

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:		MINE/PROSPECTING ID#:	MINERAL:	COUNTY:		
Monarch DENM Mine		M-2022-009	Sand and gravel	Weld		
INSPECTION TYPE:		INSPECTOR(S):	INSP. DATE:	INSP. TIME:		
Preoperation Inspection		Robert Zuber, P.E.	May 16, 2022	09:00		
OPERATOR:		OPERATOR REPRESENTATIVE:	TYPE OF OPERATION:			
Monarch Mountain Minerals and Aggregates,		Eric Leigh, Kyle Regan	112c - Construction Regular Operation			
REASON FOR INSPECTION:		BOND CALCULATION TYPE:	BOND AMOUNT:			
Preoperation Inspection		None	No Bond Held			
DATE OF COMPLAINT:		POST INSP. CONTACTS:	JOINT INSP. AGENCY:			
NA		None	None			
WEATHER:	INSPECTOR'S SIGNATURE:		SIGNATURE DATE:			
Clear			May 22, 2022			
	Phot D. 24					

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>N</u>	(RD) ROADS <u>N</u>
(HB) HYDROLOGIC BALANCE Y	(BG) BACKFILL & GRADING <u>N</u>	(EX) EXPLOSIVES <u>N</u>
(PW) PROCESSING WASTE/TAILING <u>N</u>	(SF) PROCESSING FACILITIES N	(TS) TOPSOIL <u>N</u>
(MP) GENL MINE PLAN COMPLIANCE- <u>N</u>	(FW) FISH & WILDLIFE N	(RV) REVEGETATION <u>N</u>
(SM) SIGNS AND MARKERS Y	(SP) STORM WATER MGT PLAN <u>N</u>	(RS) RECL PLAN/COMP <u>N</u>
(ES) OVERBURDEN/DEV. WASTE <u>N</u>	(SC) EROSION/SEDIMENTATION <u>N</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

APPLICATION BACKGROUND

This was a pre-operational inspection of the Monarch DENM Mine conducted by Rob Zuber with the Division of Reclamation, Mining and Safety (Division/DRMS) on May 16, 2022. Kyle Regan with Civil Resources, LLC and Eric Leigh with Monarch Mountain Minerals and Aggregates, LLC were present during the inspection. The weather was warm and partly cloudy. The ground was dry other than mud from irrigation return flows.

The Construction Materials Regular (112) Operation Reclamation Permit application was received by the Division on March 4, 2022. The application was deemed complete on March 16, 2022. No objections were received by the Division. Comment letters from the US Army Corps of Engineers, the Division of Water Resources, the Colorado Parks and Wildlife, and History Colorado were received and forwarded to the Applicant.

The application has not been approved by the Division. Adequacy letters were sent on May 13 and May 17, 2022, and the Division is awaiting responses.

The application proposes a 544-acre site with most of that area to be disturbed (one adequacy item will clarify the amount of disturbance). The site is located (mostly) south of WCR 44 and west of Highway 60, approximately five miles north of Platteville, CO. A small portion of the site is north of WCR 44.

Topsoil depth at the site is estimated to vary considerably, from 10 inches to several feet. Topsoil will be stockpiled near the edges of pits. Overburden will be mined along with sand and gravel, and, like topsoil, the depth varies considerably. The depth to bedrock is estimated to vary from 13 feet on the west side of the site to 58 feet on the east side. Groundwater elevations are generally six to 20 feet below the surface.

Pits will be excavated to a depth of 50 feet. No mining will be conducted below the groundwater table prior to construction and approval of slurry walls for the lined cells. No mining will be conducted below the groundwater table prior to approval of a Substitute Water Supple Plan for unlined cells.

Processing onsite will entail wet screening but no crushing.

The perimeter slopes of the pits will be mined and reclaimed at the final 3H:1V grade. Topsoil will be replaced above the high water elevation at a minimum depth of six inches.

The proposed post-mining land use for much of the site is developed water resources. Other portions of the site will be revegetated. Details, including the seed mixture, will be provided through the adequacy process.

OBSERVATIONS FROM THE INSPECTION

The required notice sign was posted at the entrance of the site off of WCR 60. Other signs were not seen during the inspection, and they were apparently damaged or blown away by wind. Four days after the inspection, Kyle Regan sent photographs of the signs after they were replaced or fixed.

Most permanent man-made structures within 200 feet of the proposed affected area appear to have been identified by the Applicant (Map C-3). The structures that are not on this map all appear to be owned by the landowner, including an irrigation pipeline and offices and outbuildings. **Map C-3 should be revised to include these structures. This should be done as part of the adequacy process**.

No wetland areas were observed within the proposed permit boundary. No weed patches were observed. Much of the site is currently irrigated farmland, including alfalfa and grass hay.

Photographs taken during the inspection are attached.

Please contact me with comments or questions at the Division of Reclamation, Mining and Safety, 1313 Sherman Street, Room 215, Denver, CO 80203; by telephone at 720-601-2276; or by email at rob.zuber@state.co.us.

PHOTOGRAPHS



Looking northeast at the landowners' small office and out buildings near northwest corner of the site.



Looking south at irrigation of alfalfa field, near center of site.



Looking south along the western boundary, approximate center of site in the north/south direction.



Looking east towards landowners' main office.



Looking south towards WCR42 with United Power lines along road.



Looking east at Western Mutual Ditch, near south end of site.



Looking south at road near Doolittle house, near south end of site.

Inspection Contact Address Eric Leigh, Kyle Regan Monarch Mountain Minerals and Aggregates, LLC 5 Concourse Pkwy Suite 1900 Atlanta, GA 30328

CC: Michael Cunningham, DRMS