



Response to Reclamation Permit Conversion Application

DATE: December 6, 2019
TO: Elliott R. Russell, Environmental Protection Specialist
FROM: Sarah Brucker, P.E. *SB*
RE: Detroit City Mine, File No. M-2017-003
Applicant/Operator: Colorado Calumet Co., Inc.
Phone Number: (303) 918-1879
NW¼ Section 33, Twp 8 South, Rng 78 West, 6th P.M., Park County
Water Division 1, Water District 23

CONDITIONS FOR APPROVAL

- ☒ The proposed operation will consume water by: ☐ evaporation, ☒ dust control, ☐ reclamation, ☐ water removed in the mined product, ☐ processing, ☒ other: drilling.
The operator will need to document that such water was obtained from a legal source or diverted in priority under a water right decreed for such mining/industrial use.
- ☒ The proposed operation does not anticipate exposing groundwater. Therefore, exposure of groundwater must not occur during or after mining operations, unless a technical revision is obtained and the applicant complies with the condition stated below.
- ☒ Prior to the use of any groundwater at the site, the applicant will need to obtain a water well permit. However, prior to obtaining a well permit, an approved substitute water supply plan or decreed plan for augmentation is required.
- ☒ Any stormwater runoff intercepted by this operation that is not diverted or captured in priority must be released to the stream system within 72 hours.

COMMENTS: The Detroit City Mine (M-2017-003) is an underground mining operation located along the west side of Mt. Bross near Alma, Colorado. The primary commodity mined at the site is mineral specimens. The subject application seeks to convert M-2017-003 from a Limited Impact 110(1) Mining Operation Reclamation Permit to a 110(2) Hard Rock Permit. The conversion is required to accommodate the inclusion of an additional 0.4 acres of parking area that was created adjacent to the access road. The inclusion of this area will increase the permit area beyond the maximum of 4.99 acres currently allowed under the 110(1) permit. Under the 110(2) permit, the permit area will be increased to 9.5 acres. The conversion is anticipated to extend the life of the mining operation for an additional five (5) years. No other changes to the mining operation are proposed.

Approximately 1.0 acre-foot of water per year was estimated to be required for underground drilling and dust control on the surface. According to the Adequacy Response from the applicant dated April 17, 2017, water was proposed to be purchased from the Town of Alma. Based on information from the District 23 water commissioner, 1.0 acre-foot of water leased from HASP has been diverted and used for mining purposes at the site via approved exchange in water years 2018 and 2019. Both the Town of Alma and HASP are acceptable sources of water supply for mining operations.



A DRMS inspection on August 29, 2019 observed water seeping and flowing from several fractures within the cross-cut tunnel, and found that the operator was collecting this water and using it for drilling. According to the approved mining plan, if water inflows were encountered, the source of the flow was to be immediately pressure grouted to completely seal the source and prevent future inflows. Because the required grouting had not occurred, this was cited as Compliance Problem #2. The current deadline to complete the corrective action is January 21, 2020. If groundwater will continue to be intercepted and/or used at the site, the applicant will need to obtain a water well permit and either a substitute water supply plan approved by the state engineer or a court-decreed plan for augmentation. It is the understanding of this office that such a change to the approved mining plan would also require a technical revision from the DRMS.

Stormwater runoff from the site will be conveyed by collection ditches to an onsite sediment pond. All runoff intercepted by this operation must be released to the stream system within 72 hours; otherwise the operator will need to make replacements for evaporation. The applicant has indicated that the sediment pond will be dewatered by pump as needed to comply with the 72-hour limit. The sediment pond is proposed to be removed during reclamation. The site is proposed to be reclaimed to its current use as rangeland (forest/mountain slope) upon completion of this mining operation.

The DRMS or the applicant may contact the State Engineer's Office with any questions.