

April 25, 2018

COLORADO Division of Reclamation, Mining and Safety Department of Natural Resources

1313 Sherman Street, Room 215 Denver, CO 80203

Jeff Carter 15954 Jackson Ck Pkwy B281 Monument, CO 80132

RE: Lombard #4 & #5; DRMS File No. M-2018-012; Preliminary Adequacy Review

Dear Mr. Carter,

The Division of Reclamation, Mining and Safety (Division) has completed its preliminary adequacy review of your Limited Impact 110(1) Reclamation Permit Application. The application was received on March 23, 2018 and was called complete for review on April 5, 2018. The decision date for this application is May 4, 2018. Please be advised that if you are unable to satisfactorily address any concerns identified in this review before the decision date, it will be your responsibility to request an extension of the review period. If there are outstanding issues that have not been adequately addressed prior to the end of the review period, and no extension has been requested, the Division will deny this application.

The review consisted of comparing the application content with specific requirements of Rule 6.1, 6.2, 6.3, and 6.5 of the Minerals Rules and Regulations of the Colorado Mined Land Reclamation Board for Hard Rock, Metal, and Designated Mining Operations. In general the application was substantially adequate, however, as with most applications there are a few items that will require the submittal of additional information or clarification of the existing information. Inadequacies are identified under the respective exhibit heading along with suggested corrective actions to correct them.

- 1. As required by Rule 1.6.2(d) and 1.6.5(2), please submit proof of publication in a newspaper of general circulation in the locality of the proposed mining operation.
- 2. As required by Rule 1.6.2 (e), please submit proof the public notice was provided to all owners of record of surface and mineral rights of the affected land and to the owners of record of all land surface within 200 feet of the boundary of the affected land including all easement holders located on the affected land and within 200 feet of the boundary of the affected land. Proof of notice may be return receipts of a Certified Mailing or by proof of personal service.
- 3. The Division received comments from the Colorado Division of Water Resources. The letter is attached for your review. Please address the comments noted in the letter and make any changes to the application as necessary.



6.3.2 Exhibit B – Site Description

4. The Applicant described the soil characteristics as 'very rocky'. This is not an adequate description soil resources. As required by Rule 6.3.2(a), provide a description of the soil characteristics in the area of the proposed operation. The local office of the Natural Resources Conservation Service may provide you with this information as well as recommendations for Exhibit D – Reclamation Plan.

6.3.3 Exhibit C – Mining Plan

- 5. The Mining Plan Map depicts two adits within the proposed permit boundary. Please verify that mining activities will be conducted in both adits.
- 6. Specify the existing dimensions of each adit and provide the final dimensions of the adits following mining activities. Please distinguish the adits from one another by providing a designation such as 'upper' and 'lower' in the response.
- 7. Specify if the Operator will create additional surface disturbance in support of underground mining activities such as secondary escape ways or ventilation shafts. If additional surface disturbance will be created, then the features must be described in the Mining Plan and Reclamation Plans and must be depicted on the Mining Plan and Reclamation Plan Maps.
- 8. Clarify if the adits are currently accessible. If not, describe what work will be done to open the adits.
- 9. Pursuant to Rule 3.1.6(1), disturbances to the prevailing hydrologic balance of the affected land and of the surrounding area and to the quantity of quality of water in surface and groundwater systems both during and after mining must be minimized. Please specify if there are any discharges, seasonal or otherwise, coming from either of the adits.
- 10. Provide a description of the proposed underground mining activities and clarify if the adits will be advanced.
- 11. Specify where waste rock will be stockpiled and depict the stockpile locations on the Mining Plan Map.
- 12. Specify how the adits will be safeguarded from unauthorized entry during active mining operations and during periods of seasonal closures.
- 13. As required by Rule 6.3.3(1)(g), specify the dimensions of the existing roads within the proposed permit boundary.

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- 14. The Mining Plan Map depicts a tailings pile below each of the adits. Please clarify if these are tailings or waste rock piles. Tailings consist of fine-grained sediments which result from the crushing and grinding of ore during the recovery of valuable minerals. Waste rock consists of overburden which was removed during the development of underground workings to reach to the ore body. If the material is best described as waste rock, then the labels on the Mining and Reclamation Plan Maps must be revised accordingly.
- 15. Specify if the tailing/waste rock piles will be disturbed by the proposed mining activities. Will material be removed from or added to the existing tailing/waste rock piles?
- 16. As required by Rule 6.3.3(1)(f), specify the dimensions of each waste rock pile.
- 17. As required by Rule 6.3.3(1)(i), describe the methods to be used to minimize disturbance to the surface water system including sediment containment and stormwater runoff controls.
- 18. The Mining Plan calls for salvaging 4 6 inches of topsoil. Please describe the surface disturbance which will require the salvaging of topsoil. According to the financial warranty estimate provided by the Applicant, 10 cubic yards of topsoil will need to be replaced during reclamation. Clarify how the total volume of topsoil to be replaced was calculated and depict the location of the topsoil stockpile(s) on the Mining Plan Map.
- 19. The Mining Plan calls for moving 2 feet of overburden. Please clarify if the overburden is to be removed from the surface or from underground. In addition, clarify if the proposed 2 feet of overburden is related to the 50 cubic yards of material which is proposed to be backfilled into the adits. If the overburden is separate from the 50 cubic yards of backfill material, then specify the total volume of overburden to be stockpiled and depict the location of the overburden stockpile(s) on the Mining Plan Map.

