

United States Environmental Protection Agency
Region IX
POLLUTION REPORT

Date: Monday, August 4, 2008

From: Michelle Rogow

Subject: Excavation of Repository and Waste Rock Pile 1 Continues

Altoona Mine Site

Shasta -Trinity National Forest, Castella, CA

Latitude: 41.1367000

Longitude: -122.5475000

POLREP No.:	4	Site #:	09PC
Reporting Period:	7/28/08-8/3/08	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

7/28/08 – EPA:1, USCG:1, ERRS: 15, START: 3, URS: 1, Aramark: 4, Travers: 1, SHN: 3. ERRS continued excavation of the north side of the repository, hauling 2,474 cubic yards of clean material from the repository to the screen plant and 2,753 cubic yards of contaminated material from the area of Waste Rock Pile 1 to the Waste Rock 2 pile. Screen plant operations continued. ERRS continued moving clean materials to the stockpile area. URS construction management/quality control (CMQC) engineer coordinated with the surveyors on staking out the repository berm construction and surveying of the completed top of excavation and the top of repository liner trench. The surveyors also surveyed the as built by-pass road. Water was used for dust control in the repository. Off road diesel was delivered. At the end of the day, the main road through the repository was blocked with heavy equipment and fencing to prevent access to the repository area. START continued air monitoring with PDRs. START collected 19 confirmation samples from completed areas of contaminated soil removal in the repository area and conducted XRF analysis of samples collected. START also collected 15 assessment samples from the Retort 2 area. In the morning, the OSC was notified by Pine Gri La of a fire at mile marker 4 on Castle Creek Road (USFS 25). CDF and USFS worked on the fire throughout the day, with hand crews and

water drops. PST Thomas went down to the fire site to coordinate with the IC and obtain information. By the end of the day, the fire was contained to 5 acres and crews worked to cool the fire area. The OSC and ERRS RM met with Aramark PM regarding issues with the catering services at camp.

7/29/08 – EPA:1, USCG:1, ERRS: 15, START: 3, URS: 1, Aramark: 4, Travers: 1. ERRS continued excavation of contaminated material from the area of Waste Rock Pile 1 and the repository area to the Waste Rock 2 pile. The dozer cut a new road into the repository area so that the old road could be excavated. Screen plant operations continued. ERRS continued moving clean materials to the stockpile area. URS continued oversight of excavation and worked on design issues with the repository. Water was used for dust control in the repository. At the end of the day, the main road through the repository was blocked with heavy equipment and fencing to prevent access to the repository area. START continued air monitoring with PDRs. START continued collecting confirmation samples (31) from completed areas of contaminated soil removal in the repository area and conducted XRF analysis of samples collected. START also collected 24 assessment samples from the USFS Soda Gulch area. START had an issue with the air quality in their trailer, possibly as a result of changing winds blowing generator exhaust towards their trailer, so ERRS worked on exhaust of generator and remedy of the issue. Recycling was brought to Mt. Shasta. I-5 Rentals was on site to service generators and equipment.

7/30/08 – EPA:1, USCG:2, ERRS: 15, START: 4, URS: 1, Aramark: 6, Travers: 1. Samples collected on the previous day from the contaminated area of the repository came back above action levels and so ERRS continued excavation of contaminated material from the area of Waste Rock Pile 1 to the Waste Rock 2 pile. Screen plant operations continued and clean materials were relocated to the stockpile area. ERRS picked up HDPE piping for repository leachate collection system and supplies for stabilization treatability study. URS continued oversight of excavation and worked on design issues with the repository. Water was used for dust control in the repository. EPA coordinated with USFS roads personnel and received USFS approval to conduct improvements on USFS 25 from the 580W crossing near Crow Creek towards Castella. START continued air monitoring with PDRs. START continued collecting confirmation samples from completed areas of contaminated soil removal in the repository area (22 samples) and conducted XRF analysis of 43 samples previously collected. START completed analyzing assessment samples from the USFS piles area and prepared data for mapping. START PM Clemens arrived on site to overlap with START PM Friedman and PST Fairburn arrived on site to overlap with PST Thomas. HASP and Fire briefings were provided for them. Travers personnel demobed at the end of the day. Aramark switched out the head cook at the camp.

