



COLORADO

Division of Reclamation,
Mining and Safety

Department of Natural Resources

1313 Sherman Street, Room 215
Denver, CO 80203

August 21, 2014

Bob Gydesen
Colorado Mining and Exploration, LLC
502 S. Wisconsin Ave.
Gunnison, CO 81230

**Re: File No. M-2014-027, Crystal Hill Project, Decision Letter - Financial and Performance
Warranty Request - Hard Rock Mining Operation**

Dear Mr. Gydesen,

On August 21, 2014, the Division of Reclamation, Mining and Safety approved your 110(2) mining permit application.

The amount of financial warranty set by the Division for this operation is \$14,109.10. You must submit a financial warranty in this amount and a performance warranty in order for us to issue a permit. In the event you have requested a financial warranty form, we have enclosed it in this letter. If you have not, please select a type of financial warranty from Rule 4.3. You may find the proper form on our website (see web address below) in pdf format, which you may fill out, print and send to us. We have enclosed a performance warranty form with this letter for your use. For all questions regarding the bonding forms, please contact Barbara Coria in the Division's Denver office, at 303-866-3567 ext 8148.

The reclamation cost estimate is also enclosed with this letter. Please notify me promptly if you see any errors or omissions in the figures.

PLEASE NOTE THAT MINING OPERATIONS MAY NOT COMMENCE UNTIL A PERMIT HAS BEEN ISSUED BY THE DIVISION AFTER RECEIPT OF YOUR FINANCIAL WARRANTY AND PERFORMANCE WARRANTY. A PERMIT WILL NOT BE ISSUED UNTIL WE VERIFY THE ADEQUACY OF BOTH YOUR FINANCIAL WARRANTY AND PERFORMANCE WARRANTY.

If you have any questions, please contact me, at 970-247-5193, or at bob.oswald@state.co.us.

Sincerely,

Bob Oswald
Environmental Protection Specialist



Bob Gydesen/M-2014-027

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Enclosures: performance warranty, and reclamation cost estimate

Cc(w/o encl): Russ Means, DRMS Grand Junction
Barbara Coria, DRMS Denver

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STATE OF COLORADO

DIVISION OF RECLAMATION, MINING AND SAFETY
Department of Natural Resources

1313 Sherman St., Room 215
Denver, Colorado 80203
Phone: (303) 866-3567
FAX: (303) 832-8106



John W. Hickenlooper
Governor

Mike King
Executive Director

Virginia Brannon
Director

PERFORMANCE WARRANTY

Permittee: Colorado Mining & Exploration, LLC

Operation: Crystal Hill Project

Permit No: M-2014-027

This form has been approved by the Mined Land Reclamation Board pursuant to sections 34-32-117, C.R.S., of the Mined Land Reclamation Act and 34-32.5-117, C.R.S., of the Colorado Land Reclamation Act for the Extraction of Construction Materials. Any alteration or modification of this form, without approval by the Board shall result in the financial warranty being invalid and result in the voiding of any permit issued in conjunction with such invalid financial warranty and subject the operator to cease and desist orders and civil penalties for operating without a permit pursuant to sections 34-32-123, C.R.S., of the Mined Land Reclamation Act and 34-32.5-123, C.R.S., of the Colorado Land Reclamation Act for the Extraction of Construction Materials.

KNOW ALL MEN BY THESE PRESENTS, THAT:

WHEREAS, the Colorado Mined Land Reclamation Act, C.R.S. 34-32-101 et seq. (the "Act"), as amended, and the Colorado Land Reclamation Act for the Extraction of Construction Materials, C.R.S. 34-32.5-101 et seq. (the "Act"), as amended, provides that no permit may be issued under the Act until the Mined Land Reclamation Board (the "Board") receives a performance warranty (or warranties) that is a written promise to comply with all applicable requirements of the Act.

