

## Introduction

The Anaconda Copper Mine Site (ACMS) is currently Nevada's largest abandoned mine lands project undergoing active remediation. The Nevada Division of Environmental Protection (NDEP) is the lead agency for oversight of cleanup activities, and Atlantic Richfield Company (ARC) is performing the work.

The ACMS covers approximately 3,000 acres, of which 50% is private land and 50% public land managed by the Bureau of Land Management (BLM). Significant site features include an open pit, several large waste rock piles, historical heap leaches, abandoned processing areas, and large tailings deposits.

Mining operations were conducted by the Anaconda Copper Mining Company from 1952 until 1978, resulting in the development of the open pit. Heap leaching operations were carried out by Arimetco, Inc. from 1989 – 1999 when mining operations ceased. Singatse Peak Services (SPS) acquired Arimetco's assets at the site in 2011, and is the current private landowner.

**Remediation Approach:** NDEP and ARC are following a CERCLA-protective process for developing and implementing remedial actions at the site. CERCLA, which stands for Comprehensive Environmental Response, Compensation, and Liability Act (also known as Superfund) was enacted by the EPA in 1980 to lay out a consistent protocol for investigating and remediating contaminated properties. An important milestone under this program is the development and approval of a Record of Decision (ROD) that specifies required remedial actions (Remedy) to protect human health and the environment.

At the ACMS, remediation is planned to occur in 3 phases. The first phase of action is focused on addressing the five historical heaps and the associated ongoing drain down of fluids from the heaps. Phase 2 includes much of the northern area of the site including the historic processing facilities, tailings ponds, groundwater, and the Wabuska Drain. Phase

# **INFORMATION BULLETIN**

**Remediation Activities at the Anaconda Copper Mine Site, Lyon County, Nevada** 

# **Record of Decision (ROD) 1/1A**

Heap Regrading and Capping, Stormwater Management, FMS Upgrade

## October 2021

3 will focus on the south end of the site dominated by the Pit Lake and the South Waste Rock Area (SWRA) consisting of primarily overburden material removed from the mine pit.

The Phase 2 and Phase 3 areas of the site are currently undergoing investigations, risk assessment, and feasibility studies – prior to development of a proposed remedy and ROD. The ROD for the Phase I areas was signed in July 2017 by the EPA, NDEP, and BLM. A supplement ROD 1A was finalized in November 2020. Remedial actions under ROD 1/1A are currently underway as described below.



# **ROD 1/1A – Arimetco Heaps**

ROD 1/1A actions are concerned with managing and mitigating ongoing fluid draindown from five heap leaches that were constructed when Arimetco was conducting mining activities. Atlantic Richfield is performing the remedial action selected for the Arimetco heap leaches under an administrative consent order issued by NDEP. This will allow for a faster overall site cleanup, which Atlantic Richfield and NDEP hope to accomplish within an approximately 10-year window. The ROD 1/1A remedy requires three key remedial actions:

- Upgrade the fluid management system (FMS) including construction of 5 new double-lined fluid retention/ evaporation basins
- Regrade the heaps (and some waste pile areas) to at least 2.5:1 slopes and cap with at least 2-feet of material
- Construction of "interim" stormwater management features

#### **Actions Completed to Date**

- Numerous pre-design studies and pilot tests
- Remedial designs and specifications for the FMS upgrades
- Construction of 5 double-lined FMS retention basins and repairs to fluid collection channels associated with each heap (August 2019 August 2020)
- Remedial designs for the heap regrading and capping
- Start of the construction for regrading and capping

In May 2021 construction activities related to the heap regrading and capping project kicked off with the drilling and blasting of an over-steep highwall on the south side of what is known as the W3 waste rock pile. In early June, heavy equipment and personnel began arriving on site from the selected construction contractor High Mark Construction headquartered in Elko. Personnel and equipment from Yerington-based Desert Engineering supplemented the High Mark team.

Presently, there are approximately 50 staff on site involved with the heap regrading/capping effort which is expected to take 16 months to complete. Heavy equipment includes large dozers, excavators, scrapers, haul trucks, motor graders, and compactors. The focus of the recent work is on preparing areas around each heap for the placement of polyethylene "wing liners" which will underly the spent ore pushed down as part of the heap regrading. Haul roads are also being prepared and minor demolition activities are being conducted. Several stormwater retention ponds, lined and unlined, have been constructed. Extensive grading has been completed on two large waste rock piles known as W3 and S23, and grading/contouring has begun on what is known as the Slot Heap.









## **Upcoming Actions**

- Complete wing liner construction
- Initiate mass grading and contouring/sloping of five historical heap leaches
- Cover regraded heaps with 2-feet of material
- Construct stormwater channels and add rip rap

# Health, Safety, Security, Environment (HSSE)

All activities at the site are conducted in compliance with OSHA Construction and HAZWOPER protocols. Each staff member must complete 40 hours of OSHA HAZWOPER certification training in addition to ARC specified control of work and hazard identification training. All equipment is inspected daily. Safety and health professionals are on site continuously during the work activities to monitor compliance with the sitewide HSSE Plan and ensure worker safety. Dust suppression measures are implemented continuously during working hours. Archaeologists are called in and various stakeholders are notified whenever excavation activities impact "native" ground in the event that cultural artifacts might be uncovered.

## For more information or questions:

Visit NDEP's Anaconda Copper Mine webpage at https:// ndep.nv.gov/land/abandoned-mine-lands/anaconda-home or send questions directly to acms@ndep.nv.gov.

### Or

Nick Peterson Project Manager Atlantic Richfield Company Houston, TX nick.peterson@BP.com 281.886.4530







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