

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 1, 2013

Gary Wright
New Smuggler Mine Company
715 W. Main Street, Suite 201
Aspen, CO
81611

John W. Hickenlooper
Governor

Mike King
Executive Director

Loretta Piñeda
Director

RE: Smuggler Mine, Permit No. M-1995-097, Reclamation Costs Update and Notice of Surety Increase (SI-2)

Dear Mr. Wright:

In an effort to ensure the Financial Warranty for the above referenced site adequately reflects the actual current costs of fulfilling the requirements of the approved reclamation plan, the Colorado Division of Reclamation, Mining and Safety (Division) has updated the reclamation cost estimate (copy enclosed). ***Therefore, pursuant to Section 34-32-117(4) of the Colorado Land Reclamation Act, adequate Financial Warranty must be submitted to the Division within 60 days of the mailing date of this letter.*** The additional amount needs to be accepted prior to **Tuesday, October 01, 2013**. Please review the enclosed figures as soon as possible and contact our office if any calculation errors are noted.

Staff calculations estimate the cost to reclaim the above referenced site to be \$106,014.00. This is an increase of \$26,126.00 over the \$79,888.00 currently held by the Division. This estimate is based on conditions observed during the July 23, 2013 inspection.

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, have questions or concerns, please contact me at the DRMS Grand Junction Field Office.

Sincerely,



Dustin Czupla

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
Fax: (970) 241-1516

Enc: Financial Warranty Cost Estimate

COST SUMMARY WORK

Task description: Routine review of financial warranty costs

Site: Smuggler Mine Permit Action: 2013-08 Review Permit/Job#: M1995097

PROJECT IDENTIFICATION

Task #: 000 State: Colorado Abbreviation: None
Date: 8/1/2013 County: Pitkin Filename: M097-000
User: DMC

Agency or organization name: DRMS

TASK LIST (DIRECT COSTS)

Task	Description	Form Used	Fleet Size	Task Hours	Cost
01a	Seal mine openings	MINESEAL	1	20.00	\$16,408.00
02a	Demo/dispose of structures and junk	DEMOLISH	1	40.00	\$43,929.78
03a	Rip compacted surfaces	RIPPER	1	3.87	\$536.00
04a	Import growth medium	TRUCK1	1	42.08	\$15,770.86
05a	Spread growth medium	DOZER	1	4.43	\$613.99
06a	Vegetate 2.1 acres	REVEGE	1	4.00	\$6,219.96
07a	Mobilize reclamation crew and equipment	MOBILIZE	1	2.57	\$2,434.28
<u>SUBTOTALS:</u>				116.95	\$85,912.87

INDIRECT COSTS

OVERHEAD AND PROFIT:

Liability insurance:	2.02%	Total =	\$1,735.44
Performance bond:	1.05%	Total =	\$902.09
Job superintendent:	58.48 hrs	Total =	\$3,824.85
Profit:	10.00%	Total =	\$8,591.29
		TOTAL O & P =	\$15,053.67
		CONTRACT AMOUNT (direct + O & P) =	\$100,966.54

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%		\$5,048.33

CONTINGENCY: 0.00 Total = \$0.00

TOTAL INDIRECT COST = \$20,102.00

TOTAL BOND AMOUNT (direct + indirect) = \$106,014.87

SAFEGUARDING UNDERGROUND OPENINGS

Task description: Seal mine openings

Site: Smuggler Mine

Permit Action: 2013-08 Review

Permit/Job#: M1995097

PROJECT IDENTIFICATION

Task #: 01A

State: Colorado

Abbreviation: None

Date: 8/1/2013

County: Pitkin

Filename: M097-01a

User: DMC

Agency or organization name: DRMS

UNIT COSTS

Opening Description	Dimensions	Closure Method	Quantity	Unit	Unit Cost	Total Cost
Cap the Smuggler Shaft	6' x 9'	Shaft closure - concrete cap, poured-in-place (per sq. ft.)	54.00	SF	\$105.70	\$5,707.80
Install 4 locking portal gates	6' x 9'	Adit closure - grated door (per opening)	4.00	EA	\$2,675.05	\$10,700.20

