

VIA EMAIL TO: rob.zuber@state.co.us

January 15, 2025

Colorado Department of Natural Resources Division of Reclamation, Mining and Safety Attn: Rob Zuber 1313 Sherman St, Room 215 Denver, CO 80203

Re: Bowie No. 2 Mine, C-1996-083, MT-06 Request for RCE Revisions

Dear Mr. Zuber,

During the informal hearing with the Division of Reclamation Mining and Safety (the "Division") on November 19, 2024, Bowie Resources, LLC ("Bowie") requested an opportunity to review the proposed changes to its reclamation cost estimate for Permit C-1996-083 under the midterm review (MT-06) (the "RCE") and the opportunity to provide additional commentary and request for reconsideration for some of the adjustments to the RCE. Enclosed herein is a list of items Bowie respectfully requests the Division change to the RCE.

Equipment Costs

First and foremost is Bowie's concern that the pricing used for equipment costs within the tasks have increased significantly. While historically, a general increase in equipment ownership and operating costs have aligned with Historical Cost Index data (like Heavy Construction Costs with R.S. Means Data from Gordian), this MT-06 adjustment shows equipment costs rising far above generally accepted inflation adjustment indices. During our informal hearing, it was clarified the Division uses "Equipment Watch" as their source for ownership and operating cost amounts on all equipment.

After some additional research, Bowie realized that Equipment Watch is a source for equipment costing for rental rates. Equipment Watch is commonly used in the equipment rental industry to determine market rates for renting equipment to a third party, commonly referred to as the "Rental Rate Blue Book Rates" (see Equipment Watch Cost Recovery Guide). While Equipment Watch appears to be adequate for the Division's CIRCES use, it fails to include depreciation of capital investments at a rate standard for contractors that own their equipment.

Most often, during major reclamation projects, a third-party contractor that owns their equipment is hired for the construction work. Third party contractors are incentivized to use the most competitive equipment rates to be the winning bidder. By renting all equipment for use on the site, it would render a contractor's bid uncompetitive with others that own their equipment. By



owning their equipment, a contractor has a better understanding of the useful life for each piece of equipment for depreciation purposes.

In order to best understand equipment operating and ownership costs, the majority of mining companies utilize the industry standard reference <u>Mine and Mill Cost Models</u>. This cost reference covers all aspects of the mining industry and is used worldwide for reclamation cost estimation. Bowie engaged a third-party consultant to identify similar equipment used in the RCE and provide the most recent (2024) Mine and Mill cost numbers. Below in Table 1 shows a comparison of the CIRCES equipment costs compared to the 2024 Mine and Mill equipment costs. For the sake of comparison, the labor costs were not changed based on Bowie's conversation with the Division. Where a more standard industry piece of equipment was found, the 2024 Mine and Mill numbers reference a larger capacity machine.

CIRCES Equipment Costs using Equipment Watch vs. 2024 Mine and Mill Costs															
	DRMS Cost Estimates						2024 Mine and Mill Equipment Cost					Variance			
	Ои	vnership	Operating Equip Cost C		Ov	vnership	Operating		Equip Cost						
Equipment		Cost		Cost	S	ubtotal		Cost		Cost	5	Subtotal		\$/hr	% reduction
773F Haul Truck*	\$	128.28	\$	102.12	\$	230.40	\$	51.06	\$	153.68	\$	204.74	\$	(25.66)	11%
365C Excavator	\$	244.29	\$	218.49	\$	462.78	\$	87.36	\$	100.25	\$	187.61	\$	(275.17)	59%
D10T	\$	257.39	\$	196.93	\$	454.32	\$	157.90	\$	162.31	\$	320.21	\$	(134.11)	30%
627G Scraper	\$	234.09	\$	265.71	\$	499.80	\$	82.33	\$	121.58	\$	203.91	\$	(295.89)	59%
988H Loader	\$	131.26	\$	100.12	\$	231.38	\$	144.60	\$	165.12	\$	309.72	\$	78.34	-34%
D10T w/ Ripper	\$	282.41	\$	208.66	\$	491.07	\$	157.90	\$	162.31	\$	320.21	\$	(170.86)	35%
825H Compactor	\$	164.53	\$	161.21	\$	325.74	\$	43.14	\$	128.90	\$	172.04	\$	(153.70)	47%
Gen 10-12cy truck*	\$	22.44	\$	60.44	\$	82.88	\$	6.62	\$	50.91	\$	57.53	\$	(25.35)	31%
345D Excavator	\$	281.20	\$	202.68	\$	483.88	\$	57.04	\$	74.04	\$	131.08	\$	(352.80)	73%
950H Loader*	\$	36.61	\$	35.43	\$	72.04	\$	39.79	\$	48.14	\$	87.93	\$	15.89	-22%
D9T	\$	253.16	\$	164.35	\$	417.51	\$	112.60	\$	135.25	\$	247.85	\$	(169.66)	41%
14M Grader*	\$	135.56	\$	89.13	\$	224.69	\$	54.44	\$	71.06	\$	125.50	\$	(99.19)	44%

