



**COLORADO**  
**Division of Reclamation,**  
**Mining and Safety**  
Department of Natural Resources

November 14, 2023

Tony Tennyson  
Colowyo Coal Company L.P.  
5731 State Highway 13  
Meeker, CO 81641

**Re: Colowyo Coal Mine (Permit No. C-1981-019)**  
**Technical Revision No. 160 (MR-160)**  
**Second Adequacy Review**

Dear Mr. Tennyson:

After reviewing TR-160 from Colowyo Coal Company L.P. (Colowyo), the Division has the following comments:

1. This item has been resolved. No additional comments necessary.
2. This item has been resolved. No additional comments necessary.
3. This item has been resolved. No additional comments necessary.
4. This item has been resolved. No additional comments necessary.
5. This item has been resolved. No additional comments necessary.
6. This item has been resolved. No additional comments necessary.
7. This item has been resolved. No additional comments necessary.
8. ***Division:*** *At this time, the Division has insufficient information to conduct an accurate reclamation cost estimate associated with the proposed changes associated with TR-160. Once the Division receives additional information regarding some of the above comments, a reclamation cost estimate will be provided under a second adequacy letter.*

***Colowyo:*** *No response required.*

**Division:** With the Colowyo provided responses, the Division is now performed a reclamation cost estimate to reclaim the proposed Collom Haul Road channels. The total value of this estimate is



\$25,577.00 (see attached cost estimate). The Division's cost estimate is consistent with previous cost estimates approved by both the Division and Colowyo. The Division respectfully requests a response from Colowyo with any questions regarding the cost estimate or an acceptance of the Division's estimate.

If you have any questions, feel free to contact me.

Sincerely,

A handwritten signature in black ink, appearing to read 'Zach Trujillo'.

Zach Trujillo  
Environmental Protection Specialist  
(303) 866-3567 ext. 8164  
Zach.Trujillo@state.co.us

## COST SUMMARY WORK

Task description: Reclaim New Collom Haul Road Channels

Site: Colowyo Coal Mine

Permit Action: TR160

Permit/Job#: C1981019

### PROJECT IDENTIFICATION

Task #: 000

State: Colorado

Abbreviation: None

Date: 10/18/2023

County: Moffat

Filename: C019-000

User: ZTT

Agency or organization name: DRMS

### TASK LIST (DIRECT COSTS)

Task	Description	Form Used	Fleet Size	Task Hours	Cost
001	Demolish Culverts	DEMOLISH	1	2.00	\$392
002	Regrade Topsoil for New Collom Haul Road Channels	DOZER	1	15.07	\$6,976
003	Reseed Collom Haul Road Channels w/Grazing Land Seed Mix	REVEGE	1	11.80	\$13,571
<b><u>SUBTOTALS:</u></b>				<b>28.87</b>	<b>\$20,939</b>

### INDIRECT COSTS

#### OVERHEAD AND PROFIT:

Liability insurance: 2.02  
Performance bond: 1.05  
Job superintendent: 14.43  
Profit: 10.00

Total = \$423  
Total = \$220  
Total = \$939  
Total = \$2,094

TOTAL O & P = \$3,676

CONTRACT AMOUNT (direct + O & P) = \$24,615

#### LEGAL - ENGINEERING - PROJECT MANAGEMENT:

Financial warranty processing (legal/related costs): \$0  
Engineering work and/or contract/bid preparation: 2.00  
Reclamation management and/or administration: 1.91

Total = \$0  
Total = \$492  
Total = \$470

CONTINGENCY: 0.00

Total = \$0

TOTAL INDIRECT COST = \$4,638

**TOTAL BOND AMOUNT (direct + indirect) = \$25,577**

## DEMOLITION WORK

Task description: Demolish Culverts

Site: Colowyo Coal Mine

Permit Action: TR160

Permit/Job#: C1981019

### PROJECT IDENTIFICATION

Task #: 001

State: Colorado

Abbreviation: None

Date: 10/18/2023

County: Moffat

Filename: C019-001

User: ZTT

Agency or organization name: DRMS

### UNIT COSTS

Location adjustment: 89.80 %

Structure or Item Description	Dimensions	Demolition Menu Selection	Quantity	Unit	Unit Cost	Total Cost
Culvert 71	12" x 50'	Pipe, corrugated metal (CMP) - 12 in. diameter pipe	50.00	LF	\$4.37	\$218.27
Culvert 72	12" x 50'	Pipe, corrugated metal (CMP) - 12 in. diameter pipe	50.00	LF	\$4.37	\$218.27

Job Hours: 2.00

Subtotal  
(unadjusted): \$436.54

Total Cost  
(adjusted for location): \$392.01

**BULLDOZER WORK**Task description: Regrade Topsoil for New Collom Haul Road ChannelsSite: Colowyo Coal MinePermit Action: TR160Permit/Job#: C1981019**PROJECT IDENTIFICATION**Task #: 002State: ColoradoAbbreviation: NoneDate: 11/14/2023County: MoffatFilename: C81002User: ZTTAgency or organization name: DRMS**HOURLY EQUIPMENT COST**Basic Machine: Cat D9T - 9SUHorsepower: 405Blade Type: Semi-UniversalAttachment: 3-shank ripperShift Basis: 1 per dayData Source: (CRG)**Cost Breakdown:**

