


**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.

MINE NAME: Colorado Rose Red Pit	MINE/PROSPECTING ID#: M-1978-332	MINERAL: Granite, granite gneiss	COUNTY: Larimer
INSPECTION TYPE: Monitoring	INSPECTOR(S): Jared L. Ebert	INSP. DATE: May 15, 2017	INSP. TIME: 10:00
OPERATOR: Colorado Rose Red Inc.	OPERATOR REPRESENTATIVE: Caleb Liesveld	TYPE OF OPERATION: 110c - Construction Limited Impact	

REASON FOR INSPECTION: Normal I&E Program	BOND CALCULATION TYPE: Complete Bond	BOND AMOUNT: \$500.00
DATE OF COMPLAINT: NA	POST INSP. CONTACTS: None	JOINT INSP. AGENCY: None
WEATHER: Clear	INSPECTOR'S SIGNATURE: 	SIGNATURE DATE: June 1, 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: Gen. Compliance With Mine Plan

PROBLEM: The Operator is not conducting the mining operation in accordance with the approved plan. The current mine plan needs to be updated and clarified pursuant to C.R.S. 34-32.5-110(1)(a)(VII) to identify the type of mining operation and how the operator is conduct the operation. This issue is cited as a problem at this time for failure to comply with the conditions of a permit in accordance with C.R.S. 34-32.5-124.

CORRECTIVE ACTIONS: The Operator shall submit an Amendment, with the required \$827 fee, to update and clarify the current approved mine plan to reflect existing and proposed future mining activities by the corrective action date.

CORRECTIVE ACTION DUE DATE: 8/30/17

INSPECTION TOPIC: Off-site Damage

PROBLEM: To date, no geotechnical and stability analysis has been conducted demonstrating the underground mining operation is being conducted in such a manner that offsite areas will be protected from a geologic failure. In accordance with Rule 6.5(3) where there is the potential for off-site impacts due to failure of any geologic structure or constructed earthen facility, which may be caused by mining or reclamation activities, the Applicant shall demonstrate through appropriate geotechnical and stability analysis that offsite areas will be protected with appropriate factors of safety incorporated into the analysis.

CORRECTIVE ACTIONS: The Operator shall conduct a geotechnical and stability analysis to demonstrate off-site

areas will be protected.

CORRECTIVE ACTION DUE DATE: 8/30/17

INSPECTION TOPIC: Reclamation Success

PROBLEM: The current reclamation plan does not account for the underground openings/adits created. In accordance with Rule 3.1.5(6), adits and shafts must be closed during reclamation. The current reclamation plan needs to be updated and clarified pursuant to C.R.S. 34-32.5-116(2) and Rule 6.3.4.

CORRECTIVE ACTIONS: The Operator shall submit an Amendment, with the required \$827 fee, to update and clarify the current approved reclamation plan to reflect existing and proposed activities by the corrective action date.

CORRECTIVE ACTION DUE DATE: 8/30/17

INSPECTION TOPIC: Reclamation Success

PROBLEM: The Operator has not conducted an engineering stability analyses to demonstrate the stability of the reclaimed slopes or highwalls in accordance with Rule 6.5(2).

CORRECTIVE ACTIONS: The Operator shall conduct an engineering stability analyses for the final reclaimed slopes/highwalls. The Operator shall submit an Amendment, with the required \$827 fee, included in the amendment shall be the results of this analysis required by Rule 6.5(2).

CORRECTIVE ACTION DUE DATE: 8/30/17

INSPECTION TOPIC: Signs & Markers

PROBLEM: The mine identification sign was not posted at the entrance of the mine site. This is a problem for failure to post a mine identification sign as required by Rule 3.1.12(1).

CORRECTIVE ACTIONS: The Operator shall, at the entrance of the mine site, post a sign which shall be clearly visible from the access road with the following: the name of the operator, a statement that a reclamation permit for the operation has been issued by the Colorado Mined Land Reclamation Board; and the permit number. The operator shall submit photo documentation that a proper sign has been posted by the corrective action date.

