

2022 Award Winner

KG Mining (Bald Mountain) **RBM Pit Partial Backfill**

Award Category

Leadership in Concurrent Mine Reclamation

The RBM Pit partial pit backfill consisted of approximately 17-million tons of non-ore bearing material with an alluvial layer and growth media capping, which will assist in seeding and revegetation efforts. Reclamation also consisted of about 98 acres of seeding of the RBM North rock disposal area (RDA) and about 49 acres within the partially backfilled RBM pit.

One of the motivating factors for concurrent reclamation efforts is to reduce disturbance of the Area 10 mule deer herd migration corridor at the mine; this herd is considered one of the largest within Nevada. The corridor is a transitional habitat between winter and summer ranges. In addition to these reclamation activities, any new disturbance within designated mule deer migration corridors is reclaimed as soon as the activity in the area is complete.

The following tasks were incorporated during KG-BM's reclamation projects: portions of the open pits were partially backfilled to allow for potential mule deer movement through the area, RDAs were graded so that no slope was steeper than 2.5:1, the topography was blended and shaped to match the surrounding terrain, with islands of native vegetation left intact. The areas were seeded with the BLM/NDOW approved seed mix. When the partial backfill was completed, a portion of the remaining southeast highwall was sloped and graded to provide easier access and connectivity for deer movement.



RBM Pit partial backfill final grading incorporated for stormwater management and blended with nearby RDA material. Spring, 2020.

Committee Recognition

The following project was not eligible for an award at this time; however, the evaluation committee recognized this project for the approach, investment, and effort in such a challenging environment.

Coeur Mining **Sterling Mine Revegetation Test Plot Program**

Recognition Category

Innovative Revegetation Strategy

Coeur sought to develop a robust reclamation program that could be used for future revegetation success by investing in a site-wide reclamation study. This two-step study started with a materials characterization inventory to identify available material on site that could be used as reclamation media.

Reclamation specialists identified the Wood Canyon Formation, an overburden material, as having suitable agronomic properties (e.g., low saline/sodic potential and relatively high organic carbon content, etc). They believed that the fine grain component of the formation would enhance soil water holding capacity and generate increased water availability for plants, the primary limiting factor for plant growth in this extremely arid environment.

To test this theory, Coeur constructed two one-acre test plots with soils derived from the Wood Canyon Formation and seeded the plots with a site-specific mix of local, native seeds. The seed mix was also innovative in that it was developed based on agronomic characteristics, baselines surveys, and past reclamation success. The test plots were seeded in February 2021 and will undergo continued evaluation in the years to come.



Test plot construction at the Sterling site near Beatty. Coeur constructed two one-acre plots using media from the Wood Canyon Fm.

This unique approach to reclamation planning was presented at the 2021 Tailings and Mine Waste Conference to share with peers in the mining industry the strategy of investigating geologic materials, such as overburden, which exhibit favorable agronomic characteristics to overcome site specific reclamation challenges. The results will be used by agencies to inform site-specific reclamation targets for this current reclamation program and other nearby reclamation projects.