Job Hours: 20.00

Total Cost: \$16,408.00

DEMOLITION WORK

Task description: Demo/dispose of structures and junk

Site: Smuggler Mine

Permit Action: 2013-08 Review

Permit/Job#: M1995097

PROJECT IDENTIFICATION

Task #: 02A
Date: 8/1/2013
User: DMC

State: Colorado
County: Pitkin

Abbreviation: None
Filename: M097-02a

Agency or organization name: DRMS

UNIT COSTS

Location adjustment: 98.50 %

Structure or Item Description	Dimensions	Demolition Menu Selection	Quantity	Unit	Unit Cost	Total Cost
Main level shop	40' x 40' x 10'	Bldg. (SN) demo./off-site disposal in approved landfill - Max. 15 mile haul	16,000.00	CF	\$1.07	\$17,120.00
Main level storage building	(2) 12' x 16' x 12'	Bldg. (SN) demo./off-site disposal in approved landfill - Max. 15 mile haul	4,608.00	CF	\$1.07	\$4,930.56
Storage building on main level mine waste	12' x 16' x 12'	Bldg. (SN) demo./off-site disposal in approved landfill - Max. 15 mile haul	2,304.00	CF	\$1.07	\$2,465.28
No. 2 level structure	10' x 14' x 8'	Bldg. (SN) demo./off-site disposal in approved landfill - Max. 15 mile haul	1,120.00	CF	\$1.07	\$1,198.40
Misc. salvageable equipment	370 c.y.	Loading and 5 mile haul, salvage allowed - Steel frame structures	340.00	CY	\$9.48	\$3,223.20
Misc. junk and debris to landfill	1000 c.y.	Loading and 2 mile haul, no salvage - Machine loading	1,000.00	CY	\$15.43	\$15,430.00
Haul above junk and debris 8 additional miles (10 miles total to landfill)	55 trips x 8 miles	Hauling only, per mile, 12-18 CY truck - 30 mph average speed	444.00	MI	\$0.52	\$231.32

Job Hours: 40.00

Subtotal
(unadjusted): \$44,598.76

Total Cost
(adjusted for location): \$43,929.78

BULLDOZER RIPPING WORK

Task description: Rip compacted surfaces

Site: Smuggler Mine Permit Action: 2013-08 Review Permit/Job#: M1995097

PROJECT IDENTIFICATION

Task #: 03A State: Colorado Abbreviation: None
Date: 8/1/2013 County: Pitkin Filename: M097-03a
User: DMC

Agency or organization name: DRMS

HOURLY EQUIPMENT COST

Basic Machine: Cat D6T LGP Horsepower: 200
Ripper Attachment: 3-Shank Ripper Shift Basis: 1 per day
Data Source: (CRG)

Cost Breakdown:

		Utilization %
Ownership Cost/Hour:	<u>\$35.09</u>	<u>NA</u>
Operating Cost/Hour:	<u>\$65.97</u>	<u>100</u>
Ripper Operating Cost/Hour:	<u>\$0.00</u>	<u>100</u>
Operator Cost/Hour:	<u>\$37.41</u>	<u>NA</u>
Total Unit Cost/Hour:	<u>\$138.47</u>	
Total Fleet Cost/Hour:	<u>\$138.47</u>	

MATERIAL QUANTITIES

Selected estimating method: Area

Alternate Methods:

Seismic: NA Bank Volume: NA BCY NA
Area: 2.10 acres Rip Depth (ft): 2.00 Volume: 6,776 BCY or CCY

Source of estimated quantity: Approved reclamation plan

HOURLY PRODUCTION

Seismic:

Seismic Velocity: NA feet/second

Area:

Average Ripping Depth: 1.64 mph
Average Ripping Width: 6.58 degrees
Average Ripping Length: 100.00 feet
Average Dozer Speed: 88.00 feet
Average Maneuver Time: 0.25 feet
Production per unit area: 0.654 acres/hour

Job Condition Correction Factors

Unadjusted Hourly Unit Production: 0.654 Acres/hr
Site Altitude: 8,075 feet
Altitude Adj: 1.00 (CAT HB)
Job Efficiency: 0.83 (1 shift/day)
Net Correction: 0.83 multiplier

