

August 25, 2023

Joseph Harrington MineWater LLC 10924 Leroy Dr. Northglenn, CO 80233

Re: Adequacy Reivew, 110d Hardrock Application London Mine, File No. M-2023-015

Dear Mr. Harrington,

The Division of Reclamation, Mining, and Safety (Division) has reviewed the content of the 110d Hardrock Designated Mining Limited Impact Operation Reclamation Permit Application for the proposed operation for the London Mine (File No. M-2023-015) submitted MineWater LLC (Applicant), and submits the following comments. **The Division is required to make a decision on the application no later than** <u>September 15, 2023</u>, **therefore, a response to the following adequacy review concerns should be submitted to the Division as soon as possible.** If more time is needed to respond to this Adequacy Review, the Division can grant an extension of the decision date deadline following a request by the Applicant. Please respond to this Adequacy Review with the requested information by summarizing each response to the numbered items below, in a cover letter titled "Adequacy Review Response; M-2023-015" and providing replacement exhibits, as necessary.

AFFECTED LANDS BOUNDARY – HAUL ROAD

1. The application discusses and depicts two non-contiguous Affected Land areas which will be accessed by existing County/Forest Roads. The Applicant proposes to haul material from the South London Stockpile Area to the Central Extension and Sorting Plant Area for processing and then to haul mineralized fines and barren waste rock back to the South London Stockpile Area for disposal. The Applicant states no roads will be significantly improved and therefore, no roads are included in the permit area acreage. Upon review of the Park County Assessor online map viewer, the County Road 696 line (defined by the assessor's map viewer legend as a bright green/vellow line) terminates 0.25 miles east of the sorting plant area and doesn't continue up to the existing road which will be used by the operation. Additionally, the area involved between the two permit areas do not include any Forest Service lands, as all parcels are privately owned by entities which the Applicant's president also owns. Although this road existed prior to the application, will not be substantially upgraded to support the mining operation, and is not a part of the reclamation plan, and therefore could be exempted from some of the definition of affected lands per Rule 1.1(4), the Division considers this road to be an integral part of the operation and is not considered to be "off-site". The road to be used for hauling ore down to the processing area and waste rock/fines back up to the South London Stockpile Area for disposal is Affected Lands in accordance with Rule 1.1(4). To proceed with the application as proposed, the Applicant may either submit an Amendment to the Application to revise the Affected Lands Boundary to include the haul road (please note, the proposed permit is for 9.9 acres so the permit boundary will need to be reduced in size elsewhere to account for the additional acreage for the road) OR submit a 112d application to encompass the South London Stockpile Area, Central Extension and Sorting Plant Area, and the haul road between the two areas.



GENERAL APPLICATION PROCEDURES

- 2. As required by Rule 1.6.2(1)(g), please submit proof of publication of a public notice in a newspaper of general circulation in the locality of the proposed mining operation *Proof of publication received August 2, 2023 is adequate. No response needed.*
- 3. As required by Rule 1.6.2(1)(g), please submit proof that 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. Proof of notice may be return receipts of a certified mailing or by proof of personal service. *Proof of noticing MW Sorter LLC and MineWater Finance LLC received August 9, 2023 is adequate.* Upon review of the Park County Assessor online map viewer, the United States Forest Service appears to be a surface owner within 200 feet of the Central Extension and Sorting Plant Area and it appears three other owners share ownership with MineWater Finance LLC on Parcel/Schedule #R0090417 located within 200 feet of the South London Stockpile Area. These additional surface owners will need to receive notice in accordance with Rule 1.6.2(1)(g) and be given their own 10-day comment period.
- 4. The Division received comment letters from Colorado Parks and Wildlife and the Division of Water Resources regarding the application. The letters are attached for your review. Please acknowledge and address any comments noted in the letters and make changes to the application as necessary.

