

Lisbon Valley Mining District Removal Site Update

Operations Period: 02 October 17-23, 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.

Radon Mine facility in approximately 1960. Image courtesy of Department of Interior Bureau of Mines.



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

- Excavate the top of the waste pile along the slope that leads down to the drainage.
- Place the material that is excavated along the old terraces that were constructed at the abandoned mine and back away from the drainage.

Activities Accomplished

At the Radon Mine, EPA's Response Team removed a section of the waste pile that is approximately 15' deep and 25' wide along the entire crown of the eroded slope. This activity will allow for easier access to the slope itself and to access the bottom of the pile.

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.

Radon Mine at the beginning of operational period:



Radon Mine at the end of operational period:



Planned Activities

During the next Operations Period (October 24-30), EPA's Response Team will continue excavating the eroded slope of the waste pile and create a path for heavy equipment down into the drainage to access the toe of the 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.

Radon Mine operations with crew beginning to excavate crown of waste pile at the west end:

