




MINERALS PROGRAM INSPECTION REPORT
PHONE: (303) 866-3567

The Division of Reclamation, Mining and Safety has conducted an inspection of the mining operation noted below. This report documents observations concerning compliance with the terms of the permit and applicable rules and regulations of the Mined Land Reclamation Board.

MINE NAME: Pikeview Quarry	MINE/PROSPECTING ID#: M-1977-211	MINERAL: Limestone (general), granite gneiss and do	COUNTY: El Paso
INSPECTION TYPE: Monitoring	WEATHER: Clear	INSP. DATE: September 30, 2024	INSP. TIME: 10:00
OPERATOR: Riverbend Industries Inc.	OPERATOR REPRESENTATIVE: Jerry Schnabel	TYPE OF OPERATION: 112c - Construction Regular Operation	
REASON FOR INSPECTION: Normal I&E Program	BOND CALCULATION TYPE: None	BOND AMOUNT: \$6,805,607.00	
DATE OF COMPLAINT: NA	POST INSP. CONTACTS: None	JOINT INSP. AGENCY: None	
INSPECTOR(S): Hunter Ridley	INSPECTOR'S SIGNATURE: 	SIGNATURE DATE: October 14, 2024	

GENERAL INSPECTION TOPICS

This list identifies the environmental and permit parameters inspected and gives a categorical evaluation of each. No problems or possible violations were noted during the inspection. The mine operation was found to be in full compliance with Mineral Rules and Regulations of the Colorado Mined Land Reclamation Board for the Extraction of Construction Materials and/or for Hard Rock, Metal and Designated Mining Operations. Any person engaged in any mining operation shall notify the office of any failure or imminent failure, as soon as reasonably practicable after such person has knowledge of such condition or of any impoundment, embankment, or slope that poses a reasonable potential for danger to any persons or property or to the environment; or any environmental protection facility designed to contain or control chemicals or waste which are acid or toxic-forming, as identified in the permit.

(AR) RECORDS----- <u>N</u>	(FN) FINANCIAL WARRANTY----- <u>Y</u>	(RD) ROADS----- <u>Y</u>
(HB) HYDROLOGIC BALANCE----- <u>Y</u>	(BG) BACKFILL & GRADING----- <u>Y</u>	(EX) EXPLOSIVES----- <u>N</u>
(PW) PROCESSING WASTE/TAILING---- <u>N</u>	(SF) PROCESSING FACILITIES----- <u>N</u>	(TS) TOPSOIL----- <u>Y</u>
(MP) GENL MINE PLAN COMPLIANCE- <u>N</u>	(FW) FISH & WILDLIFE----- <u>Y</u>	(RV) REVEGETATION---- <u>Y</u>
(SM) SIGNS AND MARKERS----- <u>Y</u>	(SP) STORM WATER MGT PLAN---- <u>Y</u>	(RS) RECL PLAN/COMP-- <u>Y</u>
(ES) OVERBURDEN/DEV. WASTE----- <u>N</u>	(SC) EROSION/SEDIMENTATION--- <u>Y</u>	(ST) STIPULATIONS----- <u>N</u>
(AT) ACID OR TOXIC MATERIALS----- <u>N</u>	(OD) OFF-SITE DAMAGE----- <u>N</u>	

Y = Inspected / N = Not inspected / NA = Not applicable to this operation / PB = Problem cited / PV = Possible violation cited

OBSERVATIONS

This inspection was conducted by Hunter Ridley with the Division of Reclamation, Mining and Safety (Division) as part of the continuing planned monthly inspections to observe the backfill placement for the final reclamation of the Pikeview Quarry. As backfill placement has ceased, monthly inspections have continued to observe final grading and revegetation efforts. Jerry Schnabel (representing the Permittee, Riverbend Industries Inc.) and Stantec representative Paul Kos were present for the inspection. David Deitemeyer with the City of Colorado Springs was present. USFS representatives Cullen Lapointe, Julie Spawn, and Madison Banks were also present for the inspection.

