

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



August 19, 2013

Glen Williams
Cotter Corporation, N.S.L.
P.O. Box 700
Nucla, CO
81424

John W. Hickenlooper
Governor

Mike King
Executive Director

Loretta Piñeda
Director

RE: SR-13A Mine, Permit No. M-1977-311, Amendment Approval, Revision No. AM-1

Dear Mr. Williams:

On August 19, 2013 the Division of Reclamation, Mining and Safety (Division) approved the Amendment application (AM-1) submitted on September 28, 2012, addressing the following:

Update permit to meet requirements for 110d operations.

The terms of AM-1 approved by the Division are hereby incorporated into Permit No. M-1977-311. All other conditions and requirements of the permit remain in full force and effect.

The Division has estimated the reclamation costs based on the operation proposed through AM-1 and determined that the Financial Warranty shall be set at \$27,600.00. According to Division records, the Department of Energy (DOE) currently holds a Financial Warranty of \$6,000.00 and the Division holds a Financial Warranty of \$100.00 for this site. Please submit additional bond in the amount of \$21,500.00. The revision will not be final until the bond is approved by the Division.

Please make arrangements with Barbara Coria at the Division of Reclamation, Mining and Safety Denver Office, phone no. 303.866.3567, ext. 8148 for submittal of the financial warranty. Any questions regarding completion, execution and/or submittal of financial warranty forms should also be directed to Barbara Coria.

If you require additional information, or have questions or concerns, please contact me at the DRMS Grand Junction Field Office.

Sincerely,



Dustin Czaplá

Environmental Protection Specialist
Department of Natural Resources
Division of Reclamation, Mining and Safety
101 South 3rd, Suite 301
Grand Junction, CO 81501
Phone: (970) 243-6299

Cc: Ed Cotter, DOE
James Blair, BLM
Jennifer Thurston, INFORM

COST SUMMARY WORK

Task description: AM1

Site: SR-13A Mine

Permit Action: AM1

Permit/Job#: M1977311

PROJECT IDENTIFICATION

Task #: 000

State: Colorado

Abbreviation: None

Date: 8/12/2013

County: San Miguel

Filename: M311-000

User: DMC

Agency or organization name: DRMS

TASK LIST (DIRECT COSTS)

Task	Description	Form Used	Fleet Size	Task Hours	Cost
01a	Demolition/disposal of structures	DEMOLISH	1	8.00	\$5,005.02
02a	Seal openings	MINESEAL	1	16.00	\$4,800.01
03a	Recontour mine waste dump	DOZER	1	9.64	\$1,334.72
04a	Spread fines over waste dump area	DOZER	1	4.64	\$642.86
05a	Pock waste dump	EXCAVATE	1	15.57	\$1,463.00
06a	Revegetate disturbed area	REVEGE	1	8.00	\$4,086.51
07a	Mobilize reclamation crew and equipment	MOBILIZE	1	5.55	\$3,537.77
<u>SUBTOTALS:</u>				67.4	\$20,869.89

INDIRECT COSTS

OVERHEAD AND PROFIT:

Liability insurance: 2.02%

Total = \$421.57

Performance bond: 1.05%

Total = \$219.13

Job superintendent: 33.70 hrs

Total = \$2,204.32

Profit: 10.00%

Total = \$2,086.99

TOTAL O & P = \$4,932.01

CONTRACT AMOUNT (direct + O & P) = \$25,801.90

LEGAL - ENGINEERING - PROJECT MANAGEMENT:

Financial warranty processing (legal/related costs): 500.00

Total = 500.00

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

Total = \$0.00

Reclamation management and/or administration: 5.00%

\$1,290.10

CONTINGENCY: 0.00

Total = \$0.00

TOTAL INDIRECT COST = \$6,722.11

TOTAL BOND AMOUNT (direct + indirect) = \$27,600.00

DEMOLITION WORK

Task description: Demolition/disposal of structures

Site: SR-13A Mine

Permit Action: AM1

Permit/Job#: M1977311

PROJECT IDENTIFICATION

Task #: 01A

State: Colorado

Abbreviation: None

Date: 8/12/2013

County: San Miguel

Filename: M311-01a

User: DMC

Agency or organization name: DRMS

UNIT COSTS

Location adjustment: 91.60 %

Structure or Item Description	Dimensions	Demolition Menu Selection	Quantity	Unit	Unit Cost	Total Cost
Office building	20' x 10' x 10'	Bldg. (SN) demo./off-site disposal in approved landfill - Max. 30 mile haul	2,000.00	CF	\$1.14	\$2,288.00
Shop	20' x 10' x 10'	Bldg. (SN) demo./off-site disposal in approved landfill - Max. 30 mile haul	2,000.00	CF	\$1.14	\$2,288.00
Foundations	20' x 10' x 10' (2)	Demo. and on-site disposal in existing pit, 8 in. thick - Max. 200 ft. push	400.00	SF	\$2.22	\$888.00

Job Hours: 8.00

Subtotal
(unadjusted): \$5,464.00

Total Cost
(adjusted for location): \$5,005.02

SAFEGUARDING UNDERGROUND OPENINGS

Task description: Seal openings

Site: SR-13A Mine

Permit Action: AM1

Permit/Job#: M1977311

PROJECT IDENTIFICATION

Task #: 02A

State: Colorado

Abbreviation: None

Date: 8/12/2013

County: San Miguel

Filename: M311-02a

User: DMC

Agency or organization name: DRMS

UNIT COSTS

Opening Description	Dimensions	Closure Method	Quantity	Unit	Unit Cost	Total Cost
Portal	EA	Adit closure - grate with bat access, slot type (per opening)	1.00	EA	\$2,157.62	\$2,157.62
Venthole	EA	Shaft closure - precast concrete panel (per opening)	1.00	EA	\$2,642.39	\$2,642.39

Job Hours: 16.00

Total Cost: \$4,800.01

BULLDOZER WORKTask description: **Recontour mine waste dump**Site: **SR-13A Mine**Permit Action: **AM1**Permit/Job#: **M1977311****PROJECT IDENTIFICATION**Task #: **03A**State: **Colorado**Abbreviation: **None**Date: **8/12/2013**County: **San Miguel**Filename: **M311-03a**User: **DMC**Agency or organization name: **DRMS****HOURLY EQUIPMENT COST**Basic Machine: **Cat D6T LGP**Horsepower: **200**Blade Type: **Straight**Attachment: **NA**Shift Basis: **1 per day**Data Source: **(CRG)****Cost Breakdown:**

		<u>Utilization %</u>
Ownership Cost/Hour:	\$35.09	NA
Operating Cost/Hour:	\$65.97	100
Ripper op. Cost/Hour:	\$0.00	0
Operator Cost/Hour:	\$37.41	NA

Total unit Cost/Hour: **\$138.47**Total Fleet Cost/Hour: **\$138.47****MATERIAL QUANTITIES**Initial Volume: **2,000**Swell factor: **1.000**Loose volume: **2,000 LCY**Source of estimated volume: **Division of Reclamation, Mining & Safety**Source of estimated swell factor: **Cat Handbook****HOURLY PRODUCTION**Average push distance: **50 feet**Unadjusted hourly production: **444.6 LCY/hr**Materials consistency description: **Partly consolidated stockpile 1.1**Average push gradient: **0 %**Average site altitude: **5,700 feet**Material weight: **2,700 lbs/LCY**Weight description: **Stone - crushed****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:	0.800	(FND-RF)
Push gradient:	1.000	(CAT HB)
Altitude:	1.000	(CAT HB)
Material Weight:	0.852	(CAT HB)
Blade type:	1.000	(PAT)

Net correction: 0.4667

Adjusted unit production: 207.49 LCY/hr

Adjusted fleet production: **207.49** LCY/hr

JOB TIME AND COST

Fleet size: 1 Dozer(s)

