



COLORADO

Division of Reclamation,
Mining and Safety

Department of Natural Resources

1313 Sherman Street, Room 215
Denver, CO 80203

August 20, 2015

Mr. Mike Romaniuk
Fortune Revenue Silver Mines, Inc
1900 Main Street, Unit 564
Ouray, CO 81427

Re: Revenue Mine, Permit No. M-2012-032, Amendment Approval, Revision No. AM-1

Dear Mr. Romaniuk:

On August 20, 2015 the Division of Reclamation, Mining and Safety approved the Amendment application submitted to the Division on March 4, 2015, addressing the following:

Increase the land disturbance around the Revenue portal.

The terms of the Amendment No. 1 approved by the Division are hereby incorporated into Permit No. M-2012-032. All other conditions and requirements of Permit No. M-2012-032 remain in full force and effect.

The estimated liability amount of \$464,333.79 exceeds the \$340,570.00 reclamation bond currently held. If you have not already done so, please submit additional bond in the amount of \$123,763.79. The revision will not be final until the bond is approved by the Division.

If you have any questions please contact me at the DRMS Grand Junction Field Office at (970) 241-2042 .

Sincerely,

Travis Marshall
Environmental Protection Specialist

Enclosure - Updated Reclamation Cost Estimate

M-RV-01



COST SUMMARY WORK

Task description: Final Reclamation Cost Estimate AM-1

Site: Revenue Mine

Permit Action: AM-1

Permit/Job#: M2012032

PROJECT IDENTIFICATION

Task #: 001

State: Colorado

Abbreviation: None

Date: 8/17/2015

County: Ouray

Filename: M032-001

User: THM

Agency or organization name: DRMS

TASK LIST (DIRECT COSTS)

Task	Description	Form Used	Fleet Size	Task Hours	Cost
01a	Demolish and dispose of buildings and debris	DEMOLISH	1	120.00	\$99,905.07
02a	Dispose of mill chemicals	DEMOLISH	1	10.00	\$11,250.63
03a	Grade slopes to 3:1 max and fill sed ponds 2-3	DOZER	1	137.60	\$34,914.00
04a	Improve permanent portal closures	MINESEAL	1	30.00	\$12,657.06
05a	Purchase, deliver and dump topsoil from permitted source	NA	1	250.00	\$153,000.00
06a	Spread topsoil	DOZER	1	19.66	\$4,988.00
07a	Revegetate disturbed area	REVEGE	1	40.00	\$25,152.00
08a	Haul reclamation equipment to and from site	MOBILIZE	1	7.14	\$4,780.00
<u>SUBTOTALS:</u>				614.4	\$346,647

INDIRECT COSTS

OVERHEAD AND PROFIT:

Liability insurance: 2.02%

Total = \$7,002.27

Performance bond: 1.05%

Total = \$3,639.79

Job superintendent: 307.20 hrs

Total = \$23,089.15

Profit: 10.00%

Total = \$34,664.70

TOTAL O & P = \$68,395.91

CONTRACT AMOUNT (direct + O & P) = \$415,042.91

LEGAL - ENGINEERING - PROJECT MANAGEMENT:

Financial warranty processing (legal/related costs): 500.00

Total = 500.00

Engineering work and/or contract/bid preparation: 4.25%

Total = \$17,639.32

Reclamation management and/or administration: 5.00%

\$20,752.15

CONTINGENCY: 3.00

Total = \$10,399.41

TOTAL INDIRECT COST = \$117,686.79

TOTAL BOND AMOUNT (direct + indirect) = \$464,333.79

DEMOLITION WORK

Task description: Demolish and dispose of buildings and debris

Site: Revenue Mine

Permit Action: AM-1

Permit/Job#: M2012032

PROJECT IDENTIFICATION

Task #: 01A

State: Colorado

Abbreviation: None

Date: 8/14/2015

County: Ouray

Filename: M032-01a

User: THM

Agency or organization name: DRMS

UNIT COSTS

Location adjustment: 94.70 %

Structure or Item Description	Dimensions	Demolition Menu Selection	Quantity	Unit	Unit Cost	Total Cost
Remove track	400 LF	Railroad track - Ties and track	400.00	LF	\$9.01	\$3,604.00
Remove diesel tank	10,000 gal total	Haul tank to certified salvage dump - 3,000 to 5,000 gal. tank	2.00	EA	\$760.00	\$1,520.00
Remove tailings conveyor	50 x 10	Conveyor, overland, including supports - 5 ft. W x 6 ft. H housing	50.00	LF	\$17.56	\$878.00
Remove crusher retaining wall	28' x 16'	USER PROVIDED ITEM	1.00	EA	\$4,000.00	\$4,000.00
Office/Dry Building	2 story	USER PROVIDED ITEM	1.00	EA	\$2,400.00	\$2,400.00
Filter Building	2 story	USER PROVIDED ITEM	1.00	EA	\$4,000.00	\$4,000.00
Snow shed/battery charger bldg.	45' x 120'	USER PROVIDED ITEM	1.00	EA	\$1,400.00	\$1,400.00
Portal cover structure - permanent	80 x 20 x 15	Bldg. (SN) demo./on-site disposal in existing pit or cut - Max. 50 ft. push	0.00	CF	\$0.17	\$0.00
Storage bldg (quonset, empty)	145 x 50 x 20	Loading and 5 mile haul, salvage allowed - Steel frame structures	1,000.00	CY	\$9.48	\$9,480.00
Misc debris - hauling	150 cy	Hauling only, per mile, 12-18 CY truck - 30 mph average speed	390.00	MI	\$0.52	\$203.19
Misc debris - disposal	150 cy	Dump fees - Building construction materials.	150.00	CY	\$74.00	\$11,100.00
Propane Tanks	2 tanks	USER PROVIDED ITEM	2.00	EA	\$150.00	\$300.00
Remove Thickner, Foundation and Piping	26' x 8'	USER PROVIDED ITEM	1,692.00	SF	\$13.60	\$23,011.20
Remove 3 Shaft superstructures and foundations	16' x 12' x 12'	USER PROVIDED ITEM	3.00	EA	\$14,333.33	\$42,999.99
Remove 4 water tanks	500 gal	USER PROVIDED ITEM	4.00	EA	\$150.00	\$600.00

Job Hours: 120.00

Subtotal
(unadjusted): \$105,496.38

Total Cost
(adjusted for location): \$99,905.07

DEMOLITION WORK

Task description: Dispose of mill chemicals

Site: Revenue Mine

Permit Action: AM-1

Permit/Job#: M2012032

PROJECT IDENTIFICATION

Task #: 02A

State: Colorado

Abbreviation: None

Date: 8/17/2015

County: Ouray

Filename: M032-02a

User: THM

Agency or organization name: DRMS

UNIT COSTS

Location adjustment: 94.70 %

Structure or Item Description	Dimensions	Demolition Menu Selection	Quantity	Unit	Unit Cost	Total Cost
Mill item (1)	Drum/liq. qty.	Hazardous waste removal - Bulk solids, large quantities (over 1.5 tons)	4.00	TON	\$751.32	\$3,005.28
Mill item (2)	Container/dry qty.	Hazardous waste removal - Bulk liquids, large quantities (over 2,500 gal.)	1,000.00	GAL	\$1.70	\$1,700.00
Mill item (3)	Transporation	Solid transport, large truck (max. 80 drums, 25 cy, or 18 tons) - Minimum	500.00	MI	\$3.85	\$1,925.00
Mill item (4)	Disposal	Dumpsite disposal charge - Average	20.00	TON	\$262.50	\$5,250.00

Job Hours: 10.00

Subtotal
(unadjusted): \$11,880.28

Total Cost
(adjusted for location): \$11,250.63

BULLDOZER WORKTask description: Grade slopes to 3:1 max and fill sed ponds 2-3Site: Revenue MinePermit Action: AM-1Permit/Job#: M2012032**PROJECT IDENTIFICATION**Task #: 03AState: ColoradoAbbreviation: NoneDate: 8/17/2015County: OurayFilename: M032-03aUser: THMAgency or organization name: DRMS**HOURLY EQUIPMENT COST**Basic Machine: Cat D9T - 9SUHorsepower: 405Blade Type: Semi-UniversalAttachment: NAShift Basis: 1 per dayData Source: (CRG)**Cost Breakdown:**

		<u>Utilization %</u>
Ownership Cost/Hour:	\$72.57	NA
Operating Cost/Hour:	\$143.16	100
Ripper op. Cost/Hour:	\$0.00	0
Operator Cost/Hour:	\$38.01	NA

