

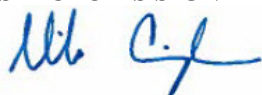
**COLORADO**Division of Reclamation,  
Mining and Safety

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.

<b>MINE NAME:</b> Chieftain South Mine	<b>MINE/PROSPECTING ID#:</b> M-1981-148	<b>MINERAL:</b> Clay (general)	<b>COUNTY:</b> Jefferson
<b>INSPECTION TYPE:</b> Monitoring	<b>INSPECTOR(S):</b> Michael A. Cunningham	<b>INSP. DATE:</b> May 30, 2017	<b>INSP. TIME:</b> 13:00
<b>OPERATOR:</b> General Shale Brick, Inc.	<b>OPERATOR REPRESENTATIVE:</b> Jason McGraw	<b>TYPE OF OPERATION:</b> 112c - Construction Regular Operation	

<b>REASON FOR INSPECTION:</b> Normal I&E Program	<b>BOND CALCULATION TYPE:</b> Complete Bond	<b>BOND AMOUNT:</b> \$315,000.00
<b>DATE OF COMPLAINT:</b> NA	<b>POST INSP. CONTACTS:</b> None	<b>JOINT INSP. AGENCY:</b> None
<b>WEATHER:</b> Clear	<b>INSPECTOR'S SIGNATURE:</b> 	<b>SIGNATURE DATE:</b> July 19, 2017

**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:** Availability Of Records

**PROBLEM/POSSIBLE VIOLATION:** Problem: The Division does not have a copy of a Mining Plan Map or a Reclamation Plan Map which accurately depicts the affected area. Pursuant to Rule 6.4.3 and 6.4.6 of the Construction Materials Rule the Operator is to provide a Mining Plan and Reclamation Plan Map which portray the total area to be involved in the operation.

**CORRECTIVE ACTIONS:** The Operator shall submit a Mining and Reclamation Plan Map which depict the current permit area. The maps must be drawn to scale no smaller than appropriate to clearly show all elements that are required to be delineated by the Act and the Rules; show a north arrow, note any section corners adjacent to the operation, and indicate the date illustrated. At a minimum, the maps must include the information outlined in Rule 6.2.1(2), 6.4.3 and 6.4.6. The maps shall be submitted to the Division in the form of a Technical Revision along with a revision fee of \$216.00 on or before the corrective action date.

**CORRECTIVE ACTION DUE DATE:** 9/18/17

**INSPECTION TOPIC:** Availability Of Records

**PROBLEM/POSSIBLE VIOLATION:** Problem: The current reclamation plan needs to be updated and clarified pursuant to C.R.S. 34-32.5-116 (1). The operator must follow approved reclamation plan or provide sufficient information to describe or identify how the operator intends to conduct reclamation.

**CORRECTIVE ACTIONS:** The operator shall submit a Technical Revision, with the required \$216 revision fee, to update and clarify the current approved reclamation plan to account for reclamation of the pond within the mine pit. The Technical Revision shall be submitted on or before the corrective action date.

**CORRECTIVE ACTION DUE DATE:** 9/18/17

**INSPECTION TOPIC:** Hydrologic Balance

**PROBLEM/POSSIBLE VIOLATION:** Problem: The Division has no evidence that the operator has a valid well permit for the exposed groundwater at the site. This is a problem related to 34-32.5-116(4)(h) of the Colorado Revised Statutes and 3.1.6(1)(a) of the Construction Materials Rules and Regulations governing injury to existing water rights.

**CORRECTIVE ACTIONS:** The operator shall provide a copy of a valid well permit from the Office of the State Engineer on or before the corrective action date.

**CORRECTIVE ACTION DUE DATE:** 9/18/17

### **OBSERVATIONS**

The inspection was conducted by Michael Cunningham of the Division of Reclamation, Mining and Safety (Division). Jason McGraw was present on behalf of General Shale Brick, Inc. The Chieftan South Mine is located just southeast of the West Alameda Parkway overpass at Highway C-470 in Jefferson County. The commodity of interest is clay and the post-mining land use is rangeland.

