Bureau of Land Management
Colorado River Valley Field Office
Minerals Inspection Report

General Information	
Date	9/6/2017
Project Name	Mid-Continent Limestone Quarry
Operator	RMR Aggregates, Inc.
Serial Number	COC-074205
Project Classification	Plan of Operations
Project Location	T5S R89W Sec36, Garfield County
Inspection Purpose	Regular site inspection (per 43 CFR 3809.600 (a))
Time Period Onsite	4 hours
Attendees	Jessica Lopez Pearce, BLM Geologist
	Bobby Wagner, RMR Aggregates, Inc. Director of Operations
	Justin Olin, RMR Aggregates, Inc. Mine Superintendent

Summary

I conducted an inspection of the RMR Aggregates, Inc. Mid-Continent Quarry on September 6, 2017. I visited the production bench, mill bench, lower road, and Transfer Trail access road. Items that require attention include: mine bench design, noxious weed eradication, and topsoil slope requirements. Some of these topics are items that should be included in the upcoming proposed Plan of Operations modification.

New Remarks

On September 6, 2017 I inspected the RMR Aggregates, Inc. Mid-Continent Quarry and was joined by Bobby Wagner and Justin Olin from RMR Aggregates, Inc. This site visit was a regular inspection per 43 CFR 3809.600. The weather was sunny and hazy; temperatures were in the 60's in the morning, warming to the 80's in the afternoon.

As I drove up Transfer Trail to the quarry, I observed "Heavy Truck Traffic" signage at the intersection of Traver Trail and Transfer Trail and at two other points along Transfer Trail (Photo 1). Per the January 14, 2011 BLM letter related to parking and access on Transfer Trail: "CalX will install a metal sign at the intersection of Transfer Trail Road and Traver Trail Road. The sign will be approximately 2 feet by 4 feet in size and will read: Caution, Semi Truck Traffic, Mine in Operation 7 Days a Week, Park in Designated Areas Only, Do Not Block Road." The 2011 letter further states: "CalX will install "Heavy Truck Traffic" signs at multiple points along Transfer Trail Road." This requirement has been fulfilled.

At the entrance gate to the operation, I observed a RMR Aggregates sign (Photo 2). The gate, a scale shack, and a scale were approved under 43 CFR 3809 in a BLM letter dated November 20, 1986 which states: "The installation of a gate, scales, and scale shack is approved subject to item 3b(3) of the reclamation plan submitted by Mid-Continent Resources, Inc." The sign and gate were recently granted an occupancy authorization under 43 CFR 3715 in a letter dated January 9, 2017. The scale and scale shack that were previously located at the gate have been removed. Haul trucks are currently weighed on a digital scale located on the south side of the mill building.

I drove into the quarry on the Lower Road and established a new photopoint at the junction between the middle road and the lower access road (Photo 3).

There are currently two mine benches and a third mine bench in development on the far west side (Photo 4). The lowest mine bench is separated from the production bench by a 55-foot tall highwall, which is mostly covered in loose rock. The lowest mine bench is approximately 600 feet long and 50 feet wide, with a 55 foot tall highwall above it. The second mine bench is approximately 600 feet long and 15 feet wide, with a 60 foot tall highwall above it. Quarrying activities include a combination of using an excavator attached with rotary rock cutters and drill-and-blast. Justin stated that the blasting contractor (Rock Solid Solutions) would be arriving that day and would establish approximately 200 shot holes in the lowest mine bench. The blasting date was tentatively set for next week. Per the June 15, 2009 BLM authorization letter, neighboring property owners are notified of blasting in advance. According to the 1982 Plan of Operations (Exhibit D, Section 4. Blasting Plan): "Limestone is quarried by developing benches in the solid rock with the bench width being at least twice the height of the high wall." This statement does not match what currently exists on the mine benches. Additionally, according to the 1989 approved Plan Amendment 1: "Only one quarry bench will be worked at a time. Bench widths will not exceed 60 feet and the length of the portion being quarried will be approximately 300 feet." Any upcoming Plan of Operations Modification should include an update to the mining plan and mine bench design.

While walking on the west side of the production bench, I observed an excavator with hydraulic rock hammer operating on the lowest mine bench (Photo 5). Several pieces of scrap metal are located on the western side of the production bench. I was told these would be removed before the blast occurred. Two types of noxious weeds were observed on this side of the production bench. I observed mullein and thistle growing in patches in this area (Photo 6). These noxious weeds must be addressed. The 2015 Colorado River Valley Field Office Resource Management Plan, Appendix K – Best Management Practices (BMPs) and Conservation Measures states: "WEED-17: Inspect and document all ground-disturbing activities in noxious weed infested areas for at least three growing seasons following completion of the project. For ongoing projects, continue to monitor until reasonably certain that no weeds are present. Plan for follow-up treatments based on inspection results."

In the central portion of the production bench, I observed a crusher, a new screen plant, a 2,500 gallon water tank for dust suppression, a transformer box, and several material stockpiles (Photo 7). The new screen plant was brought in to fulfill a contract from Colorado Egg for chicken grid product. The contract was for a total of 1,800 tons of material. The stockpiles present in the area consisted of chicken grit, an undersized stockpile, an oversized stockpile, and a large fines stockpile.