Total unit Cost/Hour: \$253.73Total Fleet Cost/Hour: \$253.73**MATERIAL QUANTITIES**Initial Volume: 47,000Swell factor: 1.000Loose volume: 47,000 LCYSource of estimated volume: Division of Reclamation, Mining & SafetySource of estimated swell factor: Cat Handbook**HOURLY PRODUCTION**Average push distance: 90 feetUnadjusted hourly production: 1,351.7 LCY/hrMaterials consistency description: Rock, well ripped or blasted 0.8Average push gradient: 0 %Average site altitude: 10,650 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:	0.800	(CAT HB)
Dozing method:	1.000	(GEN.)
Visibility:	0.800	(POOR)
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:	0.793	(CAT HB)
Blade type:	1.000	(PAT)

Net correction: 0.2527

Adjusted unit production: 341.57 LCY/hr

Adjusted fleet production: 341.57 LCY/hr

JOB TIME AND COST

Fleet size: 1 Dozer(s)

Unit cost: \$0.743/LCY

Total job time: 137.60 Hours

Total job cost: \$34,914

SAFEGUARDING UNDERGROUND OPENINGS

Task description: Improve permanent portal closures

Site: Revenue Mine

Permit Action: AM-1

Permit/Job#: M2012032

PROJECT IDENTIFICATION

Task #: 04A

State: Colorado

Abbreviation: None

Date: 8/17/2015

County: Ouray

Filename: M032-04a

User: THM

Agency or organization name: DRMS

UNIT COSTS

Opening Description	Dimensions	Closure Method	Quantity	Unit	Unit Cost	Total Cost
Revenue main portal - existing bat grate	12 x 12	USER PROVIDED ITEM	1.00	EA	\$0.00	\$0.00
Close mill portal - strengthen door	35 x 35	USER PROVIDED ITEM	1.00	EA	\$1,500.00	\$1,500.00
Close storage portal (1) - strengthen	20 x 15	USER PROVIDED ITEM	1.00	EA	\$1,000.00	\$1,000.00
Close storage portal (2) - strengthen	20 x 15	USER PROVIDED ITEM	1.00	EA	\$1,000.00	\$1,000.00
Close storage portal (3) - strengthen	8 x 8	USER PROVIDED ITEM	1.00	EA	\$1,000.00	\$1,000.00
Close vent shafts (3 qty)	6 x 6	Shaft closure - precast concrete panel (per opening)	3.00	EA	\$2,719.02	\$8,157.06

Job Hours: 30.00

Total Cost: \$12,657.06

BULLDOZER WORKTask description: Spread topsoilSite: Revenue MinePermit Action: AM-1Permit/Job#: M2012032**PROJECT IDENTIFICATION**Task #: 06AState: ColoradoAbbreviation: NoneDate: 8/17/2015County: OurayFilename: M032-06aUser: THMAgency or organization name: DRMS**HOURLY EQUIPMENT COST**Basic Machine: Cat D9T - 9SUHorsepower: 405Blade Type: Semi-UniversalAttachment: NAShift Basis: 1 per dayData Source: (CRG)**Cost Breakdown:**

		<u>Utilization %</u>
Ownership Cost/Hour:	\$72.57	NA
Operating Cost/Hour:	\$143.16	100
Ripper op. Cost/Hour:	\$0.00	0
Operator Cost/Hour:	\$38.01	NA

Total unit Cost/Hour: \$253.73Total Fleet Cost/Hour: \$253.73**MATERIAL QUANTITIES**Initial Volume: 13,245Swell factor: 1.125Loose volume: 14,901 LCYSource of estimated volume: Division of Reclamation, Mining & SafetySource of estimated swell factor: Cat Handbook**HOURLY PRODUCTION**Average push distance: 65 feetUnadjusted hourly production: 1,752.8 LCY/hrMaterials consistency description: Partly consolidated stockpile 1.1Average push gradient: 0 %Average site altitude: 10,650 feetMaterial weight: 2,550 lbs/LCYWeight description: Earth - Dry packed**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:	0.902	(CAT HB)
Blade type:	1.000	(PAT)

Net correction: 0.4324

Adjusted unit production: 757.91 LCY/hr

Adjusted fleet production: 757.91 LCY/hr

JOB TIME AND COST

Fleet size: 1 Dozer(s)