6.3.4 Exhibit D – Reclamation Plan

- 20. The Reclamation Plan calls for backfilling the adits after the completion of mining. Please specify the horizontal length of the adits, if known. The Division will require the Operator to backfill the adits to a minimum depth of 15 feet from the top of the inner fill to the outer top of the fill. There shall be no spaces between the top of the fill and the roof of the adit that exceed three inches and there shall be no space between the top of the fill and the roof of the adit at the entrance of the adit. Please commit to following these guidelines when backfilling the adits.
- 21. Please identify the source of material to be used to backfill the adits and provide an estimate of the average size of rock which will be used for backfill material.
- 22. The Applicant selected Zone 6 Alpine as the seed mix to be used during reclamation of the site. The Alpine seed mix is designed for sites located at an elevation of 11,400 feet and above. The Lombard #4 & #5 site is situated at an elevation of 10,500 feet. Zone 5 Sub-Alpine seed

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mix is a more suitable seed mix for this location. Please commit to using Zone 5 seed mix (copy attached) during reclamation of the site.

- 23. The Reclamation Plan calls for establishing a final grade of 1H:0.5V. Pursuant to Rule 3.1.5(7), maximum slopes and slope combinations shall be compatible with surrounding conditions and selected land use. Please clarify if 1H:0.5V is the existing grade at the mine site. A final grade of 3H:1V may be more appropriate for site conditions.
- 24. As required by Rule 6.3.4(1)(e), specify the reclamation treatment of any waste rock dumps, including the measures taken to minimize disturbance to the hydrologic balance, prevent off site damage, and provide for a stable site configuration consistent with the proposed future land use.
- 25. As required by Rule 6.3.4(2), specify the haul distances for both topsoil and overburden. This information is required to calculate the financial warranty.
- 26. The financial warranty estimate indicates seeding will be required over the entire 4 acre permit area. Please clarify if the entire 4 acres will be disturbed as a result of the proposed mining operation. If the entire 4 acres will not be disturbed, then specify the size of the surface area which will require reseeding.

6.3.5 Exhibit E – Map

- 27. The Mining Plan Map depicts a permit boundary that is 20.66 acres in size. The Application Form indicates the size of the permit area is 4 acres. The permit boundary depicted on the Mining Plan Map must be revised to depict a 4 acre permit boundary. If the Applicant wishes to permit 20.66 acres of disturbance, then the 110(1) Application which is currently under review should be withdrawn and a 112 Application should be submitted for review instead.
- 28. As required by Rule 6.3.5(2)(c), please revise the Mining Plan Map to show the location of topsoil and overburden stockpiles.
- 29. The Mining and Reclamation Plan Maps do not distinguish between the two adits in the permit area. Please revise the Mining and Reclamation Plan Maps to include labels which distinguish the adits form one another, i.e. 'upper' and 'lower'.
- 30. The Reclamation Plan Map does not depict the 4 acre permit boundary. Please revise the Reclamation Plan Map to include a labeled permit boundary as required by Rule 6.2.1(2)(d).
- 31. The Reclamation Plan Map does not include a scale. Please revise the Reclamation Plan Map to include a scale as required by Rule 6.2.1(2)(e).
- 32. The Reclamation Plan Map does not include the name of the Applicant. Please revise the Reclamation Plan Map to include the name of the Applicant as required by Rule 6.3.2(2)(a).

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- 33. The Reclamation Plan Map does not show the gradient of all reclaimed slopes (horizontal:vertical) sufficient to describe the post-mine topography. Please revise the Reclamation Plan Map to show the gradient of all reclaimed slopes as required by Rule 6.3.5(3)(a). The Applicant may indicate the gradient of reclaimed slopes by adding a label and including an arrow to indicate the direction of the slope.
- 34. The Reclamation Plan Map does not state the average thickness of topsoil and overburden to be replaced. Please revise the Reclamation Plan Map to state the average thickness of topsoil and overburden to be replaced as required by Rule 6.3.5(3)(d)and(e).