7/31/08 – EPA:1, USCG: 2, ERRS: 15, START: 4, URS: 1, Aramark: 6. In the morning, ERRS continued excavation of contaminated material from the area of the repository to the Waste Rock 2 pile. The eastern side of the repository samples came back clean and excavation focused on the south western portion, underneath what was formerly waste rock pile 1. The dozer began ripping out the road on the eastern portion of the repository. Clean material was relocated to the stockpile area and 3' minus rock was transferred down to USFS 25 where the material was placed and graded for improving the segment of road from the 580W split by the Crow Creek crossing east toward Castella. Approximately $\frac{3}{4}$ mile of road was improved. Screen plant operations continued. The 345 excavator had a hydraulic hose issue and I-5 Rental was on site to repair, but could not get the replacement part until the following day. URS continued oversight of excavation and worked on design issues with the repository. Water was used for dust control in the repository and for road work. The OSC coordinated with Hitchcock Construction who is working for Roseburg Resources on road maintenance in the area. START continued air monitoring with PDRs. START collected 22 confirmation samples from completed areas of contaminated soil removal in the repository area and conducted XRF analysis of 59 samples collected. START prepared Repository and USFS data for mapping. START PM Clemens continued overlap and information transfer with START PM Friedman and PST Fairburn overlapped with PST Thomas, who demobed by late afternoon. The OSC coordinated with the USFS on the partial assessment which had been conducted on USFS lands, which indicated that contamination was much more widely distributed and in higher concentrations than previously identified. EPA also coordinated with the USFS on permanent gates for the project area and repository. The OSC coordinated with PST on communications and the use of their radios which had been awaiting swap out, but was cancelled.

8/1/08 – EPA:1, USCG: 1, ERRS: 15, START: 3, URS: 1, Aramark: 3. In the morning, ERRS continued excavation of contaminated material from under Waste Rock Pile 1 (from the areas known as 'the amphitheater' and 'Nob Hill') to the Waste Rock 2 pile. The dozer, compactor and haul trucks began construction of the berm on the east side of the repository. Screen plant operations continued. The 345 excavator was repaired by I-5 Rental, also a sensor in the loader was replaced. URS continued oversight of excavation and worked on design issues with the repository. Water was used for dust control in the repository and construction of the berm. Repairs were made to the Doe Creek culvert, which had been run over numerous times by log trucks, despite a fence being put up after the first time it

occurred. Repair of the culvert was conducted and more rock was brought in to protect the culvert and repair the water tower area. START submitted data for the USFS area (including the retort and stream where piles of tailings are located.) START continued air monitoring with PDRs. START collected 26 confirmation samples from completed areas of contaminated soil removal in the repository area and conducted XRF analysis of 39 samples collected. START PM Friedman demobed in the morning. A new START arrived in the late morning, along with the PST communications tech that arrived with the USCG radios and repeater. PST crew worked on set up of the repeater and testing of the USCG radios. The repeater did not work, so the battery was taken for charging.

8/2/08 – EPA:1, USCG: 1, ERRS: 15, START: 4, URS: 1, Aramark: 3. All day ERRS conducted excavation of clean material from the repository. The dozer, compactor and haul trucks worked on construction of the berm on the east side of the repository for a short duration. Screen plant operations continued, working on clean material brought in from the repository. URS continued oversight of excavation. Water was used for dust control in the repository and construction of the berm. START submitted data for the USFS area (including the retort and stream where piles of tailings are located.) START continued air monitoring with PDRs. START collected 15 assessment samples from the USFS Soda Gulch area and conducted XRF analysis of 22 samples collected the previous day from the amphitheater and nob hill. START and the OSC discussed performing an XRF study with the new Niton tube XRF and the Innov-X. The OSC coordinated with the START PO on the scope of work for the study, which is proposed to be performed on site under a separate TDD.) PST assisted with sample collection and preparation. PST and ERRS worked on set up of the repeater and testing of the USCG radios. The repeater still did not work and some USCG radio batteries did not last through the day. Work continued on resolving communications issues.

8/3/08 – ERRS: 1. EQM provided site security.

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 relocation of waste rock pile #1 to waste rock pile #2. Continue to excavate hot spots in the repository footprint. Continued sampling of excavated hot spot areas. Continue excavation of repository footprint.

Key Issues

1. The size of the repository
2. Does the contamination have a boundary or an end?
3. Surrounded and smoked out on occasion

www.epaosc.org/Altoona