EXHIBIT B – Site Description (Rule 6.3.2):

5. Exhibit B does not provide information regarding permanent man-made structures as required by Rule 6.3.2(b). Upon review of Exhibit L, the Applicant has identified overhead electric lines near the Central Extension Area, owned by Public Service Company of Colorado and the Applicant, as well as Forest Road 696 owned by the US Forest Service (USFS). During the August 14, 2023 pre-operational inspection, the Division observed an overhead utility near the north and northeast sides of the South London Stockpile Area and numerous structures near the Central Extension and Sorting Plant Area that are not accounted for in the permit. Please revise Exhibit B, an Exhibit E Map, and Exhibit L to comply with Rules 6.3.2(b), 6.3.5(1)(b), 6.3.12, respectively, for all structures within 200 feet of the affected lands.

EXHIBIT C - Mining Plan (Rule 6.3.3)

- 6. Exhibit C discusses that there are existing buildings on the permitted site that will be utilized in the operation and that temporary structures ("zircon-type" steel containers) may be brought to the site. Additionally, as observed during the August 14, 2023 pre-operational inspection, the Central Extension and Sorting Plant Area is located within a disturbance associated with the historic London Mine and current water treatment activities. Please review the definition of "affected lands" outlined in Rule 1.1(4): and confirm all mining activities will remain within the affected lands boundary. Please also discuss how the permit boundary will be clearly delineated pursuant to Rule 3.1.12(2) to prevent off-site impacts from occurring at the Central Extension and Sorting Plant Area where a pre-permit disturbance exists on the other side of the permit boundary.
- 7. Exhibit C lacks specific details or estimations regarding quantities of materials that will be processed. Please provide the estimated volume of material (cubic yards) that will be removed from each of the three waste rock areas (South London Stockpile Area and the Upper WR Stockpile and Lower WR Stockpile at the Central Extension and Sorting Plant Area). Please provide how much is expected to leave the site as ore for off-site milling and how much barren material will remain on-site.

- 8. Based on discussions with the Applicant during the August 14, 2023 pre-operational inspection, Exhibit C and Exhibit E Mine Plan Map need to be updated to describe and depict the entire processing plan including but not limited to the crusher feed stockpile, crusher, radial stacker, sorter feed stockpile, fines stockpile, sorting facility, sorted ore and barren stockpiles, and any other facility to be used. Appropriate designs and details need to be provided for all structures which are existing or and proposed to be constructed as a part of the operation.
- **9.** It is the Division understanding, the sorting plant requires the material to be screened and therefore a certain quantity of fines will remain. These fines will contain both mineralized ore and barren waste material. Please provide an estimated volume (cubic yards) of fines that will be generated from the Operation.
- **10.** Please provide the maximum volume (cubic yard) at any given time of the following processing stockpiles: crusher feed, sorter feed, fines, sorted ore, and barren stockpiles.
- 11. In accordance with Rule 6.3.3(1)(i), please provide design details and additional information regarding the storm water runoff and sediment containment berms located at the base of each waste rock pile and the southern edge of the processing area. Through discussions with the Applicant regarding the topography constraints of the Upper and Lower WR Stockpiles at the Central Extension Area, the Applicant may also propose to utilize alternative measures for storm water and sediment control.
- 12. During the August 14, 2023 pre-operational inspection, the Applicant discussed the plans for storm water controls at the processing area. The site will be graded to the north where storm collects in a ditch and flows to a small sediment pond in the northeast corner of the area before discharging into the off-site CDPS Pond. This is currently not discussed in the Exhibit C Mine Plan nor accurately depicted on the Exhibit E Mine Plan Map. Please revise Exhibit C and E accordingly.
- 13. During the August 14, 2023 pre-operational inspection, the Applicant stated that the construction of additional facilities/processes are needed for the pre-permit and off-site water treatment. The Applicant mentioned the foundation pad for the ore sorter may be used to contain clarifying units for this new water treatment. Please thoroughly discuss these plans for the water treatment system, providing specific design details and a discussion on the timeframes of construction and use as compared to the mining operation's timeframes. Depending on how the Applicant responds to this item, the foundation pad may need to be considered an Environmental Protection Facility and comply with all appropriate portions of Rule 6.4.21 and Rule 7 and the water treatment may need to be addressed in accordance with Rule 3.1.6(1).
- 14. During the August 14, 2023 pre-operational inspection, the Division observed a water line from the well associated with P-2016-020, located west of the crusher area traveling east toward the London Mine water tunnel, likely crossing through the permitted area. Please provide details on the location of the water line in comparison to the proposed operation. If this line is within 200 feet of the permit boundary, please account for this additional structure in Exhibit B and update Exhibit C to include the size of pipe, depth, flow rates, and any proposed protective measures that are needed to ensure the operation does not damage the water line.
- **15.** Through discussions with the Applicant on ensuring the reclaimed site is stabilized as required by 3.1.5(3), 3.1.5(10), and 6.3.4(1)(e), the Applicant has stated the operation will now salvage the native material underneath the South London Stockpile Area and it will be used as a growth media for reclamation prior to seeding the site. Please update Exhibit C with this revised plan and provide details on the estimated depth of growth media to be salvaged during removal of the waste rock piles

