

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:		MINE/PROSPECTING ID#:	MINERAL:	COUNTY:
Douglas Mountain Mine		M-2018-016	Sand and gravel	Clear Creek
INSPECTION TYPE:		INSPECTOR(S):	INSP. DATE:	INSP. TIME:
Pre-Operation Inspection		Peter S. Hays	December 19, 2018	12:00
OPERATOR:		OPERATOR REPRESENTATIVE:	TYPE OF OPERATION:	
Empire Aggregate, Inc.		Ben Langenfeld	112c - Construction Regular Operation	
REASON FOR INSPECTION:		BOND CALCULATION TYPE:	BOND AMOUNT:	
Pre-Operation Inspection		None	No Bond Held	
DATE OF COMPLAINT:		POST INSP. CONTACTS:	JOINT INSP. AGENCY:	
NA		None	None	
WEATHER:	INSPECTOR'S SIGNATURE:		SIGNATURE DAT	E:
Snowing	f.Ang		December 24, 2018	

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 <u>N</u>	(BG) BACKFILL & GRADING <u>N</u>	(EX) EXPLOSIVES <u>N</u>
(PW) PROCESSING WASTE/TAILING <u>N</u>	(SF) PROCESSING FACILITIES <u>N</u>	(TS) TOPSOIL <u>N</u>
(MP) GENL MINE PLAN COMPLIANCE- <u>N</u>	(FW) FISH & WILDLIFE <u>N</u>	(RV) REVEGETATION <u>N</u>
(SM) SIGNS AND MARKERS <u>N</u>	(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 and found in compliance / N = Not inspected / NA = Not applicable to this operation / PB = Problem cited / PV = Possible violation cited

OBSERVATIONS

This was a pre-operational inspection of the proposed Douglas Mountain Mine application amendment (AM-01) conducted by Peter Hays with the Division of Reclamation, Mining and Safety (Division/DRMS). Mr. Ben Langenfeld with Greg Lewicki and Associates was present during the inspection. The proposed mine site was covered by approximately three (3) inches of snow and it was snowing during the inspection.

The 112 construction materials permit application amendment was received by the Division on August 18, 2018. The application amendment was deemed complete on October 29, 2018. The Applicant published public notice as required by Rule 1.6.2(d) for four consecutive weeks. The last notice was published on November 28, 2018. The public comment period for the application amendment ended on December 18, 2018. Three hundred and forty (340) letters of objection from two hundred and seventy four (274) individuals to the original application and application amendment were received by the Division during the public comment periods. The objection letters were forwarded to the Operator for review and response. The notice sign was observed at the entrance to the site from CR 257 as required by Rule 1.6.2(b). The current decision date for the application amendment is January 28, 2019.

The Douglas Mountain Mine application amendment proposes a 68.2 acre construction materials site located in Clear Creek County. The proposed mine site is currently an undisturbed plateau. The Applicant estimates the minable sand and gravel deposit is more than 200 feet deep with 12 inches of topsoil above the deposit. The Applicant intends to stop mining two (2) feet above the anticipated groundwater elevation. No groundwater would be exposed during the mining operation. The life of mine is estimated at 15 years by the Applicant. The mining excavation would start in the southeast corner of the terrace and proceed to the north and west towards Empire, CO and the West Fork of Clear Creek. The overall mine slope would be maintained at a minimum 3H:1V slope. Mining activities, excavation and processing, would occur between 9 to 12 months a year weather permitting.

The proposed reclamation plan states 54.6 acres of disturbance would be reclaimed to a post-mining land use of rangeland. The site access road and internal roads would remain post-reclamation for the landowner's use. Reclamation is planned to occur concurrently as mining progresses following the initial 26.1 acre disturbance area. The reclamation activities would include replacement of 12 inches of topsoil, seeding with a rangeland seed mixture, mulching and weed control measures.

The proposed amended mine site was observed during the inspection. The proposed amended mine site was as described by the Applicant in the permit application amendment consisting of a well-vegetated grassland plateau bisected from east to west by a two-track road, a gas line and an overhead powerline.

The depth to water and depth to bottom of monitoring wells TH-4 and TH-5 were measured by the Division. The depth to water was measured at 107 and 90 feet below the existing grade, respectively. The total depth was measured at 120 and 100 feet below the existing grade, respectively. Borehole TH-02, the Colorado Society for Crippled Children (31816), the Easter Seals (54580-MH) and the Norseman of the Rockies (217822) wells were searched for but were not located during the inspection.

Photographs taken during the inspection are attached.

PHOTOGRAPHS



View of TH-5



View of site from TH-05 looking west



View of site from approx. location of TH-2 looking north



View of the site from the west side looking east



View of the site from the northeast corner looking south

Inspection Contact Address

Ben Langenfeld Empire Aggregate, Inc. 1935 65th Avenue Greeley, CO 80634

Ec: Michael Cunningham, DRMS