




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: Lykins Gulch	MINE/PROSPECTING ID#: M-2000-090	MINERAL: Dolomite and Sandstone	COUNTY: Boulder
INSPECTION TYPE: Monitoring	INSPECTOR(S): Amy Eschberger	INSP. DATE: March 22, 2017	INSP. TIME: 09:00
OPERATOR: Loukonen Bros. Stone Company	OPERATOR REPRESENTATIVE: Michael Loukonen	TYPE OF OPERATION: 110c - Construction Limited Impact	
REASON FOR INSPECTION: Normal I&E Program	BOND CALCULATION TYPE: Partial Bond	BOND AMOUNT: \$21,000.00	
DATE OF COMPLAINT: NA	POST INSP. CONTACTS: None	JOINT INSP. AGENCY: None	
WEATHER: Clear	INSPECTOR'S SIGNATURE: 	SIGNATURE DATE: March 27, 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>Y</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>NA</u>
(SM) SIGNS AND MARKERS----- <u>Y</u>	(SP) STORM WATER MGT PLAN---- <u>Y</u>	(CI) COMPLETE INSP---- <u>Y</u>
(ES) OVERBURDEN/DEV. WASTE----- <u>Y</u>	(SC) EROSION/SEDIMENTATION--- <u>Y</u>	(RS) RECL PLAN/COMP-- <u>Y</u>
(AT) ACID OR TOXIC MATERIALS----- <u>NA</u>	(OD) OFF-SITE DAMAGE----- <u>N</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

OBSERVATIONS

This was a normal monitoring inspection of the Lykins Gulch site (Permit No. M-2000-090) conducted by Amy Eschberger of the Division of Reclamation, Mining and Safety (Division). Mr. Michael Loukonen represented the operator during the inspection. The site is located approximately 6 miles southwest of Lyons, Colorado in Boulder County. The site can be accessed by taking a private road off of US-36, and following it approximately 0.85 mile northwest up Lykins Gulch. The affected land is owned by Leonard Loukonen.

This is a 110c operation permitted for 9 acres to mine primarily sandstone for use as building and landscape material, and dolomite for use in maintenance of property roads. It should be noted the operator had initially requested a 9.9 acre permit area, and this acreage amount is shown in the Division's permit system. However, in review of the approved site maps, it appears the permit area is actually comprised of 9 acres, including a 5.5 acre north quarry, a 2.5 acre south quarry, and a one acre storage area along the main access road. The main access road does not appear to be included in the permit area. The Division simultaneously approved an acreage reduction (Revision No. AR-01) and a permit amendment (Revision No. AM-01) on 9/16/2002, which reduced the north quarry by 2 acres (from 7.5 acres to 5.5 acres), increased the south quarry by 1 acre (from 1.5 acres to 2.5 acres), and added the one acre storage area. These revisions were submitted as Board-ordered corrective actions for infraction no. MV-2002-020 (issued 7/24/2002) for a total of 1.09 acres of offsite disturbance. An old dolomite quarry is present southeast of the permitted site. This quarry was mined in the 1960's, and is not included in this permit as it will not be redisturbed by the operation.

The dolomite is removed as overburden and stockpiled separately for use in road maintenance on site. The sandstone deposit is approximately 40-60 feet thick, and is extracted with the use of hand tools. No material processing occurs on site, besides basic stone working. The approved reclamation plan includes backfilling all disturbed areas with any remaining overburden, grading the surface to gradients of 3H:1V or flatter, and spreading 4-6 inches of growth medium across the disturbed land. Very little topsoil is present on site. However, the operator committed to separating any salvaged topsoil, and importing additional growth medium as needed for reclamation. The site will be seeded with western wheatgrass, needle-and-thread, and arizona fescue for a post-mining land use of rangeland. The main access road will remain after reclamation.

At the time of the inspection, it was clear and cool, and the ground was dry. A permit sign was posted at the gated entrance to the site off US-36. The permit boundaries were delineated by PVC pipe stuck on rebar posts. The site was not active during the inspection. According to the most recent annual report submitted by the operator, the site was last active in December of 2016. The operator indicated the site is active more than 180 days per year (e.g., extraction, stone working, hauling off from stockpiles). If the operation were to be active for less than 180 days per year, the operator would need to submit a technical revision application for intermittent status (**see enclosed form**).

The Division observed the storage area adjacent to the main access road (**Photos 1-4**), which the operation uses for staging of equipment, storage of palletized material, and stone working. The Division observed a group of concrete culverts stored adjacent to the main access road, but outside of the permitted storage area. The Division also observed a stockpile of asphalt grindings (**Photo 5**) present north of the main access road, and southeast of the old dolomite quarry, which are outside of the permit area. The operator indicated this material was brought in by the county transportation department to be stored temporarily for nearby road improvement projects. Because the culverts and asphalt stockpile do not appear to be associated with the mine operation, the Division will not consider it affected land. However, the operator should be cautious in storing any construction-related materials or equipment close to the permitted areas, as it could be considered off-site damage.

