

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:
Buffalo No 1	M-1978-011	Clay (general)	Elbert
INSPECTION TYPE:	INSPECTOR(S):	INSP. DATE:	INSP. TIME:
Monitoring	Amy Eschberger	August 12, 2014	13:15
OPERATOR:	OPERATOR REPRESENTATIVE:	TYPE OF OPERATION:	
General Shale Brick, Inc.	Jason McGraw	112c - Construction Regular Operation	

REASON FOR INSPECTION:	BOND CALCULATION TYPE:	BOND AMOUNT:
Normal I&E Program	None	\$36,314.00
DATE OF COMPLAINT:	POST INSP. CONTACTS:	JOINT INSP. AGENCY:
NA	None	None
WEATHER:	INSPECTOR'S SIGNATURE:	SIGNATURE DATE:
Clear	Ann. Eichberger	October 15, 2014
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The following inspection topics were identified as having Problems or Possible Violations. OPERATORS SHOULD READ THE FOLLOWING PAGES CAREFULLY IN ORDER TO ASSURE COMPLIANCE WITH THE TERMS OF THE PERMIT AND APPLICABLE RULES AND REGULATIONS. If a Possible Violation is indicated, you will be notified under separate cover as to when the Mined Land Reclamation Board will consider possible enforcement action.

INSPECTION TOPIC: Gen. Compliance With Mine Plan

PROBLEM/POSSIBLE VIOLATION: Problem: The current mining plan and mining plan map need to be updated and clarified pursuant to C.R.S. 34-32.5-112 (1)(c)(VI). The operator must provide sufficient information to describe or identify how the operator intends to conduct the operation.

CORRECTIVE ACTIONS: The operator shall submit a Technical Revision, with the required \$216 revision fee, to update and clarify the current approved mining plan and mining plan map to reflect existing and proposed activities by the corrective action date.

CORRECTIVE ACTION DUE DATE: 11/15/14

OBSERVATIONS

This was a normal monitoring inspection of the Buffalo No 1 mine (Permit No. M-1978-011) conducted by Amy Eschberger of the Division of Reclamation, Mining, and Safety (Division). Mr. Jason McGraw represented the Operator, General Shale Brick, Inc. for the inspection. The permit area is comprised of two separate mining areas in Elbert County, called Phase III (9.8 acres) and Phase IV (197.9 acres). These phases are located in relatively level areas on the eastern side of a prominent ridge, east of Comanche Creek Road. Currently, only the Phase III area, located approximately 1.3 miles north of Phase IV has been mined. Only Phase III was visited during this inspection. The Phase III mining area is located approximately 11.5 miles northeast of Kiowa, Colorado, on land owned by Steven Zurich. This site is accessed via a gated entrance off of Co Rd 150. The access road is shared with a residence located just east of the permit area. The post-mining land use for both phases in this permit is rangeland.

This is a 112c operation permitted for a total of 210 acres to mine clay product for brick manufacturing. The maximum allowed disturbed acreage at any time for this operation is 30 acres. This permit is the result of a conversion from a 110c permit approved on 03/22/1990, at which time, the permit area was 410 acres. Three acreage reductions were approved between 2000 and 2008, which released 200 acres from the permit area, including Phases I, II, and V. A Succession of Operators (SO-01) from Robinson Brick Company to the current Operator was approved for this permit on 07/03/2008. The Division is currently reviewing a Technical Revision (TR-01) that was submitted on 09/17/2014 to import 20,000 tons of inert fill (scrap brick generated from the Operator's Denver brick plant) to this site for reclamation.

During the inspection, it was warm and sunny, and the ground was dry. A permit sign was posted at the gated entrance to the site off of Co Rd 150 (Photo 1). <u>However, the sign should have the current Operator's name (Not Robinson Brick Company)</u>, and "MLRD" should be corrected to "MLRB" for Mined Land Reclamation <u>Board.</u> The permit boundary was delineated by fencelines. No mining activities were occurring during the inspection. A small wheeled dozer was stored on site (Photo 2). Mr. McGraw indicated that no mining has occurred at this site since 2006; however, stockpiled material is hauled off site every year. According to Division records, this is not an intermittent operation. As discussed with Mr. McGraw during the inspection, <u>if mining activities (e.g., excavating, processing, hauling) occur at the site for less than 180 days per year, the Operator is required to apply for Intermittent Status per C.R.S. 34-32.5-103(11)(b). If mining activities do not occur every year at the site, the Operator is required to file for Temporary Cessation per C.R.S. 34-32.5-103(11)(b) and Rule 1.13.5(1-2).</u>

Current disturbance in the Phase III area is approximately 8.9 acres, and includes an excavated pit (in the southwestern portion; Photo 3), a stockpile pad area with a product stockpile (in the northern portion; Photo 4), and a stockpile of topsoil/overburden (in the southern portion). The short access road located north of the site which was previously used by the operation appears to no longer be in use. The road currently used for pit access runs along the northeastern permit boundary (Photo 5), and appears to be shared by a residence located east of the pit. According to historical imagery shown in Google Earth, the access road was moved to its current location in 2006. **Because the current access road is not included in the approved permit files for this site, a Problem will be cited in this report and corrective actions will be required (see page 1).** The Operator shall submit a Technical Revision to update the Mining Plan and Mining Plan Map for this site (Phase III). In addition, the Operator shall provide the Division with a signed lease agreement from the owner of the residence, stating the Operator is allowed to use the private road for mine access, and whether or not the road is to be reclaimed. The approved reclamation plan for this site states the haul road will be reclaimed. However, much of the currently used haul road is located outside of the permit area. If the road will not be reclaimed, it will need to be added to the permit area through the submittal of an Amendment. If the road will not be reclaimed, then including it in the updated Mining Plan and Mining Plan Map will be sufficient.

The excavated pit is 30-45 feet deep with highwall slope gradients of 1H:1V to 2H:1V. No standing water was observed in the pit during the inspection. However, wetland vegetation has established on the pit floor (Photo 6), indicating the pit floor is inundated to a depth and a period long enough for emergent wetland vegetation to persist. C.R.S. 34-32.5-116(4)(h) requires the Operator to minimize disturbances to the prevailing hydrologic balance of the affected land and of the surrounding area. In addition, Rule 3.1.6(1)(a) requires the Operator to be in compliance with applicable Colorado water laws and regulations governing injury to existing water rights. Therefore, the Division recommends the Operator backfill the pit and/or implement the water management plan for this site to divert surface runoff around the pit. Otherwise, the Operator will need to demonstrate that the operation is in compliance with the Office of the State Engineer (SEO). Mr. McGraw indicated during the inspection that mining of this portion of the permit area is complete, and the pit will be backfilled in the near future. The Division will follow up on this issue in the next inspection.

Vegetation that has volunteered in the pit (other than wetland vegetation) includes native grasses and forbs, annual weeds such as Russian thistle and kochia, and several young trees. A few of the trees are Tamarisk (salt cedar), which is a state-listed noxious weed species. Currently, Tamarisk growth is in small numbers and is only in this portion of the permit area. <u>The Operator will need to remove these Tamarisk trees, and continue to monitor their growth and spread in the permit area.</u>

The required Financial Warranty for this permit was increased in 2008 from \$30,900.00 to \$36,314.00, for a disturbed area of approximately 9 acres in Phase III. No additional acres appear to have been affected since 2008. After conducting the recent inspection, the Division has determined that the current bond is adequate for reclamation of the site. However, the Operator shall notify the Division before disturbing land in Phase IV so the required Financial Warranty can be re-evaluated.

PHOTOGRAPHS



Photo 1. View of permit sign posted at entrance to site off of Co Rd 150.



Photo 2. View looking north at stockpile pad area where wheeled dozer is stored.



Photo 3. View looking south at excavated pit located in southwestern portion of site.



Photo 4. View looking south at stockpile pad area, showing material stockpile (at right).



Photo 5. View of mine access road located on eastern edge of site. The road is also used as residential access by adjacent homeowner (indicated).



Photo 6. View showing wetland vegetation established on pit floor.

GENERAL INSPECTION TOPICS

The following list identifies the environmental and permit parameters inspected and gives a categorical evaluation of each

(AR) RECORDS <u>Y</u>	(FN) FINANCIAL WARRANTY <u>N</u>	(RD) ROADS <u>Y</u>
(HB) HYDROLOGIC BALANCE <u>N</u>	(BG) BACKFILL & GRADING <u>Y</u>	(EX) EXPLOSIVES <u>NA</u>
(PW) PROCESSING WASTE/TAILING <u>Y</u>	(SF) PROCESSING FACILITIES <u>NA</u>	(TS) TOPSOIL <u>Y</u>
(MP) GENL MINE PLAN COMPLIANCE- <u>PB</u>	(FW) FISH & WILDLIFE <u>N</u>	(RV) REVEGETATION Y
(SM) SIGNS AND MARKERS <u>Y</u>	(SP) STORM WATER MGT PLAN <u>N</u>	(SB) COMPLETE INSP Y
(ES) OVERBURDEN/DEV. WASTE <u>Y</u>	(SC) EROSION/SEDIMENTATION Y	(RS) RECL PLAN/COMP Y
(AT) ACID OR TOXIC MATERIALS <u>NA</u>	(OD) OFF-SITE DAMAGE <u>Y</u>	(ST) STIPULATIONS <u>NA</u>

Y = Inspected and found in compliance / N = Not inspected / NA = Not applicable to this operation / PB = Problem cited / PV = Possible violation cited

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CC: Tom Kaldenbach, DRMS