REQUEST FOR REVISION 26-01

CR Minerals Company New Mexico LLC

Permit No. RA004RE

SECTIONS 33 & 34, T. 21 N., R. 7 E.

Rio Arriba County, New Mexico

Prepared for
CR Minerals Company

Prepared by
Barr Engineering Co.

May 2026

P.O. Box 708
Ohkay Owingeh, NM 87566

170 South Main Street, Suite 1200
Salt Lake City, UT 84101

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1 Background

CR Minerals Company, LLC operates the Rocky Mountain Mine, a pumice mine located approximately 5.5 miles west of Española, New Mexico, along 31-Mile Road in Rio Arriba County. The site has a long mining history, with pumice extraction beginning as early as 1949 under previous ownership, before being purchased by CR Minerals in 1997. Mining activities at the site are regulated under New Mexico Mining Act Permit No. RA004RE, which was originally approved in June 1999. Today, CR Minerals mines naturally occurring pumice used in a wide range of industrial and construction applications.

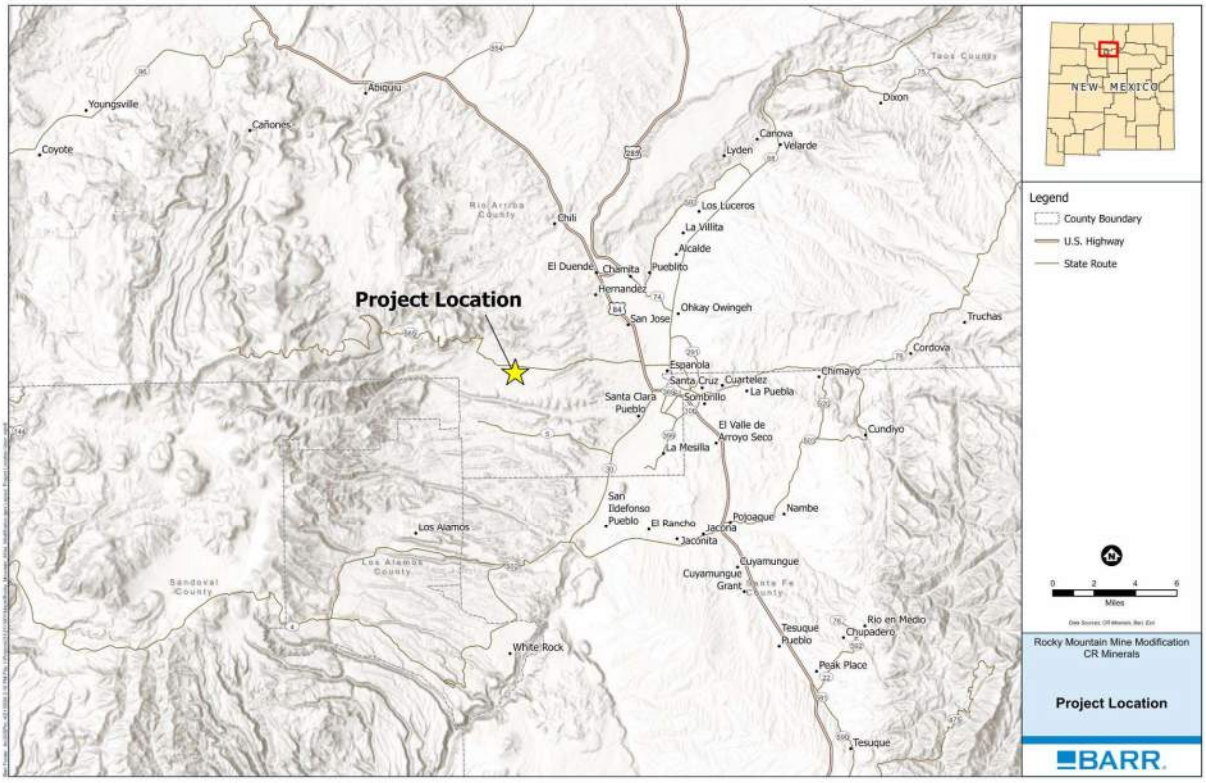

Figure1. Rocky Mountain Mine Location

The approved permit area encompasses approximately 542 acres, with an existing disturbance footprint of approximately 82 acres. Mining operations consist of a small, active surface pumice mine with no permanent buildings, processing facilities, or impoundments located on-site. Operations are limited to open pits, overburden and topsoil stockpiles, and screened pumice stockpiles. Mining is conducted using standard earth-moving equipment, with pumice extracted from shallow surface pits and stockpiled for shipment off-site. Pit depths are relatively shallow and do not intercept groundwater. Overburden and topsoil are segregated and stockpiled for use in concurrent and final reclamation activities. Mining progresses in discrete blocks, allowing for ongoing backfilling, grading, and reclamation of previously mined areas consistent with the approved mining and reclamation sequence. CR Minerals Rocky Mountain Mine also has coverage under EPA's 2015 Multi-Sector General Permit (MSGP). MSGP coverage became effective on 2015-10-30. NPDES ID. NMR053267 was assigned.

