## United States Environmental Protection Agency Region IX POLLUTION REPORT

Date: Sunday, November 9, 2008

From: Michelle Rogow

Subject: Completion of Season 1

Altoona Mine Site

Shasta - Trinity National Forest, Castella, CA

Latitude: 41.1367000 Longitude: -122.5475000

POLREP No.: Site #: 09PC **Reporting Period:** 10/27/08-11/8/08 D.O. #: 9015 **Start Date:** 7/7/2008 **Response Authority: CERCLA** Mob Date: 7/6/2008 **Response Type:** Time-Critical **Demob Date:** 11/8/2008 **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**

10/27/08 – EPA:1, USCG: 1, ERRS: 14, URS: 1, Aramark: 3, USFS: 1. ERRS shifted focus to restoration and began working diligently on completing work on USFS lands, including creek restoration and backfill of excavated areas. ERRS continued hauling backfill to the Mine Waste Area placing material for restoration. ERRS continued to grade slopes for erosion control measures installation. ERRS continued backfill placement along the stream on the USFS lands and began restoration within the stream itself. Backfill continued to be placed on USFS lands. The final liner samples were received back from the laboratory and all seams passed, so repository could be fully covered with soil. ERRS continued covering the cap with topsoil.

10/28/09 – EPA:1, USCG: 1, ERRS: 14, Aramark: 3, USFS: 1. ERRS continued restoration working on USFS lands, including creek restoration and backfill of excavated areas. ERRS continued hauling backfill to the Mine Waste Area placing material for restoration. ERRS continued to grade slopes for erosion control measures installation. ERRS continued covering the cap with topsoil working towards full

coverage of the liner. Preparations for demobilization of equipment began.

10/29/09 – USCG: 1; ERRS: 15; Aramark: 3; USFS: 5. The water tower, screen plant, and one office trailer was demobilized. ERRS began work on installation of the upper repository drainage trench; laying filter fabric and placing rock. Restoration and backfill of the mine waste and forest service areas continued. Lop and scatter was placed on the forest service area. Topsoil continued to be hauled to the repository and staged, but a liner pocket had formed in an area that had yet to be covered (likely due to heat) so the cover operations were suspended until morning when the liner had cooled. The USFS crew and ERRS hauled 4 loads of scrap metal to the recycling center in Redding. Approximately 1720 cubic yards of topsoil were moved to the repository.

10/30/09 – USCG: 1; ERRS: 14; Aramark: 3; USFS: 5. Rainfall began on site. The second office trailer and one Connex box was demobilized from site. The 15,000 gallon fuel tank was placed on the transport trailer and staged at the old screen plant. The air bubble in the liner was drastically reduced and so in the morning, ERRS focused on cover of the remaining portion of the liner. The excavator was used to slowly add fill and pull the slack out of the geocomposite, which had shifted due to the air pocket. Cover of the repository was completed today, but final contouring still needs to be addressed. The upper repository drainage channel was completed, along with the channels on the east and western sides. ERRS continued work on the forest service parcel, but was unable to complete the last segment of the box channel. The USFS crew took another 6 loads of scrap to the recycler. ERRS, USCG and USFS also installed straw waddles and conducted some hand seeding and restoration work in the forest service area. The leachate collection tank was ordered, but will not arrive for 10 days. Roads deteriorated over the day and haul operations were stopped early due to the unsafe road conditions. The EPA satellite was still not-functional but was finally able to be stowed.

10/31/08 USFS: 1, USCG: 1, ERRS: 15, Aramark: 4. Rainfall continued overnight and site conditions were very sloppy. ERRS installed coir matting onto over 80% of the repository. Excavators formed drainage channels along both sides and lower slope of repository to direct heavy rain runoff. 1 loader was demobilized from the site The Volvo loader, one 30 ton plus the 35,40 ton haul trucks were staged at Whalan Station for I-5 to pick-up. The grader led the haul trucks down the hill followed by a pickup to return the truck drivers. The 345 excavator was prepared to be moved offsite. Aramark began boxing up their supplies in preparation for demobe.

11/01/08 USCG: 1, ERRS: 14, Aramark: 3. Heavy rain continued to hamper operations. ERRS installed coir matting and straw waddle on the slopes of the repository and improved drainage channels that direct runoff away from the repository. ERRS also started break down of the camp site by pulling out 1 septic tank and removing septic and propane lines. Three haul trucks were moved from the site to Whalan Station. Aramark demobilized from camp. Crew moved from camp to a hotel in Mt Shasta, since camp needed to be removed.