MineWater LLC – Adequacy Review – M-2023-015 August 25, 2023 Page **4** of **6**

EXHIBIT D – Reclamation Plan (Rule 6.3.4):

- 16. In response to Notice of Deficiency Item 5, the Applicant addressed Rule 6.3.4(1)(f), including a discussion on the applicability of Rules 3.1.6(1)(f)-(h) for the proposed operation. Please discuss how the Applicant will demonstrate the proposed mining operation will complement the ongoing water treatment program and is expected improvement of water quality. This demonstration could be to comply with Rule 6.4.21(9) and then commit to providing groundwater data through the life of mine prior to treatment and discharge. This would allow the Applicant to compare pre-permit conditions to water quality during and after the mining operation to help show the operation did not degrade water quality.
- 17. As required by Rule 6.3.4(1)(e), please provide details and designs on the backfilling of barren waste rock to ensure a stable configuration of the replaced material.
- 18. As discussed above, the Operation will now salvage the native material underneath the South London Stockpile Area to be used as a growth media for reclamation prior to seeding the site for the purposes of stabilization and the protection of off-site lands. Please update Exhibit D with this revised plan and provide details to address the measures that will be taken to revegetate the site as required by Rule 6.3.4(1)(c).
- 19. The quality of growth media underneath the South London Stockpile Area is unknown and could be degraded. Please demonstrate through a soil test that the material planned to be salvaged as growth media is of sufficient quantity and quality to cover and revegetate the backfilled barren waste rock and the footprint of the removed historic waste rock stockpiles. If the soil tests indicate soil amendments are needed, please provide the specific recommendations for how the soil needs to be modified to support revegetation. Otherwise the Applicant may propose a plan to import the necessary growth media to the site. Please revise Exhibit D and Exhibit U to address these comments in accordance with Rules 6.3.4(1)(c)(i) and (ii) and Rule 6.4.21(17).
- 20. Please provide the size of the disturbance footprint associated with each of the three waste rock stockpiles.
- **21.** The Division will calculate the total required financial warranty for the site after the responses to this review letter are received. The Division will provide the Applicant a copy of the Division's reclamation cost estimate for review prior to the decision on the application. *No response needed.*

EXHIBIT E - Map (Rule 6.3.5)

22. In accordance with Rule 6.2.1(2)(d), the Division requests that at least one map provide the latitude/longitude coordinates of each permit boundary corners. This information will be utilized in the review of the permit application, assist the Division in conducting future inspections of the operation, and provide a more thorough permit file. The Applicant may also provide a simple table with the requested coordinates in lieu of updating one of the maps, however one permit map will need to provide numbered labels on each boundary corner which corresponds to the respective coordinate on the table.

EXHIBIT F – List of Other Permits and Licenses Required (Rule 6.3.6)

23. The application states the two areas of the permit will be accessed by County/Forest Roads. Please provide documentation that no additional permit or approval is needed for the operation from the United States Forest Service if the operation will be using FS roads.

MineWater LLC – Adequacy Review – M-2023-015 August 25, 2023 Page **5** of **6**

24. Please discuss if the Steinert XRT Ore Sorter will require a Radioactive Material License from the Colorado Department of Public Health and Environment or any other permit, license, or authorization from applicable agencies.

EXHIBIT I – Proof of Filing with County Clerk (Rule 6.3.9):

25. Any changes or additions to the application on file with the Division, must also be reflected in the public review copy. Please submit proof that the public review copy has been updated with a copy of the response to this adequacy letter

EXHIBIT L – Permanent Man-made Structures (Rule 6.3.12):

26. Within Exhibit L, the Applicant has identified three structures within 200 feet of the affected lands boundary, however the structure agreements or alternatives were not provided in Exhibit L. Please provide documentation in accordance with Rule 6.3.12 for all structures not owned by the Applicant.

EXHIBIT U – Designated Mining Operation Environmental Protection Plan (Rule 6.4.21):

- 27. Within Exhibit U, Section 6, the text states a waste rock analysis is included in the application, however the Division was unable to locate the analysis. Please provide the waste rock analysis. Geochemical data and analysis is required under Rule 6.4.21(14). Please ensure the application addresses all sections of Rule 6.4.21(14) for the stockpiled ore to be processed by the operation and the waste material (mineralized fines from crushing/screening and sorted barren material) that will need to be disposed of on-site.
- **28.** In addition to the waste rock analysis, please ensure Exhibit U, Section 6 of the application addresses all sections of Rule 6.4.21(6) regarding material handling. The Applicant will need to address handling the ore prior to crushing, sorter feed and fines stockpiles, and sorted ore stockpiled for off-site transport.
- **29.** Within Exhibit U, Section 10(a), the Applicant describes the general surface water control and containment facilities. As required by Rule 6.4.21(10)(a), please provide design specifications (locations, dimensions, capacities, materials, maintenance plan, etc.) certified by a licensed professional engineer for all Environmental Protection Facilities intended to capture and/or retain surface water run-off from areas affected by the Designated Mining Operation prior to its release from the mine-site. Please note, in accordance with Rule 7.3.1(3), such facilities shall be appropriately designed for their intended purpose and shall consider site specific conditions and on or off-site impacts to human health, property and the environment. Design capacities shall be sufficient to handle the design storm event for the area. The design storm event may be the two (2) year, 24-hour storm event up to the Probable Maximum Precipitation (PMP) event plus the ten (10) year, 24-hour storm event.
- **30.** Please provide information on how the Applicant intends to comply with Rule 7.4 regarding the site's Environmental Protection Facility's review, certification, and inspection.
- 31. In response to Rule 6.4.21(10)(b), the Applicant states Stormwater Management conditions have been incorporated into the CDPS Permit. Please provide a demonstration that a Storm Water Management Plan is a part of the off-site water treatment discharge permit. In accordance with Rule 6.4.21(10)(b), please also provide a copy of the Storm Water Management Plan and a maintenance and inspection program to ensure all drainage control and containment facilities will be properly operated and maintained.

MineWater LLC – Adequacy Review – M-2023-015 August 25, 2023 Page **6** of **6**

- **32.** As required by Rule 6.4.21(15)(a), please provide a detailed construction schedule for the waste disposal facility.
- 33. The Division has reviewed Exhibit U and has determined application does not address all sections of the Rules Please submit a revised Exhibit U addressing all requirements outlined under Rule 6.4.21. At a minimum, please provide information addressing all sections of Rule 6.4.21(7), 6.4.21(8), Rule 6.4.21(11), Rule 6.4.21(12), and Rule 6.4.21(13).

This concludes the Division's adequacy review of this application. This letter shall not be interpreted to mean that there are no other technical deficiencies in your application; other issues may arise as additional information is supplied. Please be advised the permit application may be deemed inadequate, and the application may be denied on September 15, 2023, unless the above mentioned adequacy review items are addressed to the satisfaction of the Division. If more time is needed to complete the reply, the Division can grant another extension to the decision deadline. A request for additional review time must be received no later than the deadline date.

If you have any questions, please contact me at 303-866-3567 ext. 8132 or elliott.russell@state.co.us.

Sincerely,

Elliott R. Russell Environmental Protection Specialist

Cc: Michael Cunningham, Division of Reclamation, Mining & Safety Bob Oswald, High County Consulting Services LLC Ben Langenfeld, Greg Lewicki and Associates