As discussed in the Division's last inspection report, Pikeview has submitted a Technical Revision (TR) application for the review of its updated as-built stability analyses. The application for TR-25 was received by the Division on October 7, 2024. The Division has reviewed and approved the updated stability analyses, calling TR-25 approved on October 14, 2024.

On October 10, 2024 the Division received a submission for Surety Reduction 4 (SR-4). This reduction request is for tasks related to earthwork, topsoil placement, and rip rap placement. The Division is currently in the process of reviewing the materials submitted.

Records: Since the placement of backfill material has ceased at Pikeview Quarry, so has the necessity for compaction testing. In total, compaction testing occurred on backfill material from March of 2022 to July of 2024. With the conclusion of backfill activities and compaction testing, and due to the continued overall stability of the buttress, the Operator and the Division discussed a reduction in frequency of geotechnical report submission. TR-25 includes this request to reduce reporting frequency from monthly to quarterly. The next report will be due in January 2025 and include observation data from October 2024 to December 2024.

The Leica prism system data continues to be collected onsite and monitored by Riverbend Industries. Prism data continues to support the conclusion that slope stability is being achieved on the buttress. This data will aid the Division in its decision to approve or deny the eventual final release of the Pikeview Quarry permit. The review and approval of additional geotechnical analyses as described above ensures the longevity of slope stability at the site and also aids in this decision.

The final prism, located below the tension crack area, has been placed. The Leica prism system will stay in place until the Division approves the full and final release of the Pikeview Quarry permit. After this release of jurisdiction, it will be up to the landowners whether or not to keep the system in place.

The mine sign, which included all required information pursuant to Rule 3.1.12, was located at the site's access road.

Backfilling and Grading:

All major earthwork is complete at the site. All placed backfill was tested for compaction in accordance with the approved specifications until the conclusion of earthwork activities on July 31, 2024. All equipment associated with the earthwork contractor has been removed from the site. The only remaining equipment on site will be used in revegetation efforts and in the placing of rip rap in drainage channels. The south borrow area is currently acting as the storage area for this rip rap material, also called the lower rip rap quarry area. Once all this rock material has been removed and placed, the site will reduce the size of the bench by backfilling, topsoiling, and seeding up to the first bench of this slope (Photo 8). Above this, the slope will remain rocky. A smaller bench will thus remain in this area, adjacent to the plunge pool feature.

Roads: The site continues its work in obliterating all roads on Forest Service property, as requested by the Forest Service.

Fish and Wildlife: No negative impact on wildlife was observed. A small herd of ~12 Bighorn sheep and lambs were observed laying atop the upper most site benches (Photo 6).

Revegetation & Topsoil: Remaining activities include continuing to topsoil and mat slopes and placing rip rap in drainage channels. All ~ 31,000 tree have been planted onsite. Revegetation efforts continue to be monitored by staff. The U.S. Forest Service has also conducted several site visits to advise site personnel on best practices invasive species removal before final seeding activities. Weeds currently being treated at the site include a List A noxious weed species, Myrtle spurge along with common knapweed, thistle, toadflax, and mullein.

Hydroseeding of the upper peaks is complete and matting has been completed on benches just below this area (Photo 1). All matted areas continue to show signs of stability in supporting grasses and shrubs. Areas which were first matted are supporting thickening vegetation, with a diverse level of species coming through, ranging from grasses to shrubs to forbs. Newly mated areas, such as in the north borrow area and top slopes (Photo 1, 2, and 7), show small sprouts of growth within the first few weeks of mat placement. The north borrow area has been re drill seeded, mulched, and matted on Forest Service property. Tree plantings were preserved in this area by cutting holes in the new mat to accommodate the seedlings before final mat placement. Trees planted across the site are experiencing some dieback, but shrubs seem to be less impacted by Bighorn activity as previously.

