

February 13, 2019

Colorado Division of Reclamation and Mining Safety
Mr. Peter Hays
1313 Sherman Street, Room 215
Denver, CO 80203

RE: Response to Adequacy Review 1 (TR-07) - S&H Mine (Permit M-2000-158), Weld County, Colorado

Dear Mr. Hays:

Scout Investments offers the following responses to comments in Adequacy Review No. 1 received from the DRMS on February 9, 2019.

Adequacy Review Comment 1: The Operator proposes a revision to the approved Mining and Reclamation Plans to construct and operate a silt pond in the northeast corner of the site. Please provide construction and operation details for the silt pond.

Response 1: The proposed silt pond will be mined early in the mining process and will not be lined subsequently requiring inclusion in the Temporary Substitute Supply Plan for the Site completed by Martin Marietta. Fines washed from the mined aggregate will be pumped to this pond and eventually will fill the excavation at which time augmentation will no longer be necessary and the area will be reclaimed and seeded as upland grass area as it exists now and as described in TR-07 Request Letter.

Adequacy Review Comment 2: The reclamation cost estimate provided by the Operator in Attachment 1 is not sufficient for the Division to accurately calculate the cost of reclamation that would be incurred by the State. Please provide all information necessary to calculate the cost of reclamation broken down into the various major phases of reclamation pursuant to Rule 6.4.12(1). Please include the anticipated equipment types, material volumes and haul distance for each reclamation task, at minimum.

Response 2: The proposed mining sequence and corresponding reclamation requirements can be broken into two major phases with worse case reclamation requirements as follows:

Phase 1 - Initial Conditions:

- *The Site currently has a slurry wall previously approved by the State as meeting lined storage criteria and is in active use. No reclamation of this area is necessary.*
- *The existing freshwater pond and processing area would require reclamation as follows:*
 - o *Backfill the existing wash pond with existing material stockpiles and/or material from within the existing slurry walled area. Cost: \$500,000*
- *New Initial Work*
 - o *North Silt Pond: Reclamation cost would be the highest right after the area is fully excavated. It is estimated that approximately 220,000 cubic yards of material would be required to backfill this pond, plus top soil and seeding (TR-7 cost estimate) for a total estimated cost of \$250,000.*

- Cell C2:
 - *Slurry Wall Construction: Overburden will be borrowed to construct a flat bench and a slurry wall be constructed prior to beginning mining of this area. No reclamation of the slurry wall is necessary.*
 - *Initial Mining: After mining has begun the slurry wall will be tested and the submitted to the State for approval as lined storage. An estimated maximum of 500,000 cubic yards may be mined prior to approval of liner test. The cost to backfill this pond would be approximately \$525,000.*
- General Site Cleanup and Reclamation
 - *In TR-07 Attachment 1 Civil Resources allowed approximately \$808,000 to reclaim and reseed the processing area, perimeter areas and miscellaneous equipment and disposables left on-site.*

Total Phase 1 Reclamation Cost: \$1,558,313

Phase 2 – Active Mining of C2

- *After the C2 slurry wall has been approved, no reclamation of this area would be required because the side slopes will be mined at the final reclamation slope of 3:1 and augmentation of evaporative losses would not be required thereby reducing the total potential cost during Phase 1 by \$525,000.*

The Phase 1 reclamation cost, as the maximum reclamation cost condition, is summarized in the attached table with standard direct and indirect costs added per DRMS requirements. We estimate the total bond amount to be \$2.1 million until the C2 slurry wall is approved, at which time it could be reduced to \$1.6 million.

Sincerely,
CIVIL RESOURCES, LLC.



Brad L. Hagen, P.E.
Principal Civil Engineer

Cc: Mr. Jason Von Lembke, Scout Investments

Attachments:
Bonding – Reclamation Cost Table

Attachment 1
Scout Investments Reclamation Costs Permit M-2000-158

Activity	Quantity	Units	Unit Costs	Cost
A. Reclamation per TR-06 (ex. Processing Area)				
1 Move stockpiles into mined area	344,330	CY	\$ 1.05	\$ 361,546.50
2 Final grade and place 6" of topsoil on the entire disturbed area	48,400	CY	\$ 1.05	\$ 50,820.00
3 Seed and mulch	60	Acres	\$ 977.00	\$ 58,620.00
4 Scarify ground	60	Acres	\$ 150.00	\$ 9,000.00
5 Remove equipment	1	LS	\$ 20,000.00	\$ 20,000.00
Subtotal				\$ 499,986.50
B. Reclamation of North Silt Pond				
1 Backfill	220,000	CY	\$ 1.05	\$ 231,000.00
2 Final grade and place 6" of topsoil on the entire disturbed area	12,100	CY	\$ 1.05	\$ 12,705.00
3 Seed and mulch	6	Acres	\$ 977.00	\$ 5,862.00
4 Scarify ground	6	Acres	\$ 150.00	\$ 900.00
Subtotal				\$ 250,467.00
C. Reclamation of Perimeter Outside of Cells				
1 Final grade and place 6" of topsoil on the entire disturbed area	34,690	CY	\$ 1.05	\$ 36,424.50
2 Seed and mulch	43	Acres	\$ 977.00	\$ 42,011.00
3 Scarify ground	43	Acres	\$ 150.00	\$ 6,450.00
Subtotal				\$ 84,885.50
D. Backfill & Reclamation of Mined Areas (80% since mining at reclamation slope)				
1 Backfill	588,800	CY	\$ 1.05	\$ 618,240.00
2 Final grade and place 6" of topsoil on the entire disturbed area	42,860	CY	\$ 1.05	\$ 45,003.00
3 Seed and mulch	53	Acres	\$ 977.00	\$ 51,781.00
4 Scarify Ground	53	Acres	\$ 150.00	\$ 7,950.00
Subtotal				\$ 722,974.00
Total Disturbance Costs				\$ 1,558,313.00
Indirect Costs				
Overhead & Profit				
Performance Bond (2.02%) - Based on DRMS estimate				\$ 31,477.92
Performance Bond (3.07%) - Based on DRMS estimate				\$ 47,840.21
Job Superintendent (240 hours @ \$75/hr) - Based on DRMS estimate				\$ 18,000.00
Contractor Mob and DeMob (3%) - Based on DRMS estimate				\$ 46,749.39
Contractor Overhead and Profit (10%) - Based on DRMS estimate				\$ 155,831.30
Subtotal				\$ 299,898.82
Contract Amount (direct + O & P)				\$ 1,858,211.82
Legal, Engineering & Project Management				
Financial warranty processing (legal/related costs) (\$500)				\$ 500.00
Engineering Work and/or contract/bid preparation (4.25%)				\$ 78,974.00
Reclamation management and/or administration (5%) - Based on DRMS estimate				\$ 92,910.59
Contingency (3%)				\$ 46,749.39
Subtotal				\$ 219,133.98
Total Indirect Costs				\$ 519,032.81
Total Bond Amount (rounded to nearest \$100,000)				\$ 2,100,000.00