CR Minerals Company, LLC (CR Minerals) requests a revision to Mining Act Permit No. RA004RE and a corresponding update to the financial assurance pursuant to 19.10.12.1210 NMAC. This application is submitted consistent with prior approved revisions for the Rocky Mountain Mine.

The purpose of Revision 26-01 is to:

1. Release specific reclaimed areas from reclamation liability, including:
    - The dirt work (grading and earthwork) and seeding component of 16 acres of mined-out areas; and
    - Final reclamation liability for the 2011, 2012/2013, and 2014 reclamation areas
2. Retain the financial assurance instrument, with released acreage capacity made available to support future mining and reclamation activities within the approved permit area;
3. Update the total financial assurance amount to reflect escalation and current reclamation cost factors since the last approved revision; and
4. Modify the revegetation standards by removing the total productivity requirement and update the approved seed mix based on demonstrated site performance.

This revision does not request the release of financial assurance funds. All released reclamation liability will be offset by continued or future disturbance obligations and updated cost escalation factors.

This revision does not propose any changes to the approved mining plan or post-mining land use. All current and future mining activities, reclamation methods, and closure objectives remain consistent with those described in the approved closeout plan and all Revisions, including the latest, in 2019. Reclamation is being conducted using the same concurrent reclamation approach, including backfilling of mined-out areas, grading and contouring to stable landforms, placement of suitable growth media, and revegetation consistent with the approved post-mining land use of livestock grazing. No changes are proposed to the scope, methodology, or sequencing of the approved Closeout Plan. Mining will continue in the same sequence as currently approved, and future mined areas will continue to be reclaimed in accordance with the permit requirements and New Mexico Mining Act regulations.

2 Description of Work Completed

2.1 Earthwork and Grading and Seeding

Grading consisted of smoothing and contouring reclaimed mine surfaces across 16 acres of mined-out areas within the approved mining area limits (Figure 1). Earthwork was completed to create stable, erosion-resistant landforms that promote positive surface drainage and blend with the surrounding topography. Hydroseeding was completed on these areas after stabilization was achieved.

Final graded surfaces generally have slopes of less than 5H:1V. There are no perennial, intermittent, or ephemeral drainages downgradient of the reclaimed areas, and the reclaimed surfaces do not drain directly into any defined channel or erosion feature. Drainage occurs as sheet flow across stable surfaces.

Earthwork and seeding activities were completed using standard mine equipment and in accordance with the approved reclamation and Close-Out Plan (Figures 2 and 3).

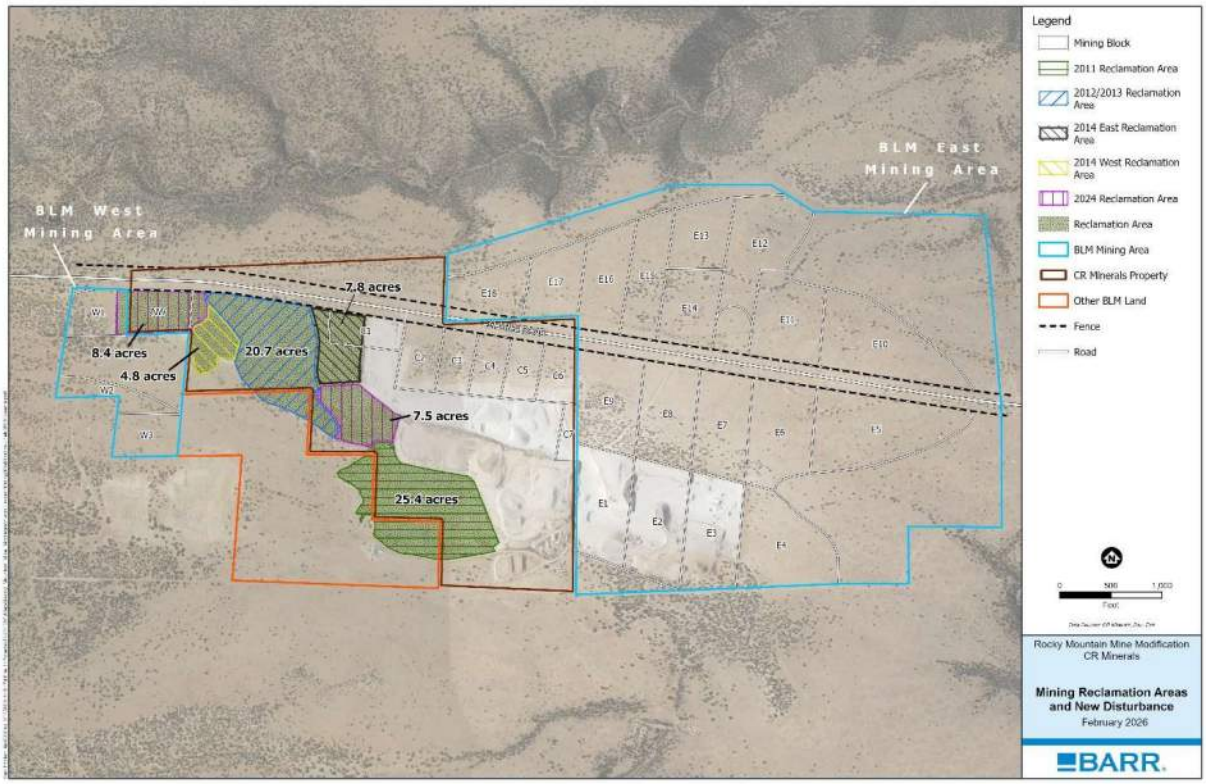

Figure 2. Rocky Mountain Mine Reclamation Areas for Full or Partial Release

Figure 3. Photo of grading area, seeded after final stabilization

Figure 4. Photo of grading area, seeded after final stabilization

2.2 Revegetation – Final Release Areas

CR Minerals requests the final release of financial assurance for the following reclamation areas:

- 2011 reclamation area
- 2012/2013 reclamation areas
- 2014 reclamation area

These areas have completed the required revegetation liability period and exhibit stable surfaces, no evidence of ongoing erosion, and self-sustaining vegetation communities consistent with site conditions and approved post-mining land use.

3 Proposal to Modify Financial Assurance

The current financial assurance amount for the Rocky Mountain Mine is $632,982, as established under the most recent approved revision.

CR Minerals requests an update to the financial assurance accounting to reflect the following:

- Completion of grading, earthwork, and seeding on 16 acres, for which the earthwork component of reclamation liability is no longer required;
- Completion of the revegetation liability period for the 2011, 2012/2013, and 2014 reclamation areas, which have met final reclamation standards and no longer require financial assurance coverage; and
- Adjustment of unit costs and escalation factors to reflect current reclamation cost assumptions and inflation since the last approved revision.

The overall financial assurance instrument will remain in place. The acreage released from reclamation liability will be partially reallocated within the financial assurance model to support existing and future mining areas authorized under Permit No. RA004RE.

The revised financial assurance amount was calculated using the NM MMD Microsoft Excel reclamation cost model, updated RSMeans cost data, and applicable escalation factors. A detailed accounting of released acreage, reallocated disturbance, updated unit costs, and the resulting total financial assurance amount is provided in Table 1 and Attachment 1.

Table 1- Summary of Financial Assurance Relocation and Updated Amount

Facility	Current Financial Assurance	Released Reclamation Liability (Acres)	Revised Financial Assurance
Rocky Mountain Mine (RA00RE)	$632,982	16.0	$707,591

The values above reflect the financial assurance cost estimate of implementing the closeout plan.

Financial Assurance Reallocation Details
This application includes all information required under **19.10.12.1210 NMAC** to document the release of completed reclamation areas from financial assurance liability and the reallocation of financial assurance coverage. Supporting documentation includes:

Attachment 1 – Updated NM MMD Microsoft Excel Reclamation Cost Model, including escalation adjustments and revised acreage accounting

Attachment 2 – Public Notice Documentation: The list of individuals that CR Minerals provided the public notice to via certified mail is provided in this attachment with an example copy of the notice letter. The list includes landowners within ½ mile of the property, state and federal agencies, local municipalities, and interested parties. Also, included in this attachment are affidavits and tear sheets documenting that the public notice for this application was published in the Rio Grande Sun newspaper in Espanola, NM on April 7th, 2026. The list of public areas where the notice was posted is also provided. These notices were provided in accordance with 19.10.12.1210 A (3), 19.10.902, and 19.10.903 NMAC.

The estimate of total remaining closure/closeout work at the Rocky Mountain Mine required for financial assurance is $707,591.

An overview of the current CR Minerals financial assurance and the instrument by which it has been implemented is provided in the CR Minerals Mining Act Permit No. RA004RE. Financial assurance for the closure/closeout of the Rocky Mountain Mine is in place in the form of an Irrevocable Standby Letter of Credit issued by Texas Capital ($707,591 as of April 7th, 2026).

Revision to Revegetation Success Standards
Removal of Total Productivity Requirement
CR Minerals proposes to modify the revegetation success criteria by removing the total productivity requirement from the final revegetation standards. Final revegetation success will continue to be evaluated based on:

- Species composition and diversity relative to the reference area
- Percent vegetative cover relative to the reference area

- Evidence of self-sustaining vegetation communities; and
- Long-term surface stability and erosion control.

These criteria are consistent with NM MMD guidance and provide a reliable and site-appropriate measure of reclamation success.

4 Updated Approved Seed Mix

CR Minerals requests approval of an updated seed mix for use in future reclamation. The revised seed mix emphasizes native grasses, forbs, and shrubs that have demonstrated successful establishment and persistence on pumice-rich substrates at the Rocky Mountain Mine.
Species with limited establishment success have been removed, and species that have performed well based on recent vegetation surveys have been prioritized. The updated seed mix and revised revegetation standards are included in Attachment 3.

CR Minerals requests NM MMD approval of Revision 26-01, acknowledging the completion of reclamation obligations for the identified areas and approval of the updated financial assurance amount.
A check in the amount of $4,500 accompanies this application package. CR Minerals appreciates your consideration in this matter. Please contact Jeff Whidden at (817) 873-0419, or jeff@crminerals.com if you require additional information.

