

United States Environmental Protection Agency
Region IX
POLLUTION REPORT

Date: Saturday, August 1, 2009

From: Michelle Rogow

Subject: Work on creek restoration resumes

Altoona Mine Site

Shasta -Trinity National Forest, Castella, CA

Latitude: 41.1367000

Longitude: -122.5475000

POLREP No.:	19	Site #:	09PC
Reporting Period:	7/27/09 - 8/2/09	D.O. #:	9015
Start Date:	7/7/2008	Response Authority:	CERCLA
Mob Date:	7/6/2008	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

7/27/09 - EPA: 1; USCG: 1; ERRS: 11

Work continued in the creek, with the excavator leapfrogging rock through the box canyon so that work could begin on restoration in that segment. ERRS repaired small drainage on USFS lands, adding more rock in the preferential pathway that the water flowed last season. The box canyon was rockered as a trapezoidal channel. 4 panels of coir matting were pulled off of the west mine waste slope to install a fingered rock drainage to convey water from above the restored areas into the channel. Equipment continued to work on the rock stockpiles at the new screen plant and on unscreened material at the old screen plant. Dust control operations continued. ERRS worked on improving the 580W with the addition of 1"-3" rock as time was available. ERT Johnson mobilized to Dunsmuir.

7/28/09 - EPA: 2; USCG: 1; ERRS: 11

ERRS installed filter fabric and rock in the west mine slope drainage channels and excavated sediment out

of the next segment of Soda Gulch. Work began on installation of step pools in the excavated segment of Soda Gulch, with approximately 30 feet of creek segment finished by the end of the day. ERT Johnson was on site directing and overseeing installation of water conveyance structures. Equipment continued to work on the rock stockpiles at the new screen plant and on unscreened material at the old screen plant. Dust control operations continued. PST and ERRS went to Red Bluff to pick up the leachate collection tank and deliver it to the Site. The RM and FCA went off Site for errands and medical assistance for the RM. PST brought EPA radios and demobed from the Site with their equipment and personnel. A 320 excavator was delivered to the Site.

7/29/09 - EPA: 2; ERRS: 10

ERRS continued installation of step pools in the mine waste area of Soda Gulch, with 120 feet of reconstruction completed by the end of the day. ERT Johnson continued to direct and oversee installation of water conveyance structures. ERRS removed coir mat from the repository berm and limited areas of the cover, in order to perform improvements. Work began work on the repository cover to establish effective topography for drainage. Work also began on cutting and filling of the repository berm to obtain a 1:8 to 1 slope for seismic stability. Equipment continued to work on the rock stockpiles at the new screen plant and on unscreened material at the old screen plant. Rock was loaded from the new screen plant for creek restoration work. Dust control operations continued. The RM was off site, but was working from Dunsmuir. The OSC and RM held a conference call with URS engineers to discuss the repository berm and leachate collection system.

7/30/09 - EPA: 2; ERRS: 12; USFS: 2

ERRS continued installation of step pools in the mine waste area of Soda Gulch, with 160 feet of reconstruction completed by the end of the day. ERT Johnson continued to work with ERRS. Work continued on the cover to establish effective topography for drainage of the repository cover. Work also continued on cutting and filling of the repository berm to obtain a 1:8 to 1 slope for seismic stability. Equipment continued to work on the rock stockpiles at the new screen plant and on unscreened material at the old screen plant. Dust control operations continued. USFS representatives were on site to observe current work, meet with the OSC, review the fire plan, discuss funding and 2009 work to be performed. Filter fabric was delivered to the site.

7/31/09 - EPA: 2; ERRS: 12; USFS: 2

ERRS continued installation of the creek in the upper portion of the mine waste area, with 140 feet of reconstruction completed by the end of the day. ERT Johnson continued to work with ERRS. Work also continued on slope of the repository berm to obtain a 1:8 to 1 slope for seismic stability. Backfill of the readyline area was conducted. Equipment continued to work on the rock stockpiles at the new screen plant and on unscreened material at the old screen plant. Dust control operations continued, although the water truck was down for a few hours.

8/1/09 - EPA: 2; ERRS: 12

In the morning, the OSC, ERT and ERRS walked and discussed the installation of all the drainages around the south side of the repository and the western mine waste area slopes. Also, drainage along the former road to USFS lands was assessed. ERRS began installation of the main drainage below the repository. ERT Johnson continued to work with ERRS. Work also continued on slope of the repository berm to obtain a 1:8 to 1 slope for seismic stability. ERRS continued work on backfill of the readyline area to bring it to former grade. Equipment continued to work on the rock stockpiles at the new screen plant and on unscreened material at the old screen plant. Dust control operations continued.

8/2/09 – Day off.

Planned Removal Actions

1. Complete restoration of the creek.
2. Install drainage channels on repository and around the repository berm.
3. Complete repository berm.
4. Complete restoration of the mine waste area.
5. Repair damage from winter season.
6. Install permanent erosion control measures.
7. Install leachate collection tank.
8. Restore operating areas and private lands.
9. Winterize site and roads.

Next Steps

Complete creek restoration.

Continue construction of the repository berm.

Installation of drainages at the toe of the repository berm.

Key Issues

Action memo ceiling increase for additional funding is needed.

response.epa.gov/Altoona