




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: Apache 9	MINE/PROSPECTING ID#: M-1978-009	MINERAL: Clay (general) and sand and gravel	COUNTY: El Paso
INSPECTION TYPE: Surety-Related Inspection	INSPECTOR(S): Timothy Cazier, P.E.	INSP. DATE: June 29, 2022	INSP. TIME: 10:30
OPERATOR: General Shale Brick, Inc.	OPERATOR REPRESENTATIVE: Jason McGraw	TYPE OF OPERATION: 112c - Construction Regular Operation	
REASON FOR INSPECTION: Surety Release Requested	BOND CALCULATION TYPE: Complete Bond	BOND AMOUNT: \$181,161.00	
DATE OF COMPLAINT: NA	POST INSP. CONTACTS: Colo. Land Board	JOINT INSP. AGENCY: None	
WEATHER: Clear	INSPECTOR'S SIGNATURE: 	SIGNATURE DATE: January 31, 2023	

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>Y</u>	(SF) PROCESSING FACILITIES----- <u>Y</u>	(TS) TOPSOIL----- <u>Y</u>
(MP) GENL MINE PLAN COMPLIANCE- <u>Y</u>	(FW) FISH & WILDLIFE----- <u>Y</u>	(RV) REVEGETATION---- <u>Y</u>
(SM) SIGNS AND MARKERS----- <u>Y</u>	(SP) STORM WATER MGT PLAN---- <u>N</u>	(RS) RECL PLAN/COMP-- <u>Y</u>
(ES) OVERBURDEN/DEV. WASTE----- <u>Y</u>	(SC) EROSION/SEDIMENTATION--- <u>Y</u>	(ST) STIPULATIONS----- <u>Y</u>
(AT) ACID OR TOXIC MATERIALS----- <u>Y</u>	(OD) OFF-SITE DAMAGE----- <u>Y</u>	

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

OBSERVATIONS

This inspection was conducted by Tim Cazier of the DRMS as part of the request for a surety reduction (SR-1) keeping the maximum disturbed area at 85 acres or less related to the approved phased bonding approach for this site. Mr. McGraw had emailed the DRMS an advance copy of the surety reduction request, but the official version was not received until the day of the inspection. The Permittee (General Shale Brick, Inc.) was represented by Mr. Jason McGraw who was present for the inspection. The Apache 9 Pit north entrance is located approximately 2.5 miles southwest of the center of Calhan, off Soapweed Rd, 1.5 miles south of Hwy 24. The south entrance is ½ mile south, off Soapweed Rd. This is a 112c clay mine. It was not operating at the time of the inspection. Evidence of recent material removal from product stockpiles was observed.

Availability of Records: Annual reports are current, having been filed through August 2022, stating the last mining activity was August 3, 2022. The previous inspection was on May 9, 2018. The approved post-mine land use is rangeland. There was one open infraction relating to exposed groundwater prior to the inspection, which was resolved during the inspection (see Hydrologic Balance section below). All the surface is privately owned. Section 16 minerals are managed by the State Land Board, the remainder is private.

Acid And Toxic Materials: An above ground fuel/oil storage tank was observed. Mr. McGraw stated it was empty.

Backfilling and Grading: Sufficient backfill material appeared to be available either as stockpiled caprock overburden, or from a dozer push down approach given all excavations are offset a significant distance from the affected area boundaries.

Areas included in the surety reduction request had been backfilled and graded (see **Photos 1, 2 and 3**) some time ago.

Excess Spoil and Dev. Waste: Overburden piles consist of stockpiled caprock (see **Photo 4**).

Financial Warranty: The \$181,161 bond held by the DRMS was last updated in 2015 and included 65 acres of reseeded. The surety reduction request received on June 29th did not include the required bond estimate. This bond estimate (\$331,075) was subsequently received by the DRMS and found to significantly exceed the bond currently held and was similar to the draft reclamation cost estimate generated by the DRMS (\$324,665). As this revised bond amount exceeded the bond held, a surety reduction is not the appropriate vehicle to account for completed reclamation. Furthermore, Mr. McGraw stated he did not wish to remove the reclaimed areas from the permit as General Shale may decide to mine these areas in the future.

Complicating an appropriate reclamation cost estimate is that the cost basis comes from the Permittee's use of "Minor", "Moderate", and "Major" disturbance as was the practice in the late 70's. [As of January 12, 2023, the Permittee plans to submit a technical revision \(TR\) to update and clarify the mine and reclamation plans in order for the DRMS to generate a more appropriate reclamation cost estimate, based on an updated mine plan, and costs to complete specific reclamation tasks. Mr. McGraw indicated during a January 12th phone call they expected to submit the TR by the end of February 2023.](#)

Fish and Wildlife: No impact to wildlife was observed. Pronghorn were seen in the undisturbed areas.