Sincerely,

Jeff Whidden
President, CR Minerals Company, LLC

Attachment 1- Project Location Map

Legend

- County Boundary
- U.S. Highway
- State Route

0 2 4 6

Miles

Data Sources: CR Minerals, Barr, Esri

Rocky Mountain Mine Modification
CR Minerals

Project Location

BARR

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Attachment 2- Rocky Mountain Mine Reclamation Areas Map

BLM West Mining Area

BLM East Mining Area

7.8 acres

8.4 acres

4.8 acres

20.7 acres

7.5 acres

25.4 acres

W1 NW W2 W3

C1 C2 C3 C4 C5 C6 C7

E18 E17 E16 E15 E14 E13 E12 E11 E10 E9 E8 E7 E6 E5 E4 E3 E2 E1

31 MILE ROAD

Legend

- Mining Block
- 2011 Reclamation Area
- 2012/2013 Reclamation Area
- 2014 East Reclamation Area
- 2014 West Reclamation Area
- 2024 Reclamation Area
- Reclamation Area
- BLM Mining Area
- CR Minerals Property
- Other BLM Land
- Fence
- Road

0 500 1,000

Feet

Data Sources: CR Minerals, Barr, Esri

Rocky Mountain Mine Modification
CR Minerals

Mining Reclamation Areas and New Disturbance

February 2026

BARR

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Attachment 3- NM MMD Excel Cost Model

BOND AMOUNT CALCULATION
New Mexico Mining and Minerals Division
General Information

Rocky Mountain Mine

04/07/26

Applicant	CR Minerals P.O. Box 708 Ohkay Owingeh, NM 87566	Contact: Joe Griego (505) 428-2940
Permit Number	RA004RE	
Number of Acres	81.64 acres in disturbance area (66.43 ac. on BLM, 15.21 ac. on CRM)	
Type of Operation	Existing/Surface/Pumice	
Location	Espanola	
Prepared by	Taylon Earl and Ty Morris	
Recommended Bond	**$707,591**	

BOND AMOUNT CALCULATION | Rocky Mountain Mine
New Mexico Mining and Minerals Division | Worksheet #1
Reclamation Description | 04/07/26

Describe worst-case reclamation scenario:

Remove buildings, sheds, equipment, tanks, fuel, and foundations

Remove portable screening equipment
Remove abandoned equipment and debris

Earthmoving

Reduce slopes and backfill or partially backfill active pit area
Cover pit bottom with topsoil

Ripping

Rip roads outside pit area
Rip pit bottom areas that are not adequately covered except area covered by highwall reduction slopes

Grading

Grade all disturbed areas

Revegetation

Revegetate pit bottom
Revegetate all ripped roadways
Revegetate slopes
Revegetate stockpile locations

Other

Construct check dams and rip rap channels as necessary

BOND AMOUNT CALCULATION
New Mexico Mining and Minerals Division
Structure Demolition and Disposal Cost Summary

Rocky Mountain Mine
Worksheet #2
04/07/26

Location Adjust.	Santa Fe	103.3%
Subtotals	Buildings	$0
	Other	$0
	Disposal	$3,558
Total Cost (adjusted)		**$3,675**

Area	Description	Material	Dimensions (ft)	Quantity	Unit	Unit Cost ($/unit)	Item Cost ($)
	Buildings to be demolished:			0			
	Other items to be demolished:			0			
	Debris handling and disposal costs:						
	Remove screen	metal		1	3909.1	$0.52	$2,032.73
	Remove trailer	metal		1	1954.5	$0.52	$1,016.34
	Remove debris	misc.		Few	978.8	$0.52	$508.98
				Total Cost (unadjusted)			**$3,558.05**

Notes

2024 Mod	Updated location adjustment for Santa Fe to 100.9
	back calculated units from other date
	updated per CF cost
	updated Data source notes
2026 Mod	Updated location adjustment for Santa Fe to 103.3
	updated per unit cost
	updated Data source notes

Date Sources:

RS Means Site Heavy Construction Cost Data (2026)

Note: Costs were calculated by using RS Means costs open shop, Santa Fe NM for demolition of average mixed type material for 2026 (02 41 16.13 0100) Total O&P = $0.52/CF)

Date Sources:

RS Means Site & Infrastructure Work Cost Data Total (2026)
Santa Fe location adjustment for site work 103.3%

BOND AMOUNT CALCULATION
New Mexico Mining and Minerals Division
Material Handling Plan Summary Sheet

Rocky Mountain Mine
Worksheet #3
04/07/26

Notes
Mod 24 - reduced pit bottom coverage by 3,771 cy, to eliminate overburden component and to reflect topsoil onl
Mod 26 - Fixed broken link for cell C11, added
additional disturbed areas of 5.65 ac to E3,
removed all acres from NW Resource Area, and
7.74 ac from Active Mining Area, also adjusted
acreage in notes, added hauling topsoil to Active
Minnig Area

