



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.

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|---|---|--|-----------------------------|
| MINE NAME: Pikeview Quarry | MINE/PROSPECTING ID#: M-1977-211 | MINERAL: Limestone (general), granite, granite gneiss and dolomite | COUNTY: El Paso |
| INSPECTION TYPE: Monitoring | INSPECTOR(S): Timothy Cazier, P.E. | INSP. DATE: June 28, 2022 | INSP. TIME: 08:30 |
| OPERATOR: Continental Materials Corporation | OPERATOR REPRESENTATIVE: Jerry Schnabel | TYPE OF OPERATION: 112c - Construction Regular Operation | |
| REASON FOR INSPECTION: Priority | BOND CALCULATION TYPE: None | BOND AMOUNT: \$13,389,784.00 | |
| DATE OF COMPLAINT: NA | POST INSP. CONTACTS: None | JOINT INSP. AGENCY: None | |
| WEATHER: Clear | INSPECTOR'S SIGNATURE:  | SIGNATURE DATE: July 25, 2022 | |

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>Y</u> | (BG) BACKFILL & GRADING----- <u>Y</u> | (EX) EXPLOSIVES----- <u>Y</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>NA</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>N</u> | (SC) EROSION/SEDIMENTATION--- <u>Y</u> | (ST) STIPULATIONS----- <u>N</u> |
| (AT) ACID OR TOXIC MATERIALS----- <u>N</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 (DRMS) as part of the continuing planned monthly inspections to observe the backfill placement for the final reclamation of the Pikeview Quarry. Jerry Schnabel and Lauren Miller (representing the Permittee, Continental Materials Corporation (CMC); and Paul Kos (Stantec) were present during the inspection as was David Deitemeyer (City of Colorado Springs).

The Pikeview Quarry is accessed from near the intersection of Centennial Blvd. and Vindicator Dr. north of Colorado Springs. The quarry has ceased extraction of mined product and is actively focused on final reclamation. The focus of this inspection was to observe backfill placement and compaction effort. This included reviewing compaction testing records.

Records: Compaction testing records were reviewed back to the previous inspection (May 16, 2022). Only one test (No. 172) had failed at the time of the inspection. The material was re-worked and retested (No. 173) and passed the compaction specification. All other compaction tests as of the date of the inspection met or exceeded the 90% compaction specification. Prism data from the GEOMOS system which tracks the slide area movement was presented by site representatives. They noted how flat the data trendlines have been, citing this information as evidence the backfill is contributing to the stability of the slide as the flat data shows no movement.

Backfill: Backfill material was being excavated from the north end (see **Photo 1**) and hauled to the pit floor for placement (see **Photo 2**). Site representatives stated 800,000 cubic yards of material had been placed at the time of the inspection since construction was initiated in February 2022. A compactor was observed working the finished lifts (see **Photo 3**). Site representatives reported some material is still being imported (see **Photo 4**) from offsite as allowed by the approval of TR-19. The expected delay in obtaining backfill material from the adjacent areas managed by the US Forest Service, CMC planned to begin working on the demolition of the shop building (see **Photo 5**) sooner than expected in order to access the onsite backfill material underneath it.

Explosives: As work and geotechnical assessments have continued, CMC has designated three areas that will require additional blasting:

- Large rock mass that never moved with the original, or subsequent slides and poses a potential risk for the recreational post-mine land use (see **Photo 6**),
- North end of the former active pit known as "Kiewit Cliffs" (see **Photo 7**) need to be broken up to promote long term stability, and
- A quartzite lens (~100 feet wide, east to west and between 200 and 500 feet long, north to south, see **Photo 8**) has been encountered in the north end of the permit borrow area is too hard to be ripped with conventional methods.

As these proposed blasting activities are geared towards reclamation and not the original mining plan, the DRMS will require a revised blasting plan be submitted via the technical revision (TR) process. [Please use Attachment A \(key elements of a blasting plan\) to guide your blasting plan TR submittal.](#)

Environmental: No noxious weeds, oil or fuel spills were observed. No impacts to wildlife were noted. As usual, bighorn sheep were observed in the area.

Closeout Meeting: No concerns or problems were observed by the DRMS during the inspection. CMC was reminded a technical revision will be necessary for future blasting.

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. North end borrow source.

PHOTOGRAPHS (cont.)



Photo 2. Backfilled/placed material (looking SSW).



Photo 3. Compactor working latest lift (south end, looking SW from pit floor).

PHOTOGRAPHS (cont.)



Photo 4. Imported fill on south end (looking NW from south end).



Photo 5. Maintenance shop to be demolished.

PHOTOGRAPHS (cont.)



Photo 6. Large rock mass to be blasted for safety reasons.