Adjusted Hourly Unit Production: 0.54 Acres/hr
Adjusted Hourly Fleet Production: 0.54 Acres/hr

JOB TIME AND COST

Fleet size: 1 Grader(s) Total job time: 3.87 Hours

Unit cost: \$255.191 Per acre Total job cost: \$536.00

TRUCK/LOADER TEAM WORKTask description: Import growth mediumSite: Smuggler MinePermit Action: 2013-08 ReviewPermit/Job#: M1995097**PROJECT IDENTIFICATION**Task #: 04AState: ColoradoAbbreviation: NoneDate: 8/1/2013County: PitkinFilename: M097-04aUser: DMCAgency or organization name: DRMS**HOURLY EQUIPMENT COST**Shift basis: 1 per day

Equipment Description	
Truck Loader Team -Truck:	Generic 8-10 cy, 6x4
-Loader:	CAT 972H
Support Equipment -Load Area:	NA
-Dump Area:	NA
Road Maintenance -Motor Grader:	NA
-Water Truck:	NA

<u>Cost Breakdown:</u>	Truck/Loader Team		Support Equipment		Maintenance Equipment	
	Truck	Loader	Load Area	Dump Area	Motor Grader	Water Truck
%Utilization-machine:	100	100	NA	NA	NA	NA
Ownership cost/hour:	\$8.92	\$35.56	NA	NA	NA	NA
Operating cost/hour:	\$50.32	\$66.46	NA	NA	NA	NA
Ripper op. cost/hour:	NA	\$0.00	NA	NA	NA	NA
Operator cost/hour:	\$0.00	\$35.82	NA	NA	NA	NA
Unit Subtotals:	\$59.24	\$137.84	NA	NA	NA	NA
Number of Units:	4	1	0	0	0	0
Group Subtotals:	Work:	\$374.80	Support:	\$0.00	Maint:	\$0.00

Total work team cost/hour: \$374.80**MATERIAL QUANTITIES**Initial volume: 1,694

CCY

Swell factor: 1.000Loose volume: 1,694

LCY

Source of estimated volume: 2.1 ac. x 6"Source of estimated swell factor: Cat HandbookMaterial Purchase Cost: \$6.00Total Cost: \$0.00**HOURLY PRODUCTION****Truck Capacity:****Truck Payload (weight) Basis:**Material weight: 1,600 Pounds/LCYDescription: Top SoilRated Payload: 27,280 PoundsPayload Capacity: 17.05 LCY

Truck Bed (volume) Basis:

Struck Volume:	8.00	LCY
Heaped Volume:	10.00	LCY
Average Volume:	9.00	LCY
Adjusted Volume:	10.00	LCY

Final Truck Volume Based on Number of Loader Passes: 5.46 LCY

Loading Tool Capacity

Bucket Size Class: NA

Rated Capacity:	5.600	LCY (heaped)
Bucket Fill Factor:	0.975	Loose material - mixed moist aggregates (95-100%) 0.975
Adjusted Capacity:	5.460	LCY

Job Condition Corrections:

Site Altitude (ft.): 8075 feet

	Truck	Loader	Source
Altitude Adj:	0.970	1.000	(CAT HB)
Job Efficiency:	0.830	0.830	(CAT HB)

Net Correction: 0.805 0.830

Loading Tool Cycle Time: Number of Loading Tool Passes Required to Fill Truck: 1 passes

Excavators and Front Shovels:

Machine Cycle Time vs. Job Condition Rating: NA

Selected Value within this Basic Rating: NA

Track Loaders – Material Description: _____

Cycle Time Elements (min.):

Load: NA Maneuver: NA Dump: 0.100

Wheel and Track Loaders - Unadjusted Basic Loader Cycle Time (load, dump, maneuver): 0.525 minutes