CORRECTIVE ACTION DUE DATE: 6/30/17

INSPECTION TOPIC: Signs & Markers

PROBLEM: The Division could not locate a map in the permit file clearly depicting the one acre permit boundary/affected land boundary in accordance with C.R.S. 34-32.5-110(1)(a)(V), Rule 6.2.1(2) and Rule 6.3.1(3). Based on the Division's review of the file, the one acre boundary did not include the historic waste rock piles.

CORRECTIVE ACTIONS: The Operator shall submit an Amendment, with the required \$827 fee that includes a map that clearly defines the one acre permit boundary in accordance with C.R.S. 34-32.5-110(1)(a)(V), Rule 6.2.1(2) and Rule 6.3.1(3).

CORRECTIVE ACTION DUE DATE: 8/30/17

****The Operator may submit one Amendment Application and fee to address all of the issues cited above that require an amendment.**

OBSERVATIONS

This was a monitoring inspection of the Colorado Rose Red Pit, DRMS Permit No. M-1978-332 operated by Colorado Rose Red, Inc. (CRR). I, Jared Ebert of the Colorado Division of Reclamation, Mining and Safety (Division) conducted the inspection. Mr. Caleb Liesveld with CRR accompanied me during the inspection. The weather was clear and sunny at the time of the inspection. The site is located about 7 miles northwest of Lyons, Colorado. The permitting history for this site is unclear. Based on the Division's previous records it appears the operator has been permitted to affect one acre of land. Mining has occurred at this site for many years, and had occurred at this site prior to the existing State Statutes governing this type of operation. On October 27, 1978 an application was submitted by Dan Liesveld. After this application was filed, it does not appear a permit was issued for the site because the required bond was not submitted. On September 24, 1981, it appears the Colorado Mined Land Reclamation Board (Board) found the Operator in violation for operating without a permit. On September 28, 1981, it appears the Board approved the application for the quarry for this site. Based on the Division's files a new 110 application was submitted by Dan Liesveld on October 6, 1981 for a 1/2 acre permit area, also a different mining and reclamation plan was submitted on this date. As the Board's approval for the permit for this site was prior to the submittal of this new application it is unclear in the records why this new application was submitted and it does not appear it was ever approved. The Division assumes based on the history of the site, the original application and exhibit submitted on October 27, 1978 consists of the approved mining and reclamation plan.

This site was inspected on July 27, 2010 by the Division. At that time the Division cited several problems essentially requesting an updated mining and reclamation plan. On November 18, 2010 the Operator submitted an Amendment application (AM01) to address this issues identified in the Division's July 27, 2010 inspection report. On February 8, 2012 the Division denied the AM01 application. Given this, the issues cited were never fully addressed.

Financial Warranty:

The current reclamation plan indicated the Operator will leave a level area, possibly for a home site. The upper bench is a relatively level area where construction of a home may be possible. Given the current reclamation plan, the financial warranty held for the site should be adequate.

Gen. Compliance With Mine Plan:

The 1978 mining plan indicates the quarry area was 350 feet long and 50 feet wide, and at the time of the application the current working area was 80 feet by 35 feet and would be lowered eight feet. Based on the plan, it appears the Operator intended to continue to lower the active benches by removing granite blocks. The mining plan submitted in October of 1981 indicated the quarry was about 300 feet long and 50 feet wide and that the area would become no bigger and that three benches existed and that they intended to lower the benches to create one level bench.

At this time it does not appear the Operator is lowering the existing working deck and have instead quarried underground. The site consists of two benches where the access road enters the site. The lower bench is not very wide and may only accommodate a small vehicle, the upper bench is about 175 feet long and about 120 feet wide. Below these working decks is waste rock and rubble from the historic mining operation at the site. The Operator has created three underground rooms/adits, all of them are about 15 feet in height. The western most room is likely only about 50 feet wide and 20 feet deep, the center room is also about 50 feet

wide and 20 feet deep, the eastern most room is about 50 feet wide and about 160 feet deep. Above the entrance to the rooms, it appears the operator did begin to mine from the surface and mined various sized benches to the level they are currently located at.