The Division observed the south quarry (**Photos 6-10**), which includes two primary working benches and various stockpiles of overburden and waste rock at the toe of the excavations. The operator appears to be mining the south quarry generally westward. The permitted acreage for the south quarry is 2.5 acres. The Division estimates the operation has disturbed approximately 1.15 acres in the south quarry area. The Division observed the north quarry (**Photos 11-18**), which includes three primary working benches and various stockpiles of overburden and waste rock at the toe of the excavations. The operator appears to be mining the north quarry generally westward and northward. The permitted acreage for the north quarry is 5.5 acres. The Division estimates the operation has disturbed approximately 2.5 acres in the north quarry area.

The Division estimates the operation has disturbed a total of 4.65 acres at the site, including both quarries and the one acre storage area (**see enclosed Google Earth image of site**). The Division has determined the financial warranty currently held for the permit in the amount of \$21,000.00 to be sufficient for reclaiming existing disturbance in accordance with the approved reclamation plan.

The Division observed common mullein growing throughout the site, which is a state-listed noxious weed species. At this time, common mullein appears to be very problematic in the entire region of the permitted mine site. Therefore, it is unlikely the operation is a source for this weed species. However, pursuant to Rule 3.1.10(6), methods of weed control shall be employed for all prohibited noxious weed species. The operator will need to implement the approved weed control and management plan as soon as possible to control the growth of common mullein in the permitted areas.

This concluded the inspection.

PHOTOGRAPHS



Photo 1. View looking southeast across one acre storage area located adjacent to main access road. Note storage of wooden pallets.



Photo 2. View looking north across one acre storage area located adjacent to main access road. Note storage of quarried stone and wooden pallets.



Photo 3. View looking northeast across one acre storage area located adjacent to main access road. Note storage of quarried stone.



Photo 4. View of northwestern corner marker for one acre storage area located adjacent to main access road.



Photo 5. View of asphalt grindings stockpile (indicated) and concrete culverts (indicated) stored north of main access road, outside of permitted storage area.



Photo 6. View looking south from access road, showing south quarry in distance.



Photo 7. View of waste rock stockpiled at toe of excavation in south quarry.



Photo 8. Another view of waste rock stockpiled at toe of excavation in south quarry.



Photo 9. View of northern working bench in south quarry.



Photo 10. View of western working bench in south quarry.



Photo 11. View of working bench near entrance of north quarry.



Photo 12. View of waste rock stockpiled at toe of excavations in north quarry.



Photo 13. View of waste rock stockpiled at toe of excavations in north quarry.



Photo 14. Another view of waste rock stockpiled at toe of excavations in north quarry.



Photo 15. View of central working bench in north quarry.



Photo 16. View looking northeast showing working bench located east of gulch in north quarry.



Photo 17. View of working bench at top of ridge in north quarry.



Photo 18. Closer view of working bench located east of gulch in north quarry.

Inspection Contact Address

Michael Loukonen
Loukonen Bros. Stone Company
12993 N. Foothills Hwy
Longmont, CO 80503

Enclosure: Technical Revision Application for Intermittent Status
Google Earth image of site

CC: Wally Erickson, DRMS



COLORADO DIVISION OF RECLAMATION, MINING AND SAFETY

1313 Sherman Street, Room 215, Denver, Colorado 80203 Phone (303) 866-3567

TECHNICAL REVISION (TR) APPLICATION FOR INTERMITTENT STATUS (mining activities occur each year, for less than 180 days each year)

Today's date: _____

Permit number: M-_____ Site name: _____

County: _____ TR number: _____ (*DRMS use only*)

Permittee making request: _____

Operator (if other than permittee): _____

Date intermittent status begins: _____

Reason mining activities (materials extraction, processing, or hauling) will occur less than 180 days per year:

Number of affected acres: _____

Amount of financial warranty (bond) on deposit with the state: \$ _____

Required fees for technical revision by permit type (please mark the correct fee and submit it with this request for a technical revision):

<u>Permit type</u>	<u>Required TR fee</u>	<u>Submitted (mark only one)</u>
110c, 111, 112 construction materials, and 112 quarries	\$216	<input type="checkbox"/>
112 hard rock (not DMO)	\$175	<input type="checkbox"/>
110d, 112d(1, 2 or 3)	\$1,006	<input type="checkbox"/>

I request intermittent status for the above-referenced permit. This site has reserves remaining to be mined. Mining activities will occur each year for less than 180 days per year.

Operator's signature: _____

Please note:

1. While in intermittent status, the operator must continue to comply with the Rules and Act, including maintaining the site, and must continue to file an annual report and annual fee when due.
2. If production ceases for 180 days or more, the operator must either file a Notice of Temporary Cessation, or reclaim the site.

M2000-090 / Lykins Gulch / Loukonen Bros. Stone Company

Red Outline = 9 acres = Approved Permit Area [5.5 acres (North Quarry) + 2.5 acres (South Quarry) + 1 acre (Storage Area)]

Blue Outline = 4.65 acres = Total Disturbed Area [2.5 acres (North Quarry) + 1.15 acres (South Quarry) + 1 acre (Storage Area)]

Yellow Outline = 2.4 acres = 1960's dolomite quarry not permitted (will not be redisturbed by this operation)

(Image Data from 10/9/2015)

