




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: Slab Canyon Quarry	MINE/PROSPECTING ID#: M-1977-347	MINERAL: Limestone (general)	COUNTY: Larimer
INSPECTION TYPE: Monitoring	INSPECTOR(S): Amy Eschberger, Eric Scott	INSP. DATE: August 16, 2017	INSP. TIME: 11:45
OPERATOR: Holcim (US) Inc.	OPERATOR REPRESENTATIVE: Mike Toelle	TYPE OF OPERATION: 112c - Construction Regular Operation	
REASON FOR INSPECTION: Normal I&E Program	BOND CALCULATION TYPE: Partial Bond	BOND AMOUNT: \$184,819.00	
DATE OF COMPLAINT: NA	POST INSP. CONTACTS: None	JOINT INSP. AGENCY: None	
WEATHER: Clear	INSPECTOR'S SIGNATURE: 	SIGNATURE DATE: November 15, 2017	

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>Y</u>	(FN) FINANCIAL WARRANTY----- <u>Y</u>	(RD) ROADS----- <u>Y</u>
(HB) HYDROLOGIC BALANCE----- <u>Y</u>	(BG) BACKFILL & GRADING----- <u>Y</u>	(EX) EXPLOSIVES----- <u>NA</u>
(PW) PROCESSING WASTE/TAILING---- <u>N</u>	(SF) PROCESSING FACILITIES----- <u>NA</u>	(TS) TOPSOIL----- <u>Y</u>
(MP) GENL MINE PLAN COMPLIANCE- <u>Y</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>Y</u>	(RS) RECL PLAN/COMP-- <u>Y</u>
(ES) OVERBURDEN/DEV. WASTE----- <u>Y</u>	(SC) EROSION/SEDIMENTATION--- <u>N</u>	(ST) STIPULATIONS----- <u>N</u>
(AT) ACID OR TOXIC MATERIALS----- <u>NA</u>	(OD) OFF-SITE DAMAGE----- <u>Y</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 inspection of the Slab Canyon Quarry (File No. M-1977-347) was conducted by Amy Eschberger and Eric Scott of the Division of Reclamation, Mining and Safety (Division) at the request of the operator. The operator, Holcim (US) Inc. was represented by Mike Toelle during the inspection. The site is located approximately 11.5 miles north of Livermore, CO in Larimer County. The site can be accessed from the east via Co Rd 21. The approved post-mining land use for the site is rangeland.

This is a 112c operation permitted for 250 acres to mine limestone for use in the operator's cement plant located in LaPorte, CO (now closed). The site is situated at the top of a ridge. Mining was limited to Phase 1 and completed many years ago. The upper portion of the site has been reclaimed utilizing the stone berm filters and tree pads approved in Amendment No. 1 in 1994. The berm filters are well vegetated with perennial grasses, and the ponderosa pine trees planted in the berms are thriving. Trees planted higher on the slope are larger and more mature. According to annual reports submitted by the operator, the stone berm filters and tree pads were constructed in 1997, and were seeded and planted with trees in 1998. Except for the vegetated berms, much of the ridge top consists of bare sandstone, as approved in the reclamation plan. However, some volunteer pine trees are present outside of the berm areas. Mined walls at the top of the ridge were backfilled and graded in 2003. A radio tower and transmitter building were constructed on top of the ridge as approved by Technical Revision No. 1 in 2004. Reclamation of disturbed land at the top of the ridge appears to be successful, and no problems were observed in this area.

The Division observed the disturbed area along the eastern side of the ridge which was left as bare rock with berms constructed along the benches. The Division observed evidence of where trees had been planted along the berms. However, none of the trees survived in this area. Additionally, portions of the berms have been eroded allowing rocks to flow downhill. The Division recommends the operator reassess the reclamation plan for this area giving existing conditions. The eroded berms will need to be repaired to create a stable land surface in accordance with Rule 3.1.5(3). The operator will also need to either replant the trees and revegetate the berms in accordance with the approved reclamation plan, or submit a Technical Revision to revise the reclamation plan for this area. The Division observed weeds growing at the base of the slope, particularly Common mullein which is a state-listed noxious weed species. Therefore, the Division recommends the operator implement the approved weed control plan for the site as soon as feasible.

During the last inspection of the site on June 30, 2015, the Division noted the steeper walls of the small open pit near the base of the site would require regrading, retopsoiling, and revegetation. According to the 2016 annual report submitted by the operator, this work was completed in late 2015. The Division observed this area during the current inspection and confirmed the earthwork and seeding has been completed. The pit walls were well vegetated with native grasses and shrubs. Vegetation across the pit floor was not as dense as that across the slopes. The Division recommends the operator continue to monitor revegetation efforts in this area and reseed the pit floor as needed.

Due to the length of time that has passed since mining activities last occurred at the site, the Division strongly advises the operator to complete final reclamation of the site as soon as possible.

Inspection Contact Address

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