## Lake Valley Mine Safeguard Project - Phase II





The Lake Valley Mine Safeguard Project - Phase II area is located in and around the ghost town of Lake Valley, seventeen miles south of the town of Hillsboro, in Sierra County, New Mexico. The project area is on private land.

The project site consists of 58 abandoned mine openings, all of which were dangerous to the public at large.

To the maximum extent practicable, construction access is limited to existing jeep trails and roads, except as otherwise shown, specified, or allowed by the Project Manager.

This project involved the following work:

Backfilling of 24 mine openings using mine waste, other nearby material and material imported from designated borrow areas where specified. Blasting is allowed at one designated mine opening and as otherwise allowed by the Project Engineer.

Construction of bat gates in six adits and one stope opening, including one placed inside a rock bulkhead, one inside a polyurethane foam (PUF) plug, one with a cast-in-place concrete plug and three inside toroid tire plug closures, all with corrugated steel pipe culverts.

Construction of airflow closures with corrugated steel pipe risers inside polyurethane foam (PUF) plugs with precast concrete units and concrete collars at two shafts, and construction of a grated airflow closure into an existing concrete collar at one shaft.

Construction of horizontal bat compatible closures at two shafts with corrugated steel pipe risers, precast concrete units and concrete collars, and including a PUF plug at one of those shafts and a large toroid tire plug at the other.

Construction of bat cupolas at two shafts, one with a polyurethane foam plug, corrugated steel pipe riser, scoria fill, precast concrete units and concrete collar and one with a concrete footing placed on a cast-in-place concrete hollow core plug.

Construction of a polyurethane foam plug closure, with PVC drainpipe, steel sleeve and grated cover, at one shaft.

Construction of large toroid tire plug closures at nine shafts, one adit and one stope opening with small toroid mats and geotextile mesh and cloth.

Construction of a corrugated steel pipe column plug at one stope opening.

Construction of steel mesh airflow closures with rock anchors at five shafts and an underground powder house including placement of boulders as a barrier around one of the shafts.

Construction of a welded wire fence with barbed wire along a highwall.

Construction of a steel grate at a mill hopper opening.

Closure of temporary construction access roads.

Seeding of all areas disturbed by construction.

The engineer's estimate for this project was between \$500,000 and \$750,000.

You can view the project manual by clicking on the links below. Site location maps (figures 2-9) are purposely not included.

## ADDENDUM No. 1 (Added March 21, 2007)

**Contract Information** 

**General Requirements and Sitework** 

Concrete Specifications

Metals Specifications

Miscellaneous Specifications

## **Drawings and Figures**

Figure 1	Figure 19	Figure 29	Figure 39	Figure 49
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Figure 11	Figure 21	Figure 31	Figure 41	Figure 51
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Figure 13	Figure 23	Figure 33	Figure 43	Figure 53
Figure 14	Figure 24	Figure 34	Figure 44	Figure 54
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Figure 16	Figure 26	Figure 36	Figure 46	Figure 56
Figure 17	Figure 27	Figure 37	Figure 47	
Figure 18	Figure 28	Figure 38	Figure 48	

## Photos typical of the landscape







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