WHEREAS, Colorado Mining & Exploration, LLC (the "Permittee"), has applied for a permit to conduct a mining operation known as Crystal Hill Project (the "Operation") on certain lands in Saguache County, Colorado. These lands are described in the permit application, as amended and supplemented, and are referred to herein as the "Affected Lands".

WHEREAS, in its application for the permit, the Permittee has agreed to be bound by all requirements of the Act and all applicable rules and regulations of the Board, as amended from time to time.

WHEREAS, the Board has determined, in accordance with the Act, that the estimated costs of reclamation with regard to those affected lands in Saguache County which are now or may become subject to the permit are those amounts for the stated periods of time as set forth in the financial warranty, which may be amended from time to time to reflect revised estimates of said costs of reclamation.

WHEREAS, the Permittee hereby gives the Board a performance warranty pursuant to Section 34-32-117(2) or Section 34-32.5-117(2) of the Act, and herein promises the Board that it will comply with all applicable requirements of the Act with regard to those Affected Lands.

NOW, THEREFORE, the Permittee hereby promises the Board that it will comply with all applicable requirements of the Act and rules and regulations of the Board with respect to the Affected Lands.

FURTHER, the Permittee hereby promises the Board that it will comply with all of the terms of the application for a permit, as amended and supplemented, as well as any conditions attached to the permit by the Board.

FURTHER, the Permittee promises the Board, pursuant to 34-32-112(2)(d) or 34-32.5-112(1)(c)(iv) of the Act, that it has the lawful authority to enter upon the Affected Lands to conduct mining operations, including, but not limited to, reclamation. The Permittee further recognizes the right of the Board to enter to reclaim lands affected by the operation.

The description of lands herein is for convenience of reference only, and no error in such description, nor any revision of the permitted mining area, nor the disturbance by the Warrantor of lands outside of the permitted mining area shall alter or diminish the Permittee's obligation hereunder, which shall extend to the reclamation of all such lands disturbed.

The obligation of the Permittee hereunder is such that, if the Permittee shall successfully comply with the requirements of the Act, applicable rules and regulations, and the permit, then the Board, upon a finding that the Permittee has so complied, shall release this performance warranty, and the Permittee from its obligation hereunder, to the extent that the Board determines that such compliance has been accomplished. The obligation of the Permittee hereunder shall continue until released in whole or in part by the Board in accordance with applicable law.

In further satisfaction of the requirements of the Act, the Permittee promises to be responsible for the cost of reclamation up to the amount established by the Board and has attached hereto its financial warranty, which may be amended from time to time. The Permittee agrees that it will maintain a financial warranty (or warranties) for the estimated costs of reclamation in good standing for the entire life of the permit. Please note that under the provisions of the Colorado Mined Land Reclamation Act and the Colorado Land Reclamation Act for the Extraction of Construction Materials, any Applicant or Permittee that submits proof, acceptable to the Board or Division of Reclamation, Mining and Safety, that an Applicant or Permittee is a unit of County or Municipal government, or is a department or division of State government, the Applicant or Permittee is not required to submit or post any other instrument of financial responsibility but hereby promises to be responsible for the cost of reclamation up to the amount specified by the Board.

If the Board determines that the Permittee is in default under this performance warranty and has failed to cure such default, although written notice of such default and ample time to cure such default have been given, the Permittee's financial warranty shall be subject to forfeiture.

This performance warranty may be executed in multiple copies, each of which shall be treated as an original, but together they constitute only one agreement, the validity and interpretation of which shall be governed by the laws of the State of Colorado.

The provisions hereof shall bind and inure to the benefit of the parties hereto and their successors and assigns.

SIGNED, SEALED AND DATED this _____ day of _____, _____.

Colorado Mining & Exploration, LLC (SEAL)
Permittee

By: _____

Title: _____

NOTARIZATION OF PERMITTEE'S ACKNOWLEDGEMENT

STATE OF _____)
) ss.
COUNTY OF _____)

The foregoing instrument was acknowledged before me this _____ day of _____
, _____, by _____ as _____ of _____
_____.