Item	Description	Volume (cy)	Origin	Destination	Haul Distance (ft)	Grade	Equipment
1	Reduce Slopes, BLM (West)	91,470	crest, overburden	toe	50	<30%	D9
2	Cover Pit Bottom, BLM (West)	34,578	existing stained overburden, topsoil	pit	200	<10%	D9
3	Move topsoil stockpiles into BLM (West) Pit Area	34,578	topsoil	pit or toe	1500	<10%	657G
4	Reduce Slopes, BLM (East)	96,441	crest, overburden	toe	50	<30%	D9
5	Cover Pit Bottom, BLM (East)	58,677	existing stained overburden, topsoil	pit	200	<10%	D9
6	Move topsoil stockpile into BLM (East) Pit Area	58,677	topsoil	pit or toe	1500	<10%	657G
7	Reduce slopes, Active Mining Area (CRM)	17,361	crest	toe	50	<30%	D9
8	Cover pit bottom, Active Mining Area (CRM)	23,619	overburden	pit	200	<10%	D9
9	Move topsoil stockpile, Active Mining Area (CRM)	23,619	topsoil	pit or toe	1500	<10%	657G
10	Reduce slopes, NW Resource Area (CRM)	0	crest	toe	300	<30%	D9
11	Cover pit bottom, NW Resource Area (CRM)	0	overburden	pit	200	<10%	D9
12	Move topsoil stockpile, NW Resource Area (CRM)	0	topsoil	pit or toe	1500	<10%	657G

BOND AMOUNT CALCULATION
New Mexico Mining and Minerals Division
Earthwork Quantity Worksheet

Rocky Mountain Mine
Worksheet #4
04/07/26

Unit	Description	Area (ac)	Cover Depth (ft)	Swell Factor	Volume (cy)
BLM (West) Pit Area	Reduce slopes (N. Highwall at 3:1)	3.06	Various	1.00	91,470
BLM (West) Pit Area	Rip & cover pit bottom with soil	23.77	1	1.00	34,578
BLM (East) Pit Area	Reduce slopes (E. Highwall at 3:1)	3.23	Various	1.00	96,441
BLM (East) Pit Area	Rip & cover pit bottom with soil	36.37	1	1.00	58,677
Active Mining Area (CRM)	Reduce slopes	0.57	Various	1.00	17,361
Active Mining Area (CRM)	Cover pit bottom with soil	14.64	1	1.00	23,619
NW Resource Area (CRM)	Reduce slopes	0.00	Various	1.00	0
NW Resource Area (CRM)	Cover pit bottom with soil	0.00	1	1.00	0
		81.64			

Notes:

N. Highwall length is 1,141' (*Assumption 2*).
E. Highwall length is 1,203' (Assumption 2).
Active Mining Area (CRM) Highwall is 2000' (Assumption 2)
NW Resource Area (CRM) Highwall is 1700' (Assumption 2)

Cover pit bottom: 26.83 ac. (West) - 3.06 ac. (covered by highwall slope reduction) = 23.77 ac.
Cover pit bottom: 18.95 ac. (East) - 3.23 ac. (covered by highwall slope reduction) = 15.72 ac.
Cover pit bottom: 15.21 ac. (Active Mining Area - CRM) - 0.57 ac. (covered by highwall slope reduction) = 14.64 ac.
Cover pit bottom: 0 ac. (NW Resource Area - CRM) - 0 ac. (covered by highwall slope reduction) = 0 ac.
(Assumption 7)

Topsoil stockpile volume is calculated by taking 9" of topsoil from BLM West (26.83 ac.) to
determine cubic yardage (*Assumption 3*)

Notes
24 mod - reduced E1-E2 pit bottom coverage by 3,771 cy, to eliminate overburden component and to reflect topsoil only
26 mod - added additional disturbed areas of 5.65 ac to BLM East, removed all acres from NW Resource Area (CRM), and 7.74 ac from Active Mining Area (CRM), also adjusted acreage in notes. In addtion, added 15 acres of undisturbed area where mining will begin in the next 5 years.

2026 acreage modifications using acreage from 2024 Reclaim Survey figure

BLM West	M West stock	BLM East	ILM East adj
4.152	1.066	1.504	0.145
3.917		7.545	1.6
7.379		5.591	1.9
11.38		1.455	2
		2.854	
26.828		18.949	5.645

BOND AMOUNT CALCULATION — Rocky Mountain Mine
New Mexico Mining and Minerals Division — Worksheet #5
Productivity and Hours Required for Dozer Use---Earthmoving — 04/07/26

Notes
Soil weight correction used is 1,512 lbs./cy (Assumption 4)

Description:	Reduce Slopes, BLM (West)				
Equipment:	D9---Reduce Slopes Length of push (ft.): 50 Highwalls & overburden. (26-4: sand-clay, loose)				
Volume	**91,470**	**cy**	**Time**	**29**	**hours**
			Productivity	**3,194**	**cy/hr-dozer**
PERFORMANCE FACTORS					
material - loose	1.20		operator - avg	0.75	
grade - (-30%)	1.60		work hour	50	min/hr
soil weight correction	1512	lb/cy	visibility	1.00	
prod. method/blade	1.00		elevation	1.00	
normal production	1,750	cy/hr	direct drive trans.	1.00	

