



March 19, 2024

Mr. Joel Renfro
Division of Reclamation, Mining and Safety
1313 Sherman Street, Room 215
Denver, CO 80203

**Re: Thunderbird Sand and Gravel, File No. M-2023-032,
Response to Preliminary Adequacy Review**

Dear Mr. Renfro:

Martin Marietta Materials Inc., received a copy of the Division of Reclamation, Mining and Safety's ("DRMS") preliminary adequacy review of the 112 construction materials reclamation permit application for Thunderbird Sand and Gravel, permit M-2023-032, dated January 17, 2024. Please see the following responses, and the referenced supporting documentation.

Rule 6.2.1(2)(e) General Requirements – Maps and Exhibits

- 1) The Exhibits C and F maps do not meet the scale requirements that "the acceptable range of map scales shall not be larger than 1 inch = 50 feet nor smaller than 1 inch = 660 feet". The Division found the scale for these maps to be approximately 1 inch = 900 feet. Please reformat these maps to meet the scale requirements.

Response: The map scale, as shown by the scale bar, is 1"=400' which is within the range set by the rules and has not been changed. It is possible that the pages were printed out at half scale and not the full scale size pdf which is 22" x 34".

Rule 6.4 Specific Exhibit Requirements – 112c Reclamation Operation

Rule 6.4.1 Exhibit A – Legal Description

- 2) An "Exhibit A Map" is referenced under the "Mining Permit Boundary" section, but there is no Exhibit A Map provided with the application. Please provide an Exhibit A Map that meets the requirements of Rule 6.4.1(2).

Response: The attached revised Exhibit A has been corrected to reference the, "Exhibit B Map".

Rule 6.4.2 Exhibit B – Index Map

- 3) The mine entrance coordinates provided in the application (including on the Index Map) plot to the north of the Excelsior Ditch, at the northwestern corner of the proposed permit boundary. However, on the Index Map, the site entrance is shown to be located south of the Excelsior Ditch, at the southwestern corner of the proposed permit boundary. Please correct this discrepancy by ensuring the mine entrance coordinates correlate with the location depicted on site maps, including the Index Map. If the main site entrance were to change after the permit is issued, this change could be incorporated into the permit through a Technical Revision.

Response: The attached revised Exhibit A listing the mine entrance coordinates has been corrected to match the location of the entrance as shown on Exhibit B.

- 4) Please clearly label all roads and other access to the area on this map. For example, the label for Baxter Road appears to be mislocated.

Response: The label for "Baxter" references the Town of Baxter. The revised Exhibit B has added the location label for Baxter Road.

Rule 6.4.3 Exhibit C – Pre-mining and Mining Plan Map(s) of Affected Lands

Exhibit C1 Map:

- 5) Please show the owner's name, type of structures, and location of all significant, valuable, and permanent man-made structures contained on the area of affected land and within 200 feet of the affected land, per Rule 6.4.3(g). Some structures are accounted for such as Pueblo County's Baxter Road, Black Hills Energy's overhead electric, and Arkansas Groundwater and R. Assoc.'s Excelsior Ditch. However, there are structure owners identified in the table, including Premier Auto Body Repair LLC and Meadowbrook MHP LLC for which, the type of structure(s) owned by these entities (e.g., building, road, fence) are not labeled on the map. Additionally, in looking at recent aerial imagery of the site in Google Earth, there appear to be other structures located on and within 200 feet of the proposed permit area, such as fencing, buildings, roads, above ground utilities, and two small ponds (described in Exhibit G as "unnamed ponds") which are not labeled on the map. Please be advised, all existing structures must be identified on the map in accordance with Rule 6.4.3(g), including those owned by the applicant.

Response: Callouts for all significant, valuable, and permanent man-made structures are shown on revised Exhibit C1. Ancillary structures owned by the applicant which are slated for removal through the mining process, i.e. interior fences, wooden stock structures, existing dirt roads, and unnamed isolated ponds, have not been listed because they are not significant or valuable and they will be removed as mining progresses according to the submitted plans.

- 6) Please ensure all existing wells located on and within 200 feet of the proposed

affected land are identified on this map. If any of the existing wells located on the proposed affected land will be utilized by the operation in any way, these wells should also be labeled on the Exhibit C2 map.

Response: The wells located on and within 200' of the proposed affected land are shown on the revised Exhibits C1 and C2.

- 7) The location of some of the existing structures, such as roads and above ground utilities, are difficult to identify on the map. This could be due to the thin lines used to delineate them being marked over a satellite image of the site, making it difficult to differentiate these lines from the background. The satellite image provided is very helpful in showing pre-mining conditions; however, the Division will require a map where the items listed in the Legend are clearly delineated. Perhaps altering the scale of the map, changing the line style/thickness, and/or providing a black/white satellite map would correct this issue. Please revise this map to ensure that all required features are legibly portrayed.

Response: The opacity of the background image has been lowered to increase visibility of existing structures.

Exhibit C2 Map:

- 8) Please identify all proposed locations for topsoil storage, overburden storage, and mined material storage on this map.

Response: The attached revised Exhibit C2 shows the locations for topsoil, overburden and material storage. Overburden and topsoil will be segregated and stored in the berms in the north and northwest side of the site as well as in the added "stockpile area" on the northwest area north of the ditch.

- 9) Please ensure this map shows the anticipated location of all features of the proposed mining operation, including but not limited to, all roads, excavation areas, processing areas, stockpile areas, equipment storage areas, parking areas, facilities/buildings, stormwater management structures, monitoring wells, water diversions, water impoundments, and discharge points.

Response: A stockpile area, additional roads, a ditch crossing, parking area, 2 additional monitoring wells, and a shop have been added to the attached revised Exhibit C2. The excavation areas are shown on the map as the "East Pit", "West Pit", and the four (4) "Siltation Ponds". The processing/plant area is shown in the northern side of Phase 3. Equipment will be stored in the pit as described in the Mine Plan (Exhibit D). No stormwater management, water diversions or water impoundment structures are anticipated.

The Applicant will apply for and obtain a CDPS General COG500000 Discharge Permit from the Colorado Department of Public Health and Environment (CDPHE) prior to mining activities, at which point Discharge Points will be determined and authorized by CDPHE. The requirement for a Discharge Permit has been listed in Exhibit M.

- 10) Please delineate the proposed maximum disturbed area on this map (as was done with the proposed affected area). Please ensure the maximum disturbed area includes all lands to be disturbed in some way by the operation, and that it correlates with the proposed mining and reclamation plans and cost estimate.

Response: A table has been added describing the acreage of each Phase. The permit area has been set to the area of "Affected Land" which is defined as, "the surface of an area within the state where a mining operation is being or will be conducted, which the surface is disturbed as a result of such operation." The applicant is proposing the whole area within the permit boundary as "Affected Land". The Applicant understands that a Technical Revision may be required for changes to the mine plan map shown in Exhibit C2.

- 11) This map shows "screening berms" will be placed along the northwestern edges of the proposed permit area. However, it is not clear how this portion of the permit area will be accessed by the operation. The map shows a minimum 80-foot buffer will be maintained from the Excelsior Ditch which crosses this portion of the permit area, and the proposed mine entrance is located on the south side of this ditch. Please ensure this map shows how all proposed disturbance areas (including lands disturbed by the screening berms) will be accessed by the operation.

Response: A ditch crossing and road have been added to Exhibit C2 showing the approximate access to the area north of the Excelsior Ditch.

- 12) In the Notes section at the bottom of this map, Item #2 states "River bank location will be evaluated with pending survey". The application does not discuss a pending survey. Please clarify what type of survey will be performed and when it is expected to be completed.

Response: A land survey of the bank will be conducted to determine the actual bank location prior to mining. The slurry wall and mine limit will be adjusted based on the results of this survey to maintain the offsets shown on Exhibit C2. Discussion of this survey has been added to Exhibit D.

Exhibit C1 and C2 Maps:

- 13) Please refer to Item #1 above regarding the map scale.

Response: The map scale, as shown by the scale bar, is 1" = 400' which is within the range set by the rules and has not been changed. It is possible that the pages were printed out at half scale, 11" by 17" and not the full-scale size of the pdf which is 22" x 34".

- 14) Please ensure the proposed mine entrance location and coordinates are accurate. As with the index map, the coordinates provided on these maps (which plot at the northwestern corner of the proposed permit area) do not correlate with the location shown (at the southwestern corner of the proposed permit area).

Response: The coordinates have been updated to reflect the location on the map.

- 15) The proposed affected area shown on these maps appears to be set equal to the proposed permit area of 543.5 acres. However, based on the proposed disturbances described in the application and depicted on the Exhibit C2 map, the eastern half of the proposed permit area, as well as portions in the northwestern and southern areas will not be disturbed by the operation. Please clarify whether the applicant is proposing an affected area set equal to the permit area, as depicted on these maps. If this is not the case, then please revise the maps accordingly.

Response: The Applicant is proposing an affected area set equal to the permit area, as depicted in Exhibits C1 and C2. The Applicant understands that a Technical Revision may be required for changes to the mine plan map shown in Exhibit C2.

Rule 6.4.4 Exhibit D – Mining Plan

- 16) This exhibit states under section (a) that “Lined cells may be lined with slurry walls, clay liners, or a combination thereof”. The Division will require the applicant to commit to a method for lining the cells, whether it is by slurry wall, clay liner, or a combination thereof. The Exhibit C2 map indicates a slurry wall liner will be used in conjunction with a clay liner on each of the two proposed mining cells. Please provide a detailed description in this exhibit of how the mined cells will be lined and ensure this plan correlates with the Exhibit C2 map. The description should include all information needed to calculate the required financial warranty for the operation, such as the approximate dimensions of the proposed liner system(s), materials used, approximate volumes, installation methods, and equipment. For a slurry wall liner, this exhibit should also include the approximate total linear length of each enclosure and the depths to which the system will be keyed into bedrock.

Response: Phases 2 and 3 will be slurry wall lined as reflected in the revised Exhibit D. The slurry walls will be keyed 4-feet into the bedrock and the revised slurry wall curtain area utilized in the Financial Warranty is 379,100 and 198,144 square-feet respectively for Phases 2 and 3. Exhibits C2, D and L (Financial Warranty estimate) have been revised to reflect the changes accordingly.

- 17) Please provide a detailed description of all proposed mine facilities/structures that will require demolition or removal for reclamation so that an appropriate financial warranty can be calculated. For example, this exhibit mentions that a parking area will be constructed adjacent to the plant area. Will this parking area be surfaced in any way (e.g., graveled, paved)? If so, please describe the type of surfacing, an approximate surface area (in acres), and an approximate depth of placement. Additionally, please ensure that any such features are included on the Exhibit C2 map and a reclamation plan for these features is included in Exhibit E.

Response: Exhibits C-2, D, E, F, and L have been updated to reflect the anticipated structures requiring demolition and reclamation. A conveyor will be used to transfer mined materials to the plant area. The shop and scale house will be modular structures on footings. Costs for the removal of the conveyor, shop and scale house footings are included in the revised Exhibit L, Financial Warranty. The parking area will be graveled and is near the site access road and is included as part of the Phase 1a reclamation.

- 18) Please address how the northwestern portion of the proposed permit area, north of the Excelsior Ditch, will be accessed to place the proposed screening berms and to reclaim this area. The Exhibit C2 map shows that a minimum 80-foot buffer will be maintained from the ditch, indicating that no crossings will be installed. However, no additional access to this area is proposed off Baxter Road. Therefore, it is not clear how the applicant plans to access this area.

Response: Martin Marietta will coordinate the placement of a culvert or bridge with the owners of the Excelsior Ditch to access the northwest area. Exhibits C2, D and L have been updated.

- 19) This exhibit states that topsoil and overburden will be stripped from a given phase and placed in stockpiles. Please commit to storing the topsoil and overburden in separate stockpiles.

Response: Martin Marietta commits to segregating topsoil and overburden in separate stockpiles.

- 20) Please describe how the existing Thunderbird Lake will be utilized by the operation. Will this lake be used or disturbed in any way?

Response: Thunderbird Lake will serve as the site freshwater supply supplying water to the site wash plant. Water will be pumped from the lake and recirculated to the lake after passing through a series of siltation ponds at Phases 1a and/or 1b. Pipes to and from the lake will be utilized to minimize disturbance. Placement of topsoil and reseeding area 1 acre included in the revised Exhibit L.

- 21) This exhibit states that siltation ponds will be utilized in the operation. Please clarify how they will be utilized (e.g., process water, dust mitigation). Will water from the plant site be pumped to the siltation ponds? Will water from the siltation ponds be pumped to a discharge point along the river? What infrastructure (e.g., ditches, pipelines) will be needed? Please ensure that all proposed infrastructure is shown on the Exhibit C2 map.

Response: The siltation ponds will receive used water via pipeline from the wash plant in order to allow silt to settle by gravity. The clarified water will move through the settling ponds, and eventually to the fresh water pond (Thunderbird Lake) to be re-used in the plant. It is not anticipated that water from these ponds will be discharged. All discharge to the river will be in accordance with conditions of the discharge permits to be obtained. These items have been updated on Exhibit C2.

- 22) This exhibit states under section (a) Mining - Phase 1 that "Excess overburden may also be sold for use offsite". If the overburden may be needed for reclamation backfill, the applicant must commit to keeping all salvaged overburden on site until reclamation is completed.

Response: Martin Marietta calculations indicate a substantial excess of overburden is present on the site compared to the overburden needed to complete the proposed reclamation plan.

Martin Marietta commits to retaining 1.3 times more overburden than that required for final reclamation on site. Overburden in excess of this amount may be sold for use off site. After final reclamation, any remaining overburden may be sold.

- 23) This exhibit states under section (a) Mining - Phase 2 that "Mining may encroach to 200 feet of the top of river bank" and that "These encroachments will be backfilled to a distance 400 feet from the top of river bank". Please provide additional details on how this plan will be implemented, including an estimated timeline for the proposed backfilling with respect to mining and liner installation. The applicant should be aware, the plan to mine within 400 feet of the river without proposing any floodplain protection measures for the pits (e.g., bank stabilization, inlet/outlet structures) may not comply with the Division's floodplain protection standards for new sand and gravels pits adjacent to rivers and perennial streams. Please refer to the enclosed adequacy review letter from Rob Zuber for further information on this topic.

Response: The slurry wall liners will be constructed prior to the mining below the water table in Phases 2 and 3. On the river side, the slurry wall will be placed 175-feet, at its closest, from the river bank. The mine limit will be 25-feet from the slurry wall, or a distance of 200-feet from the river bank. Martin Marietta plans to mine no closer than 200-feet from the top of river bank during the non-flood season, September 30 through April 1. Backfill, using overburden removed prior to mining, will be placed at least 400-feet from the top of bank by the succeeding April 1st. In this manner, any areas mined up to 200-feet of the riverbank will be backfilled to at least 400-feet from the top of the bank. Review of Mr. Zuber's review comments and Mile High Flood District policies, indicates no stabilization is required if mining is 400-feet from the river bank.

- 24) This exhibit states under section (a) Processing that "All material mined under this proposed application will be transported by conveyor or haul truck to the processing area". Will this conveyor have any permanent components that will require removal/demolition for reclamation, such as concrete footings? If so, please provide approximate dimensions for the conveyor and all associated components requiring removal/demolition.

Response: The conveyor may have permanent components in the form of concrete footings. These are shown in Exhibit L, Financial Warranty.

- 25) This exhibit mentions under section (a) Import Material that material may be imported to the site, and that if any of this material will be used as backfill, a notarized letter will be submitted to the Division indicating the materials are inert in accordance with Rule 3.1.5(9). Please commit to submitting a Technical Revision with all information required by Rule 3.1.5(9) for any proposal to import material to the site for use in reclamation. This revision should include revised mining and reclamation plans and maps and a revised bond estimate, as appropriate.

Response: Martin Marietta commits to submitting a Technical Revision for any proposal to use import fill for reclamation, and this is reflected in Exhibit D.

- 26) This exhibit states under section (b) Earthmoving that "All phases will be mined at a 0.5:1 slope or flatter". First, please specify the horizontal and vertical components of the proposed slope gradient (for example, 0.5H:1V). Additionally, please specify the

anticipated maximum length of the active highwall to occur at any time, prior to grading the slope to its final configuration for reclamation.

Response: 0.5:1 refers to 0.5 horizontal to 1 vertical (0.5H:1V) and has been adjusted in the revised Exhibit D. The anticipated maximum length of highwall to occur is 2,000 lineal feet.

- 27) This exhibit states under section (d) that “The Operator may mine multiple stages concurrently in order to obtain a range of material for production” and “Since multiple stages will be worked at any one time, the approximate combined size of the areas being worked at any one time may range from 25 acres to 131 acres”. The Division understands the applicant is proposing to mine multiple stages at any time. However, the applicant must commit to a maximum amount of disturbance so that an appropriate financial warranty amount can be calculated for the proposed operation. Therefore, please specify a maximum disturbance amount (in acres). Please also make sure this disturbance amount is reflected on the Exhibit C2 map (or a separate mining plan map). Please be advised, the maximum disturbance amount must include all lands disturbed by the operation, regardless of the reclamation status of these lands. Note that after permit issuance, the maximum disturbance amount can be increased at any time through a Technical Revision submittal.

Response: The maximum disturbance of 223 acres is accounted for in the Financial Warranty Exhibit L.

- 28) According to the information provided in section (f)(i) of this exhibit, 2-22 feet of overburden exists at the site and the overburden overlies approximately 5-27 feet of sand and gravel deposit. Based on these ranges, the Division estimates a maximum depth of approximately 49 feet (plus topsoil) may be mined. Please specify the maximum mining depth for the operation.

Response: Based on the explorations performed at the site (summarized in Exhibit I), and as stated in section (f)(i) of Exhibit D, the maximum depth of mining will be approximately 29 feet.

- 29) This exhibit states under section (g) that gold may be extracted as a secondary commodity. Please describe how the gold will be recovered, specifically, what chemicals if any will be used in the recovery process?

Response: Gold may be recovered utilizing mats placed in the wash plant. No chemical processes will be utilized.

- 30) Per Rule 6.4.4(j), please specify the dimensions of any existing or proposed roads that will be used for the mining operation, and describe any improvements necessary on existing roads and the specifications to be used in the construction of new roads. Additionally, please describe any associated drainage and runoff conveyance structures to include sufficient information to evaluate structure sizing.

Response: Roads will be graveled and approximately 30 feet wide. No runoff conveyance structures are planned.

- 31) Please include a detailed description in this exhibit of the proposed liner system(s) to be installed for reclamation, and the timing of installation with respect to mining.

Response: See response to item 16.

- 32) Please include a detailed description of the proposed backfill activities for reclamation, including the type of backfill material to be used, where this material will be derived, approximate material volumes, how this material will be placed, and the anticipated timing of backfilling activities with respect to mining.

Response: All backfill will consist of overburden from the site. Based on the exploration, there will be ample overburden to achieve reclamation goals. Estimated requirement for the backfill amounts are shown in Exhibits F and L. The amount of available overburden is estimated to be approximately 2,400,000 cubic yards available after stripping of the three-mine phases. Placement of fill in the backfill slopes will be timed in a manner that avoids double handling of the material by stripping an area to be mined and placing it directly in the backfill slope as much as possible. Timing of backfill placement to achieve a 400-foot distance from the top of river bank is discussed in item 23 above.

- 33) In section (a) of this exhibit, it's estimated that approximately 6 acres will be mined to create fresh water and silt ponds. The Exhibit C2 map shows 4 proposed siltation ponds that will each be approximately 2 acres in size, giving a total of 8 acres. Please make sure the text in this section correlates with what is shown on the maps.

Response: Exhibit E has been corrected to match the maps.

- 34) Please describe how any planned disturbances to the existing Thunderbird Lake will be reclaimed. Please clarify if this lake is the "fresh water" pond referred to in this exhibit.

Response: See response to item 20.

- 35) In section (a) of this exhibit, it is mentioned that bermed topsoil and overburden *may* be used in final reclamation. Please change "may be used" to "will be used" since all salvaged topsoil and overburden must be used in final reclamation, as needed to fulfill all components of the reclamation plan. Any excess materials that remain after reclamation is completed can then be taken off-site or sold.

Response: Language has been changed to "will be used". However, concurrent reclamation is expected to occur as mining progresses, meaning that material stripped may be directly placed for final reclamation without the need to store in berms. It is possible that topsoil and overburden that is placed in the berms during the early phases of mining will become excess materials. Excess overburden and topsoil are available based on material balance estimates.

- 36) In section (a) of this exhibit, the proposed topsoil, overburden, and clay stockpiles are referenced as being shown on Figure C-2; however, no stockpiles, other than "screening berms" were labeled on this map. Please ensure that all proposed

stockpiling areas are shown on the Exhibit C2 map.

Response: See revised Exhibit C-2 map.

- 37) Given the proposed mining operation is located adjacent to the Arkansas River, the applicant will need to provide a detailed stormwater management plan for the site describing what measures will be taken to prevent impacts to the river during mining and reclamation. This plan can be provided in this exhibit, Exhibit D, or Exhibit G. In this exhibit, please describe how any proposed stormwater structures/features will be reclaimed.

Response: Consistent with other mining operations near rivers, drainage from disturbed areas at the site will be directed, if needed, into the pit. The setbacks the natural vegetation that will remain in the setbacks help prevent any impacts to the river. If needed, stormwater will be discharged from the site under discharge permits obtained from the Colorado Department of Public Health and Environment (CDPHE). A Stormwater Management Plan will be written and implemented prior to mining at the site if required by the CDPS Discharge Permit.

- 38) In section (c) of this exhibit, it states "Drill or auger holes that are part of the mining operation shall be plugged with non-combustible material, which shall prevent harmful or polluting drainage. Any test pits, soils boring holes, or monitoring wells not located within the mine excavation limits will be plugged as soon as it can be confirmed that they are no longer needed for the operation.". The Division could not find a Notice of Intent approved by our office for the exploration activities described. Therefore, please provide a detailed description of all existing exploration-related disturbances (e.g., boreholes, test pits, wells), including the approximate number and dimensions of each type of feature, and how these features will be reclaimed.

Response: This statement is referring to future holes that may be drilled, if needed, after permit issuance. All existing monitoring wells at the site are permitted as shown on the Exhibit G map. Monitoring Well Permits will be obtained for any additional monitoring wells to be drilled at the site. The wells will be constructed in a manner the meets DWR requirements. There are no current exploration-related disturbances that require reclamation.

- 39) Since wildlife habitat is part of the proposed post-mining land use for the site, has the applicant contacted Colorado Parks and Wildlife to see if any unique opportunities are available to enhance habitat and/or benefit wildlife which could be accomplished within the framework of the reclamation plan and costs, per Rule 3.1.8(2)?

Response: Parks and Wildlife is aware of the project based on discussions with Martin Marietta regarding the public comment period. To date Parks and Wildlife has not submitted any comments to enhance wildlife. Martin Marietta is open to further dialogue with CPW.

- 40) According to the Exhibit C2 map, a scale and scale house will be located along the main access road. However, this exhibit does not include a plan for reclaiming these structures. Please provide a description of all proposed structures/facilities (e.g., scale, scale house, utilities, conveyor, roads) that will require reclamation, specifically any permanent features such as concrete foundations or footings that will require demolition/removal for reclamation.

Response: Modular buildings are planned at the site. The buildings will require footings. An updated Exhibit L, Financial Warranty accounts for these structures.

- 41) Section (c) of this exhibit includes a seed mixture for stabilizing topsoil stockpiles that remain in place for more than 180 days. However, a seed mixture was not included in this exhibit for disturbed areas to be revegetated for reclamation. Please provide the reclamation seed mixture(s), including the seeding/planting rate for each species (in pounds of PLS per acre), and the expected time(s) of seeding/planting.

Response: A reclamation seed mixture, seeding quantities and times of planting are listed in Exhibit E and provided on the Exhibit F map.

- 42) Please provide a description of the size and location of each area to be reclaimed during each phase as required by Rule 6.4.5(2)(e)(ii). Please break down the acreages by type of disturbance, such as reservoirs, reservoir shorelines, ponds, stockpile areas, facility areas, roads, etc.

Response: See the revised Exhibit F map.

- 43) Please state the total amount of acres at the site that will be retopsoiled and revegetated for reclamation. Additionally, please break this acreage amount down by reclamation phase and area, such as the reservoir slopes above waterline for each pit and disturbed areas outside of the pits.

Response: The areas and quantities are broken out on the Exhibit F map and in the Financial Warranty estimate of Exhibit L.

- 44) In section (c) of this exhibit, it states "The permit area will be marked by signage and fencing on the north side of the river. Because no mining will occur south of the river, the permit area will be marked by signage and existing fences will remain." Please commit to marking the boundaries of the entire affected area by monuments or other markers that are clearly visible and adequate to delineate such boundaries, as required by Rule 3.1.12(2).

Response: Martin Marietta commits to displaying visible monuments or other markers to delineate the permit boundary.

Rule 6.4.6 Exhibit F – Reclamation Plan Map

- 45) Please show the approximate locations of any proposed bank stabilization and/or inlet/outlet structures to be installed for reclamation.

Response: The applicant is not proposing any bank stabilization or inlet/outlet structures. Mining within 400 feet of the river bank will be performed during the non-flood season (September 30 through April 1), and will be backfilled to a distance of 400 feet from the top of the river bank by the following April 1.

- 46) What will be the fate of any existing or proposed wells on site? Please show on the map any wells that will remain after reclamation. If any monitoring wells (not owned by the applicant) are to be converted for domestic use, please include a notarized letter from the landowner acknowledging their desire to keep these wells for that purpose.

Response: All proposed wells will be plugged and abandoned and a GWS-09 Well Abandonment Report will be submitted to the Department of Water Resources once reclamation is complete.

- 47) Please ensure that all other structures/features proposed to remain for reclamation (e.g., utility lines, roads, fences, stormwater management structures) are shown on this map.

Response: All structures intended to remain are shown on the Exhibit F1 Map.

- 48) Please revise this map to ensure that all required features are legibly portrayed (refer to item #7 above).

Response: The aerial has been removed to increase visibility of the required features.

- 49) Please show on this map the proposed final slope gradient (in horizontal:vertical) for all disturbed lands to be reclaimed.

Response: The annotations located inside the ponds describe the final slope gradient as well as the typical sections of the reclamation slopes shown on the bottom of the map. Reclaimed slopes will be no steeper than a 3H:1V slope.

- 50) Please show on this map all areas that will be revegetated for reclamation.

Response: All areas slated for revegetation are shown on Exhibit F.

- 51) Please show the proposed final land use (e.g., developed water resource, wildlife habitat) for each portion of the affected lands.

Response: The proposed final land use for the site is developed water resource, as shown on Exhibit F. Disturbed areas outside of the two lined reservoirs will be graded and reseeded as upland grassland.

- 52) Please state on this map the average or range of thickness of replaced overburden and topsoil by reclamation area or phase.

Response: Exhibit F shows the depth of the ponds. Six (6) inches of topsoil will be replaced throughout the site. The volumes of each material required for reclamation are shown on Exhibit F per phase and the total for the site has been included in the notes. There is an estimated 2.4 million cubic yards of overburden at the site and total estimated overburden required for reclamation is 1.8 million cubic yards.

- 53) Please ensure the reclamation plan for all proposed disturbances (e.g., scale, scale house, roads, stockpile areas, parking/equipment storage areas, stormwater structures, conveyor areas) is depicted on this map.

Response: Exhibit F shows the reclamation plan for all disturbed areas depicted on the Exhibit C2 Map.

Rule 6.4.7 Exhibit G – Water Information

- 54) Please describe how this operation will directly affect surface and/or groundwater systems.

Response: See revised Exhibit G.

- 55) Section (a) of this exhibit mentions the existing Thunderbird Lake and two unnamed ponds in the southwestern portion of the proposed permit area. While Thunderbird Lake is identified on the Exhibit C maps, the two unnamed ponds are not identified. It is not clear how Thunderbird Lake will be utilized by the operation, but it appears the two unnamed ponds will be mined through during Phase 3. Please describe how these 3 existing water features will be affected by the proposed mining operation.

Response: See response to item 20 for the utilization of Thunderbird Lake. The unnamed ponds will be mined through in Phase 3. This is also reflected in paragraph (a) of Exhibit G.

- 56) Due to the close proximity of the proposed mining operation to the Arkansas River, please provide a detailed plan describing how water from dewatering operations or from runoff from disturbed areas, piled material and operating surfaces will be managed to protect against pollution of either surface or groundwater both during and after the operation.

Response: All discharges from the site will be covered under the Colorado Discharge Permit System permit that will be obtained from the CDPHE as described in the revised Exhibit G. All runoff from disturbed areas, including stockpiles and operating surfaces, will be directed toward the pit. Dewatering operations will be designed to allow settling prior to discharge through a permitted discharge point.

- 57) Please describe any proposed infrastructure or other features associated with dewatering.

Response: Dewatering will be accomplished by digging a sump, generally along the base of the mine slope, which will hold a floating pump. The pump will have an HDPE discharge line that will be routed to a comingled discharge point. The pump and HDPE line are all portable and temporary so they can move as the mine progresses.

- 58) Please provide the approximate groundwater levels that exist within the proposed affected lands.

Response: Measurements from existing monitoring wells and review of exploration logs indicate the groundwater lies at approximately 5 to 8 feet below the ground

surface.

- 59) Please describe how the operation intends to prevent any impacts to the Excelsior Ditch during mining and reclamation.

Response: The operation is not anticipated to have impacts to the Excelsior Ditch during mining and reclamation. The geotechnical stability analysis indicates that the setbacks and perimeter slopes of the mining areas meet the DRMS requirements for factor of safety to protect the ditch. Phase 1 will be wet mined (with no dewatering) having minimal to no impacts on the ditch. Phases 2 and 3 will be slurry wall lined prior to mining below the water table effectively cutting off impacts from dewatering within the mine pits.

- 60) Please describe any expected impacts by the operation to existing wetlands identified within the proposed affected lands (if authorized by the USACE).

Response: Impacts to wetlands are anticipated to be minimal due to the design of the mining plan. The report in Exhibit H identifies 69.24 acres of potential wetlands on the property. It is expected that less than 0.5 acres will be impacted due to the design of the mining plan. Impacts to wetlands along the Excelsior Ditch will be minimal for the same reasons described above in the response to number 59. Wetlands associated with Thunderbird Lake will be relatively stable due to the pumping and recirculatory use of the freshwater pond. If wetlands around Thunderbird Lake are affected, the area will be reclaimed with a wetlands-seed mix. 0.06 acres of wetlands associated with the one (1) unnamed pond will be affected as the site will mine through this area during Phase 3. An additional isolated wetland of 0.38 acres may be affected. A jurisdictional determination or a nationwide permit will be obtained from USACE if required prior to disturbing these wetlands. Approximately 68.56 acres of potential wetlands on the east side of the site will not be affected. Wetlands along the Arkansas River will not be impacted as they are 175-feet from the slurry wall.

- 61) This exhibit indicates there will be a total of 6.6 acres of water surface at any time, including a 2-acre freshwater pond, 4 acres of siltation ponds, and 0.6 acre of dewatering trench. However, these estimates do not correlate with what is shown on the Exhibit C2 map. The Exhibit C2 map shows two primary siltation ponds, approximately 2 acres each, and two secondary siltation ponds, also 2 acres each. The estimated acreages for the freshwater pond and dewatering trenches are not shown on this map. Based on the estimates shown on the map, the 4 proposed siltation ponds alone would cover approximately 8 acres, which exceeds the total water surface estimate of 6.6 acres. Assuming the estimates provided in this exhibit for the freshwater pond and dewatering trenches are accurate, the Division estimates the total water surface at the site will be 10.6 acres. Please ensure the water surface estimates provided in this exhibit correlate with what is shown on the Exhibit C2 map.

Response: Only two siltation ponds (either Phase 1a or 1b) will be open at a time thus the 4.0 acres is correct for the siltation water exposures. The freshwater from Thunderbird Lake leaves 4.8 acres of water exposed. The total amount of exposed water will 9.4 acres (0.6+4+4.8) for a total evaporation loss of from exposed water surfaces is estimated to be 32.62 ac-ft. See the revised Exhibit G.

- 62) Section (d) of this exhibit states that “Annually the total evaporative and operational losses from mining activities (open water surface evaporation, water retained in the aggregate product, dust suppression) totals 33.0 acre-feet of depletion which must be augmented”. Please make any necessary corrections to the projected total depletions based on any changes made to the proposed total water surface.

Response: Adjusting for the use of Thunderbird Lake the depletions are 42.72 ac-ft. The number is revised in Exhibit G.

- 63) Please indicate the projected amount from each of the sources of water to supply the project water requirements for the mining operation. Stating that this information will be provided in the Substitute Water Supply Plan obtained from the Division of Water Resources is not sufficient, as Rule 6.4.7(4) requires this information be submitted with the permit application.

Response: Sources of water to supply the project may change throughout the life of the mine. These sources will be identified annually in the Substitute Water Supply Plan that will be submitted and approved by the Division of Water Resources. Sources of water are expected to be similar to those used at the applicant’s Rich Pit and may include water leased from the following entities:

- *Arkansas Groundwater and Reservoir Association*
- *Donala Water and Sanitation District*
- *Pueblo Board of Water Works*
- *Other water sources that may be obtained by the applicant*

The full amount of water required will be sourced from one or more of these potential sources.

- 64) Please provide an estimate of the water requirements, if any, for the reclamation phases of the project, and indicate the projected amount from each of the sources of water to supply these requirements.

Response: As stated in the revised Exhibit G, reclamation activities will require water for slurry mixing, and compaction of reclamation slopes and backfill to bring mine 400-feet from the riverbank. We estimate that approximately 116 acre-feet will be required over the life of the mine. This water will come from groundwater on the property, and will be accounted for in the Substitute Water Supply Plan, if required, as reclamation activities are conducted.

- 65) This exhibit states under the Mining Plan section of the Groundwater Sampling and Analysis Plan that “Three (3) mine cells are currently planned at the site”. Two mine cells are evident based on the mining and reclamation plan maps submitted. However, it is not clear where the 3rd mine cell is located. Please describe the proposed 3rd mine cell and ensure it is clearly identified on the appropriate maps and discussed in the mining and reclamation plans.

Response: The third mine cell, Phase 1, is associated with the wet mining that will occur when the siltation ponds are excavated.

- 66) The applicant should be aware, the Groundwater Sampling and Analysis Plan provided in this exhibit may not comply with the Division's standards for groundwater monitoring plans. Please refer to the enclosed adequacy review letter from Eric Scott for further information on this topic.

Response: The applicant has reviewed Mr. Scott's letter, which did not identify any specific deficiencies with the Groundwater Sampling and Analysis Plan that is included in the attached revised Exhibit G.

Rule 6.4.8 Exhibit H – Wildlife Information

- 67) This exhibit includes a Biological Resources Report prepared by Pinyon Environmental, Inc. for the Thunderbird property (heretofore referred to as "Report"), dated September 22, 2020. According to the Report, the site evaluation occurred on August 11-13, 2020, which was more than three years ago. Page 14 of the Report states "Soil, hydrologic, vegetation, biological, and ecological conditions typically vary even over short distances, by season, by elevation, and by meteorological conditions. Thus, the nature and extent of variations outside this biological investigation may not become evident except through further investigation. It is possible that ecological conditions may change from those observed, particularly over time." Please confirm that information provided in the Report accurately represents existing conditions at the site.

Response: The information provided in the report accurately represents existing conditions at the site.

- 68) Throughout section 3.4 of the Report, it is stated that portions of the proposed affected lands are occasionally or frequently flooded. Please explain how installing lined reservoirs will affect the flood hydraulics at this site. This information can be included in Exhibit E or G.

Response: Flood waters will fill the lined reservoirs until capacity is reached. Once full, the flood will occur as normal. See revised Exhibit G.

- 69) Section 4.1.2.1 of this Report recommends that additional Bald Eagle nesting surveys be performed prior to the commencement of operations, and that if new (unmapped) Bald Eagle nests are noted, coordination with the U.S. Fish and Wildlife Service (USFWS) and/or Colorado Parks and Wildlife (CPW) may be warranted. Please commit to this recommendation.

Response: Martin Marietta commits to the recommendation for a Bald Eagle nesting survey prior to commencement of operations.

- 70) Section 4.2 of this Report recommends the operation comply with the Migratory Bird Treaty Act (MBTA) at all times, as well as follow recommended guidelines set by CPW for nesting raptors. If active raptor nests are confirmed to occur within a 0.5-mile buffer of the project area prior to the onset of construction, it is recommended that a qualified wildlife biologist coordinate with the USFWS and/or CPW to identify appropriate actions to ensure that project activities do not disrupt nesting activities. It

is also recommended that nesting surveys be completed for non-raptor species prior to construction if the project activities occur during the nesting season (generally April-August). Please commit to these recommendations.

Response: Martin Marietta commits to these recommendations.

- 71) This Report describes 12 wetlands that were identified in the study area, including along the Arkansas River, the Excelsior Ditch, Thunderbird Lake, and Unnamed Pond 1, as well as two isolated wetlands. In Section 4.3, it states “The project will submit a request for a Jurisdictional Determination to the USACE to determine areas under the jurisdiction of the USACE. Prior to the beginning of work and after design is complete, impacts to WUS will be determined. If impacts to WUS are anticipated to occur, Section 404 permitting would be required. The type of permitting (Nationwide Permit or Individual Permit) will be dependent on the amount and type of impacts to WUS. If no impacts to WUS are anticipated, then no further action is required.” The Division has the following items regarding the wetlands:

- a. Please provide an estimate of when the request for a Jurisdictional Determination (JD) will be submitted to the U.S. Army Corps of Engineers (USACE).

Response: The applicant submitted a JD for this property on July 30, 2021. This request is attached to this response. USACE responded on May 6, 2022 with an, “Aquatic Resource Concurrence”, which was submitted in Exhibit J of the application. Since a JD expires after 5 years, a request for JD may be submitted within 5 years of any anticipated disturbance of wetlands within the permit boundary. However, the May 6, 2022 letter from USACE clearly states, “A JD is not required to process an application for a Department of the Army Permit.” The mine has been designed to minimize impacts to wetlands as much as possible. Given the limited impacts, a Nationwide Permit may be applied for prior to impacting any potential wetlands.

- b. Please commit to providing a copy of the JD request to the Division after it is submitted.

Response: A copy of any JD request will be supplied to the Division upon submittal.

- c. Please commit to not conducting any activities at the site that could impact the wetlands until a determination from USACE has been made.

Response: Wetlands will not be impacted prior to obtaining either a JD or nationwide permit from USACE.

- d. Please commit to providing a copy of the USACE determination letter to the Division once it is received.

Response: A copy of the determination letter will be supplied to the Division upon receipt.

- e. In the event the USACE determines that Section 404 permitting is required, please commit to submitting a Technical Revision to update Exhibit M accordingly and to make any necessary changes to the mining and reclamation plans and maps.

Response: A Technical Revision will be submitted if changes are required to the mining and reclamation plans and maps.

Rule 6.4.10 Exhibit J – Vegetation Information

- 72) This exhibit includes an Aquatic Resource Concurrence letter issued by the USACE on May 6, 2022 for the Thunderbird site. The Division has the following items regarding this letter:

- a. The letter indicates that USACE's concurrence with the aquatic resource delineation for the site is based on available information and a site visit conducted on July 1, 2021. Please confirm the information submitted to USACE with the request for verification included the information provided in the Report submitted in Exhibit H of this application.

Response: The information submitted to USACE in July 2021 is attached, and includes the information provided in Exhibit H.

- b. The letter refers to an enclosed aquatic resource drawing. Please provide a copy of this drawing.

Response: The aquatic resource drawing enclosed with the May 6, 2022 letter from USACE is attached.

- c. The letter states "This verification letter does not constitute a jurisdictional determination (JD). A JD is not required to process an application for a Department of the Army (DOA) permit." The applicant stated (in Exhibit H) that a request for a JD will be submitted to the USACE. Please state if the applicant intends to submit an application for a DOA permit prior to requesting a JD.

Response: A final decision has not been made. It is possible that an application for DOA nationwide permit may be submitted prior to requesting a JD, due to the very limited amount of wetlands that may be impacted.

Rule 6.4.11 Exhibit K – Climate

- 73) Please provide the average wind speeds for the area.

Response: Please see the revised Exhibit K which includes average wind speeds.

Rule 6.4.12 Exhibit L – Reclamation Costs

- 74) Please ensure the approximate dimensions and material volumes are included in this estimate for all structures/facilities to be demolished and/or removed for reclamation.

Response: These dimensions and material volumes are included in the revised Exhibit L.

- 75) Are there any other proposed structures requiring demolition and/or removal for reclamation (e.g., conveyor system, water infrastructure)? If so, please ensure costs are included in this estimate for reclaiming these structures.

Response: All proposed structures requiring removal are included in the revised Exhibit L

- 76) This estimate includes costs for reclaiming 4 acres of silt ponds. However, the Exhibit C2 map shows a total of 8 acres of siltation ponds are proposed. Please revise this task accordingly.

Response: Only 2-ponds will be open at a time. 4-acres is the correct amount. If the secondary siltation ponds (Phase 1b) become necessary, a technical revision will be submitted to revise the reclamation cost estimate.

- 77) This estimate includes a task in sections C and D for “Reclamation Slope and Backfill Fill” for the Phase 2 and 3 pits. Based on the information provided in Exhibits E and F, the Division believes this task is meant to include grading pit slopes from 0.5H:1V to 3H:1V and also backfilling the southern edge of each pit to 400 feet from the top of river bank. Please split this item into two separate tasks for each phase, including one for pit slope backfill/grading, and one for the proposed southern pit backfill areas, with the estimated material volumes and push/haul distances.

Response: Please see the revised Exhibit L, where this has been split as requested.

- 78) The retopsoil tasks provided in this estimate are for replacing 12 inches of topsoil. However, the proposed reclamation plan calls for replacing 6 inches of topsoil on disturbed lands. Please clarify if the applicant wishes to replace 6 or 12 inches of topsoil for reclamation, and revise either Exhibit E or this estimate, as needed.

Response: The correct thickness is 6-inches. Exhibit L has been revised to reflect this.

- 79) The costs provided for the Phase 2 and Phase 3 slurry wall installations (\$1,729,000.00 and \$1,085,500.00 respectively) are less than the Division’s estimates (\$1,734,378.75 and \$1,091,376.00) based on the lineal feet and average depth provided for each enclosure, at \$6.50/SF. This is a discrepancy of over \$11,000. Please revise these costs accordingly.

Response: Phases 2 and 3 will be completely encompassed by slurry wall thus the curtain area is greater and is reflected in the revised Exhibit L.

- 80) In Exhibit D, the Division is asking the applicant to commit to a method for lining the cells, whether it is by slurry wall, clay liner, or a combination thereof. If the applicant

commits to installing both slurry walls and clay liners (as indicated on the Exhibit C2 map) or a clay liner only, please revise this estimate accordingly.

Response: Slurry wall will be utilized. The estimate has been revised accordingly.

- 81) Please ensure all reclamation areas identified in this estimate, including areas to be retopsoiled and revegetated along reservoir shorelines and outside of the reservoirs, correlate with the Exhibit F map.

Response: The Exhibit F map has been revised accordingly.

Rule 6.4.13 Exhibit M – Other Permits and Licenses

- 82) Does the applicant plan to conduct a class III cultural resource survey prior to the start of this project, as recommended by History Colorado in their comment letter received on October 26, 2023?

Response: Applicant does not plan to conduct a cultural resource survey.

- 83) If the applicant will be seeking a JD and possibly a Section 404 permit with USACE for the proposed operation, please add these items to this exhibit.

Response: Exhibit M has been updated.

Rule 6.4.18 Exhibit R – Proof of Filing with County Clerk and Recorder

- 84) Please note that future notices to the county clerk and recorder should remove the word “amendment” since this is a new permit application (not an amendment application), and should also include the file number (M-2023-032) since one has been assigned to this application now.

Response: Acknowledged.

Rule 6.4.19 Exhibit S – Permanent Man-made Structures

- 85) Please provide a complete list in this exhibit of all permanent man-made structures (e.g., buildings, fences, above or below ground utilities, irrigation ditches, roads, wells, water storage structures, discharge and conveyance structures) located on or within 200 feet of the proposed affected lands and the structure owner(s). Please ensure this list correlates with what is shown on the Exhibit C1 map.

Response: Exhibit C1 map has been revised accordingly.

- 86) In this exhibit, the applicant provided certified mail numbers for mailings to Premier Auto Body Repair, LLC, Arkansas Groundwater and Reservoir Association, Pueblo County Public Works, Meadowbrook MHP LLC, and Black Hills Energy, which are structure owners identified on the Exhibit C1 map. The Division has the following items regarding the attempted structure agreements:

- a. Please include copies of the structure agreement forms listing out the applicable structures and with the Certification and Notary for Permit Applicant sections filled out and notarized by the applicant, which were sent to each structure owner. (A blank structure agreement form is enclosed for reference.)

Response: Copies of the structure agreement packages sent to each owner are attached.

- b. Please provide proof of delivery for all attempted structure agreements, which may be in the form of return receipts of a Certified Mailing or proof of personal service.

Response: Return receipts are attached.

- c. Please provide any structure agreements that have been obtained since the application was submitted.

Response: To date no structure agreements have been returned. Any future returned structure agreements will be provided to the division.

- 87) If any of the existing (non-applicant owned) structures will be moved or removed during the proposed operation (e.g., utility lines, roads, ponds), please provide a notarized letter from the structure owner acknowledging these proposed impacts to their structure(s). This acknowledgement can be part of the notarized structure agreement obtained by the structure owner, rather than a separate letter. Some examples of existing structures the operation appears to be proposing to move or remove include utility lines and two unnamed ponds located within the proposed mining area.

Response: No non-applicant owned structures will be removed. The unnamed ponds are owned by the applicant.

- 88) In this exhibit, the applicant provided a Geotechnical Stability Analysis prepared by Gary Linden, P.G., a Senior Engineering Geologist (presumably with Martin Marietta Materials). This analysis appears to only address 3 of the many structures located on and within 200 feet of the proposed affected lands (Excelsior Ditch, Overhead transmission lines, and Baxter Road). The Division has the following items regarding this analysis:

- a. Please ensure the information presented in this analysis correlates with the proposed mining and reclamation plans (e.g., slope gradients, liner type, mining depths, setbacks).

Response: A revised Stability Analysis has been provided and is consistent with the mining and reclamation procedures. See the revised analysis.

- b. Per Rule 6.4.19(b), where a structure agreement cannot be reached, the engineering evaluation must demonstrate that such structure shall not be

damaged by activities occurring at the mining operation. Therefore, please ensure this analysis addresses, at a minimum, all structures (not owned by the applicant), for which, structure agreements are not obtained.

Response: The revised analysis addresses non-applicant owned structures closest to the mine highwalls. Other structures are further away from the highwalls and thus will have greater factors of safety (FOS). Thus, the analysis demonstrates that all non-applicant owned structures will not be damaged during the mining operation.

- c. Please be advised, the Division cannot accept the engineering evaluation provided until sufficient proof has been submitted (see above requirements) demonstrating that structure agreements have been attempted for all (non-applicant owned) permanent, man-made structures located on and within 200 feet of the proposed affected lands.

Response: The applicant has demonstrated per item 86 that structure agreements have been attempted. Therefore, the engineering evaluation should be accepted.

Additional Items:

- 89) The Division received agency comments on the application from History Colorado and the Colorado Division of Water Resources. Copies of these comment letters were emailed to the Applicant as they were received by the Division and are also enclosed. Please respond to any concerns or issues identified in these letters and revise the permit application accordingly. No objections to the permit application were received during the public comment period.

Response: The need for a SWSP is acknowledged in the submittal. Storm water will enter the mine and be discharged with the CDPHE discharge permit.

Response: A class III cultural resource study will be conducted.

- 90) Please review and respond to the adequacy items provided by Eric Scott, DRMS (see enclosed letter, dated November 29, 2023).

Response: Item 1 See revised Exhibit G and Existing Conditions Map (Exhibit C1) for location and discussion of water bodies within the permit boundary.

Response: Item 2 See revised Exhibit G and Existing Conditions Map (Exhibit C1) for locations of wells on-site and within 200-feet of the permit area. Available construction information has been added to Exhibit G. The applicant owns the wells within the Permit Boundary.

Response: Item 3 See revised Exhibit G for discussion of groundwater levels in existing wells at the site and flow direction. Historic data is very limited. Available construction details are provided. As shown and described in Exhibit G, existing monitoring wells on the site are part of the groundwater monitoring and analysis plan.

Response: Item 4 See revised Exhibit G for discussion of groundwater levels and flow directions. There is very limited historic data available. Since dewatering will occur after installation of slurry walls, no impacts to nearby wells are expected due to dewatering activities. Once additional groundwater level data is acquired per the groundwater sampling and analysis plan, and prior to installation of any slurry walls, applicant commits to submitting as a Technical Revision any revisions required to minimize impacts to the prevailing hydrologic balance, including the design of any under drains, if the analysis of groundwater levels shows those are necessary.

Response: Item 5 Slurry Walls at Phases 2 and 3 will be constructed prior to mining below the water table in these cells, as shown clearly in the revised Exhibits submitted with this response.

Response: Item 6 Please see Item 2 of comment 91 below. Further, the revised application shows that the slurry wall will not be installed in fill material.

Response: Item 7 See response to item 23 above.

Response: Item 8 As stated in Exhibit G, applicant has already committed to at least 5 quarters of baseline groundwater level and sampling. Additionally, this application clearly states that well permits and SWSP will be obtained prior to exposing groundwater.

Response: Item 9 See revised mitigation plan in Exhibit G.

Response: Item 10 The revised Groundwater Quality Monitoring Plan is included in Exhibit G.

Response: Item 11 Martin Marietta commits to submitting future Technical Revisions regarding water level data, water quality data, modifications to analyte list, sampling intervals, or Table Value Standards benchmarks.

- 91) Please review and respond to the adequacy items provided by Rob Zuber, DRMS (see enclosed letter, dated November 30, 2023).

Response: Item 1 See revised Exhibit G for discussion water bodies within the permit boundary.

Response: Item 2 The final mine limit and reclamation will always be 400-feet from the top of river bank during the flood season (April 1 to September 30). Thus, no special flood control features are required per DRMS and MHFD guidelines.

- 92) Please review and respond to the adequacy items provided by Zach Trujillo, DRMS (see enclosed letter, dated November 30, 2023).

Response: The borehole drill logs were provided in Exhibit I of the application. The location of each hole is considered confidential, but all were within the

permit boundary. The attached revised stability analysis accurately reflects the conditions with a slurry wall keyed 4-feet into the bedrock. The analysis showed the FOS remained the same for each structure. In addition, a closer structure was identified. This structure is a power line on the east side of Baxter Road. Analyses indicate all structures within 200 feet of the mine will be stable.

- 93) Pursuant to Rule 1.6.2(e), please submit proof of the notice sent to all owners of record of the surface and mineral rights of the affected land and the owners of record of all land surface within 200 feet of the boundary of the affected lands (including all easement owners located on the affected land and within 200 feet of the boundary of the affected lands). Proof of notice may be by submitting return receipts of a Certified Mailing or by proof of personal service.

Response: Return receipts for notices sent to owners of record within 200 feet are attached.

- 94) Pursuant to Rule 1.6.2(1)(c) and (2), any changes or additions to the application on file in our office must also be reflected in the public review copy which was placed with the local County Clerk and Recorder. Pursuant to Rule 6.4.18, you must provide our office with an affidavit or receipt indicating the date on which the revised application/adequacy response was placed with the local County Clerk and Recorder.

Response: Acknowledged.

Should you have additional questions please contact me at 720-612-6232 or phillip.courtney@martinmarietta.com.

Sincerely,



Phillip J. Courtney
Land Manager

Encl(s):