

Lisbon Valley Mining District Removal Site Update

Operations Period: 01 October 10-16, 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

- Mobilize equipment and personnel.
- Set the Site up for construction activities.
- Begin excavating the waste pile.

Activities Accomplished

EPA's Response Team mobilized to the Radon Mine on October 10, 2022. A detailed radiation survey was conducted prior to commencing work and the Team set up the Site by:

- Re-grading the historic access road to the Radon Mine and cutting back the brush along the road to allow better access for large equipment.
- Establishing an Exclusion Zone, a Contamination Reduction Zone (decontamination area for personnel and equipment) as well as a Support Zone using safety fence. A decontamination trailer was placed in the Contamination Reduction Zone and EPA's Mobile Emergency Operations Center (MEOC) was placed in the Support Zone. A tank to fuel heavy equipment and a water trailer was placed along the boundary between the Exclusion Zone and the Support Zone. The fuel tank will be refilled as needed while the water trailer will be refilled several times each day as needed.
- Deploying dust tracking devices to monitor air quality levels in both the Contamination Reduction and Support Zones.

The Response Team then cleared and saved organic material from the area where material excavated from the waste pile will be placed and began excavating the pile. The Team started by removing the upper portion of the metal debris on the slope as well at a hot spot on the pile's flank. The crew then began removing the top 12-15 feet of material along the crown of the waste pile to lower the elevation at which the top of a ramp down to the ephemeral drainage will eventually be constructed.

Planned Activities

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 at the beginning of the Operations Period:



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