## 11/02/08 Much needed day off.

11/03/08 EPA: 1, USCG: 1, ERRS: 14. Weather continued to be cold with a mixture of rain and snow. ERRS laid coir matting on the west slope of the mine waste area, shaped drainage area on the east side of the repository, and created 4 straw bale check dams along the mine waste area drainage channel. ERRS continued to break down camp by removing 2 septic tanks, 1 propane tank, and 2 generators. EQM satellite was relocated and set up at the office. The 345 excavator was moved to staging area on USFS 25. 17 man USFS crew attempted to mobilize onsite but were unable to reach Altoona site due to snow accumulation on roads leading to site. EPA ERT hydrologist arrived onsite and provided recommendations on erosion and site stabilization. New EQM RM arrived on site to overlap with outgoing RM. USFS hotshot crew attempted to drive up to the site, but their large crew truck couldn't make it up past the snow.

11/4/08 EPA: 1, USCG: 3, ERRS: 14, USFS: 11. Due to continuing snowfall on Whalan Summit, ERRS graded and plowed snow from camp to mile marker 8 for safer travel to and from site. The last 2 haul trucks, water truck, 60k generator, 2 125k generators were moved to Whalan station for pickup. A 9 man USFS hotshot crew laid coir matting on eastern edge of repository downward towards toe of berm. EPA ERT Johnson gave recommendations of placement of matting. USFS geotechnical engineer Steve Romero onsite. I didn't have a chance to speak with him but Brad would be the POC for his evaluation of the site. USFS geotechnical engineer Steve Romero was onsite with USFS OSC Shipley and conducted an evaluation of the repository stability after the heavy rain and snowfall that had come. 2 USCG PST personnel arrived onsite; ranger, ATV, EPA satellite, and other EPA and USCG equipment were demobed. Gate was installed on old screen side of repository. The v-ditch was connected from drainage channel to natural drainage area in between the repository berm and old screen. The 2000 gallon split tank was demobed and Inter rail began demobilization of camp trailers, with 2 trailers moved off site.

11/05/08 – USCG: 1, ERRS: 13. Weather onsite is snow and freezing temperatures. ERRS continued to grade the roads to make them as drivable as possible for personnel, equipment and trailer transport. Inter-rail was onsite and continued to remove camp trailers; removing 4 trailers by the end of the day. The office trailer and generator were prepared and staged for transport, although vendors that were going to come and pick up equipment onsite were delayed due to weather and undrivable road conditions. ERRS is also taking apart the camp trailers using the D6 and the 330 excavator. The gate was installed at the entrance on the West side of the repository. Due to weather conditions, USFS Hot Shot crew could not be onsite to continue installation of coir matting.

11/06/08 – USCG: 1, ERRS: 8. Because of snow melt, the USFS 25 continues to be dangerous to travel. The grader worked its way up from mile marker 10 and then the grader was utilized to haul the last remaining office trailer down to the USFS 25; near the bridge going to Rams Horn. ERRS continued restoration of the camp site to the best of the equipment's ability, given the conditions. The toilets were demobed. Inter-Rail removed all trailers and the sleds that they were sitting on today. Inter-rail also moved the garbage dumpster off site. ERRS PM decided to leave the yellow I-5 connex box onsite for the winter, as there is not a safe way to remove it. The sewage truck was unable to make it up the USFS 25 to complete the sewage removal and pick up the tanks. The trucks that were coming up to demobilize the fuel tank and the office trailer could not make it up to the Site. The loader was transported to Whalan Station for pickup and the EQM satellite was demobed. Muddy roads at the Site today slowed the demob process today.

11/07/08 – USCG: 1, ERRS: 8. The grader completed grading at the camp site, towed the office trailer sitting on USFS 25 to the chip seal portion of the road, and then completed grading from the site down to the chip seal portion of USFS 25. The 15,000 gallon fuel tank demobilized. Items which were left onsite include: the sewage and grey water tanks near camp, and one connex box. Two excavators, two dozers, the service truck, the grader and the ATV were demobilized. The USFS hot shot crew plans to wait till the weather cooperates long enough to complete erosion control measures where possible.

11/8/08 - ERRS and USCG demobilized from the site until weather allows work to continue.

### **Planned Removal Actions**

- 1. Complete restoration of the creek.
- 2. Install drainage channels on repository and around the repository berm.
- 3. Complete restoration of the mine waste area.
- 4. Install permenant erosion control measures.
- 5. Install leachate collection tank.
- 6. Restore operating areas and private lands.

### **Next Steps**

Wait out the winter season and see what needs to be done when spring arrives.

### **Key Issues**

Heavy rainfall and snowfall before all of site work was completed.

response.epa.gov/Altoona