Recent vegetation growth was observed across the main buttress portion of the site (Photos 3 and 4). Irrigation tanks are located on the lower buttress bench (Photo 3), but site representatives stated that these are likely to be removed soon. No additional irrigation tanks are planned to be added anywhere onsite. Instead, the site will opt for more sporadic watering via a water truck. As previously discussed, irrigation may weaken the long-term stability of slope vegetation. Instead, more infrequent watering of the slopes may set vegetation up for more success in final reclamation and create vegetated conditions that are in compliance with Rule 3.1.10(1).

Sediment Control

Coconut matting onsite, both recently placed and originally placed, seem to be holding up to stormwater and general erosion well. Thickening vegetation has been observed even on newer matting area, which has kept erosion across the site to a minimum.

Hydrologic Balance: The area where a large culvert was previously is the highest accessible area via vehicle (Photo 5). The Division and site representatives hiked up to upper levels to inspect.

Final configurations of the surface water drainage channels continue to be constructed onsite as per the approved design. All minor channels have received rip rap (Photos 1, 3, and 4). As final reclamation progresses, rip rap of various sizes will be used to stabilize major channels, depending on slope or the presence of bedrock. All rip rap needed for construction is already stored on site in the lower rip rap quarry area.

Pikeview has worked with the City and the Forest Service to address concerns of erosion and overtopping at the site's southernmost drainage channel. The channel bend in this area will be reinforced with rip rap to avoid any chance of stormwater flows overtopping the small berm here and flowing south into the adjacent watershed, instead of east as planned. Additionally, a line of rocks will be added to the steep area to dissipate energy as stormwater makes its way towards the channel bend leading further into the site. Pikeview will assess the success of this initial design and adjust, if necessary, should monitoring through the winter and spring season suggest the channel is not functioning appropriately. Pikeview will continue to place rip rap along all other drainage channels on site first, but any excess rock will likely go towards additional armoring and reinforcement of this southern bedrock drainage channel.

Pikeview has also addressed the future of the small water impoundment located near the top slopes, below the north peak area. This feature, also known as the 'sheep pond' onsite will be completely removed via final grading work. To address the seep in this area which creates the feature, a vertical standpipe will be added to direct the seep water into a 'guzzler system' (Photo 7). This system was recommended by CPW as a way to maintain the seep as a water source and continue to support the local population of Bighorn sheep. Since the system is mostly enclosed, this also relieves the need for an augmentation plan to cover evaporative losses. An excess water will be directed downslope into the approved main channel area.

Post Inspection Meeting: No problems or possible violations were observed during the inspection. Items of importance discussed during the site meeting and items which will need to be followed up on are summarized below:

- Future reduction of monthly inspection frequency to begin when only monitoring of revegetation efforts remain and as approved by the Division
- Address any concerns with the southernmost drainage channel in the South Borrow area into the Spring 2025 season
- Continue to monitor and address invasive species removal across the site

Photographs taken during the inspection have been included below. Responses to this inspection report should be directed to: Hunter Ridley at the Division of Reclamation, Mining and Safety, 1313 Sherman St., Room 215, Denver, CO 80203. Direct contact can be made by phone at 720-868-7757 or via email at hunter.ridley@state.co.us.

PHOTOGRAPHS



Photo 1: View west of the northern section of the upper bench, 'bare' areas have been hydro mulched, and the channel has been rip rapped.



Photo 2: View east of the recently matted, mulched, and seeded north borrow area.



Photo 3: View south of the partially revegetated buttress and water tanks along the first bench.



Photo 4: View south of the north facing slope of the south borrow area, to be partially backfilled and seeded.



Photo 5: View northwest of the area where a large culvert was previously removed, this area will be cut to form the start of the main northern channel.



Photo 6: A small group of Bighorn sheep were observed on the slopes upper benches.



Photo 7: View west of the slope where the CPW recommended 'guzzler' system will be installed to direct seep water out of the hillside, through the guzzler system, and down into the main channel.



Photo 8: View south of the north face of the south borrow area.

Inspection Contact Address

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