NOTARY PUBLIC

My Commission expires: _____

APPROVED:
State of Colorado
Mined Land Reclamation Board
Division of Reclamation, Mining and Safety

By: _____ Date: _____
Division Director

COST SUMMARY WORK

Task description: Cost summary

Site: Crystal Hill Project

Permit Action: New permit

Permit/Job#: M2014027

PROJECT IDENTIFICATION

Task #: 000

State: Colorado

Abbreviation: None

Date: 8/18/2014

County: Saguache

Filename: M027-000

User: RCO

Agency or organization name: DRMS

TASK LIST (DIRECT COSTS)

Task	Description	Form Used	Fleet Size	Task Hours	Cost
001	Waste dump grading	DOZER	1	18.12	\$3,914.00
002	Pit walls and floor grading	DOZER	1	18.94	\$4,091.00
003	Stormwater berm grading	DOZER	1	0.74	\$159.00
004	Revegetate waste rock area	REVEGE	1	10.00	\$2,294.00
005	Haul reclamation equipment to and from site	MOBILIZE	1	5.50	\$1,426.00
<u>SUBTOTALS:</u>				53.3	\$11,884

INDIRECT COSTS

OVERHEAD AND PROFIT:

Liability insurance: 2.02%

Total = \$240.06

Performance bond: 1.05%

Total = \$124.78

Job superintendent: 0.00 hrs

Total = \$0.00

Profit: 10.00%

Total = \$1,188.40

TOTAL O & P = \$1,553.24

CONTRACT AMOUNT (direct + O & P) = \$13,437.24

LEGAL - ENGINEERING - PROJECT MANAGEMENT:

Financial warranty processing (legal/related costs): 0.00

Total = 0.00

Engineering work and/or contract/bid preparation: 0.00%

Total = \$0.00

Reclamation management and/or administration: 5.00%

\$671.86

CONTINGENCY: 0.00

Total = \$0.00

TOTAL INDIRECT COST = \$2,225.10

TOTAL BOND AMOUNT (direct + indirect) = \$14,109.10

BULLDOZER WORKTask description: Waste dump gradingSite: Crystal Hill ProjectPermit Action: New permitPermit/Job#: M2014027**PROJECT IDENTIFICATION**Task #: 001State: ColoradoAbbreviation: NoneDate: 8/18/2014County: SaguacheFilename: M027-001User: RCOAgency or organization name: DRMS**HOURLY EQUIPMENT COST**Basic Machine: Cat D8T - 8SUHorsepower: 310Blade Type: Semi-UniversalAttachment: 3-shank ripperShift Basis: 1 per dayData Source: (CRG)**Cost Breakdown:**

		<u>Utilization %</u>
Ownership Cost/Hour:	\$69.05	NA
Operating Cost/Hour:	\$108.22	100
Ripper op. Cost/Hour:	\$0.75	10
Operator Cost/Hour:	\$38.01	NA

Total unit Cost/Hour: \$216.02Total Fleet Cost/Hour: \$216.02**MATERIAL QUANTITIES**Initial Volume: 5,647Swell factor: 1.215Loose volume: 6,861 LCYSource of estimated volume: Division of Reclamation, Mining & SafetySource of estimated swell factor: Cat Handbook**HOURLY PRODUCTION**Average push distance: 60 feetUnadjusted hourly production: 1,246.9 LCY/hrMaterials consistency description: Consolidated stockpile 1.0Average push gradient: 0 %Average site altitude: 9,100 feetMaterial weight: 3,300 lbs/LCYWeight description: Decomposed rock - 75% Rock, 25% Earth**Job Condition Correction Factor**

		<u>Source</u>
Operator Skill:	0.750	(AVG.)
Material consistency:	1.000	(CAT HB)
Dozing method:	1.000	(GEN.)