<u>Table 1</u>	
CIRCES Equipment Costs using Equipment Watch vs 2024 Mine and Mill Costs	

*Denotes larger equipment used for Mine & Mill costs

Based on the 2024 Mine and Mill numbers, the equipment costs are closely aligned with historical cost indices that reflect real-world inflation since the last RCE adjustment. Bowie respectfully requests that the Division use the more industry standard approach of Mine and Mill Cost Models for equipment costs throughout the RCE. A full table showing the Mine and Mill Costs is attached as Appendix 1.

Task 014: Haul Fill from Adj. Mat'l Storage Area to B-Seam Portal Bench

In addition to adjusting the hourly equipment costs for each task, Bowie requests a revision to *Task 014: Haul Fill from Adj. Material Storage Area to B-Seam Portal Bench.* The Truck/Loader team for this task uses a Cat 988H front end loader. This is the only task that uses a 988H loader. In order to align this task with similar tasks and avoid mobilizing this piece of equipment, Bowie requests the Cat 988H loader be replaced with a Cat 365C excavator.



Tasks 180 & 181: Mobilize/Demobilize Equipment

Based on the change above to Task 014, the mobilization/demobilization costs should remove the 988H from the equipment list for each task.

Push/Haul Distances

There are a few tasks where the push distance for bulldozer work or haul distances appears excessive. Bowie asks that the following tasks be reduced to the new proposed distances:

Task 11: Regrade Train Loadout Facilities and Railbed Benches

This task calls for an average push distance of 200 ft. The maximum width of this area is approximately 100ft. Bowie requests the average push distance for this task be reduced to 50 ft.

Task 45A: Distribute Gob Pile #2 cover hauled by T/L

This task calls for an average push distance of 200 ft. The maximum width between each bench is approximately 200 ft. Bowie requests the average push distance for this task be reduced to 150 ft. Additionally, the dozer task does not account that the majority of pushing is downhill on the designed 2:1 slope. Because of the downhill push, Bowie also requests the push gradient factor be changed to 1.4 per the specifications of the Cat Operating Handbook.

<u>Task 110: Replace Topsoil from Stockpile A to Portal/Utility Bench</u> This task assumes a haul distance of 8,000 ft. Based on measurements from aerial imagery, this distance appears to be 6,700 ft. Exhibit 1 attached hereto shows the measured distance from the Topsoil A pile to the D-bench portal area. Bowie requests the haul distance for this task be changed to 6,700 ft.

Bulldozer Ripping Work

Tasks 60 through 65 are for bulldozer ripping prior to the placement of topsoil. These locations will have the coverfill recently placed prior to topsoil placement. The coverfill will not be hardpacked and would not require ripping to enhance root penetration. Additionally, the permit in Section 2.05.4 (2)(d), states that ripping of these areas prior to topsoil placement is optional. Bowie does not intend to perform this optional task and does not see the need for ripping to enhance vegetation success. Bowie requests that these optional tasks be removed completely from the RCE.

Revegetation Costs

During the informal hearing, the Division noted that revegetation costs have risen sharply over the past five years. While seed supply and availability can vary, the RCE uses costs for 2024. Bowie has significant experience with costs and supply for revegetation costs in this area of



Colorado. Most recently, Bowie completed revegetation efforts of Gob Pile #3 in 2024. Bowie contacted a local seed supplier for accurate pricing for seed mixes 3, 4 and 7. Bowie also contacted a state certified producer of weed free straw that sells large bales in this region of Colorado for current pricing.