Unit cost: \$0.667/LCY

Total job time: **9.64** Hours

Total job cost: **\$1,334.72**

BULLDOZER WORKTask description: Spread fines over waste dump areaSite: SR-13A MinePermit Action: AM1Permit/Job#: M1977311**PROJECT IDENTIFICATION**Task #: 04AState: ColoradoAbbreviation: NoneDate: 8/12/2013County: San MiguelFilename: M311-04aUser: DMCAgency or organization name: DRMS**HOURLY EQUIPMENT COST**Basic Machine: Cat D6T LGPHorsepower: 200Blade Type: StraightAttachment: NAShift Basis: 1 per dayData Source: (CRG)**Cost Breakdown:**

		<u>Utilization %</u>
Ownership Cost/Hour:	\$35.09	NA
Operating Cost/Hour:	\$65.97	100
Ripper op. Cost/Hour:	\$0.00	0
Operator Cost/Hour:	\$37.41	NA

Total unit Cost/Hour: \$138.47Total Fleet Cost/Hour: \$138.47**MATERIAL QUANTITIES**Initial Volume: 1,210Swell factor: 1.000Loose volume: 1,210 LCYSource of estimated volume: Division of Reclamation, Mining & SafetySource of estimated swell factor: Cat Handbook**HOURLY PRODUCTION**Average push distance: 100 feetUnadjusted hourly production: 303.3 LCY/hrMaterials consistency description: Loose stockpile 1.2Average push gradient: 0 %Average site altitude: 5,700 feetMaterial weight: 1,600 lbs/LCYWeight description: Top Soil**Job Condition Correction Factor**

		<u>Source</u>
Operator Skill:	0.750	(AVG.)
Material consistency:	1.200	(CAT HB)
Dozing method:	1.000	(GEN.)

Visibility:	1.000	(AVG.)
Job efficiency:	0.830	(1 SHIFT/DAY)
Spoil pile:	0.800	(FND-RF)
Push gradient:	1.000	(CAT HB)
Altitude:	1.000	(CAT HB)
Material Weight:	1.438	(CAT HB)
Blade type:	1.000	(PAT)

Net correction: 0.8593

Adjusted unit production: 260.63 LCY/hr

Adjusted fleet production: **260.63 LCY/hr**

JOB TIME AND COST

Fleet size: 1 Dozer(s)

Unit cost: \$0.531/LCY

Total job time: **4.64 Hours**

Total job cost: **\$642.86**

HYDRAULIC EXCAVATOR WORK

Task description: Pock waste dump

Site: SR-13A Mine

Permit Action: AM1

Permit/Job#: M1977311

PROJECT IDENTIFICATION

Task #: 05A

State: Colorado

Abbreviation: None

Date: 8/12/2013

County: San Miguel

Filename: M311-05a

User: DMC

Agency or organization name: DRMS

HOURLY EQUIPMENT COST

Basic Machine: Cat 315D L 8'-6" Stick

Attachment 1: ROPS Cab

Horsepower: 115

Weight (MT): 17.32

Shift Basis: 1 per day

Data Source: (CRG)

Cost Breakdown:

		Utilization %
Ownership Cost/Hour:	\$23.85	NA
Operating Cost/Hour:	\$36.12	100
Operator Cost/Hour:	\$33.94	NA
Total Unit Cost/Hour:	\$93.91	
Total Fleet Cost/Hour:	\$93.91	

MATERIAL QUANTITIES

Initial volume: 2,000

CCY

Swell factor: 1.000

Loose volume: 2,000

LCY

Source of estimated volume: Division of Reclamation, Mining & Safety

Source of estimated swell factor: Cat Handbook

HOURLY PRODUCTION

Excavator Cycle Time (load bucket, swing loaded, dump bucket, swing empty):

Basic Job Condition Description: AVERAGE

Secondary Job Condition within Basic Description: AVERAGE

Cycle Time Value: 0.256 minutes

Load Bucket Capacity

Bucket Size Class: Medium

Rated Capacity: 0.80 LCY (heaped)

Bucket Fill Factor: 0.825 Blasted rock - avg. blasted (75 - 90%) 0.825

Adjusted Capacity: 0.66 LCY

Job Condition Correction Factors

Site Altitude: 5700 feet

Altitude Adj:	<u>1.00</u>	Source (CAT HB)
Job Efficiency:	<u>0.83</u>	(1 shift/day)
Net Correction:	<u>0.83</u>	multiplier