Cycle Time Factors		Factor (min.)	Source
Material:	Mixed material 0.02	0.020	(Cat HB)
Stockpile:	Conveyor or dozer piled 10 ft. high and up 0.00	0.000	(Cat HB)
Truck Ownership:	Common ownership of trucks and loaders -0.04	-0.040	(Cat HB)
Operation:	Constant operation -0.04	-0.040	(Cat HB)
Dump Target:	Nominal target 0.00	0.000	(Cat HB)
Net Cycle Time Adjustment:		-0.060	minutes
Adjusted Loader Cycle Time:		0.465	minutes
Net Load Time per Truck:		0.100	minutes

Truck Cycle Time:

Truck Exchange Time:	0.50	Minutes	Adjusted for site altitude:	0.515	Minutes
Truck Load Time:	0.100	Minutes	Adjusted for site altitude:	0.100	Minutes
Truck Maneuver and Dump Time:	0.80	Minutes	Adjusted for site altitude:	0.825	Minutes

Truck Travel (Haul & Return) Time:
penetration 1.2

Road Condition: Very hard, smooth, asphalt or concrete, no tire

Haul Route:

Seg #	Haul Distance (Ft)	Grade (%)	Roll. Res (%)	Total Res (%)	Velocity (fpm)	Travel Time (min)
1	36960.00	0.00	1.20	1.20	2895	12.860

Haul Time: **12.860** minutes

Return Route:

Seg #	Haul Distance (Ft)	Grade (%)	Roll. Res (%)	Total Res (%)	Velocity (fpm)	Travel Time (min)
1	36960.00	0.00	1.20	1.20	2913	12.716

Return Time: **12.716** minutesTotal Truck Cycle Time: **27.016** minutes

Loading Tool unit Production 532.28 LCY/Hour
 Truck Unit Production 12.13 LCY/Hour
 Optimal No. of Trucks: 44 Truck(s)

Adjusted for job efficiency: 441.79 LCY/Hour
 Adjusted for job efficiency: 10.06 LCY/Hour
 Selected Number of Trucks: 4 Truck(s)

Adjusted hourly truck team production: 40.26 LCY/Hour
 Adjusted single truck/loader team production: 40.26 LCY/Hour
 Adjusted multiple truck/loader team production: **40.26** LCY/Hour

JOB TIME AND COST

Fleet size: 1 Team(s) Total job time: **42.08** Hours
 Unit cost: \$9.310 /LCY Total job cost: **\$15,770.86**

BULLDOZER WORKTask description: Spread growth mediumSite: Smuggler MinePermit Action: 2013-08 ReviewPermit/Job#: M1995097PROJECT IDENTIFICATIONTask #: 05AState: ColoradoAbbreviation: NoneDate: 8/1/2013County: PitkinFilename: M097-05aUser: DMCAgency or organization name: DRMSHOURLY EQUIPMENT COSTBasic 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: \$138.47MATERIAL QUANTITIESInitial Volume: 1,694Swell factor: 1.000Loose volume: 1,694 LCYSource of estimated volume: Division of Reclamation, Mining & SafetySource of estimated swell factor: Cat HandbookHOURLY PRODUCTIONAverage push distance: 50 feetUnadjusted hourly production: 444.6 LCY/hrMaterials consistency description: Loose stockpile 1.2Average push gradient: 0 %Average site altitude: 8,075 feetMaterial weight: 1,600 lbs/LCYWeight description: Top SoilJob 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: 382.04 LCY/hr

Adjusted fleet production: **382.04** LCY/hr

JOB TIME AND COST

Fleet size: 1 Dozer(s)

Unit cost: \$0.362/LCY

Total job time: 4.43 Hours

Total job cost: **\$613.99**

REVEGETATION WORKTask description: Vegetate 2.1 acresSite: Smuggler MinePermit Action: 2013-08 ReviewPermit/Job#: M1995097PROJECT IDENTIFICATIONTask #: 06AState: ColoradoAbbreviation: NoneDate: 8/1/2013County: PitkinFilename: M097-06aUser: DMCAgency or organization name: DRMSFERTILIZINGMaterials

Description	Units / Acre	Unit	Cost / Unit	Cost /Acre
6-24-24, 10-20-10, 15-15-15	100.00	pound	\$0.26	\$26.40
Total Fertilizer Materials Cost/Acre				\$26.40

Application

Description	Cost /Acre
Tractor towed spreader (MEANS 32 01 90.13 0120)	\$52.71
Total Fertilizer Application Cost/Acre	\$52.71