Seed Mix 7 (Pasture Mix) cost Bowie \$4.95/PLS lb.¹ Seed Mix 3 (Upland Mix) was quoted to Bowie at \$32.16/PLS lb.² Seed Mix 4 (Mountain Shrub) was quoted to Bowie at \$22.10/PLS lb.³ Certified Straw in 1,100lb bales was quoted to Bowie at \$65/bale (\$118/ton).⁴ Trucking for Certified straw from source to the mine was \$57/ton.⁵

¹ Seed Mix 7 (pasture) cost Bowie \$2,906 for 588 PLS lbs from CropwoRx in Eckert, CO. Invoice is included as Exhibit 2

² Seed Mix 3 (upland) for \$1,075/ac or \$32.16/PLS lb quote from CropwoRx – Exhibit 3.

³ Seed Mix 4 (mountain shrub) for \$____/ac or \$____/PLS lb quote from CropwoRx - Exhibit 4.

⁴ *Current price per large bales (4'x4'x8') at 1,100lbs each from Bernal Farms in Loma, CO.*

Listed as a certified producer under the CO Dept of Agriculture 2024 Weed Free Forage

Directory with general trucking costs provided by local trucking companies (Exhibit 5).

Using the up-to-date numbers from local suppliers that would likely be used during reclamation, Bowie requests the following changes for the specific tasks listed below:

Task 150: Drill Seed Mix 3 on Disturbed Area

The Seed Mix 3 in the permit is designed for 33.34 PLS/lb per acre. The seed mix provided in the RCE uses some alternative species and an additional PLS lb. Bowie asks that the Division revises the seed mix and cost to match the price quoted by its supplier at \$1,075 per acre. Bowie also requests the division revise the mulch material costs to \$350/acre. Additionally, the estimated failure and replanting assumes that mulch will be applied during the second replanting. Bowie does not see that this would be effective and certainly would not require a mulch application rate of 2 tons per acre. Bowie requests that the replanting costs only include the cost for seeding.

Tasks 151, 152 & 155: Drill Seed

The costs Bowie provided above for Seed Mix 4 at \$442/acre and mulch at \$350/acre should be updated in these tasks.

Task 154: Broadcast Seed Mix 3 on Gob Pile #3

The permitted seed mix for Gob Pile #3 is Seed Mix 7 (pasture). The RCE mistakenly uses Seed Mix 3, a much more expensive mix. The RCE also assumes that Gob Pile #3 requires mulching. As shown in Volume XI, Page 11 of the permit, mulching is not required during the application of the pasture mix. Bowie requests that the seed mix be changed to the permitted mix (7) and the seed cost be changed to the actual price of \$4.95/PLS lb. The RCE is correct that this area is to be broadcast seeded, so the permitted rate would double from 12.25 to 24.5 PLS lb. This makes the seed cost per acre \$121.28.



Bowie also requests the mulching materials and application costs be removed from this task. Bowie also noted that the "Job Hours" for this task are double compared to the other revegetation tasks. Presumptively, this is because the seed rate doubled. Bowie does not agree that it would take double the amount of time simply because the seed rate is doubled to allow for broadcast seeding. Bowie requests the total job hours for this task be reduced to 30.63 (1 hr/acre).

Bowie asks that the Division update the applicable revegetation tasks with actual cost data provided from local suppliers using up-to-date 2024/2025 numbers.

Indirect Costs

Bowie requests the following indirect costs be revised:

<u>Job superintendent</u>. The total hours should be revised down based on the revision to the hours associated with the changes proposed on Task 154.

Engineering work and contract/bid preparation. The previous RCE uses 4% to determine this cost compared to the new RCE of 4.25%. Bowie requests this rate stay at 4.0% for the new RCE.

<u>Reclamation Management and administration.</u> The previous RCE rate for this was 3.13%. During the informal hearing, the Division determined the wrong rate was used on this item. Bowie requests this be reduced back to 3.13%.