		<u>Utilization %</u>
Ownership Cost/Hour:	\$238.76	NA
Operating Cost/Hour:	\$162.29	100
Ripper own. Cost/Hour:	\$18.32	NA
Ripper op. Cost/Hour:	\$2.25	25
Operator Cost/Hour:	\$41.30	NA

Total unit Cost/Hour: \$462.92Total Fleet Cost/Hour: **\$462.92****MATERIAL QUANTITIES**Initial Volume: 10,648Swell factor: 1.000Loose volume: **10,648 LCY**Source of estimated volume: Division of Reclamation, Mining & SafetySource of estimated swell factor: Cat Handbook**HOURLY PRODUCTION**Average push distance: 150 feetUnadjusted hourly production: 910.5 LCY/hrMaterials consistency description: Consolidated stockpile 1.0Average push gradient: 5 %Average site altitude: 7,600 feetMaterial weight: 1,600 lbs/LCYWeight description: Top Soil**Job Condition Correction Factor**

		<u>Source</u>
Operator Skill:	0.900	(A.B.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:	0.800	(FND-RF)
Push gradient:	0.903	(CAT HB)
Altitude:	1.000	(CAT HB)
Material Weight:	1.438	(CAT HB)
Blade type:	1.000	(PAT)

Net correction: 0.7760

Adjusted unit production: 706.55 LCY/hr  
Adjusted fleet production: **706.55** LCY/hr

### **JOB TIME AND COST**

Fleet size: 1 Dozer(s)  
Unit cost: \$0.655/LCY  
  
Total job time: **15.07** Hours  
Total job cost: **\$6,976**

**REVEGETATION WORK**Task description: ReseedCollom Haul Road Channels w/Grazing Land Seed MixSite: Colowyo Coal MinePermit Action: TR160Permit/Job#: C1981019**PROJECT IDENTIFICATION**Task #: 003State: ColoradoAbbreviation: NoneDate: 11/14/2023County: MoffatFilename: C019-003User: ZTTAgency or organization name: DRMS**FERTILIZING****Materials**

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

**Application**

Description	Cost / Acre
	\$
<b>Total Fertilizer Application Cost/Acre</b>	<b>\$0.00</b>

**TILLING**

Description	Cost / Acre
Disc harrowing, 6" deep (MEANS 32 91 13.23 6100)	\$112.82
<b>Total Tilling Cost/Acre</b>	<b>\$112.82</b>

**SEEDING**

Seed Mix	Rate – PLS LBS / Acre	Seeds per SQ. FT	Cost / Acre
Beardless Wheatgrass - Whitmar	2.00	6.52	\$23.45
Mountain Brome - Bromar	1.00	1.61	\$3.80
Great Basin Wildrye - Magnar	0.50	2.03	\$5.78
Rocky Mountain Fescue	0.50	8.03	\$3.63
Slender Wheatgrass - Native	0.75	2.74	\$3.47
Milk Vetch, Cicer - Monarch	0.30	1.00	\$2.46
Thickspike Wheatgrass - Critana	1.25	4.42	\$8.59
Western Wheatgrass - Arriba	1.50	3.79	\$9.75
Needlegrass, Green - Lodorm	0.75	3.12	\$8.83
Sagebrush, Mountain or Big	0.50	26.40	\$9.88

Flax, Lewis Blue	0.25	1.66	\$4.13
Saltbush, Four Wing	1.60	2.20	\$20.00
Snowberry, Mountain	0.75	1.29	\$37.88
Penstemon, Rocky Mountain	0.25	3.92	\$7.38
Yarrow, Western	0.10	6.08	\$4.18
<b>Totals Seed Mix</b>	<b>12.00</b>	<b>74.80</b>	<b>\$153.18</b>

**Application**

Description	Cost / Acre
Drill Seeding (DRMS Survey Cost)	\$232.00
<b>Total Seed Application Cost/Acre</b>	<b>\$232.00</b>

**MULCHING and MISCELLANEOUS****Materials**

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

**Application**

Description	Cost / Acre
	\$
<b>Total Mulch Application Cost/Acre</b>	<b>\$0.00</b>

**NURSERY STOCK PLANTING**

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

**JOB TIME AND COST**

No. of Acres: 23.6                      Cost / Acre: \$498.00  
 Estimated Failure Rate: 20%                      Cost / Acre\*: \$385.18  
 \*Selected Replanting Work Items: SEEDING

Initial Job Cost: **\$11,752.80**  
 Reseeding Job Cost: **\$1,818.05**  
 Total Job Cost: **\$13,571**  
 Job Hours: **11.80**