COLORADO
Division of Reclamation, Mining and Safety
Department of Natural Resources

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:** June 25, 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:** $13,389,784.00	
DATE OF COMPLAINT: NA	**POST INSP. CONTACTS:** None	**JOINT INSP. AGENCY:** None	
INSPECTOR(S): Hunter Ridley Zach Trujillo	**INSPECTOR'S SIGNATURE:** Hunter Ridley	**SIGNATURE DATE:** July 1, 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---------- N	(FN) FINANCIAL WARRANTY-------- Y	(RD) ROADS---------- N
(HB) HYDROLOGIC BALANCE---------- Y	(BG) BACKFILL & GRADING---------- Y	(EX) EXPLOSIVES--------- N
(PW) PROCESSING WASTE/TAILING---- N	(SF) PROCESSING FACILITIES------- N	(TS) TOPSOIL---------- N
(MP) GENL MINE PLAN COMPLIANCE- N	(FW) FISH & WILDLIFE---------- Y	(RV) REVEGETATION---- Y
(SM) SIGNS AND MARKERS---------- Y	(SP) STORM WATER MGT PLAN---- N	(RS) RECL PLAN/COMP-- Y
(ES) OVERBURDEN/DEV. WASTE--------- N	(SC) EROSION/SEDIMENTATION--- N	(ST) STIPULATIONS------- N
(AT) ACID OR TOXIC MATERIALS------- N	(OD) OFF-SITE DAMAGE----------N	

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 and Zach Trujillo 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. Jerry Schnabel (representing the Permittee, Riverbend Industries Inc.) and Stantec representatives Tim Culberson, Paul Kos, and Michaela Swain 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.

Technical Revision No. 24 (TR24) was approved by the Division on June 10, 2024. TR24 included a redesign of the site's surface drainage channels to account for current site conditions and granite bedrock to be left in place on the upper slope.

Earthwork is nearly complete at the site. Slopes at final grade are being topsoiled, seeded, and matted and revegetation efforts are being closely monitored by staff on site (Photo 2).

Records: Compaction testing records were reviewed back to May 2nd, the last date not available during the previous inspection. All test results reviewed in this period (May 2nd to June 6th) demonstrated at least 90 percent compaction in compliance with the approved specification. No retests were required. Mr. Schnabel presented the Leica prism system data and trends for May and June. Small amounts of movement were visible in the far south 7300 prism. Mr. Schnabel explained that this was likely due to earthwork in that area to tie in the buttress and the bench. The initial downward movement seen in the 7300 and 7400 prism series continues to flatten out as material settles into place.

The Annual Report, Map and Fee for 2024 were submitted to the Division on June 4, 2024. This submission included a map of the Myrtle spurge locations on site and a log of spraying and weed removal actions.

The mine sign, which included all required information, was located at the site's access road (Photo 1).

Backfilling and Grading: The shop area is no longer being used for fill material but is being backfilled slightly to meet final grade. Subgrade contouring, topsoiling, seeding, and matting has been completed or is near completion on the first four lifts. All placed backfill continues to be tested for compaction in accordance with the approved specifications.

The site's April geotechnical report noted that two tension cracks had formed on the upper slope fill. The report described these features as ~100ft x 2in cracks which were noted at two of the site's visual inspections in April. The report cited the cause of these cracks as expected settlement from the buttress below. This crack area is inspected weekly by the Stantec team. Stantec's geotechnical report for May stated that the crack had extended ~ 30 feet to the south in the last month, but that this was still within the same area the original cracks are being monitored. Compaction tests are still completed for this area. The Division revisited this area to observe the cracks during this inspection. Mr. Kos explained that while this area was awaiting topsoiling and seeding, a makeshift extensometer was fashioned with two, staked down pieces of wood. These wooden stakes were positioned with their points touching (Photo 10). Therefore, any movement of the cracks could be noted by way of inspecting whether these wooden stakes were or were not still touching. At the time of inspection, the stakes had moved a minimal amount. After topsoiling and seeding, the wooden stakes will be removed, and two additional prisms will be installed above and below the area of the cracks to monitor movement. Overall, the cracks remain superficial in depth and length and have begun to fill in naturally with small amounts of erosion. All cracks are located above the historic landslide area. No mounding or bulging of material was noted in the area immediately below the cracks or further down on the next bench. Should the movement of these prisms continue to be minimal in over time, the Division has no major concern for slope stability.

