

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

**Date:** Tuesday, July 22, 2008

**From:** Michelle Rogow

**Subject:** Site Set -up Continues

Altoona Mine Site

Shasta -Trinity National Forest, Castella, CA

Latitude: 41.1367000

Longitude: -122.5475000

<b>POLREP No.:</b>	2	<b>Site #:</b>	09PC
<b>Reporting Period:</b>	7/14 - 7/20/08	<b>D.O. #:</b>	9015
<b>Start Date:</b>	7/8/2008	<b>Response Authority:</b>	CERCLA
<b>Mob Date:</b>	7/7/2008	<b>Response Type:</b>	Time-Critical
<b>Demob Date:</b>		<b>NPL Status:</b>	Non NPL
<b>Completion Date:</b>		<b>Incident Category:</b>	Removal Action
<b>CERCLIS ID #:</b>		<b>Contract #</b>	EP-W-07-022
<b>RCRIS ID #:</b>			

#### **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**

7/14/08 – EPA: 1, USCG:2, ERRS: 16, START: 4. EQM continued work on the camp. The last 2 trailers were brought in with the bed truck and set. Secondary containment areas for the generators were built and lined, and generators were set and hooked up to the camp trailers. The Travers electrician was on site and linked up the trailers, installed insulation and got the power and water systems hooked up. The septic tanks were brought up to the camp site and installed. Work began on piping the septic system. 3 125 kW generators were mobilized to the camp and set in lined secondary containment areas. EQM began work to complete the on site fuel cell, but soil was needed and adequate sampling had not yet been conducted, so completion was put off. The fuel tank was lined and the 2000 gallon split tank was installed into the lined fuel cell. Three connex boxes were mobilized up to the site from Whalan Station, where they had been dropped off. Two boxes were brought to the camp and the third box brought to the office trailer area. The office trailer connex was supposed to be for START to operate the balance and have additional storage space at the office location. USCG continued efforts to get satellite communications operational, and was finally successful after the satellite was placed away from the office trailers on top of a connex box. USCG wired and tested the satellite system. USCG also worked on the fire plan and the camp

rules. START was on site and received an operations, health and safety, medical, fire and evacuation plan briefing. The OSC and START met about the SAP and priorities for site sampling. Afterwards, the START TM worked on a revision to the SAP. START set up the lab and performed QA on the instruments. It was discovered that a switch on the Niton XRF was missing and START coordinated with Eagle to remedy the issue. START collected 13 samples with GPS coordinates from around the fuel cell, the truck parking area and the perimeter of waste rock pile 2 and the processing area. START began preparing samples for on site analysis and downloaded data from the XRF and the GPS. Problems were encountered calibrating the Lumex and troubleshooting occurred. Roseburg's contractor was back on site and continued logging of the repository.

7/15/08 – EPA: 1, USCG:2, ERRS: 16, START: 4. With the camp trailers delivered, work continued on set up and hook up of the camp trailers. It was noted that many items were not as specified in the bid package and a number of things were in need of repair. One of the roofs of a trailer had been damaged in transport, air conditioning in the wet sleepers was not operational, refrigerators were not operational and a number of items were missing from the camp as specified in the bid package. Travers worked to remedy the issues and Aramark (the food services contractor, who is also the parent company of Travers) was supposed to be on site, but got stuck in Sacramento due to the closure of I-5. A propane tank was mobilized to the camp, hooked up and filled. Materials for walkways in camp and septic system were purchased. The satellite dishes were moved up to the camp area and installed on the roofs (one on each side of camp.) Because the EPA router was broken, only one router was available to set up the system. It was determined that the signal was still not strong enough and additional routers and/or boosters would be needed to access the internet from the central portion of camp. EQM also shifted back to the Site where work continued on relocating waste rock pile #1 to waste rock pile #2. Water trucks provided good dust suppression. START conducted air sampling, in addition to air monitoring using pDRs. START began XRF analyses of soil samples and determined that contamination on the western perimeter of the site extended into the fuel tank area and ready line. START collected additional background samples, north of the By-Pass road and delineation samples to the northwest of the Main Shaft. In addition, samples were collected in the camp area. 12 samples in total were collected. Problems with Lumex were still not resolved, but the new button for Niton arrived in Dunsmuir. The water tower pad and turn-around was prepared. The grader was repaired and new cutting edges were installed. The gator flat tire was also repaired. Roseburg's contractor was back on site to complete logging of the repository and mobilized equipment to begin de-limbing operations at the screen plant.

