



Minerals 3600 Mine and Reclamation Inspection

U.S. Department of the Interior
Bureau of Land Management
Royal Gorge Field Office



The BLM has conducted an inspection of your operations, which concludes whether the documented operations on file with BLM are compliant or noncompliant. Any non-compliance issues are reported in the Additional Actions Necessary section of this inspection.

Operation Type: ☒ Surface – continual ☐ Surface – intermittent ☐ Underground

Date: Jul 20, 2018 Time: 10:45 Weather: Sunny	Operation Name: CO-Quarries: Mica White Case Number: COC78191 CDRMS #: M1992058
Attendees BLM: A. Sanderson & D. Pike Operator(s): Greg Cleaves (mine manager/operator) Other(s): None	General Operation(s) are in compliance with documentation on file ☒ Yes ☐ No ☐ N/A Operation(s) and disturbance on-site coincide with the operations and access on file ☒ Yes ☐ No ☐ N/A

Inspection Purpose: ☐ Pre-Operations ☒ General ☐ Final ☐ Trespass ☐ Complaint

Inspection Items	Compliant	Non-Compliant	N/A
1. Method of Operations			
Hardrock Quarry, Pit, Other			
a. Hardrock Quarry	☒	☐	☒
• Operations Equipment	☒	☐	☐
• Processing Equipment	☒	☐	☐
• Blasting ☐ Internal ☐ External	☐	☐	☒
• Interim Benches	☒	☐	☐
• Final Benches	☒	☐	☐
• Working Floor	☒	☐	☐
b. Pit	☐	☐	☐
• Operations Equipment	☐	☐	☐
• Processing Equipment	☐	☐	☐
• Slopes	☐	☐	☐
c. Other	☐	☐	☒
• Operations Equipment	☐	☐	☐
• Processing Equipment	☐	☐	☐
2. Site Conditions			
a. Material/Waste Rock Management	☒	☐	☐
b. Erosion & Stormwater Control	☒	☐	☐
c. Man-made Structures	☒	☐	☐
d. Weed Management	☒	☐	☐
e. Safety Hazards	☒	☐	☐
f. Interim Reclamation	☐	☐	☒

Inspection Items	Compliant	Non-Compliant	N/A
3. Housekeeping			
a. Container Management	☒	☐	☐
b. Spills/Leaks Observed	☒	☐	☐
c. Hazardous Substances/POL Management	☒	☐	☐
d. General Housekeeping	☒	☐	☐
4. Access			
a. Road Management	☒	☐	☐
b. Berms	☒	☐	☐
c. Security	☒	☐	☐
d. Signage	☒	☐	☐
e. Surface Water Controls	☒	☐	☐
5. Quality Assurance/Quality Control			
a. Routine Site Conditions Monitoring	☒	☐	☐
b. Air, Water, Noise, Other Monitoring	☒	☐	☐
c. Monitoring Reporting	☒	☐	☐
d. Regulatory Submittals	☒	☐	☐
e. Other Agency/Entity Permits	☒	☐	☐
7. Final Reclamation	☐	☐	☒
a. Exploration/Sampling Location	☐	☐	☐
b. Access Roads/Trails	☐	☐	☐
c. Grading	☐	☐	☐
d. Revegetation	☐	☐	☐
e. Removal of Structures	☐	☐	☐
f. Free of Trash	☐	☐	☐

Additional Actions Necessary by Operator

Operator monitors dust from crushing/screening of processed material. Water trucks are used to minimize fugitive dust, however due to the lack of precipitation throughout the area, the site was dusty during the inspection. No offsite migration was observed nor migration into/toward any surficial water. Operator was spraying water at the time of the inspection. Site has never had an issue with dust in past inspections.

1. Include dust control mitigation into your Storm Water Management Plan (SWMP) to mitigate fugitive dust from crushing/screening processes and for the off-site transport of raw, final or fines materials.
2. Operator should reference their CDPHE 2014 APEN and 2017 Storm Water Permit (COG500000-Sand and gravel) which states the appropriate control measures in order to minimize the generation of fugitive dust.

Final Notes

General Comments:

1. Suggestive Dust Control Measures: Attach a water sprayer along the conveyor belt of the crusher/screener to minimize fugitive dust? This may help decrease dust during processing, however water saturation can interfere with the product by swelling the material if the material expands when wet. This could affect the weight of the final product.
2. Watch berm height on access road. Berms should be $\geq \frac{1}{2}$ the height of the largest vehicle/equipment's axle. Material (Fines) can be added to the berms if erosion from drought/wind continues.
3. Check both of these inspection items during the next inspection.

Proprietary Information: None

Date inspection shared with CDRMS: 03/14/19

Date inspection shared with Operator: 03/14/19

Images

Image 1:



Comment: Fines stockpiles located south of active operations. Adequate ingress/egress and angle of repose on stockpiles.

Image 2:



Comment: Signage upon entrance to active operational site

Images

Image 3:



Comment: Fines stockpiles located on staging floor south of the N/ NE working floor

Image 4:



Comment: Crusher and screener of 1/4" aquarium material. Fines screened separately from processed material. Dust was an issue on-site. Operator had water trucks spraying, however due to the minimal precipitation in the general area, the site was extremely dusty.

Images

Image 5:



Comment: Fines on the left and 1/4" aquarium rock on the right

Image 6:



Comment: Active highwall containing minimal black contaminant material. Depending on a client's needs will depend where on the highwall mining will occur

Images

Image 7:



Comment: Active highwall of pure white material. This material is most desired by clients since material is dyed following processing.

Image 8:



Comment: Haul road looking down from highwall. Berms are adequate for the type of equipment utilized.

Images

Image 9:



Comment: Water truck in parking area. Area where fuels and oils stored.

Image 10:



Comment: Access road to northern site. Berms need to be watched for erosion. Material will need to be added to increase berm size to the axle size of the largest piece of equipment using the access road.