Prisms BR1 and BR3 were recently removed from the BFR area to allow for final rock reduction, backfilling of the area to its planned 2H:1V slope, and the tying in of this area to the southern edge of the bench (Photo 9). These two prisms will be replaced and rock bolted down once earthwork in this area is complete.

Roads: Minimal equipment remains onsite as earthwork nears completion at the site (Photo 10). Mr. Schnabel reiterated the Forest Service's request for no formal roads to remain on their portion of the property in final reclamation. As such, as final reclamation of the upper slopes occurs, these access roads will be removed, making the upper peak areas largely inaccessible, except on foot. All other roads on site are maintained. A water truck was noted to be active onsite.

Fish and Wildlife: No negative impact on wildlife was observed. Mr. Schnabel indicated that over twenty Bighorn sheep had ben observed onsite throughout the last month. The fifth bench will include a large, rocky area to accommodate the sheep in the area and to provide additional wildlife habitat.

Revegetation & Topsoil: The first, second, third, and fourth benches of the buttress have been topsoiled, seeded, and matted. These tasks are nearly complete on the fifth bench. Shrubs and trees continue to be planted across the north borrow area and first few buttress slopes (Photos 5 and 7). Shrubs are planted in clusters throughout the slopes and vary in cluster design to encourage more natural growing conditions. Should any large areas of shrub or tree vegetation fail, the site's team will attempt to replace these plants with species that are doing well in other areas of the site. Sufficient topsoil is onsite to complete the rest of reclamation and adhere to the 6-inch depth of topsoil reclamation requirement.

Recent vegetation growth was mostly observed in the northern portion of the site, on City property (Photos 3,4, and 7). Growth in this area appeared to be supporting multiple species of grasses and transplanted shrubs were noted to be greening and getting taller. The 10 acres test plot planted ~ 2 years ago also shows some signs of successful revegetation. However, most of this is limited to 1-2 species, mainly alfalfa and sweet clover (Photo 6). This slope will need to show a more diverse species composition in final reclamation. Mr. Schnabel indicated that he was aware of this requirement and noted that additional seeding may have to occur to improve the growth of grass species in this area.

On Forest Service land, trees will be planted on the benches of the top slopes where possible. Hydroseeding will also be available to less accessible and more rugged areas of the top slopes and the three peaks areas. No topsoiling or tree planting is set to occur on the north or middle peak. Site personnel continues to work closely with the USFS to refine tree and shrub species and placement for final revegetation. Any new tree or shrub species that were ultimately added to the site were updated through the process of Technical Revision 24.

Weeds currently being treated at the site include a List A noxious weed species, Myrtle spurge along with common knapweed, thistle, and mullein.

Sediment Control
Extra coconut matting blankets were being installed at the time of inspection to address erosional features occurring above the shop area (Photo 3). Matting procedures onsite are usually reserved for 2H:1V or greater slopes.

Hydrologic Balance: Preliminary cuts for the final configuration of the surface water drainage channels continue to be constructed onsite (Photo 5). Channels above and directly below the Kiewit Cliffs area have been partially laid out, but not yet formally cut. In final reclamation, each drainage terrace will have prisms permanently installed. TR 24 addressed designs changes needed for the upper drainage channels at the site. As final reclamation progresses, rip rap which will be used to construct and stabilize these channels. This rip rap is already stored on site and has been largely sourced from onsite areas like the Dragon's Back area and three peaks areas.

A small impoundment feature is present adjacent to the middle peak area (Photo 8). This impoundment feature is fed via a seep from further up the mountainside. Water depth was estimated at slightly above 2-3 feet. A few small clumps of cattails were growing in the water. Mr. Schnabel indicated his preference to keep this imponudmnet as a wildlife support feature in final reclamation. This impoundment is on Forest Service property. If the feature is to remain in final reclamation, the Division will need written approval from the Forest Service that they also wish the feature to be permanent. Additionally, the Division will need to see the appropriate water rights and or permit documentation that addresses the permanent impoundment of this water. Documentation of the appropriate permits would also be required if the impoundment feature was relocated onsite. Should the Pikeview team decide not to keep this impoundment area as a permanent feature or should the Forest Service not allow for permanent impoundment, the most recent re-design of upper drainage channel has the potential to drain this impounded seep water fully or partially and mitigate the need for additional permits or water rights. Mr. Kos and Mr. Schnabel indicated that they would keep in contact with the Division as these decisions are made in the coming weeks.

