all afternoon, so no drilling was performed. Surveyor was on site, and took shots of the installed panels, and some bottom grade, but equipment issues prevented him from completing his tasking. PST set up PDRs and assisted with site safety during liner installation. PST also delivered

samples to FedEx and brought back recycling. ERT Johnson arrived on site.

8/26/08 – EPA: 2, USCG: 1, ERRS: 15, URS: 1, Aramark: 3, NWL: 10; SHN: 1. Northwest Linings continued installation of geocomposite on the eastern face of the repository. ERRS crew assisted by providing heavy equipment support for deployment of the geocomposite. NWL seamed the geocomposite. NWL then continued installing GCL and HDPE liner on the northern face of the repository. By the end of the day, 3 panels of HDPE were installed and seamed. URS conducted QA/QC of the geocomposite and liner installation. The test results of the second set of seams was received and all passed testing. The screen plant was operating focusing on producing drain rock for the leachate collection system. Water was used for dust control in the repository and along roads. The horizontal drilling contractor was on site and horizontal drilling for the leachate collection pipe was conducted. Surveyor was on site, and completed shots of the installed panels, bottom grade and installed leachate collection pipe. At the end of the day, a rock hammer arrived to begin work on the eastern side of the repository where bedrock was encountered. PST set up PDRs and assisted with site safety during liner installation. ERT Johnson was on site and observed repository construction and coordinated with the OSC on site drainage and storm water runoff design. ERT Johnson provided a review of the proposed repository drainage system prepared by URS and reviewed the potential downstream work on USFS lands.

8/27/08 – EPA: 1, USCG: 1, ERRS: 14, URS: 1, Aramark: 3, NWL: 10. Northwest Linings began installation of GCL and liner on the floor of the repository. NWL seamed the liner in all but the southern and western edges (to allow for contraction of the liner). Repairs and testing of the floor was conducted. Work in the sump area and around the leachate collection pipe was conducted. By the end of the day, approximately 16,000 sq feet of liner was installed onto the floor. URS conducted QA/QC of the geocomposite and liner installation. ERRS began work with the rock hammer, excavator and dozer to remove bedrock from the north east and east walls of the repository. Water was used for dust control in the repository and along roads. The 135 foot manlift was transported out of the repository for demobilization. PST set up PDRs and assisted with site safety during liner installation. PST also delivered samples to FedEx and assisted Aramark with retrieval of the groceries for camp. ERT Johnson demobed from site.

8/28/08 – EPA: 2, USCG: 1, ERRS: 14, URS: 1, Aramark: 3, NWL: 10; SHN: 1. Northwest Linings checked on the liner multiple times during the evening, due to winds and in the very early morning came out and marked the liner for contraction, so that seams on the north and west side could be performed without buckling and bridging when contraction occurred. In the morning, NWL began seaming the north and west sides of the floor, and the boot around the leachate collection pipe. By afternoon, NWL began installation of geocomposite on the south face and across the floor of the repository. ERRS crew assisted by providing heavy equipment support for deployment of the geocomposite. NWL seamed the installed geocomposite. URS conducted QA/QC of the geocomposite and liner installation. ERRS began removal of the ramp on the southeast side of the repository. The grader worked on the roads around the site. Water was used for dust control in the repository and along roads. The rock breaker was used to bust huge rocks into manageable sizes for restoration. Surveyor was on site, and took shots of the installed panels, bottom grade and other needed points for the as-builts. PST set up PDRs and assisted with site safety during liner installation. ERS Chief Calanog arrived on site and toured the operation.

8/29/08 – EPA: 2, USCG: 1, ERRS: 14, URS: 1, Aramark: 3, NWL: 10. Northwest Linings began installation of GCL and HDPE liner on the northern face of the repository past the 200 foot mark. ERRS crew assisted by providing heavy equipment support for deployment. URS conducted QA/QC of the GCL and liner installation. NWL completed work on the boot around the leachate collection pipe. URS signed off on the western side of the repository, approving the installation and allowing tailings to be placed in the repository! The dozer and the 345 excavator worked to build a road to the tailings piles, so that processed material could be used on the bottom layer of the repository. Once the road was built, tailings began to be hauled into the repository. By mid day, the geocomposite pulled out of the trench and ripped down the slope. The mini-excavator was brought into the repository to dig out the tailings along the west slope of the repository. By days end, only part of the slope was exposed. The rock hammer was called off rent, deconned and brought down to the 25 for pickup. PST set up PDRs, assisted with site safety during liner installation and reviewed camp maintenance and caretaking items with crew. ERS Chief Calanog continued his visit of the site and departed the site mid-day. Site preparation for shut down over the weekend was conducted throughout the day. Garbage was collected, generators and water at camp was filled, tools and supplies were placed into the connex boxes. After a long day and 2 months on site, the crew left site to spend labor day at home.

8/30/08 to 9/1/08 – EPA: 1, USCG: 1, Aramark: 3. Crews demobed for the holiday weekend. EPA and USCG PST performed security at camp. Aramark staff stayed at camp.

Planned Removal Actions

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

Next Steps

Complete installation of liner. Fill repository with tailings.

Key Issues

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

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