Description:	Cover Pit Bottom, BLM (West)				
Equipment:	D9---Cover Pit Bottom Length of push (ft.): 200 Highwalls & overburden. (26-4: sand-clay, loose)				
Volume	**34,578**	**cy**	**Time**	**40**	**hours**
			Productivity	**856**	**cy/hr-dozer**
PERFORMANCE FACTORS					
material - loose	1.20		operator - avg	0.75	
grade	1.20		work hour	50	min/hr
soil weight correction	1512	lb/cy	visibility	1.00	
prod. method/blade	1.00		elevation	1.00	
normal production	625	cy/hr	direct drive trans.	1.00	

We previously used 500 foot length of push rather than 300 feet as per Mike Thompson's suggestion, but there was no justification for the change. Changing to 200 feet as 500 feet longer than the optimal push distance and beyond what is typically thought of as max pushing distance

Description:	Reduce Slopes, BLM (East)				
Equipment:	D9---Reduce Slopes Length of push (ft.): 50 Highwalls & overburden. (26-4: sand-clay, loose)				
Volume	**96,441**	**cy**	**Time**	**30**	**hours**
			Productivity	**3,194**	**cy/hr-dozer**
PERFORMANCE FACTORS					
material - loose	1.20		operator - avg	0.75	
grade - (-30%)	1.60		work hour	50	min/hr
soil weight correction	1512	lb/cy	visibility	1.00	
prod. method/blade	1.00		elevation	1.00	
normal production	1,750	cy/hr	direct drive trans.	1.00	

Description:	Cover Pit Bottom, BLM (East)				
Equipment:	D9---Cover Pit Bottom Length of push (ft.): 200 Highwalls & overburden. (26-4: sand-clay, loose)				
Volume	**58,677**	**cy**	**Time**	**69**	**hours**
			Productivity	**856**	**cy/hr-dozer**
PERFORMANCE FACTORS					
material - loose	1.20		operator - avg	0.75	
grade	1.20		work hour	50	min/hr
soil weight correction	1512	lb/cy	visibility	1.00	
prod. method/blade	1.00		elevation	1.00	
normal production	625	cy/hr	direct drive trans.	1.00	

We previously used 500 foot length of push rather than 300 feet as per Mike Thompson's suggestion, but there was no justification for the change. Changing to 200 feet as 500 feet is longer than the optimal push distance and beyond what is typically thought of as max pushing distance

Description:	Reduce slopes, Active Mining Area (CRM)				
Equipment:	D9---Reduce slopes Length of push (ft.): 100 Highwalls & overburden. (26-4: sand-clay, loose)				
Volume	**17,361**	**cy**	**Time**	**8**	**hours**
			Productivity	**2,190**	**cy/hr-dozer**
PERFORMANCE FACTORS					
material - loose	1.20		operator	0.75	
grade - (-30%)	1.60		work hour	50	min/hr
soil weight correction	1512	lb/cy	visibility	1.00	
prod. method/blade	1.00		elevation	1.00	
normal production	1,200	cy/hr	direct drive trans.	1.00	

Description:	Cover pit bottom, Active Mining Area (CRM)				
Equipment:	D9---Cover Pit Bottom Length of push (ft.): 200 Highwalls & overburden. (26-4: sand-clay, loose)				
Volume	**23,619**	**cy**	**Time**	**28**	**hours**
			Productivity	**856**	**cy/hr-dozer**
PERFORMANCE FACTORS					
material - loose	1.20		operator - avg	0.75	
grade	1.20		work hour	50	min/hr
soil weight correction	1512	lb/cy	visibility	1.00	
prod. method/blade	1.00		elevation	1.00	
normal production	625	cy/hr	direct drive trans.	1.00	

Added this because it was missing

Description:	Reduce slopes, NW Resource Area (CRM)				
Equipment:	D9---Reduce slopes Length of push (ft.): 300 Highwalls & overburden. (26-4: sand-clay, loose)				
Volume	**0**	**cy**	**Time**	**0**	**hours**
			Productivity	**821**	**cy/hr-dozer**
PERFORMANCE FACTORS					
material - loose	1.20		operator	0.75	
grade - (-30%)	1.60		work hour	50	min/hr
soil weight correction	1512	lb/cy	visibility	1.00	
prod. method/blade	1.00		elevation	1.00	
normal production	450	cy/hr	direct drive trans.	1.00	

Description:	Cover pit bottom, NW Resource Area (CRM)				
Equipment:	D9---cover pit bottom Length of push (ft.): 200 Overburden (26-4: sand-clay, loose)				
Volume	**0**	**cy**	**Time**	**0**	**hours**
			Productivity	**856**	**cy/hr-dozer**
PERFORMANCE FACTORS					
material - loose	1.20		operator	0.75	
grade	1.20		work hour	50	min/hr
soil weight correction	1512	lb/cy	visibility	1.00	
prod. method/blade	1.00		elevation	1.00	
normal production	625	cy/hr	direct drive trans.	1.00	

Changing to 200 feet as 700 feet is longer than the optimal push distance and beyond what is typically thought of as max pushing distance

BOND AMOUNT CALCULATION — Rocky Mountain Mine
New Mexico Mining and Minerals Division — Worksheet #6
Productivity and Hours Required for Dozer Use---Grading — 04/07/26