Post Inspection Meeting: No problems or possible violations were observed during the inspection. Items of importance discussed during the site meeting are summarized below:

- Monitoring of the tension crack and eventual installation of prisms in this area
- Future reduction of monthly inspection and report requirements to begin after the July inspection
- Action will need to be taken to address the small impoundment of water near the western peaks

Photographs taken during the inspection and a site map outlining the current disturbance boundary 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: Mine sign identification is located on the gate at the site access road entrance.

Photo 2: View west of the partially matted buttress and three peaks.

Photo 3: Erosion control matting was being placed on a northeastern slope where erosion rills were present.

Photo 4: View of a reseeded slope on city property. Test plot areas for tree growth are located at the top of this slope.

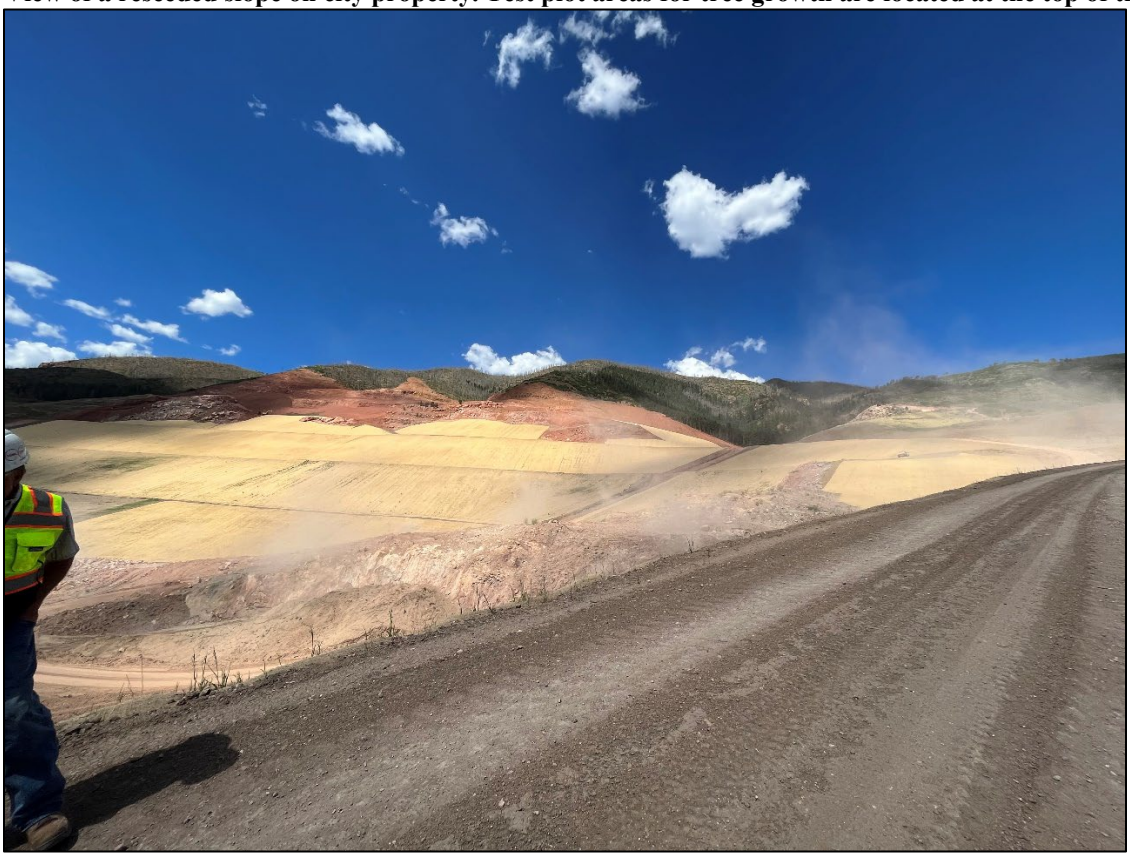

Photo 5: View west of the 'Dragon's back' area, matted slopes, and the beginning cuts for the main drainage channel.

Photo 6: The 'test plot' area on city property. Sweet clover and other shrubs are growing in abundance but lacks sufficient grass cover.

Photo 7: Recent growth in the City's portion of the permit, matting and planted occurred in the past month.

Photo 8: View west of the small impoundment area.

Photo 9: View of the BFR, the southern extent is begin filled in to grade, rocky material has been left below the BFR to serve as wildlife habitat.

Photo 10: View of the tension crack slope, topsoiling has begun on the southern portion of this slope.

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