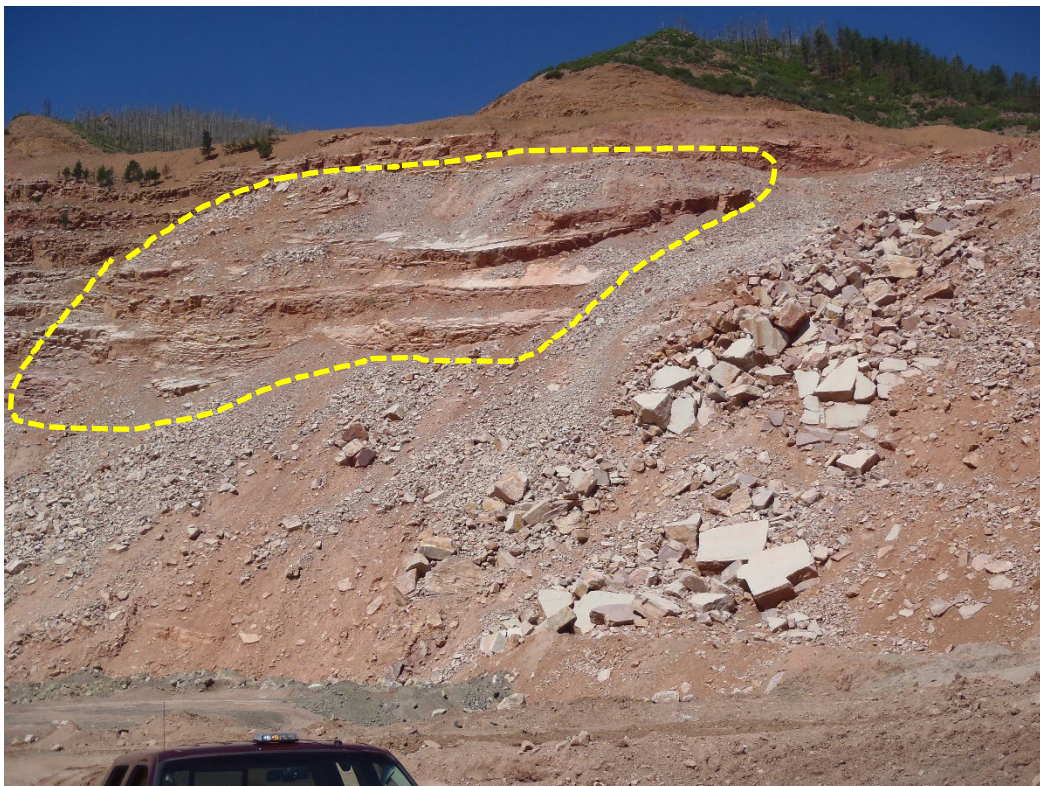


Photo 7. "Kiewit Cliffs" to be blasted for stability and safety.

PHOTOGRAPHS (cont.)



Photo 8. Exposed portion of quartzite lens requiring blasting for removal (looking SE).

Inspection Contact Address

Jerry Schnabel
Continental Materials Corporation
549 E Cucharas Street
Colorado Springs, CO 80903

Enclosure: Attachment A – Key Elements of a Blasting Plan

ec: Zach Trujillo, DRMS
Michael Cunningham, DRMS
DRMS file
Jerry Schnabel, CMC
Amy Titterington, USFS
David Moore, Stantec
Paul Kos, Stantec
David Deitemeyer (City of Colorado Springs)

ATTACHEMENT A

Key Elements of a Blasting Plan

- I. Blast Schedule Notification:
 - a. Name, address & phone number of Operator;
 - b. Identify where blasting will occur;
 - c. Day(s) and time(s) of blasting;
 - d. Methods used to control access;
 - e. Outline warning signals (e.g., sirens, horns, etc.);
 - f. Schedule distribution (who is notified: e.g., workers, residents, local governments, etc.).
- II. Pre-Blast Surveys – where agreed to and approved by structure owners:
 - a. Generally for structures within one half mile of the blast area;
 - b. Establish a pre-blasting record of existing structure(s) condition;
 - c. ID structures or contents sensitive to blasting.
- III. Blast Plan:
 - a. Limits on ground vibration;
 - b. Limits on airblast;
 - c. Methods used to control adverse effects of blasting;
 - d. Description of monitoring systems to be used and where to be set up;
 - e. Blasting protocol/procedure;
 - f. Anticipated typical blast design (this information can have a range so as not to require a specific design for each blast:
 - i. Blast purpose – what product is expected (e.g., riprap, crushed aggregate, etc.);
 - ii. Number, spacing, diameter and depth of holes;
 - iii. Type and amount of stemming material;
 - iv. Blasting agent and amount per hole; and
 - v. Type of delay detonator and delay periods expected.
 - g. Location(s) of blast monitoring.
- IV. Commit to Generating and Filing a Blast Report - The DRMS requires all Operators using explosives to complete a blasting report for each shot. The report must be retained by the Operator for at least 3 years and be available for inspection by the DRMS on demand. The record shall contain the following data, but should not be submitted as part of the Blasting Plan:
 - a. Location date and time of blast;
 - b. Name, signature and license number of blaster-in-charge;
 - c. Identification, direction and distance in feet from the nearest blast hole to the nearest potentially affected structure, such as any dwelling, school, church, or community or institutional building either:
 - i. not located in the permit area; or
 - ii. Not owned nor leased by the person who conducts the mining operations.
 - d. Weather conditions, including: temperature, wind direction, and approximate velocity;
 - e. Type of material blasted;
 - f. Sketches of the blast pattern including number of holes, burden spacing, and delay pattern. Sketches shall also show decking, if holes are decked to achieve different delay times within a hole;

- g. Diameter and depth of holes;
- h. Types of explosives used;
- i. Total weight of explosives used per hole and maximum weight of explosives used per 8-millisecond period;
- j. Initiation system;
- k. Type and length of stemming;
- l. Mats or other protections used;
- m. Type of delay detonator and delay periods used;
- n. Number of persons in the blasting crew; and
- o. Seismographic records where required including:
 - i. Type of instrument sensitivity and the calibration signal of the gain setting or certification of annual calibration;
 - ii. Exact location of instrument, the blast date and time, and the instrument distance from the blast;
 - iii. Name of the person and firm taking the reading;
 - iv. Name of the person and firm analyzing the seismographic record; and
 - v. The vibration level recorded