

United States Environmental Protection Agency
Region IX
POLLUTION REPORT

Date: Wednesday, November 10, 2010

From: Tom Dunkelman

Subject: Atlantic Richfield Removals - Initiation of Action (Amended)

Yerington Anaconda Mine
102 Burch Dr., Yerington, NV
Latitude: 38.9988000
Longitude: -119.1911000

POLREP No.:	1	Site #:	09BBRV03
Reporting Period:	10/20/2010-11/10/2010	D.O. #:	
Start Date:	10/20/2010	Response Authority:	CERCLA
Mob Date:	10/20/2010	Response Type:	Time-Critical
Demob Date:		NPL Status:	Non NPL
Completion Date:		Incident Category:	Removal Action
CERCLIS ID #:		Contract #	
RCRIS ID #:			

Site Description

The Yerington/Anaconda Mine Site is an abandoned copper mining, milling, and processing facility. It covers 3,468 acres and is located two miles north of Yerington, Nevada.

The Anaconda Copper Company operated the mine from 1952 to 1978 as a low-grade copper mine and milling operation. During this period, a total of 350 million tons of ore and waste rock were mined from the Yerington Pit, and 189 tons of waste was generated.

In 1977 the Atlantic Richfield Company acquired Anaconda and assumed its operations at the Site. In June 1978, Atlantic Richfield terminated operations at the Site. In or about 1982, Atlantic Richfield sold its interests in the private lands within the Site to Don Tibbals, a local resident, who subsequently sold his interests with the exception of the Weed Heights community to Arimetco, Inc., the current owner. Arimetco operated a copper recovery operation from existing ore heaps within the Site from 1989 to November 1999. Arimetco has terminated operations at the Site and is currently managed under the protection of the United States Bankruptcy Court in Tucson, Arizona.

The site consists of an office/process facility, an open-pit mine, an overburden dump, sulfide and oxide stockpile dumps, leach pads, tailings and waste rock piles, and evaporation ponds. Naturally occurring radioactive materials including uranium, thorium, and radium, are present at the site and have become concentrated in some areas due to mining processes.

To date, EPA has conducted five separate removal actions at the site. An initial removal action was conducted at the site in February 2006. This removal action consisted of two phases of work. The first phase involved the removal of approximately 120 PCB-containing transformers. All transformers at the site were sampled for PCBs. Those transformers found to have greater than 50 ppm were removed and transported to the Clean Harbors facility in Coffeerville, KS for disposal. The second phase of this removal action involved addressing fugitive dust at the site. This work, which was conducted from April 5 to May 12, 2006, primarily involved placing a soil cap over approximately 75 acres of exposed sulfide tailings. The cap was constructed using onsite materials, referred to as vat leach tailings. During the capping work, the EPA Environmental Response Team (ERT) conducted air monitoring and sampling. Results of this monitoring and sampling effort indicated that airborne concentrations of metals and radioactive isotopes were either at non-detectable levels or were below levels that would cause health concerns. EPA also applied a soil sealant to other areas of the site, approximately 20 acres, that could possibly be contributing to fugitive dust.

EPA conducted a second removal action at the site from August to October 2006. This removal action addressed fluids management problems associated with the Arimetco heap leach system. These problems included insufficient fluids storage capacity and leaking pond liners. EPA conducted the following activities: construction of a 4-acre evaporation pond, construction of an 1,100 foot french drain intended to capture

heap draindown before it enters the Megapond, and relining of Slot Pond #2.

EPA conducted a third removal action at the site in October 2007. This removal action addressed the Bathtub Pond of the fluids management system. The liner for this pond had been torn badly by windstorms during the spring and summer of 2007, and heap leach fluids were being released directly to the subsurface. EPA removed the sediments and liner from the pond, backfilled and compacted the pond area, and installed a french drain to collect the heap leach fluids draining down from the adjacent heap.

In August 2007, EPA also conducted two separate removal assessments. One was a radiological assessment of the Process Area and one was a subsurface assessment of the heap leach ponds.

EPA completed a fourth removal action at the site in September 2008. The goal of this removal action was to complete stabilization of the Arimetco heap leach fluids management system. This project included closure of the following heap leach ponds: South Slot Pond, Plant Feed Pond, Old Raffinate Pond, New Raffinate Pond and the Megapond. Pond closure consists of removing sediment from the pond, removing the liner, and in some cases backfilling the pond. In the case of the the Old Raffinate Pond, kerosene contaminated soils exist beneath the pond to a depth of more than 20 feet. These contaminated soils will be excavated and bioremediated onsite. Bioremediation of these kerosene contaminated soils was completed in June 2010. EPA also relined the Phase I/II Pond and repair the VLT Pond, as both of these ponds were still needed to capture heap leach draindown fluids. EPA will also implemented measures to reduce bird mortalities associated with these ponds, including installation of propane bird-scare cannons.

EPA conducted a fifth removal action at the site from May to July 2010. This removal action included removal of asbestos from the Anaconda Mine office, offsite disposal of the asbestos containing material, demolition of the mine office, onsite landfilling of the demolition debris; removal, radiological screening and offsite disposal of more than 300 large truck tires; conducting a repairs to the heap leach fluids management system; performance of an evaporation pilot test; and removal of small containers of hazardous waste left onsite.

Current Activities

10/20-10/30. Atlantic Richfield Company (ARC) contractors including USA Environmental, Desert Engineering and Brown and Caldwell mobilized to the site, began site prep activities, began construction of haul roads, began construction of the landfill.

11/1-11/6. ARC contractors, including USA Environmental, Desert Engineering and Brown and Caldwell, continued construction of haul roads, construction of the transite pipe landfill, began fugitive dust monitoring, began capping of the Thumb Pond, began excavation of radiological contaminated soil. EPA and START were onsite 11/1-3.

11/8- 11/10. ARC contractors including USA Environmental, Desert Engineering, Brown and Caldwell and LVI, completed construction of haul roads, completed construction of the transite pipe landfill, continued capping of the thumb pond, continued excavation of radiological contaminated soil and began transite pipe removal. EPA and START were onsite and 11/8-10.

Planned Removal Actions

EPA and the Atlantic Richfield Company (ARC) signed an Administrative Order on Consent under which ARC agreed to conduct four removal actions: removal of electrical hazards, removal of radiological soil contamination, removal of transite pipe and capping of two areas (Thumb Pond and Sub Area A). The electrical hazards removal has been completed and the other three removal actions are now underway. EPA and the START contractor are providing field oversight of the ARC removals.

Next Steps

Continue capping of Thumb Pond and Sub Area A.

Continue excavation of radiological soil contamination and initiate offsite transport and disposal.

Continue removal of transite pipe, initiate separation of pipe containing sediment and scale.

Key Issues

There are numerous contractors onsite. It is imperative that effective communications occur with regard to the work being performed.

