



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

August 6, 2021

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. 149 (TR-149)
Adequacy Review

Dear Mr. Tennyson:

After reviewing TR-149 from Colowyo Coal Company L.P. (Colowyo), the Division has the following comments:

1. It appears that there is a text flow error on proposed page Volume 18C, Table of Contents. Exhibit 14, Item 7 has been shifted to be combined with Exhibit 13C within the Table of Contents. Please provide an updated Volume 18C, Table of Contents.
2. It is the Division's understanding that the currently approved Volume 20, Exhibit 24, Item 1 is now being removed from the Colowyo PAP and incorporated/renamed to the proposed Volume 18C, Exhibit 7, Item 25E. To ensure all information within Volume 20, Exhibit 24, Item 1 is being incorporated into the proposed Volume 18C, Exhibit 7, Item 25E, please provide the remaining SedCAD model demonstrations for the additional culverts found under this exhibit of the Colowyo PAP.
3. There appears to be a discrepancy between the proposed increase in permitted disturbed acreage to the total disturbed and reseeded acreage included with the haul road channels under Exhibit 13C. The acreage included for the channels under Exhibit 13C is 3.55 acres. The total disturbed acreage provided with the application for TR-149 is 1.2 acres. Please confirm this acreage and provide additional information regarding the difference or please provide the Division with the correct disturbed acreage associated with the Colowyo Mine TR-149.
4. The Division has received a request for additional information regarding Colowyo TR-149 from the Office of Archaeology of Historic Preservation (SHPO) on August 6, 2021. The Division has submitted the information provided under Colowyo TR-149 to SHPO for their review. Any comments and/or questions from SHPO will be provided in an additional future adequacy letter form the Division as necessary.
5. The Division has performed a reclamation cost estimate to reclaim the proposed Collom Haul Road channels. The total value of this estimate is \$3,506.00 (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



This concludes the Division's adequacy review for the Colowyo TR-149. If you have any questions, feel free to contact me.

Sincerely,

A handwritten signature in black ink, appearing to read 'ZTJ' with a stylized flourish.

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

COST SUMMARY WORK

Task description: Reclaim Collom Haul Road Channels

Site: Colowyo Coal Mine

Permit Action: TR149

Permit/Job#: C1981019

PROJECT IDENTIFICATION

Task #: 000

State: Colorado

Abbreviation: None

Date: 8/9/2021

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	Regrade Topsoil for Collom Haul Road Channels	DOZER	1	1.43	\$843
002	Reseed Collom Haul Road Channels	REVEGE	1	1.50	\$2,048
<u>SUBTOTALS:</u>				2.93	\$2,891

INDIRECT COSTS

OVERHEAD AND PROFIT:

Liability insurance: 2.02

Total = \$58

Performance bond: 1.05

Total = \$30

Job superintendent: 1.46

Total = \$105

Profit: 10.00

Total = \$289

TOTAL O & P = \$483

CONTRACT AMOUNT (direct + O & P) = \$3,374

LEGAL - ENGINEERING - PROJECT MANAGEMENT:

Financial warranty processing (legal/related costs): \$0

Total = \$0

Engineering work and/or contract/bid preparation: 2.00

Total = \$67

Reclamation management and/or administration: 1.91

\$64

CONTINGENCY: 0.00

Total = \$0

TOTAL INDIRECT COST = \$615

TOTAL BOND AMOUNT (direct + indirect) = \$3,506

BULLDOZER WORK

Task description: Regrade Topsoil for Collom Haul Road Channels

Site: Colowyo Coal Mine

Permit Action: TR149

Permit/Job#: C1981019

PROJECT IDENTIFICATION

Task #: 001

State: Colorado

Abbreviation: None

Date: 8/9/2021

County: Moffat

Filename: C1

User: ZTT

Agency or organization name: DRMS

HOURLY EQUIPMENT COST

Basic Machine: Cat D11T - 11U

Horsepower: 850

Blade Type: Universal

Attachment: NA

Shift Basis: 1 per day

Data Source: (CRG)

Cost Breakdown:

		<u>Utilization %</u>
Ownership Cost/Hour:	\$274.04	NA
Operating Cost/Hour:	\$273.21	100
Ripper own. Cost/Hour:	\$0.00	NA
Ripper op. Cost/Hour:	\$0.00	100
Operator Cost/Hour:	\$41.30	NA
Total unit Cost/Hour:	\$588.55	
Total Fleet Cost/Hour:	\$588.55	

MATERIAL QUANTITIES

Initial Volume: 4,578

Swell factor: 1.000

Loose volume: **4,578 LCY**

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

Source of estimated swell
factor: Cat Handbook

HOURLY PRODUCTION

Average push distance: 100 feet

Unadjusted hourly
production: 2,870.3 LCY/hr

Materials consistency description: Consolidated stockpile 1.0

Average push
gradient: -5 %

Average site altitude: 7,600 feet

Material weight: 1,600 lbs/LCY

Weight description: Top Soil

Job Condition Correction Factor

Source

Operator Skill:	0.900	(AB.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:	1.000	(DOZ-OC)
Push gradient:	1.115	(CAT HB)
Altitude:	0.930	(CAT HB)
Material Weight:	1.438	(CAT HB)
Blade type:	1.000	(PAT)

Net correction: 1.1139

Adjusted unit
production: 3,197.23 LCY/hr

Adjusted fleet
production: **3197.23** LCY/hr

JOB TIME AND COST

Fleet size: 1 Dozer(s)

Unit cost: \$0.184/LCY

Total job time: **1.43** Hours

Total job cost: **\$843**

REVEGETATION WORK

Task description: Reseed Collom Haul Road Channels

Site: Colowyo Coal Mine

Permit Action: TR149

Permit/Job#: C1981019

PROJECT IDENTIFICATION

Task #: 002

State: Colorado

Abbreviation: None

Date: 8/9/2021

County: Moffat

Filename: C019-002

User: ZTT

Agency 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
Disc harrowing, 6" deep (MEANS 32 91 13.23 6100)	\$114.56
Total Tilling Cost/Acre	\$114.56

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
Totals Seed Mix	12.00	74.80	\$153.18

Application

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

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:	3.55	Cost /Acre:	\$499.74
Estimated Failure Rate:	20%	Cost /Acre*:	\$385.18
*Selected Replanting Work Items:	SEEDING		

Initial Job Cost:	\$1,774.08
Reseeding Job Cost:	\$273.48
Total Job Cost:	\$2,048
Job Hours:	1.50