

## Lisbon Valley Mining District Removal Site Update

**Operations Period:** 05 November 7-13, 2022

**Website:** [response.epa.gov/LisbonValleyMiningDistrict](https://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 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. *Regrade Pile / Control Erosion:* The waste pile will be regraded to control erosion. Certain areas of the pile, especially along its west edge will not be accessible. A temporary access ramp for heavy equipment will be constructed down to the ephemeral drainage. Waste that is removed from the pile will be deposited along several benches that were constructed at the abandoned facility. Erosion control features will be constructed on the regraded waste and the pile will be revegetated.
2. *Secure the Toe of Pile:* The toe of the waste pile will be pulled back from the ephemeral drainage and secured with rip rap to the extent practical and as necessary.
3. *Remove Metal Debris:* Metal and other debris from the former facility that was dumped down the face of the waste pile will be removed from the slope and buried in the waste pile.
4. *Restrict Access:* The historic mine access road to the waste pile will be closed with a gate at its intersection with the County Road. Large boulders, ditches and/or berms will be used to prevent access around the gate. Warning signs will be placed around the Site.

### Columbia Shaft

1. *Regrade Pile / Control Erosion:* The waste pile will be regraded to control erosion. A series of terraces or benches will be created to capture runoff and direct it to a natural drainage that is west of the pile. Waste that is removed from the face will be deposited on top of the pile. Erosion control features will be constructed on the regraded waste and an attempt will be made to revegetate the pile.
2. *Restrict Camping on Waste Pile:* The access to the top of the pile will be closed with large boulders, ditches and/or berms. Warning signs will be placed around the Site.

## **Period Objectives**

### Radon Mine

- Complete repair of the culvert and rip rap its outfall.
- Begin to regrade to toe of the pile.
- Continue excavating the crown of the waste pile above the drainage.
- Place the mine waste that is excavated from the pile back away from the drainage on top of the waste pile and along the terraces that were constructed at the abandoned facility.

## **Activities Accomplished**

EPA's Response Team replaced the last section of culvert before its outfall. The old culvert was not connected and was damaged. Rock collected from along the terraces of the former facility was used to rip rap its outfall and down the slope of the waste pile.

The Team removed mine waste from the toe of the pile starting at the furthest point downstream and worked its way upstream. The crew regraded the pile and moved its new toe back away from the drainage to a point that is at least 10 vertical feet from the low point in the adjacent ephemeral stream.

The mine waste that was excavated was placed back away from the slope and used to continue establishing a more gentle 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**

EPA's Response Team will continue moving the toe of the waste pile out of the drainage and continue regrading the waste pile itself.

Weather permitting, hydro-mulch will be used to control erosion and reseed the newly regraded pile.

The Team plans to largely complete construction activities at the Radon Mine by Thanksgiving and initiate construction activities at the Columbia Shaft after Thanksgiving.

### **Regrading the Lower Slope of the Waste Pile at the Radon Mine**



**Radon Mine at the beginning of Work:**



**Radon Mine at the end of Operations Period:**