7/16/08 – EPA: 1, USCG:2, ERRS: 16, START: 4. Work continued on camp set up. Stairs and walkways began to be constructed and work was completed on the installation of the septic system. Aramark catering services was on site and realized that the camp unit had been sent without any amenities or kitchen items, so they worked on getting the needed items to get the camp and kitchen operational. The 2,000 gallon split tank was filled with gasoline and B10 diesel. The 12,000 gallon water tower was mobilized and installed at the Doe Creek location. EQM continued to relocate waste rock pile #1 to waste rock pile #2. START collected air samples and conducted dust monitoring using the pDRs. The 15,000 gallon fuel tank was delivered to the site and was placed inside the secondary containment. Loggers continued with their operations and began loading out trucks. START continued sampling areas including: the office area, further delineation around the main shaft and the fuel cell area (19 samples collected). On site analysis with the Innov-X XRF continued, but problems with the Lumex were still not resolved. The Niton was set up, but run times were excessive. Samples were prepared and mid-day, a START member departed the site to deliver the first set of samples for correlation to Region 9 laboratory. Prior to departing, START met with the OSC regarding timelines, needs and data deliverables. In the evening, while assisting Aramark with transportation of supplies and food to the camp, one of the EQM techs slid off of the 580W and rolled the vehicle. The tech was okay, but shaken and approximately a mile from camp, so he walked there. The tech was transported to the hospital by another EQM tech. The driver sustained bruises to his shoulder and ribs. The truck was totaled.

7/17/08 – EPA: 1, USCG:1, ERRS: 15, START: 3. In the morning, everyone checked out of their hotels and relocated to camp! Aramark was still working on supplies and set up, so the first meal was scheduled for that evening. One USCG PST member demobed with the PST trailer. In the morning, after documenting the incident, EQM pulled the truck which had been in the accident back to the camp. Work continued on installation of the septic system and the stairs and walkways at camp. Loading of logging trucks continued, but logging in the repository was completed, so EQM began pulling stumps. Some of the stumps would be used to create a barrier around the repository (to prevent ATV's, etc. from accessing the repository) and others would be hauled into the rear of the screen plant and placed on an old road for organic material. The by-pass road connecting 133 to the 580W began to be constructed. Work continued on relocation of waste rock pile #1 to waste rock pile #2, in order to make room for the repository. One of the 4,000 gallon water trucks was repaired. Grading and maintenance of roads continued. START continued monitoring with pDRs and conducted air sampling. Some of the air samples

were sent off to the lab for analysis. START continued on site analysis and conducted sampling in the water tower area, office and at the toe of waste rock pile 1 (20 samples total). START continued to work on the Lumex problems and discussed Niton analysis time with Niton Tech Support who determined that the source decay is causing the long run times, inaccurate results and that the unit needed to be serviced by Niton. START met with the OSC about GIS mapping and sampling efforts for the weekend. When the crew got off, they made their way 1 mile down the road to their new temporary home at camp, and had their first home cooked meal 9

7/18/08 – USCG:1, ERRS: 15, START: 3. ERRS continued with removing stumps from the repository and the screen plant area. Water was used to fill tanks at camp and for dust suppression. The grader completed the permanent construction of the by-pass road from State road 133 to Roseburg 580W. Stumps were placed on the downhill side of the road between the road and the repository to protect the repository from unwanted recreation. B10 off road diesel was delivered. START continued conducting air monitoring and air sampling. START began collecting composite samples from Repository Area (15 5-point composites samples w/ 75 discrete locations.)

7/19/08 – USCG:1, ERRS: 7, START: 2. ERRS continued removing stumps and debris from the repository area. START performed personal air monitoring and continued sampling of repository area (9 5-point composites samples w/ 45 discrete locations.) START prepared all composite samples for processing. USCG PST assisted with sample collection and processing.

7/20/08 – ERRS: 3. EQM provided site security and the FCA worked on 1900-55s.

### **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. Finish hauling logs from site. Complete removal stumps and vegetation from repository. Complete sampling of repository and screen plant. Begin excavation of repository!

### **Key Issues**

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

[www.epaossc.org/Altoona](http://www.epaossc.org/Altoona)