Unit cost: \$0.335/LCY

Total job time: 19.66 Hours

Total job cost: \$4,988

REVEGETATION WORKTask description: Revegetate disturbed areaSite: Revenue MinePermit Action: AM-1Permit/Job#: M2012032PROJECT IDENTIFICATIONTask #: 07AState: ColoradoAbbreviation: NoneDate: 8/17/2015County: OurayFilename: M032-07aUser: THMAgency or organization name: DRMSFERTILIZINGMaterials

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
Alpine Fescue	1.80	53.72	\$29.79
Nodding Brome	4.00	9.96	\$33.72
Lupine, Silver	0.80	0.47	\$54.76
Slender Wheatgrass - Native	4.40	16.06	\$9.90
Muttongrass	0.50	10.33	\$18.39
Needlegrass, Letterman's	3.30	14.39	\$330.40
Sagebrush, Louisiana or Prairie	0.20	20.16	\$27.48
Sagebrush, Silver	0.40	7.77	\$16.76
Yarrow, Western	0.20	12.16	\$6.13
		145.02	\$527.32

Totals Seed Mix	15.60		
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Application

Description	Cost /Acre
Drill seeding (DRMS Cost Data)	\$88.20
Total Seed Application Cost/Acre	\$88.20

MULCHING and MISCELLANEOUS**Materials**

Description	Units / Acre	Unit	Cost / Unit	Cost /Acre
Straw, delivered {MEANS 31 25 14.16 1200}	1.00	TON	\$265.00	\$265.00
Total Mulch Materials Cost/Acre				\$265.00

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
					\$
Totals Nursery Stock Cost / Acre					\$0.00

JOB TIME AND COST

No. of Acres:	16.42	Cost /Acre:	\$1,178.29
Estimated Failure Rate:	30%	Cost /Acre*:	\$1,178.29
*Selected Replanting Work Items:	TILLING,SEEDING,MULCHING		
Initial Job Cost:	\$19,347.52		
Reseeding Job Cost:	\$5,804.26		
Total Job Cost:	\$25,152		
Job Hours:	40.00		

EQUIPMENT MOBILIZATION/DEMobilIZATIONTask description: Haul reclamation equipment to and from siteSite: Revenue MinePermit Action: AM-1Permit/Job#: M2012032**PROJECT IDENTIFICATION**Task #: 08AState: ColoradoAbbreviation: NoneDate: 8/17/2015County: OurayFilename: M032-08aUser: THMAgency 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 D9T - 9SU	60.01	\$69.88	\$125.45	1	\$195.33	\$125.45	\$250.00
Drill/Broadcast Seeder with Tractor	25.00	\$41.05	\$88.67	1	\$129.72	\$88.67	\$250.00
Cat 336D L 10'-6" Stick	32.23	\$42.57	\$117.55	1	\$160.12	\$117.55	\$250.00

Subtotals: **\$485.17** **\$331.67** **\$750.00****ROADABLE EQUIPMENT:**

Machine Description	Total Cost/hr/ unit	Fleet Size	Haul Trip Cost/hr/ fleet	Return Trip Cost/hr/ fleet
Power Mulcher (Reinco M90)	\$25.56	1	\$25.56	\$25.56
Flatbed 45 GVW 6x4	\$55.61	1	\$55.61	\$55.61

Subtotals: **\$81.17** **\$81.17**

EQUIPMENT HAUL DISTANCE and Time

Nearest Major City or Town within project area region:	<u>MONTROSE</u>	
Total one-way travel distance:	<u>45.00</u>	miles
Average Travel Speed:	<u>35.00</u>	mph

Total Non-Roadable Mob/Demob Cost *	<u>\$4,570.79</u>
* two round trips with haul rig:	
Total Roadable Mob/Demob Cost **	<u>\$208.72</u>
** one round trip, no haul rig:	

Transportation Cycle Time:

	Non-Roadable Equipment	Roadable Equipment
Haul Time (Hours):	<u>1.29</u>	<u>1.29</u>
Return Time (Hours):	<u>1.29</u>	<u>1.29</u>
Loading Time (Hours):	<u>0.50</u>	<u>NA</u>
Unloading Time (Hours):	<u>0.50</u>	<u>NA</u>
Subtotals:	<u>3.57</u>	<u>2.57</u>

JOB TIME AND COST

Total job time:	<u>7.14</u>	Hours
Total job cost:	<u>\$4,780</u>	