Hydrologic Balance: As stated above under the "Availability of Records" section, there was an outstanding corrective action related to what was believed to be exposed groundwater in the south pit during the May 9,

2018 inspection. Mr. McGraw explained he had installed berms (see **Photo 5**) around the south pit to prevent stormwater from entering the depression. As the south pit had no water in it during this inspection (see **Photo 6**), the DRMS determined the installation of BMPs has proven effective and demonstrated the previously observed standing water was not groundwater. The potential problem related to exposed groundwater during the 2018 inspection is considered resolved.

Gen. Compliance with Mine Plan: The operation appeared to be in compliance with the approved mine plan. The maximum allowed disturbed area as approved with AM-2 in 1999 is 85 acres. Due to the nature of the aforementioned "Minor", "Moderate", and "Major" categories of disturbance, there is only 65 acres of reseeding in the reclamation cost estimate. With few exceptions, the DRMS now requires seeding be planned as part of the reclamation tasks for all disturbed areas. This should be addressed in the forthcoming TR. Google Earth was used to measure the historic disturbed area, which was estimated to be 93 acres. However, through the combination of planned and volunteer revegetation only about 54 acres require grading and revegetation. Included in this 39-acre difference, is the 13 acres the Permittee requested for surety reduction.

Highwalls were benched in the north pit (see **Photo 7**) with the upper highwall being about 5 feet high and the lower bench being about 7 feet high. The lower bench width is about 100 feet wide. The crest of the upper bench is about 50 feet from the north edge of the Stage 3 affected area boundary (*note Stage 2B is due north and adjacent to Stage 3*). The central pit was not visited as the focus was on the surety reduction areas, for which travel bypassed the central pit. The south pit (see **Photo 6**) is not benched, but appeared stable with the exception of some erosion which is captured in the pit.

Off-site Damage: The operation appeared to be confined to the permit boundary, based on Google Earth review and site observations.

Processing Waste: No processing waste was observed.

Roads: Haul and access roads did not appear to be a source of sediment that could be tracked offsite. Road side ditches were clean

Right of Entry: The Permittee owns the majority of the permitted site. Section 16 (T 12S, R 62W) minerals (clay) is managed by the State Land Board (Lease Transaction No. SM—102417).

Reclamation Success: The 5.3-acre area in Stage 3 (north area - see **Photo 1**) and the 7.7-acre area in Stage 2A (south area - see **Photos 2** and **3**) requested for surety relief are considered reclaimed. However, as they are not released from the permit, the DRMS may hold a bond for reseeding and weed management.

Revegetation: Both areas considered for a surety reduction were observed to be adequately vegetated (see Reclamation Success above). No noxious weeds were observed. Mr. McGraw indicated they use a local contractor for onsite weed control.

Sediment Control: No erosion problems were observed and no BMPs were needed at the time of the inspection.

Support Facilities On-site: No equipment was observed on site.

Signs and Markers: The permit sign was properly posted (see **Photo 8**) and boundary markers were observed. The Permittee should be aware that any area considered reclaimed for either a surety reduction or a partial acreage release should to be marked in the field (if not impractical) so as not to be re-disturbed without a

revision to the permit. Given the complex shapes of the two areas requested for surety relief and that the site is occasionally grazed by cattle, the DRMS would accept a map outlining these areas along with vertex point coordinates (long/lat or UTM) delineate the permit boundary (pursuant to Rule 301.12(3)).

Permit Stipulations: Technical Revision 1 (TR-1) allowed the Permittee to import scrap brick and block for backfill. This is required to be reported annually. Mr. McGraw indicated no scrap brick or block had been imported since the approval of TR-1.

Storm Water MGT Plan: No oil or fuel spills observed. Representatives stated the stormwater management plan is kept in their office.

Topsoil: Multiple topsoil stockpiles were observed in the vicinity of both the north and south pits.

Post Inspection Meeting: Discussion items included the possibility of getting coordinates for the boundaries of the two surety reduction areas. Mr. McGraw indicated that information could be provided. As the surety reduction was subsequently withdrawn and these areas are presumed to be included in the forthcoming TR (end of February), this information should be included in the TR.

Please contact Tim Cazier (303)328-5229 or email at tim.cazier@state.co.us if you have any questions regarding this report.

PHOTOGRAPHS



Photo 1. Reclaimed portion of Stage 3 (5.3 acres, looking north).

PHOTOGRAPHS (cont.)



Photo 2. Reclaimed portion of Stage 2A (north end of 7.7 acres, looking SE).



Photo 3. Reclaimed portion of Stage 2A (south end of 7.7 acres, looking north).

PHOTOGRAPHS (cont.)



Photo 4. Caprock overburden storage (north pit, looking NE).



Photo 5. Berm on north side of south pit (looking WNW).

PHOTOGRAPHS (cont.)



Photo 6. Dry south pit (looking west).



Photo 7. North pit upper and lower benches (looking north).

PHOTOGRAPHS (cont.)



Photo 8. North entrance permit sign.

Inspection Contact Address

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ec: DRMS file
Ben Teschner, SLB