Bowie also believes the Engineering Work and Project Management indirect costs are mistakenly calculated based on the Direct Costs <u>plus</u> Overhead and Profit. Pursuant to the OSMRE Handbook for Calculation of Reclamation Bond Amounts (Rev October 2020), "engineering redesign costs are calculated as a percentage of the total direct cost" (pg. 28) and the "project management fee is calculated as a percentage of direct cost" (pg. 28). Bowie requests that the Engineering and Project Management rates be based on the direct costs only and not the direct costs plus overhead and profit.

Conclusion

Bowie respectfully requests the Division consider and implement these proposed changes into the MT-06 RCE. The Division has expressed their concerns in changing any bond estimates because the supporting documentation needs to be industry standard and accepted. Further, the costs need to be defensible by the Division. By providing the information contained herein, Bowie has provided a sound and acceptable method to revise the bond in a reasonable manner that can still be easily referenced and uses real-world costing that would be experienced at the time of final reclamation.



Bowie greatly appreciates the opportunity to provide these comments and proposed changes to the Division and your willingness to review these changes. Bowie looks forward to your review and response of this proposal.

Should you have any questions or need additional information, please contact me via email at <u>rwilson@wolverinefuels.com</u> or by phone at (970) 852-0110.

Thank you for your consideration.

Sincerely,

Rym Wilson

Ryan Wilson Manager of Land and Regulatory Affairs Bowie Resources, LLC A subsidiary of Wolverine Fuels, LLC

Cc: Tamme Bishop Art Etter Basil Bear

Exhibit 1 Haul Distance from Topsoil A to D-Bench



Exhibit 2 Seed Mix 7 (Pasture) Price

				St-	atement Pag	ge: 1
				34	atement , a	ge. i
		CROPWO				
		10827 Hw	y 65			Main
		Eckert CO	31418	Date:	11/30/2024	- Wildert
		Phone 970-83		ID:	BowMin	
		110116 31 0-00	5-5555	Due Date :	12/10/2024	
				Total Balance	\$ 2,906.00	
	Bowie Resource	es-Mine				
	ATTN: Stephanie	Erickson		20 1.22 1.23 1.2		
	P.O. Box 1488			Amount Remitted:	-	
	Paonia, CO 8142	8				
	1. A					
	Date Number		Description	\$/Unit	Entrantin	Balance
	trate Number		Beginning Balance	<u>storn</u>	Extension	196.25
	11/25/2024 78437		beginning belance			100.20
		588.000Lbs	Misc Seed / Seed Mix #7 Custom PI	4.750/ Lb	2,793.00	
		1.000Each	Finance Charge	113.000/ Each	113.00	
				Total this invoice	2,906.00	20022020
	12/03/2024 47062			Amount Due	2,906.00	3,102.25
	12/03/2024 4/062		Payment	1	196.25	2,906.00
						10000000000000000000000000000000000000
				Total Balance		\$2,906.00
				141		
			1	20		
			1411	8751		
			Oken,	.21	- X X	
			12-1	9		
				÷.		
			24.1			
			Over 90 Days Iver 120 Days	Unapplied		
	2,906.00 0.00	0.00	0.00 0.00	0.00		
						-
1	erms Net 30-Finance Ch	arge of 10% ar	nual on accounts over 30 days -	Keep this copy for your re	ecords. Thank y	ou for your
	ousiness!	1997 - 1997 -		erenten den die eine bestehen Stellen.		NO AND STOLENE SALES
				Bow	ie Resources-M	line