6.3.6 Exhibit F – List of Other Permits and Licenses Required

35. Please indicate if Clear Creek County will require a county zoning or land use permit for the proposed operation.

6.3.7 Exhibit G – Source of Legal Right to Enter

36. Exhibit G contains a copy of the lode mining claim owned by the Applicant. The unpatented claim grants the claimant ownership of the minerals, but does not provide authorization to enter the property for the purposes of mining or reclamation. In this instance, the USFS is the owner of the surface and grants authorization to enter the area for mining and reclamation through an approved Notice of Intent (NOI) or Mine Plan of Operations (MPO). The Applicant shall submit a copy of the approved NOI or MPO as demonstration of a legal right to enter the proposed affected lands for the purpose of mining and reclamation.

This concludes the Division's preliminary adequacy review of this application. Please remember that the decision date for this application is May 5, 2018. As previously mentioned, if you are unable to provide satisfactory responses to any inadequacies prior to this date, **it will be your responsibility to request an extension of time to allow for continued review of this application.** If there are still unresolved issues when the decision date arrives and no extension has been requested, the application will be denied.

If you have any questions, please contact me at (303)866-3567 x8116.

Sincerely,

Michael A. Cunningham Environmental Protection Specialist

Enclosures (2)

CC: Wally Erickson, DRMS



COLORADO Division of Water Resources

1313 Sherman Street, Room 821 Denver, CO 80203

Response to 110(1) Hard Rock Reclamation Permit Application Consideration

DATE: April 11, 2018 TO: Michael A. Cunningham, Environmental Protection Specialist RECEIVED (Michaela.cunningham@state.co.us) CC: Division 1 Office, District 7 Water Commissioner APR 1 1 2018 FROM: Sarah Brucker, P.E. **DIVISION OF RECLAMATION** RE: Lombard #4+5, File No. M-2018-012 MINING AND SAFETY Applicant/Operator: Jeff Carter, (719) 237-5914 NE¼ Section 1, Twp 3 South, Rng 74 West, 6th P.M., Clear Creek County

CONDITIONS FOR APPROVAL

- The proposed operation does not anticipate exposing groundwater. Therefore, exposure of ground water must not occur during or after mining operations.
- If water will be used for any purpose at this site, the applicant will need to document that the water was obtained from a legal source, or diverted in priority under a water right decreed for such industrial use.
- If stormwater runoff is intercepted by this operation and is not diverted or captured in priority, it must be released to the stream system within 72 hours; otherwise the operator will need to make replacements for evaporation.

COMMENTS: The subject application is for an underground mining operation on 4.0 permitted acres located 1.8 miles outside of Alice, Colorado. The primary commodities to be mined at the site are gold and silver. Mining will be conducted seasonally. The site is proposed to be reclaimed to its current use of forestry upon completion of mining.

No water is anticipated to be needed during the mining operation. No water diversions or impoundments are proposed to be constructed to facilitate mining.

Based on the above, this office has no concerns regarding the proposed mining operation. The applicant may contact the State Engineer's Office with any questions.



d. ____ Zone 4, Montane

Site Description: The elevation of the Montane zone ranges from 7,500 to 9,300 feet. The general areas include the mountain resort towns and surrounding areas such as Georgetown, Steamboat Springs, Pagosa Springs, Crested Butte, Etc. Annual precipitation ranges from 18 to 60 inches per year. The average annual high temperature is 54°F with an average annual low temperature of 25°F.

Туре	Common Name	Scientific Name	Application Rate PLS (pounds of pure live seed per acre for Drill seeding. Double rate for broadcast seeding
Grasses	Mountain brome	Bromus carinatus	1.93
	Bluebunch	Psuedoroegneria	3.71
	wheatgrass	spicata	
	Idaho fescue	Festuca idahoensis	0.79
	Prarie junegrass	Koeleria macrantha	0.15
	Sandberg bluegrass	Poa secunda	0.37
Forbs	Common yarrow	Achillea millenfolium	0.25

e.

Zone 5, Sub-Alpine

Site Description: The elevation of the Sub-Alpine zone ranges from 9,300 to 11,400 feet. The general areas include but are not limited to Lake County, Summit County and areas adjacent to the Continental Divide. Annual precipitation is 40 inches per year and above. Average annual high temperature is 49° with average annual low temperature of 21°F.

Seed Mix	Species	Scientific Name	Application Rate PLS (pounds of pure live seed per acre for Drill seeding. Double rate for broadcast seeding
Grasses	Mountain muhly	Muhlenbergia montana	0.23
	Parry's oatgrass	Danthonia parryi	2
	Prairie junegrass	Koeleria macrantha	0.15
	Elk sedge	Carex geyeri	2.9
	Idaho fescue	Festuca idahonesis	0.8
Forbs	Lambert's locoweed	Oxytropis lambertii	0.25