Visibility:	1.000	(AVG.)
Job efficiency:	0.830	(1 SHIFT/DAY)
Spoil pile:	0.700	(FND-MF)
Push gradient:	1.000	(CAT HB)
Altitude:	1.000	(CAT HB)
Material Weight:	0.697	(CAT HB)
Blade type:	1.000	(PAT)

Net correction: 0.3037

Adjusted unit production: 378.68 LCY/hr

Adjusted fleet production: 378.68 LCY/hr

JOB TIME AND COST

Fleet size: 1 Dozer(s)

Unit cost: \$0.570/LCY

Total job time: 18.12 Hours

Total job cost: \$3,914

Note: Volumes in this task were estimated as a 3.5-acre area comprising the waste dump and short access road, and the hillside margin it is blended into. Dozing is an average of one foot deep to recontour the rough waste rock dump surface.

BULLDOZER WORKTask description: Pit walls and floor gradingSite: Crystal Hill ProjectPermit Action: New permitPermit/Job#: M2014027**PROJECT IDENTIFICATION**Task #: 002State: ColoradoAbbreviation: NoneDate: 8/18/2014County: SaguacheFilename: M027-002User: RCOAgency or organization name: DRMS**HOURLY EQUIPMENT COST**Basic Machine: Cat D8T - 8SUHorsepower: 310Blade Type: Semi-UniversalAttachment: 3-shank ripperShift Basis: 1 per dayData Source: (CRG)**Cost Breakdown:**

		<u>Utilization %</u>
Ownership Cost/Hour:	\$69.05	NA
Operating Cost/Hour:	\$108.22	100
Ripper op. Cost/Hour:	\$0.75	10
Operator Cost/Hour:	\$38.01	NA

Total unit Cost/Hour: \$216.02Total Fleet Cost/Hour: \$216.02**MATERIAL QUANTITIES**Initial Volume: 4,840Swell factor: 1.493Loose volume: 7,224 LCYSource of estimated volume: Division of Reclamation, Mining & SafetySource of estimated swell factor: Cat Handbook**HOURLY PRODUCTION**Average push distance: 60 feetUnadjusted hourly production: 1,246.9 LCY/hrMaterials consistency description: Compacted fill or embankment 0.9Average push gradient: 0 %Average site altitude: 9,100 feetMaterial weight: 2,950 lbs/LCYWeight description: Traprock - broken**Job Condition Correction Factor**

		<u>Source</u>
Operator Skill:	0.750	(AVG.)
Material consistency:	0.900	(CAT HB))
Dozing method:	1.000	(GEN.)

Visibility:	1.000	(AVG.)
Job efficiency:	0.830	(1 SHIFT/DAY)
Spoil pile:	0.700	(FND-MF)
Push gradient:	1.000	(CAT HB)
Altitude:	1.000	(CAT HB)
Material Weight:	0.780	(CAT HB)
Blade type:	1.000	(PAT)

Net correction: 0.3059

Adjusted unit production: 381.43 LCY/hr

Adjusted fleet production: **381.43 LCY/hr**

JOB TIME AND COST

Fleet size: 1 Dozer(s)

Unit cost: \$0.566/LCY

Total job time: 18.94 Hours

Total job cost: **\$4,091**

Note: This task includes only the 3.0-acre mining area delineated on the maps. Volume is estimated from an average dozing depth of one foot.