Description:	Recontour all disturbed areas (pit and stockpiles)				
Equipment:	D9 - Grade Disturbed Areas cover (26-4: sand & clay, loose)				
Area	**163.64**	**ac**	**Time**	**20.8**	**hours**
			Productivity	**7.85**	**ac/hr-dozer**
PERFORMANCE FACTORS					
material - loose	1.20		operator	0.75	
grade - flat	1.00		work hour	50	min/hr
soil weight correction	1512	lb/cy	visibility	1.00	
prod. method/blade	1.00		elevation	1.00	
effective blade width	14.2	feet	direct drive trans.	1.00	
speed	4	miles/hr			

Notes
Soil weight correction assumptions used is 1,512 lbs./cy (*Assumption 4*)
All disturbed areas totaling 144.79 ac. will be graded (*Assumption 1*)

Acreage - pulled stockpile acres from CADD - 82 added acres from 4.... Earthwork

BOND AMOUNT CALCULATION
New Mexico Mining and Minerals Division
Productivity and Hours Required for Ripper-Equipped Dozer Use

Rocky Mountain Mine
Worksheet #7
04/07/26

Description:	Rip Roads Outside Pit Area on BLM					
Equipment:	D9---Roads Outside Pit Area					
Area	**0.66**	**ac**	**Time**	**0.57**	**hours**	
Volume	**2,809**	**cy**	**Productivity**	**4.60**	**ac/hr-dozer**	
PERFORMANCE FACTORS						
ripping length	1,200	ft	turn time	0.25	min/pass	
ripper penetration	31.6	in	work hour	50	min/hr	
pocket spacing	46.4	in				
no. of pockets	3					

Description:	Rip Pit Bottom, BLM (West) Mining Area					
Equipment:	D9					
Area	**23.77**	**ac**	**Time**	**20.7**	**hours**	
Volume	**100,986**	**cy**	**Productivity**	**4.60**	**ac/hr-dozer**	
PERFORMANCE FACTORS						
ripping length	1,200	ft	turn time	0.25	min/pass	
ripper penetration	31.6	in	work hour	50	min/hr	
pocket spacing	46.4	in				
no. of pockets	3					

Description:	Rip Pit Bottom, BLM (East) Mining Area					
Equipment:	D9					
Area	**36.37**	**ac**	**Time**	**31.7**	**hours**	
Volume	**154,516**	**cy**	**Productivity**	**4.59**	**ac/hr-dozer**	
PERFORMANCE FACTORS						
ripping length	1,000	ft	turn time	0.25	min/pass	
ripper penetration	31.6	in	work hour	50	min/hr	
pocket spacing	46.4	in				
no. of pockets	3					

Description:	Rip roads (CRM)					
Equipment:	D9					
Area	**0.1**	**ac**	**Time**	**0.1**	**hours**	
Volume	**434**	**cy**	**Productivity**	**4.17**	**ac/hr-dozer**	
PERFORMANCE FACTORS						
ripping length	178	ft	turn time	0.25	min/pass	
ripper penetration	31.6	in	work hour	50	min/hr	
pocket spacing	46.4	in				
no. of pockets	3					

Description:	Rip Pit Bottom, Active Mining Area (CRM)					
Equipment:	D9					
Area	**14.6**	**ac**	**Time**	**12.6**	**hours**	
Volume	**62,197**	**cy**	**Productivity**	**4.64**	**ac/hr-dozer**	
PERFORMANCE FACTORS						
ripping length	2,000	ft	turn time	0.25	min/pass	
ripper penetration	31.6	in	work hour	50	min/hr	
pocket spacing	46.4	in				
no. of pockets	3					

Description:	Rip Pit Bottom, NW Resource Area (CRM)					
Equipment:	D9					
Area	**0.0**	**ac**	**Time**	**0.0**	**hours**	
Volume	**0**	**cy**	**Productivity**	**4.37**	**ac/hr-dozer**	
PERFORMANCE FACTORS						
ripping length	300	ft	turn time	0.25	min/pass	
ripper penetration	31.6	in	work hour	50	min/hr	
pocket spacing	46.4	in				
no. of pockets	3					

Notes
Ripping length used for D9 to rip roads outside pit area is 1,300' (approx. length of access roadway from 31-Mile Road to pit)

Ripping length used for D9 to rip pit bottom is 1,200' (avg approx. length of uninterrupted run across mining blocks)

BOND AMOUNT CALCULATION
New Mexico Mining and Minerals Division
Productivity and Hours Required for Scraper Use

Rocky Mountain Mine
Worksheet #11
04/07/26

Description:	Move topsoil stockpiles into BLM (West) Pit Area					
Equipment:	657G - Move topsoil stockpiles into open mining blocks					
Volume	**34,578**	**cy**	**Time**	**60.1**	**hours**	
			Productivity	**576**	**cy/hr-scraper**	
PERFORMANCE FACTORS						
struck capacity	32	cy	load time	0.6	min	
heaped capacity	44	cy	loaded trip time	1.1	min	
grade (loaded)	0	%	maneuver and spread time	0.6	min	
rolling resistance	5	%				
haul distance	1500	ft	return trip time	1	min	
work hour	50	min				