Given these findings, it appears the Operator is not conducting the mining operation as presented in either mining plan the Division has on file for this site. The mining plan and mining maps submitted do not depict or indicate underground mining will occur. Both the mining plan and mining plan maps need to be updated to account for the mining methods utilized at the site in accordance with Rule 6.3.3(e) and 6.3.5(c) of the Rules and Regulations.

Off-site Damage:

Based on aerial photographs of the site, it does not appear the waste rock piles below the benches have grown in size. The Division cannot say with certainty that rock has not been added to these piles. The maps submitted with the original applications do not depict the one acre permit area so there is no way to know if off-site damage is occurring. Based on a recent Google Earth© photograph, the above ground disturbance at the site is about .5 acres, this does not include the lower bench and waste rock piles.

In accordance with Rule 6.5(3) where there is the potential for off-site impacts due to failure of any geologic structure or constructed earthen facility, which may be caused by mining or reclamation activities, the Applicant shall demonstrate through appropriate geotechnical and stability analysis that offsite areas will be protected with appropriate factors of safety incorporated into the analysis. To date, no geotechnical and stability analysis has been conducted demonstrating the underground mining operation is being conducted in such a manner that offsite areas will be protected from geologic failure.

Reclamation Success:

The current reclamation plan does not account for the underground openings/adits created. In accordance with Rule 3.1.5(6), adits and shafts must be closed. The current reclamation plan needs to be updated and clarified pursuant to C.R.S. 34-32.5-116(2).

Also, the Operator has created a 30 to 50 foot highwall by quarrying the rock to the level of the upper bench. In accordance with Rule 6.5(2), the Operator will need to provide an engineering stability analyses for proposed final reclaimed slopes/highwalls.

Signs and Markers:

The required mine identification sign was not observed. This issue is cited as a problem at the beginning of the report.

The Division could not locate a map in the permit file clearly depicting the 1 acre permit boundary/affected land boundary. When the Operator submits the Amendment application updating the mining plan, reclamation plan and supplying the required engineering/geotechnical stability analysis, the Operator will also need to define the one acre permit boundary in accordance with C.R.S. 34-32.5-110(1)(a)(V). Based on the Division's review of the file, the one acre boundary did not include the historic waste rock piles.

PHOTOGRAPHS





Figure 1. Eastern most room/adit



Figure 2. Center Room/adit



Figure 3. Western most room/adit



Figure 4. Eastern most room/adit



Figure 5. View of the lower bench looking west.

GENERAL INSPECTION TOPICS

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

(AR) RECORDS----- <u>N</u>	(FN) FINANCIAL WARRANTY----- <u>Y</u>	(RD) ROADS----- <u>N</u>
(HB) HYDROLOGIC BALANCE----- <u>N</u>	(BG) BACKFILL & GRADING----- <u>NA</u>	(EX) EXPLOSIVES----- <u>NA</u>
(PW) PROCESSING WASTE/TAILING---- <u>N</u>	(SF) PROCESSING FACILITIES----- <u>NA</u>	(TS) TOPSOIL----- <u>N</u>
(MP) GENL MINE PLAN COMPLIANCE- <u>PB</u>	(FW) FISH & WILDLIFE----- <u>N</u>	(RV) REVEGETATION---- <u>NA</u>
(SM) SIGNS AND MARKERS----- <u>PB</u>	(SP) STORM WATER MGT PLAN---- <u>N</u>	(CI) COMPLETE INSP---- <u>Y</u>
(ES) OVERBURDEN/DEV. WASTE----- <u>NA</u>	(SC) EROSION/SEDIMENTATION--- <u>N</u>	(RS) RECL PLAN/COMP-- <u>PB</u>
(AT) ACID OR TOXIC MATERIALS----- <u>NA</u>	(OD) OFF-SITE DAMAGE----- <u>PB</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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Enclosure: None

CC: None