BULLDOZER WORKTask description: Stormwater berm gradingSite: Crystal Hill ProjectPermit Action: New permitPermit/Job#: M2014027**PROJECT IDENTIFICATION**Task #: 003State: ColoradoAbbreviation: NoneDate: 8/18/2014County: SaguacheFilename: M027-003User: RCOAgency or organization name: DRMS**HOURLY EQUIPMENT COST**Basic Machine: Cat D8T - 8SUHorsepower: 310Blade Type: Semi-UniversalAttachment: 3-shank ripperShift Basis: 1 per dayData Source: (CRG)**Cost Breakdown:**

		<u>Utilization %</u>
Ownership Cost/Hour:	\$69.05	NA
Operating Cost/Hour:	\$108.22	100
Ripper op. Cost/Hour:	\$0.75	10
Operator Cost/Hour:	\$38.01	NA

Total unit Cost/Hour: \$216.02Total Fleet Cost/Hour: \$216.02**MATERIAL QUANTITIES**Initial Volume: 300Swell factor: 1.165Loose volume: 350 LCYSource of estimated volume: Division of Reclamation, Mining & SafetySource of estimated swell factor: Cat Handbook**HOURLY PRODUCTION**Average push distance: 60 feetUnadjusted hourly production: 1,246.9 LCY/hrMaterials consistency description: Partly consolidated stockpile 1.1Average push gradient: 0 %Average site altitude: 9,100 feetMaterial weight: 2,900 lbs/LCYWeight description: Decomposed rock - 50% Rock, 50% Earth**Job Condition Correction Factor**

		<u>Source</u>
Operator Skill:	0.750	(AVG.)
Material consistency:	1.100	(CAT HB)
Dozing method:	1.000	(GEN.)

Visibility:	1.000	(AVG.)
Job efficiency:	0.830	(1 SHIFT/DAY)
Spoil pile:	0.700	(FND-MF)
Push gradient:	1.000	(CAT HB)
Altitude:	1.000	(CAT HB)
Material Weight:	0.793	(CAT HB)
Blade type:	1.000	(PAT)

Net correction: 0.3801

Adjusted unit production: 473.95 LCY/hr

Adjusted fleet production: 473.95 LCY/hr

JOB TIME AND COST

Fleet size: 1 Dozer(s)

Unit cost: \$0.456/LCY

Total job time: 0.74 Hours

Total job cost: \$159

Note: This is the cost to (re)establish the 1,000-foot long berm along the SW side of the disturbed area, at the time of final reclamation, in order to ensure that all permit area runoff reports to the mining pit.

REVEGETATION WORKTask description: Revegetate waste rock areaSite: Crystal Hill ProjectPermit Action: New permitPermit/Job#: M2014027**PROJECT IDENTIFICATION**Task #: 004State: ColoradoAbbreviation: NoneDate: 8/18/2014County: SaguacheFilename: M027-004User: RCOAgency or organization name: DRMS**FERTILIZING****Materials**

Description	Units / Acre	Unit	Cost / Unit	Cost /Acre
			\$	\$
			Total Fertilizer Materials Cost/Acre	\$0.00

Application

Description	Cost /Acre
	\$
Total Fertilizer Application Cost/Acre	\$0.00

TILLING

Description	Cost /Acre
Weed control spraying (MEANS 31 31 16.13 3100)	\$145.20
Total Tilling Cost/Acre	\$145.20

SEEDING

Seed Mix	Rate – PLS LBS / Acre	Seeds per SQ. FT	Cost /Acre
Blue Grama - Native	1.00	16.32	\$10.35
Indian Ricegrass - Native	5.00	16.18	\$33.70
Sand Dropseed	0.10	11.94	\$0.70
Western Wheatgrass - Native	5.00	12.63	\$15.20
Flax, Lewis Blue	2.00	13.27	\$33.04
Yarrow, Western	0.15	9.12	\$4.60
Totals Seed Mix	13.25	79.46	\$97.59

Application

Description	Cost /Acre
Broadcast seeding [DMG]	\$261.28
Total Seed Application Cost/Acre	\$261.28

MULCHING and MISCELLANEOUS**Materials**

Description	Units / Acre	Unit	Cost / Unit	Cost /Acre
			\$	\$
Total Mulch Materials Cost/Acre				\$0.00

Application

Description	Cost /Acre
	\$
Total Mulch Application Cost/Acre	\$0.00

NURSERY STOCK PLANTING

Common Name	No / Acre	Type and Size	Planting Cost	Fertilizer Pellet Cost	Cost /Acre
					\$
Totals Nursery Stock Cost / Acre					\$0.00

