

Division of Reclamation. Mining and Safety Department of Natural Resources

1313 Sherman Street, Room 215 Denver, CO 80203

September 21, 2020

Dennis Schneider Miners Mall. LLC 3143 ¹/₂ Goldeneye Ave. Grand Junction CO 81504

RE: Humming Bird Mine, File No. M-2017-035, Amendment (AM-1) 110(1) Hard Rock **Reclamation Permit, Application Adequacy Review 1**

Dear Mr. Schneider:

The Division of Reclamation, Mining and Safety (Division) is in the process of reviewing the above referenced application in order to ensure that it adequately satisfies the requirements of the Colorado Mined Land Reclamation Act (Act) and the associated Mineral Rules and Regulations of the Colorado Mined Land Reclamation Board for Hard Rock, Metal, and Designated Mining Operations (Rules). During review of the material submitted, the Division determined that the following issue(s) of concern shall be adequately addressed before the application can be considered for approval.

Exhibit A

- 1. Pursuant to Rule 6.3.1(2), On the location map include the mine entrance coordinates.
- 2. Pursuant to Rule 6.3.1(3), Include a map that depicts the affected land and names of all immediately adjacent surface owners.
- 3. Provide the GPS coordinate of each project area (the corner markers that will be field delineated).

Exhibit B

- 4. Question 2, Describe the type of vegetation present in more detail. Include descriptions such as species, plant sizes, densities, etc.
- 5. Question 3, State the average depth of topsoil and the depth of overburden.
- 6. Per 6.3.5(2)(e), Note the location of any significant, valuable, and permanent man-made structures within two hundred (200) feet of the affected area. A narrative description must be provided in Exhibit–B - Site Description.



<u>Exhibit C</u>

- 7. Pursuant to Rule 6.3.3(1)(i), Will ground water be encountered at any of the project areas?
- 8. During a previous inspection the use of Dexpan or Eco-Blast as an alternative to conventional explosives was mentioned. Moving forward with the project will either of these materials be used?
- 9. What disturbances will the support areas include? A flat pad being erected?
- 10. Will any ventilation shafts or additional portals/adits beyond what is historically present be constructed?
- 11. Siberia Project Area Please state how the portal will be safeguarded when not actively working in it.
- 12. Midway Project Area
 - a. The creation of additional trails is mentioned. Describe the average width and anticipated length of trails to be constructed.
 - b. Pursuant to Rule 6.3.3(1)(d), What is the anticipated depth and/or volume of tailings material to be sorted (i.e. mined).
 - c. Per Rule 6.3.3(1)(f), The dimension of the tailings pile to be mined and the sorted material storage if different than the mined areas.
- 13. Connector Project Area
 - a. Are the limitations of mining just picking through fallen rocks and slope stabilization? Will any actual excavations be made?
 - b. Per Rule 6.3.3(1)(f), What is the dimensions of the area to be worked under this phase?
 - c. Applications of limited amounts of topsoil is mentioned. What is the source of this topsoil? Will any soil be stockpiled from this project area, if so describe.
- 14. Purple Pipe Area
 - a. Describe the methodology of mining in more detail for this phase (rock picking, stripping surface, underground portal, etc.).
 - b. Pursuant to Rule 6.3.3(1)(c), What is the anticipated depth of overburden.
 - c. Per Rule 6.3.3(1)(d), What is the anticipated depth of material to be mined.
 - d. Per Rule 6.3.3(1) (f), The dimension of this area to be mined and the waste rock storage pile if different than the mined areas.
- 15. Yet Unnamed Project Area Provide details of the anticipated operation pursuant to Rule 6.3.3(1). Can be described in general terms with a commitment to submit Technical Revision and gain approval prior to commencement of this phase.

<u>Exhibit D</u>

- 16. At what point will mining conclude and reclamation commence?
- 17. Provide a short summary of the reclamation measures to take place at each project area given that mining methodologies vary based on project area.

- Question 3 Per Rule 6.3.4(1)(b) Provide a justification to support slopes steeper than a 3H: 1V.
- 19. Question 4 Per Rule 6.3.4(1)(c)(i) Give the anticipated range of topsoil application to be reapplied during reclamation. Material type is noted as rock/soil mixture. Alternatively provide the estimate number of cubic yards to be handled at each project area.
- 20. Question 6 Per Rule 6.3.4(1)(c)(iv) Once see is hand applied will it be raked into the soil.
- 21. Question 9 Per Rule 6.3.4(1)(c)(v) State the application method used for spreading straw mulch and clarify if it will be crimped/tacked down in any way.
- 22. Per Rule 6.3.4(1)(c)(ii) Will trails/roads be decompacted prior to reclamation?
- 23. Per Rule 6.3.4(2) Provide a reclamation cost estimate by project area with input values (volumes, distances, dimensions, etc.).

<u>Exhibit E</u>

On all maps provide a legend as to what each of the various colors, lines, pins, etc. depicted mean. Some items may be repetitive as multiple maps require similar information. Some requirements may only need to be displayed on the site overview or project are map rather than on each individual project area map, specifically where information is repetitive or not tied to a specific phase.