Unadjusted Hourly Unit Production: 154.69 LCY/Hour

Adjusted Hourly Unit Production: 128.39 LCY/Hour

Adjusted Hourly Fleet Production: 128.39 LCY/Hour

JOB TIME AND COST

Fleet size: 1 Excavator Total job time: 15.58 Hours

Unit cost: \$0.731 /LCY Total job cost: \$1,463.00

REVEGETATION WORKTask description: Revegetate disturbed areaSite: SR-13A MinePermit Action: AM1Permit/Job#: M1977311**PROJECT IDENTIFICATION**Task #: 06AState: ColoradoAbbreviation: NoneDate: 8/12/2013County: San MiguelFilename: M311-06aUser: DMCAgency 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 - Hachita	2.00	32.64	\$21.30
Indian Ricegrass - Paloma	4.00	12.95	\$34.84
Galleta	2.00	7.30	\$50.40
Slender Wheatgrass - Native	2.00	7.30	\$4.50
Needle and Thread	1.00	2.64	\$46.99
Western Wheatgrass - Native	4.00	10.10	\$12.16
Needlegrass, Green - Lodorm	2.00	8.31	\$10.78
Flax, Lewis Blue	1.00	6.63	\$16.52
Saltbush, Four Wing	3.00	4.13	\$32.19
Globemallow, Scarlet (or copper)	0.30	3.40	\$42.14
Winter Fat	1.00	2.55	\$32.69
Penstemon, Palmer	0.50	11.06	\$15.50
Totals Seed Mix	22.80	109.01	\$320.01

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: 4.5
 Estimated Failure Rate: 25%
 *Selected Replanting Work Items: TILLING, SEEDING

Cost /Acre: \$726.49
 Cost /Acre*: \$726.49

Initial Job Cost: **\$3,269.21**
 Reseeding Job Cost: **\$817.30**
 Total Job Cost: **\$4,086.51**
 Job Hours: **8.00**

EQUIPMENT MOBILIZATION/DEMOBILIZATIONTask description: **Mobilize reclamation crew and equipment**Site: **SR-13A Mine**Permit Action: **AM1**Permit/Job#: **M1977311****PROJECT IDENTIFICATION**Task #: **07A**State: **Colorado**Abbreviation: **None**Date: **8/12/2013**County: **San Miguel**Filename: **M311-07a**User: **DMC**Agency or organization name: **DRMS****EQUIPMENT TRANSPORT RIG COST**Shift basis: **1 per day**
Cost Data Source: **CRG Data**Truck 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 D6T LGP	26.87	\$35.09	\$117.55	1	\$152.64	\$117.55	\$250.00
Cat 315D L 8'-6" Stick	19.05	\$23.85	\$88.67	1	\$112.52	\$88.67	\$250.00
Drill/Broadcast Seeder with Tractor	25.00	\$39.59	\$88.67	1	\$128.26	\$88.67	\$250.00

Subtotals: **\$393.42** **\$294.89** **\$750.00****ROADABLE EQUIPMENT:**

Machine Description	Total Cost/hr/ unit	Fleet Size	Haul Trip Cost/hr/ fleet	Return Trip Cost/hr/ fleet
Light Duty Pickup, 4x4, 3/4 T.	\$15.34	1	\$15.34	\$15.34

Subtotals: **\$15.34** **\$15.34**

EQUIPMENT HAUL DISTANCE and Time

Nearest Major City or Town within project area region:	NATURITA	
Total one-way travel distance:	40.00	miles
Average Travel Speed:	45.00	mph

Total Non-Roadable Mob/Demob Cost *	\$3,510.50
** two round trips with haul rig:	
Total Roadable Mob/Demob Cost **	\$27.27
** one round trip, no haul rig:	

Transportation Cycle Time:

	Non-Roadable Equipment	Roadable Equipment
Haul Time (Hours):	0.89	0.89
Return Time (Hours):	0.89	0.89
Loading Time (Hours):	0.50	NA
Unloading Time (Hours):	0.50	NA
Subtotals:	2.78	1.78

JOB TIME AND COST

Total job time:	5.56	Hours
Total job cost:	\$3,537.77	