JOB TIME AND COST

No. of Acres: 3.5 Cost /Acre: \$504.07
 Estimated Failure Rate: 30% Cost /Acre*: \$504.07
 *Selected Replanting Work Items: TILLING, SEEDING

Initial Job Cost: \$1,764.25
 Reseeding Job Cost: \$529.27
 Total Job Cost: \$2,294
 Job Hours: 10.00

Note: Task includes lightly dragging seeded area with ATV to ensure good seed-to-soil contact. Disturbed area will be sprayed for weeds during final reclamation.

EQUIPMENT MOBILIZATION/DEMobilIZATIONTask description: Haul reclamation equipment to and from siteSite: Crystal Hill ProjectPermit Action: New permitPermit/Job#: M2014027**PROJECT IDENTIFICATION**Task #: 005State: ColoradoAbbreviation: NoneDate: 8/18/2014County: SaguacheFilename: M027-005User: RCOAgency or organization name: DRMS**EQUIPMENT TRANSPORT RIG COST**Shift basis: 1 per dayCost Data Source: CRG DataTruck Tractor Description: GENERIC ON-HIGHWAY TRUCK TRACTOR, 6X4, DIESEL POWERED, 400 HP (2ND HALF, 2006)Truck Trailer Description: GENERIC FOLDING GOOSENECK, DROP DECK EQUIPMENT TRAILER (25T, 50T, AND 100T)**Cost Breakdown:**

Available Rig Capacities	0-25 Tons	26-50 Tons	51+ Tons
Ownership Cost/Hour:	\$16.63	\$18.37	\$22.33
Operating Cost/Hour:	\$44.38	\$46.13	\$50.07
Operator Cost/Hour:	\$27.66	\$27.66	\$27.66
Helper Cost/Hour:	\$0.00	\$25.39	\$25.39
Total Unit Cost/Hour:	\$88.67	\$117.55	\$125.45

NON ROADABLE EQUIPMENT:

Machine Description	Weight/ Unit (TONS)	Owner ship Cost/hr/ unit	Haul Rig Cost/hr/unit	Fleet Size	Haul Trip Cost/hr/ fleet	Return Trip Cost/hr/ fleet	DOT Permit Cost/ fleet
Cat D8T - 8SU	47.71	\$62.67	\$117.55	1	\$180.22	\$117.55	\$250.00
Subtotals:					\$180.22	\$117.55	\$250.00

ROADABLE EQUIPMENT:

Machine Description	Total Cost/hr/ unit	Fleet Size	Haul Trip Cost/hr/ fleet	Return Trip Cost/hr/ fleet
Light Duty Pickup, 4x4, 1 T. Crew	\$25.49	1	\$25.49	\$25.49
Subtotals:			\$25.49	\$25.49

EQUIPMENT HAUL DISTANCE and Time

Nearest Major City or Town within project area region: MONTE VISTA
 Total one-way travel distance: 35.00 miles
 Average Travel Speed: 40.00 mph

Total Non-Roadable Mob/Demob Cost * \$1,381.54
 ** two round trips with haul rig:
 Total Roadable Mob/Demob Cost ** \$44.61
 ** one round trip, no haul rig:

Transportation Cycle Time:

	Non-Roadable Equipment	Roadable Equipment
Haul Time (Hours):	0.88	0.88
Return Time (Hours):	0.88	0.88
Loading Time (Hours):	0.50	NA
Unloading Time (Hours):	0.50	NA
Subtotals:	2.75	1.75

JOB TIME AND COST

Total job time: 5.50 Hours

Total job cost: \$1,426

Note: Use of the diesel 4x4 pickup is for transporting crew and ATV to and from site. The ATV will be used for the weed control spray and for broadcast seeding for revegetation (see task 004).