The Operation is permitted for 98.52 acres of disturbance and the Operator has affected 58.3 acres. No mining was occurring during the inspection. The Operator performs mining campaigns in which material is mined over a period of several months and is stockpiled for later removal and transport to processing facilities. The last time mining occurred at this operation was in 2005. However, the Operator regularly pulls material from the onsite product stockpiles.

The Operator has salvaged and stockpiled topsoil along the west side of the pit. The topsoil stockpiles are well vegetated and stable. The Division observed an overburden stockpile as well as two product stockpiles located along the east side of the pit. The Operation currently consists of a single pit which is approximately 16 acres in size. Mining operations are progressing to the north.

#### **Availability Of Records:**

On December 16, 2013, the Division approved Acreage Reduction Request No. 3, which released 10.18 acres from Stage 3 of the mining operation. The Division does not have a Mining or Reclamation Plan Map which depicts the current permit area of 98.52 acres. This matter has been cited as a problem and will require corrective action by the Operator, please see the first page of this report for additional information.

#### **Financial Warranty:**

The Division holds a financial warranty in the amount of \$315,000.00. A complete bond evaluation was performed as a part of the inspection and the Division determined the financial warranty is adequate.

Hydrologic Balance:

The Operator informed the Division they are in the process of developing a stormwater management plan, which will address overall site drainage as it relates to the housing development to the south of the mine. The housing development is situated within the historical drainage for the area. The Operator has worked to mitigate any potential off-site impacts from stormwater flowing through the mine site onto the housing development by constructing temporary berms to direct water away from the homes. Stormwater is being routed to the sediment pond located south of the pit, which then discharges to the natural drainage system. The stormwater management plan is being developed in conjunction with Jefferson County and Brookfield Residential Properties. The Division informed the Operator the final stormwater management plan and stormwater designs would need to be submitted to the Division as a Technical Revision.

The Division observed exposed groundwater water in the south end of the pit. According to the Operator, the pond is approximately 20 feet deep. The Operator has previously demonstrated compliance with the Office of the State Engineer by providing a copy of the well permit and water decree. The well permit on record expired on March 25, 2012. This matter has been cited as a problem and will require corrective action by the Operator; please see the first page of this report for additional detail.

A file review found the current Reclamation Plan does not account for a 20' deep pond in the mine pit. The Reclamation Plan will need to be updated to describe how the Operator intends to reclaim the pond. This matter has been cited as a problem and will require corrective action by the Operator, please see the first page of this report for additional detail.

Signs and Markers:

The permit sign was posted at the site entrance and the boundary of the affected land was clearly delineated.

Sediment Control:

During the inspection, the Division noted minor erosion from the access road at the north end of the pit. The berm adjacent to the access road contained a low spot, which allowed water to flow off the access road and down the north facing slope. No off-site areas were impacted by erosion. Following the inspection, the Operator provided photographs showing the repair of the berm along the access road. This problem is considered to be resolved.



## PHOTOGRAPHS



1. Overview of pit, facing south.



2. Product stockpiles.



3. Sediment pond.



4. Pond at south end of pit.



5. South end of topsoil stockpile, facing north.



6. Erosion along access road.

### GENERAL INSPECTION TOPICS

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

(AR) RECORDS----- <u>PB</u>	(FN) FINANCIAL WARRANTY----- <u>Y</u>	(RD) ROADS----- <u>N</u>
(HB) HYDROLOGIC BALANCE----- <u>PB</u>	(BG) BACKFILL & GRADING----- <u>N</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>Y</u>	(SP) STORM WATER MGT PLAN---- <u>N</u>	(CI) COMPLETE INSP---- <u>Y</u>
(ES) OVERBURDEN/DEV. WASTE----- <u>N</u>	(SC) EROSION/SEDIMENTATION--- <u>Y</u>	(RS) RECL PLAN/COMP-- <u>N</u>
(AT) ACID OR TOXIC MATERIALS----- <u>N</u>	(OD) OFF-SITE DAMAGE----- <u>N</u>	(ST) STIPULATIONS----- <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

#### Inspection Contact Address

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