- 24. Per Rule 6.3.5(2)(a) It is unclear form your maps if the red rectangular polygon is the 1 acre permit boundary or if all of the smaller polygons make up the 1 acre permit boundary. Label accordingly on all maps.
- 25. Site Overview Map Per Rule 6.3.5(2)(b)
 - a. The Bureau of Land Management should be listed as the surface owner of record.
 - b. List the mineral owner of the substance(s) mined.
 - c. List all the type of structure and owners of record of any permanent or man-made structures within two hundred (200) feet of the affected area. HWY 141 and the utility poles may be within 200 feet.
- 26. Project Area Map
 - a. Per Rule 6.3.5(2)(c) Clarify and label what are pre-existing trails/roads and what features will be created to support future phases.
 - b. Per Rule 6.3.5(2)(c) Label overburden, waste rock and topsoil stockpiles.
 - c. Per Rule 6.3.5(2)(f) Outline and label existing disturbance within and/or adjacent to the permit boundary.
- 27. Ridgetop Project Area Map
 - a. Per Rule 6.3.5(2)(c) Update legend to include all features depicted on map. Specifically blue and red lines. LowerTrail225 is on the legend but not included on map.
 - b. Per Rule 6.3.5(2)(d) Indicate direction(s) of mining. Additionally where is the target vein.
 - c. Depict any other phases (connector project area) that interact with this phase.

- 28. Siberia Portal Area Map
 - a. Per Rule 6.3.5(2)(b)/(e) List all the permanent or man-made structures within two hundred (200) feet of the affected area. HWY 141 and the utility poles may be within 200 feet.
 - b. Per Rule 6.3.5(2)(c) Update legend to include all features depicted on map. Blue line is labeled as midway but not described as to what it is, road, foot trail, etc.?
 - c. Depict any other phases (midway project area) that interact with this phase.
- 29. Midway Project Area Map
 - a. Per Rule 6.3.5(2)(c) Clarify and label what are pre-existing trails/roads and what features will be created to support future phases. Update legend to include all features depicted on map. Blue line is labeled as midway but not described as to what it is, road, foot trail, etc.?
 - b. Per Rule 6.3.5(2)(d) Indicate direction(s) of mining.
 - c. Depict any other phases (ridgetop and Siberia project area) that interact with this phase.
- 30. Connector Project Area Are all aspects of the connector project area described on the Ridgetop Map? If not please create a map for the connector project area and address Rule 6.3.5(2).
- 31. Purple Pipe Project Area Modify the Ridgetop Map to address the interactions between these two project areas or create a new map addressing Rule 6.3.5(2) and the prospecting of the Purple Pipe Project Area.
- 32. Unnamed Project Area map
 - a. This appears to be a duplicate of the Project Areas map with a slightly different legend.
 - b. Include a map to support the mining plan per Rule 6.3.5(2). Alternatively as previously stated this plan and map can later be submitted through a technical revision and for the time being just add in the acreage to the permit.
- 33. Reclamation Maps Per Rule 6.3.5(2)(a) Show the gradient of all reclaimed slopes (horizontal: vertical) sufficient to describe the post mine topography;
 - a. From your map it is unclear if each bench is 20 feet high by 30 feet deep or if the total slope with four interstitial benches is 20 x 30 feet.
 - b. Will vertical slopes remain (i.e. benches)? Reclamation plan states a 2H: 1V slope but a 1.5H: 1V slope is depicted and no benches are mentioned.
 - c. Provide the post mine topography for all project areas not just the midway project area.
 - d. One map states "re-seed entire clearing after grading to 1%". 1% is nearly flat is this a typo or will there intentionally be a flat pad area created? If so the reclamation plan for the ridgetop project area also needs to state this.
- 34. Reclamation Maps Per Rule 6.3.5(2) (b) Indicate where vegetation will not be established and the general area(s) for shrub or tree planting;

- a. What areas will/won't be seeded for each project area?
- b. No tree/shrub planting was stated in the reclamation plan but trees are shown on one of the maps. This is confusing, are these trees to be planted or currently on site.
- 35. Reclamation Maps Per Rule 6.3.5(2) (d) and (e) By project area state the average depth of overburden and topsoil to be replaced.

<u>Exhibit H</u>

36. Municipality refers to a city or town. The information you have provided refers to utilities and potential structures that may be within 200 feet of the affected lands (see Exhibit L, Rule 6.3.12). Please revise this exhibit to clarify that there are no municipalities within two miles.

<u>Exhibit L</u>

37. Per Rule 6.3.12, Address any permanent man-made structure within two hundred (200) feet affected lands. If none exist explicitly state that.

Public Notice

The Operator does not need to send public notice to the various agencies. DRMS will notice sister agencies when necessary. See Rule 1.6.2 for applicant notice requirements.

38. Pursuant to Rule 1.6.2(d), Newspaper publication served to Owners of Record (within 200 feet).

*Several of the items listed above are specified in the supplemental BLM Plan of Operations Modification. Include the requested information in the appropriate DRMS Exhibit for clarity.

Please submit your response(s) to the above listed issue(s) by **Friday**, **October 09**, **2020** In order to allow the Division sufficient time for review.

The Division will continue to review your application and will contact you if additional information is needed.

If you require additional information, or have questions or concerns, please feel free to contact me. Amy Yeldell at the Division of Reclamation, Mining and Safety, 1313 Sherman St., Room 215, Denver, CO 80203. Direct contact can be made by phone at 3030-866-3567 Ext 8183 or via email at amy.yeldell@state.co.us

Sincerely,

Amy Geldell

Amy Yeldell Environmental Protection Specialist

Cc: Travis Marshall, Senior EPS, Grand Junction DRMS Eric Eckberg, BLM