On the east side of the production bench, I observed an empty rusted tank and a double-wall diesel tank , as well as additional scrap metal, miscellaneous spare parts, and a dozer (Photo 8). The 2015 CRVFO RMP – Appendix K BMPs state: "MIN-7: Project materials which could be a hazard to public health, safety or resource value will be stored in appropriate secondary containment. No oil or lubricants will be drained onto the ground surface." Additionally, per BMP MIN-50: "Standard secondary containment shall hold 110% of the capacity of the largest single tank it contains and be impervious to any oil, glycol, produced water, or other toxic fluid for 72 hours. Earthen berms must be compacted and of fine material that will prevent seepage of any spill to surrounding area."

On the mill bench, I observed several stockpiles and a parked loader. In the central portion of the mill bench, from east to west there was a large fines stockpile, a small 8-3" stockpile, and a small 4-1" stockpile (Photo 9). The fines are used for road maintenance and a portion may be available for reclamation backfill. In the last round of road improvement, approximately 6,000 tons of fines were used. The 8-3" stockpile is used for aggregate. The 4-1" stockpile is fed to the mill for pulverized rock dust product.

The mill facility was operating during my visit. The facility was approved in BLM correspondence dated June 15, 2009. The conveyor, crushing, grinding, pulverizing, and bagging equipment were inactive while I walked thought the building, but operations started-up while I was still on site. The condition of the inside of the mill building was orderly. Per 43 CFR 3809.420 (b) (13): "During all operations, the operator shall maintain his or her structures, equipment, and other facilities in a safe and orderly manner."

Inside the mill facility, barrels and other containers of lubricants were stored on spill pallets. The 2015 CRVFO RMP – Appendix K BMPs state: "MIN-7: Project materials which could be a hazard to public health, safety or resource value will be stored in appropriate secondary containment. No oil or lubricants will be drained onto the ground surface." Additionally, per BMP MIN-50: "Standard secondary containment shall hold 110% of the capacity of the largest single tank it contains and be impervious to any oil, glycol, produced water, or other toxic fluid for 72 hours. Earthen berms must be compacted and of fine material that will prevent seepage of any spill to surrounding area."

In the boneyard west of the mill facility, I observed additional scrap metal, stacked pallets, a portable restroom, tires, hazardous material storage, and various supplies. I observed a highway diesel tank within a metal trough, which served as secondary containment. There was also a haul truck, two large trailers, a personal vehicle, and two propane tanks behind jersey barriers.

Topsoil is stored on the far western side of the mill bench (Photo 10). There were patches of mullein on and north of the stockpile that need to be eradicated. The soil stockpile appeared to be at approximately 2:1 slope and the quantity inadequate for future site reclamation. According to the stipulations included in BLM's approval of Amendment 1, dated July 21, 1989: "The stored topsoil will be graded to a slope of approximately 4:1 to prevent erosion and to facilitate seeding and establishment of grasses."

The southwestern side of the mill bench contains a stormwater retention pond (Photo 11). According to Justin, the stormwater structure was working as designed during the spring melt periods of high precipitation. The 2015 Colorado River Valley Field Office Resource Management Plan, Appendix K – Best Management Practices (BMPs) and Conservation Measures states: "MIN-17: Before activities take place, every pad, access road, or facility site will have an approved surface drainage plan (storm water management plan) for establishing positive management of surface water drainage, to reduce erosion and sediment transport. The drainage plan will include adaptive BMPs, monitoring, maintenance and reporting. BMPs may include run-on/run-off controls such as surface pocking or revegetation, ditches or berms, basins, and other control methods to reduce erosion. Pre-construction drainage BMPs will be installed as appropriate." The BPMs also state: "MIN-24: As detailed in the site plan for surface/storm water management, drainage from disturbed areas will be confined or directed to minimize erosion, particularly within 100 feet of all drainages. No runoff, including that from roads, will be allowed to flow into intermittent or perennial waterways without first passing through sediment-trapping mechanisms such as vegetation, anchored bales or catchments." Additionally, per 43 CFR 3809.420(b)(5): "all operators shall comply with applicable Federal and state water quality standards, including

the Federal Water Pollution Control Act, as amended (30 U.S.C. 1151 et seq.)." An upcoming Plan of Operations modification would benefit from a surface drainage plan.

Recommended Changes to Operations or Corrective Actions Needed

- Address and eradicate the mullein and thistle growing in numerous patches throughout the project area.
- Redesign the quarry highwall and mine benches to conform with the 1982 Plan of Operations and 1989 Plan Amendment 1 or include an updated mining plan and mine bench design in the upcoming proposed Plan of Operations modification to reflect the current mine operations.
- Regrade topsoil stockpile to the 4:1 slope as stated in the 1989 Plan Amendment 1 or include the current topsoil conditions in the upcoming proposed Plan of Operations modification.
- Per the 2015 Colorado River Valley Field Office Resource Management Plan, Appendix K- Best Management Practices: submit a surface drainage plan (or stormwater management plan) with the upcoming proposed Plan of Operations modification.

Photos

Photo 1. One of two Heavy Truck Traffic signs northbound along Transfer Trail.

Photo 2. At entrance gate, looking north to gate and RMR sign.

Photo 3. New photopoint, lowing north from Lower Road and Middle Road junction.

Photo 4. Looking eastward at the lowest mine bench, middle mine bench and associated highwalls.

Photo 5. Looking west at excavator on lowest mine bench and scrap metal.

Photo 6. Looking west from production bench to patches of mullein and thistle (indicated with red arrow).

Photo 7. Looking east from central production bench to new screenplant, crusher, and stockpiles.

Photo 8.

Photo 9. Looking north from central mill bench photo point

Photo 10. Looking west from mill facility at items in boneyard and topsoil stockpile.

Photo 11. Looking south from mill bench at sediment control structure.