Exhibit 3 Seed Mix 3 (Upland) Price

CUSTOM SEED MIX	per Acre	225 Acres
THICKSPIKE WHEATGRASS	2.50	
STREAMBANK WHEATGRASS	1.50	
SLENDER WHEATGRASS	1.00	
WESTERN WHEATGRASS	1.40	
GREAT BASIN WILDRYE	1.20	A
SHEEP FESCUE	0.20	\$ 1075.00 32 16 Rr 1B
INDIAN RICEGRASS	0.95	
GREEN NEEDLE	0.88	
PRAIRIE SAGE	0.10	*** HIGHLY Questionable Availablility
BLUELEAF SMOOTH BLUE ASTER	0.30	
CICER MILKVECH	1.10	D
LEWIS BLUE FLAX	0.50	Per Acre
ALFALFA	0.70	
SMALL BURNET	2.80	and publication and attachments within
SASKATOON SERVICEBERRY		Lowered Seeding Rate due to Limited Availablity
4-WING SALTBUSH		Increased Seeding Rate for Serviceberry
ANTELOPE BITTERBRUSH	8.30	in conception of the for service billy
WOODS ROSE		Lowered Seeding Rate due to Limited Availablity
MTN SNOWBERRY		Added to mix due to limited Woods Rose
OAKBRUSH SUMAC		Added to mix due to limited Woods Rose
MOUNTAIN BIG SAGEBRUSH	0.10	Added to him day to minico Woods hase
Total PLS lbs per Acre >>>	33.43	
Please Note Seed Species, Varieties and Pricing are Project should build	subject to	availability at time of purchase.
Project Name	C	CEDAR & OAKBRUSH MIX
Seed Mix was quoted on		January 13, 2025
Custom Quote prepared for >>>		BOB STARR
Company Name >>>		CROPWORX ·
Contact Info >>>		

Exhibit 4 Seed Mix 4 (Mountain Shrub) Price

CUSTOM SEED MIX	PLS Lbs per Acre	225 Acres	
INDIAN RICEGRASS, NEZPAR	3.00		
BLUEBUNCH WHEATGRASS, SECAR	3.00	C 1117 AD 10 (~
MOUNTAIN BROME, BROMAR	3.00	S-442.00 2219/L	Ľ
SANDBERG BLUEGRASS, VNS	3.00		
LANCELEAF COREOPSIS, VNS	1.00		1
WESTERN WHEATGRASS, ARRIBA	4.00	Per Acre	
PRAIRIE JUNEGRASS, VNS	2.00		
GOLDEN BANNER, VNS	1.00	Substitue Siberian Wallflower	
ENGLEMANNS DAISY, VNS	1.00	Substitue False Sunflower	
Total PLS lbs per Acre >>>	20.00		
Please Note Seed Species, Varieties and Pricing are Project should build	subject to	availability at time of purchase.	
Project Name	CROP	WORX CUSTOM 225 ACRE MIX	
	enter	January 15, 2025	
Seed Mix was quoted on			
Custom Quote prepared for >>> Company Name >>>		BOB STARR CROPWORX	

Exhibit 5 Local Producers from CO Weed Free Directory



Generic Straw Mulch Trucking Costs									
Cost/hr	Round Trip Time	Total Trip Cost	Total Bales	Total tons @ 1,100lb ea	Trucking Cost/ton				
\$175	5	\$875	28	15.4	\$57				

Appendix 1 Equipment Units Costs 2024 Mine and Mill Units Costs with CO RCE Labor

Proposed Equipment Unit Costs 2024 Mine and Mill Estimates										
Equipment	Hour	Hourly Ownership Cost		Hourly Operating Cost		Labor		Total Hourly Unit Cost		
CAT 777 Haul Truck*	\$	51.06	\$	153.68	\$	25.24	\$	229.98		
CAT 365C Excavator	\$	87.36	\$	100.25	\$	33.87	\$	221.48		
CAT D10T Dozer w/ ripper	\$	157.90	\$	162.31	\$	38.59	\$	358.80		
CAT 627G Scraper	\$	82.33	\$	121.58	\$	30.90	\$	234.81		
CAT 988H Loader	\$	144.60	\$	165.12	\$	36.85	\$	346.57		
CAT 825H Compactor	\$	43.14	\$	128.90	\$	25.60	\$	197.64		
Generic Hwy Truck 15Yd*	\$	6.62	\$	50.91	\$	25.24	\$	82.77		
CAT 345D Excavator	\$	57.04	\$	74.04	\$	33.87	\$	164.95		
CAT 966 Loader*	\$	39.79	\$	48.14	\$	36.85	\$	124.78		
CAT D9T	\$	112.60	\$	135.25	\$	38.59	\$	286.44		
CAT 16G Grader*	\$	54.44	\$	71.06	\$	27.76	\$	153.26		

*Denotes larger equipment than used in RCE