

United States Environmental Protection Agency
Region IV
POLLUTION REPORT

Date: Sunday, December 2, 2007

From: Leo Francendese

Subject: South Waste Rock Pile Grading Begins

Barite Hill Nevada Goldfields

McCormick, SC

Latitude: 33.8711000

Longitude: -82.2972000

POLREP No.:	5	Site #:	A4NZ
Reporting Period:	11/11/07 thru 12/01/07	D.O. #:	
Start Date:	10/15/2007	Response Authority:	CERCLA
Mob Date:	10/15/2007	Response Type:	Time-Critical
Demob Date:		NPL Status:	Non NPL
Completion Date:		Incident Category:	Removal Action
CERCLIS ID #:		Contract #	
RCRIS ID #:			

Site Description

The Barite Hill/Nevada Goldfields site is located approximately 3 miles south of McCormick, South Carolina between US 378 and US 221 on the northern side of Road 30 in McCormick County, South Carolina. The mine site is relatively remote; there are no buildings, homes, or commercial buildings within 0.5 miles of the boundary. The site actively mined gold from 1991 to 1995. From 1995 until Nevada Goldfields filed for Chapter 7 Bankruptcy in 1999, the reclamation of the site was being addressed by Nevada Goldfields. On July 7, 1999 Nevada Goldfields handed the facility's keys to SCDHEC and abandoned the site.

The site is located along a topographic high ridge area forming the headwaters of an unnamed tributary to Hawes Creek. The topography of the area consists of rolling hills with ridgelines at an elevation of about 500 feet. Within the site, the ridgeline comprising the site has a high point of about 510 feet and an average elevation of approximately 480 feet.

The permitted mine site totals 795.2 acres. Of this total, 659.7 acres are designated as buffer area (areas not disturbed beyond the pre-mine natural state); therefore the maximum disturbance area is 135.5 acres.

The facility used a cyanide solution in a heap leach process to extract gold from ore. There are 7 processing ponds and 1 sediment pond onsite. Three large, multi-acre waste rock piles exist in varying condition. Each waste rock pile has the potential for producing acid. Storm water run on and runoff are not controlled at the site. The Main Pit ("Acid Pit") from the mining operations remains. The 10 acre Acid Pit contains approximately 60,000,000 gallons of water with an average pH of 2 ~ 2.2 and a high dissolved metal content. Seeps from the Acid Pit containing acidic water with high dissolved metal content are being released to the northern unnamed tributaries of Hawes Creek which borders the pit at a rate of approximately 5 gpm.

As per a referral by the State of South Carolina, the EPA Region 4 Removal Program conducted a Removal Site Evaluation (RSE) according to the National Contingency Plan (NCP). During the RSE of March 2007, the OSC conducted an emergency response whose scope included the demolition of a furnace building and onsite neutralization of over 2000 lbs of varying strength acids and bases. As of 9/19/07, the Agency has approved an Action Memorandum to conduct a removal action. The removal action commenced on 10/15/07 and includes a Bureau of Reclamation designed cap for the 250,000 CYs of acid producing waste rock adjacent to the Acid Pit, Acid Pit neutralization and cyanide deactivation in one of the onsite process ponds.

The project is expected to take about 12 to 16 months to complete and is projected to cost approximately 4,000,000 dollars. Details concerning this action can be found in both the documents section and Pollution Reports (POLREPS) which are updated on a periodic basis.

Current Activities

CONSTRUCTION ACTIVITIES

- Disposed of abandoned trailer and various mining equipment debris.
- Demolition of exposed ridges along the centerline of the Waste Rock Piles using the trackhoe-mounted hydraulic ram completed.
- Completed rough cut of spillway. Awaiting BOR final design.
- Successful completion of pilot using carbide lime slaker and hydrospray method.
- Began grading of the South Waste Rock Pile on the 29th.
- Deforestation and grubbing of the eastern ridge was begun and is 65% complete. The area will be used as part of the clay borrow for capping.

INVESTIGATION/EVALUATION ACTIVITIES IN SUPPORT OF BOR DESIGN

- BOR Reclamation Design in progress.
- Completed 2' land survey of contours within the Acid Pit watershed.
- Complete sonar mapping of the Acid Pit using ROVER technology.
- Designing a centrally located Acid Pit monitoring station in coordination with SCDHEC and assisted by Clemson University to document the baseline, provide performance data during the removal activities, and compile data for future water quality.
- Meet with SCDHEC and Clemson Univ on the 14th in Augusta. BOR was also present as well as industry representatives. Primary topic discussed was the effects and methods of carbon loading to mining pits.

Planned Removal Actions

Contractor will demobe from the 15th of December to the 2nd of January for the holidays.

Currently planning to deactivate remaining cyanides upon remobilization in addition to continuing to execute the as built BOR Reclamation Design.

Estimated Costs *

	Budgeted	Total To Date	Remaining	% Remaining
Extramural Costs				
CMC Environmental Services	\$3,300,000.00	\$230,000.00	\$3,070,000.00	93.03%
Bureau of Reclamation	\$500,000.00	\$0.00	\$500,000.00	100.00%
TN&A	\$100,000.00	\$30,000.00	\$70,000.00	70.00%
Intramural Costs				
Total Site Costs	\$3,900,000.00	\$260,000.00	\$3,640,000.00	93.33%

* The above accounting of expenditures is an estimate based on figures known to the OSC at the time this report was written. The OSC does not necessarily receive specific figures on final payments made to any contractor(s). Other financial data which the OSC must rely upon may not be entirely up-to-date. The cost accounting provided in this report does not necessarily represent an exact monetary figure which the government may include in any claim for cost recovery.

response.epa.gov/baritehillnevadagoldfieldsremoval

POLREP #5 Last Updated 12/2/2007