

Lisbon Valley Mining District Removal Site Update

Operations Period: 04 October 31-November 6, 2022

Website: response.epa.gov/LisbonValleyMiningDistrict

Story Map: <https://storymaps.arcgis.com/stories/d53319ab3b444696a28e2faea977b443>

Site Description

The Historic Lisbon Valley Mining District (Site) is located southeast of La Sal in San Juan County, Utah. Miners discovered copper in the area in 1892 and they expanded their mining activities in the late 1920's after the additional discovery of ore bodies containing uranium and vanadium. The area remained a significant producer and area of exploration until mining operations dramatically slowed in the 1980's.

In 2022, EPA, BLM and the State of Utah identified two abandoned mines where recreational human exposure to mine waste is evident, the downstream migration of mine waste is significant during flash floods and no apparent remediation has occurred. These two abandoned mines are the Radon Mine and the Columbia Shaft.

EPA will conduct a CERCLA Time-Critical Removal Action at these two locations in the Fall 2022 to control erosion and limit human exposure to contaminated mine waste.

Safety Message

Radioactive mine waste that contains high levels of heavy metals is found at the surface at both the Radon Mine and the Columbia Shaft. Visitors to these locations may be exposed to hazardous substances. Hiking, camping and exploring at these mines is discouraged.

Site Objectives

Radon Mine

1. *Develop Equipment Access:* A temporary access road for heavy equipment will be constructed across the face of the waste pile and down to the ephemeral drainage.
2. *Secure the Toe of the Waste Pile:* The toe of the waste pile will be pulled back from the ephemeral drainage and secured with rip rap to the extent practical.
3. *Manage Excavated Mine Waste:* Mine waste excavated to develop equipment access and to secure the toe of the pile will be deposited along several benches that were constructed at the abandoned facility.
4. *Secure Abandoned Metal and Debris:* Metal and other debris from the former facility dumped down the face of the waste pile will be pulled back from the ephemeral drainage, secured with rip rap and covered with mine waste to the extent practical.
5. *Install Erosion Control Features:* Construct erosion control structures on unvegetated waste deposits and revegetate as practical to break up the velocity of runoff and limit off-site migration of contaminated material.

6. *Restrict Vehicle Access:* The historic mine access trail to the waste pile will be closed at the County Road with large boulders, ditches and/or berms.

Columbia Shaft

1. *Regrade the Waste Pile:* Regrade the waste pile to better control runoff and pull the toe of the pile away from the existing drainage.
2. *Install Erosion Control Features:* Construct erosion control structures on unvegetated waste deposits and revegetate as practical to break up the velocity of runoff and limit off-site migration of contaminated material.
3. *Restrict Camping on Waste Pile:* The access to the top of the pile will be closed with large boulders, ditches and/or berms.

Period Objectives

Radon Mine

1. EPA's Response Team will complete construction of the access ramp down to the drainage.
2. EPA's Response Team will begin pulling the toe of the pile back away from the drainage and continue excavation across the pile to make a gentler slope.
3. The crew will remove the metal debris that remains on the slope and in the drainage. The metal debris that is removed will be buried in the regraded waste pile.

Activities Accomplished

Radon Mine

At the Radon Mine, EPA's Response Team:

1. The access ramp to the drainage was completed.
2. The crew excavated over 2500 yds³ of tailings and placed them on the top of the pile. These tailings were integrated into the regraded pile.
3. The crew began to pull waste from the toe of the pile out of the drainage.
4. The crew generated >250 yds³ of rock from on-site to be used as rip-rap for stabilization.

The mine waste that was excavated was placed back away from the slope and used to begin establishing a gentler gradient. The entire waste pile will eventually be regraded to better control erosion and keep the material from entering the drainage and migrating off-Site.

Planned Activities

The EPA Response Team will complete pulling the tailings pile out of the drainage and establish a rough completion of the final grade. The EPA will also begin installing drainage control features and armoring the toe and critical slopes of the waste pile.

EPA's Response Team plans to complete construction activities at the Radon Mine by Thanksgiving and initiate construction activities at the Columbia Shaft after Thanksgiving.

View of the Radon Mine operations taken at beginning of operational period:



View of Radon Mine at end of operational period:

