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July 19, 2017

Michael Cunningham
Colorado Division of Reclamation, Mining and Safety
1313 Sherman St, Rm 215
Denver, CO 80203

RE: Fairplay Au Pit, M-1991-037, Conversion Application (CN01) – Adequacy Response 4

Mr. Cunningham:

In response to your adequacy questions dated July 5, 2017 and July 20, 2017, High Speed Mining, LLC has the following information to provide:

1. *The Operator has defined phases for the mining operation. In addition, the Operator has committed to performing concurrent reclamation and limiting the total amount of disturbance within each phase. The mine phasing and limiting of disturbance are two types of bonding mechanisms which can be used to limit the financial liability for an operation. The purpose of defining a phase is so that one or more phases can be bonded for at any given time. Alternately, the purpose of performing concurrent reclamation and limiting the overall amount of disturbance is so that phases do not need to be defined. To use both of these bonding mechanisms creates unnecessary confusion. The Division requests the Operator select one of these bonding approaches. If the Operator selects the mine phasing approach, then the total area within a phase must be bonded for. Otherwise, the Operator may bond for the maximum amount of disturbance which requires reclamation.*

The bond for the Fairplay Au is based on a worst case reclamation scenario, as described in Exhibit L. "Phase" is used on the maps and in the text to organize the mining and reclamation activity into logical increments. It does not apply to what will be bonded.

2. *The Applicant has stated the three ponds located along the Platte City Mining Ditch are accompanying structures for the ditch and will remain after final reclamation. The slope on the south side of the wash pond is vertical. In order for the wash pond to remain after reclamation, the slopes must conform to the requirements of Rule 3.1.5(7). Please specify the final grade of the wash pond slopes and ensure that the financial warranty calculation accounts for this reclamation task.*

All of the permanent ponds that are part of the Platte City Mining Ditch will have sideslopes of 3H:1V or shallower. Exhibit L has been updated to incorporate the reclamation cost of backfilling the slopes of the wash pond.

3. *The Applicant has stated mining the veritical pit walls will transition to 2H:1V at a point where the vertical pit walls could be knocked down without the crest of the slope extending beyond the edge of the mining area in a phase. If the maximum pit depth will be 120', then the point at which the transition would occur would be 240' from the edge of the excavation to the edge of the mining phase. Since the financial warranty must be based on a worst case scenario, the Division must assume that reclamation must be performed on vertical pit walls. Please revise the reclamation cost estimate account for reclaiming 1360' linear feet of vertical pit walls.*

In order to limit the size of the bond, the following restrictions will be in place:

- Vertical highwall length of no more than 400'at any time
- No mining highwall crest can be closer than 180' feet from the edge of the mining area. This will allow a 3H:1V slope to be installed via a dozer push if needed.

See the revised Exhibit L and page D-1 that are attached for the updated bond calculation.

4. *The financial warranty calculation does not account for the cost of amendments. Please ensure the cost of amendments are included in the financial warranty calculation.*

See the revised Exhibit L that is attached.

5. *The current decision date for the Hard Rock 112 Conversion Application is set for July 31, 2017. The Division mailed the Adequacy Review No. 4 Letter on July 5, 2017. To date, the Division has not received a response to the Adequacy Review No. 4 Letter.*

This is the needed response letter

6. *The Division conducted an inspection of the Fairplay Au Pit on July 10, 2017. During the inspection the Division observed the operator was replacing the lay-flat hose which was used to convey water from the Middle Fork of the South Platte River (river) to the water holding pond. The lay-flat hose was being replaced with a HDPE pipe. Based on these observations, the Division requests the following additional information on water handling at the Fairplay Au Pit.*

    a. *Describe in detail how water is conveyed from the river to the wash plant.*

Water is pumped from the river via a pump located near the river, up the slope to the water handling pond (the lined pond that the Division observed during their visit). From the water handling pond it is pumped to the wash plant as needed.

    b. *Describe what measures will be in place to ensure that water cannot backflow from the wash pond or any of the water conveyances.*

The installation of HDPE pipe is in part to protect the water handling system from any spills, since HDPE is tougher than lay-flat. Additionally, an anti-backflow valve is in place on the pump near the discharge into the water handling pond.

c. *Describe the total number of sediment ponds which will be associated with the wash plant, provide the maximum dimensions of both the water holding and sediment ponds.*

Up to three small sediment ponds may be used on the output end of the wash plant. The maximum total size of these ponds will be 0.5 acres. The water handling pond will be up to 0.75 acres. Note that these are the areas of the water surface; the actual pond disturbance area will be dictated by location and surrounding slopes. I.E., a pond built on a flat area does not have as much dry upslope as a pond built in a slope. 100% of ponds will be located within the maximum disturbance area covered by the bond.

d. *Describe how the Operator will ensure there is no discharge from the water holding ponds or the sediment ponds. Specify the maximum freeboard within the ponds and describe how the freeboard will be measured.*

At least one foot of freeboard will be maintained from the any ponds crest to the top of water level. This will be measured by operator observation.

e. *Describe in detail how water will be routed through the wash plant.*

Water is introduced into a wash plant via spray bars not long after material enters at the trommel. Underflow and overflow leaves the plant via drains, and remaining water leaves via evaporation and washed material. Over and underflow is collected in the sediment ponds on the output end of the wash plant.

To clarify: the wash plant, sediment ponds, and water handling pond are shown on Map C-2 in a typical location. They will move with mining throughout the mine life, and will be located in an active mining phase, typically.

Water is used at the Fairplay Au Pit principally for its mechanical energy, i.e. to move material through the wash plant and across the sluices. All water that does not evaporate is collected for reuse. Water from an external source is only to make up due to evaporative losses. No water will discharge from the site.

7. *Pursuant to Rule 3.1.5(11), no unauthorized release of pollutants to groundwater shall occur from any materials mined, handled or disposed of within the permit area. In addition, Rule 3.1.6, disturbances to the prevailing hydrologic balance of the affected land and of the surrounding area and to the quantity or quality of water in surface and groundwater systems both during and after the mining operation and during reclamation shall be minimized. Please describe how the Operator will comply with Rule 3.1.5(11) and Rule 3.1.6 with respect to the processing of material at the wash plant.*

Water is used at the Fairplay Au Pit principally for its mechanical energy, i.e. to move material through the wash plant and across the sluices. All water that does not evaporate is collected for

reuse. Water from an external source is only to make up due to evaporative losses. No water will discharge from the site. Therefore, the prevailing hydrologic balance of the affected land is protected.

Conclusion

The table below lists the revised pages, new pages, and revised maps attached to this response.

Attachment Table

Attached Page	Attached Map
Page D-1	
Exhibit L	

Please contact me with any further questions.

Regards,

Ben Langenfeld, P.E.
Greg Lewicki and Associates

EXHIBIT D MINING PLAN

1. General Mining Plan

The permit area for the site is 41.4 acres. 28.5 acres of that area will be disturbed as part of mining operations. Gravel for use in making construction materials products will be mined onsite. Placer gold recovery will take place as the primary production commodity when processing material. Because most of the existing 110 site is historic mining, reclamation as commonly practiced is not possible. Mining will take place from the existing surface down to roughly 100-120 feet. Active mining slopes will be roughly vertical. Groundwater is found at 100' to 190' down, depending on location. The operator has never hit groundwater on the 110 permit area, despite mining close to 100 feet down. Final mining slopes will be 2H:1V as shown on Map C-2. Unreclaimed highwall will be limited to 400' feet long, and will stop 180' from the final slope crest to allow for regrading by dozer.

The mining will take place in three phases, and proceed north to south in each phase. Reclamation of the mining area will begin once final mining is finished in portions of the mine, when additional mine floor is not needed for operations. Table D-1 shows the area of mining shown on Map C-2. Map C-2 shows the extent of the areas mining will cover; concurrent reclamation will take place, meaning mining will be confined to one phase at a time.

Table D-1 Mining Areas

Phase	Area	
1	6.5	Acres
1B	8.5	Acres
2	7.0	Acres
3	6.3	Acres
Access Road	0.3	Acres
Total	29.4	Acres

Note: Phase 1 includes the 110 permit disturbance area

Mining will stay at least 60 feet horizontally and at least 20 feet vertically from the Middle Fork of the South Platte River. A 50-80 foot berm of natural material will be maintained on the north (river) side of the mining areas. Reclamation will regrade this berm to the south, creating the flat, daylighting pit floor in Phase 1 and 1. This regrading will take place during reclamation of these

EXHIBIT L WORST CASE RECLAMATION SCENARIO

The worst case scenario of reclamation at the Fairplay Au Pit will take place at the beginning of Phase 2. At this point in the mine's life it can be assumed that Phase 1B and a portion of Phase 2 will need to be topsoiled. For the purpose of bond calculation, it will be assumed that 50% of Phase 2 has been stripped. The active excavation area will need to be regraded to 3H:1V slopes or shallower. The regrading of the active vertical mining slope will take place using a dozer pushing the top half of the vertical highwall down into the pit and grading the ensuing slope to final.

All equipment used on site is portable, so no demolition will be necessary.

All of the disturbed area onsite will need to be reseeded.

The worst case reclamation tasks are outlined below.

1. Regrade remaining from vertical to 3H:1V for 120 vertical feet along 400' linear feet. Dozer push from the halfway point (60' high) of the final slope: 80,000 CY @ $0.75/CY = $60,000.
2. Backfill water handling pond near processing. 150' x 80' x 10' = 4444 CY @ $1.25/CY = $5556.
3. Remove pond liner. $4000
4. Place topsoil equivalent on all disturbed areas at the completion of mining of Phase 1B (8.5 acres) and start of Phase 2 (50% of 7 acres = 3.5 acres), to an average depth of 9 inches. 0.75 ft over 12 acres = 14,520 CY @ $1.25 to haul and place = $18,150
5. Use soil amendment over all of Phase 1B. 8.5 acres @ $250/acre = $2125
6. Disking and harrowing of topsoil. 12 acres @ $150/ac = $1800
7. Seeding and mulching all disturbed areas. 12 acres @ $700/acre = $8400

Based on these costs, and a 28% DRMS cost factor, the total bond for the Fairplay Au Pit should be $153,640.

Worst case reclamation costs for this scenario are shown in Table L-1 below:

Table L-1 Reclamation Task and Cost Estimate

Activity Description	Time (Months)	Cost ($)
Regrade remaining highwall	0.2	80000
Backfill water handling pond	0.2	5556
Remove pond liner	0.1	4000
Topsoil disturbed areas to a depth of 9 inches	1.5	18150
Use soil amendments on Phase 1A	0.1	2125
Disk and prepare soil	0.5	1800
Seed and mulch all disturbed areas	0.5	8400
Totals	8.2	$120,031
DRMS Costs (28% x direct costs)		$33,609
Total Bond Amount		$153,640