TILLING

Description	Cost /Acre
Chisel plowing {DMG}	\$88.58
Weed control spraying (MEANS 31 31 16.13 3100)	\$145.20
Total Tilling Cost/Acre	\$233.78

SEEDING

Seed Mix	Rate – PLS LBS / Acre	Seeds per SQ. FT	Cost /Acre
Alsike Clover	4.00	62.44	\$8.12
Indian Ricegrass - Native	9.00	29.13	\$60.66
Mountain Brome - Bromar	6.00	9.64	\$20.40
Sandberg Bluegrass - VNS	4.00	84.94	\$34.72
Hard Fescue - Durar	3.00	38.91	\$6.27
Sheep Fescue - Bighorn	4.00	62.44	\$12.24
Western Wheatgrass - Native	8.00	20.20	\$24.32
Needlegrass, Letterman's	7.00	30.53	\$700.84
Totals Seed Mix	45.00	338.25	\$867.57

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
Straw, delivered {MEANS 31 25 14.16 1200}	2.00	TON	\$265.00	\$530.00
Total Mulch Materials Cost/Acre				\$530.00

Application

Description	Cost /Acre
Crimping, with tractor {DMG survey data}	\$65.89
Power mulcher (MEANS 32 91 13.16 0250)	\$86.68
Total Mulch Application Cost/Acre	\$152.57

NURSERY STOCK PLANTING

Common Name	No / Acre	Type and Size	Planting Cost	Fertilizer Pellet Cost	Cost /Acre
Bitterbrush, Antelope	50	Tubling, 10 cu. in. container {(MEANS)}	\$1.77	\$0.00	\$88.50
Buffaloberry, Silver	50	Tubling, 10 cu. in. container {(MEANS)}	\$1.45	\$0.00	\$72.50
Elderberry, Red	50	Tubling, 10 cu. in. container {(MEANS)}	\$1.46	\$0.00	\$73.00
Serviceberry	50	Tubling, 10 cu. in. container {(MEANS)}	\$1.45	\$0.00	\$72.50
Totals Nursery Stock Cost / Acre					\$306.50

JOB TIME AND COST

No. of Acres:	2.1	Cost /Acre:	\$2,430.81
Estimated Failure Rate:	25%	Cost /Acre*:	\$2,124.31
*Selected Replanting Work Items:	FERTILIZING, TILLING, SEEDING, MULCHING		

Initial Job Cost:	\$5,104.70
Reseeding Job Cost:	\$1,115.26
Total Job Cost:	\$6,219.96
Job Hours:	4.00

EQUIPMENT MOBILIZATION/DEMobilIZATIONTask description: **Mobilize reclamation crew and equipment**Site: **Smuggler Mine**Permit Action: **2013-08 Review**Permit/Job#: **M1995097****PROJECT IDENTIFICATION**Task #: **07A**State: **Colorado**Abbreviation: **None**Date: **8/1/2013**County: **Pitkin**Filename: **M097-07a**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	28.63	\$0.00	\$117.55	1	\$117.55	\$117.55	\$250.00
CAT 972H	28.00	\$35.56	\$117.55	1	\$153.11	\$117.55	\$250.00
Power Mulcher (Reinco M90)	6.00	\$7.03	\$88.67	1	\$95.70	\$88.67	\$250.00

Subtotals: **\$366.36** **\$323.77** **\$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:	ASPEN	
Total one-way travel distance:	5.00	miles
Average Travel Speed:	35.00	mph

Total Non-Roadable Mob/Demob Cost *	\$2,429.90
'* two round trips with haul rig:	
Total Roadable Mob/Demob Cost **	\$4.38
** one round trip, no haul rig:	

Transportation Cycle Time:

	Non-Roadable Equipment	Roadable Equipment
Haul Time (Hours):	0.14	0.14
Return Time (Hours):	0.14	0.14
Loading Time (Hours):	0.50	NA
Unloading Time (Hours):	0.50	NA
Subtotals:	1.29	0.29

JOB TIME AND COST

Total job time: 2.57 Hours

Total job cost: \$2,434.28