Description:	Move topsoil stockpile into BLM (East) Pit Area					
Equipment:	657G - Move topsoil stockpile into open mining blocks					
Volume	**58,677**	**cy**	**Time**	**101.9**	**hours**	
			Productivity	**576**	**cy/hr-scraper**	
PERFORMANCE FACTORS						
struck capacity	32	cy	load time	0.6	min	
heaped capacity	44	cy	loaded trip time	1.1	min	
grade (loaded)	0	%	maneuver and spread time	0.6	min	
rolling resistance	5	%				
haul distance	1500	ft	return trip time	1	min	
work hour	50	min				

Description:	Cover pit bottom, Active Mining Area (CRM)					
Equipment:	657G---cover pit bottom					
Volume	**23,619**	**cy**	**Time**	**50**	**hours**	
			Productivity	**475**	**cy/hr-scraper**	
PERFORMANCE FACTORS						
struck capacity	32	cy	load time	0.6	min	
heaped capacity	44	cy	loaded trip time	1.5	min	
grade (loaded)	0	%	maneuver and	0.6	min	
rolling resistance	5	%	spread time			
haul distance	2600	ft	return trip time	1.3	min	
work hour	50	min				

Notes

Scraper used in model is Model 657G. The struck capacity of the 657G is 32 cy, while the heaped capacity is 44 cy (Assumption 8)

Haul distance used is 1,500 ft. calculated from ArcGIS_10 projections for average haul distance from soil stockpile into pit area.

BOND AMOUNT CALCULATION
New Mexico Mining and Minerals Division
Summary Calculation of Earthmoving Costs

Rocky Mountain Mine
Worksheet #13
04/07/26

Total Cost $180,994

Equipment Type		Owning and Operating Cost ($/hr)	Labor Cost ($/hr)	Time Req'd (hrs)	Total Cost ($)	Total Production	Prod. Unit	Unit Cost ($/unit)	
Dozers-Earthmoving									
	D9—Reduce Slopes	$425.72	$49.95	28.6	13,620	91,470	cy	0.15	
	Cover Pit Bottom, BLM (West)	$425.72	$49.95	0.0	0	0	cy	0.00	Previously eliminated overburden time and costs by RT
	Reduce Slopes, BLM (East)	$425.72	$49.95	30.2	14,360	96,441	cy	0.15	
	Cover Pit Bottom, BLM (East)	$425.72	$49.95	0.0	0	58,677	cy	1.00	Previously eliminated overburden time and costs by RT
	Reduce slopes, Active Mining Area (CRM)	$425.72	$49.95	7.9	3,770	17,361	cy	0.22	
	Reduce slopes, NW Resource Area (CRM)	$425.72	$49.95	0.0	0	0	cy	#DIV/0!	
	Cover pit bottom, NW Resource Area (CRM)	$425.72	$49.95	0.0	0	0	cy	#DIV/0!	
Dozers-Grading	D9 - Grade Disturbed Areas	$425.72	$49.95	20.8	9,910	163.64	ac	60.56	
Rippers	D9—Roads Outside Pit Area	$425.72	$49.95	0.6	273	0.66	ac	413.40	
	D9	$425.72	$49.95	20.7	9,826	23.77	ac	413.40	
	Rip Pit Bottom, BLM (East) Mining Area	$425.72	$49.95	31.7	7,545	36.37	ac	207.44	Assumes that half of the acreage will need to be ripped
	Rip roads (CRM)	$425.72	$49.95	0.1	47	0.10	ac	456.13	
	Rip Pit Bottom, Active Mining Area (CRM)	$425.72	$49.95	12.6	3,004	14.64	ac	205.21	Assumes that half of the acreage will need to be ripped
	Rip Pit Bottom, NW Resource Area (CRM)	$425.72	$49.95	0.0	0	0.00	ac	#DIV/0!	Assumes that half of the acreage will need to be ripped
Scrapers	657G - Move topsoil stockpiles into open mining blocks	$510.48	$49.95	60.1	33,657	34,578	cy	0.97	
	Move topsoil stockpile into BLM (East) Pit Area	$510.48	$49.95	101.9	57,114	58,677	cy	0.97	
	Cover pit bottom, Active Mining Area (CRM)	$510.48	$49.95	49.7	27,867	23,619	cy	1.18	
				315.2					
				Total Cost:	**$180,994**				

Notes
Cost of medium operator open shop (2026 RS Means B-10X) = $48.35. Used bare costs as overhead and profit are added in tab 16. Adjusted by a factor of 1.033 For Santa Fe NM
Cost of D-9 410 hp open shop (2026 RS Means B-10X) = $412.12. Used bare costs as overhead and profit are added in tab 16. Adjusted by a factor of 1.033 For Santa Fe NM
Cost of Scraper = $494.17 for Equipment Watch. Used bare costs as overhead and profit are added in tab 16. Adjusted by a factor of 1.033 For Santa Fe NM.

BOND AMOUNT CALCULATION — Rocky Mountain Mine
New Mexico Mining and Minerals Division — Worksheet #14
Revegetation Costs — 04/07/26

Description:

Apply mulch, fertilizer, and seed mix to areas and chain, plow, and crimp

Location Adjust.	Santa Fe	103.3%
Total Cost		**$174,346**

Area	Area (acres)	Unit Cost ($/acre)	Subtotal Cost ($)
BLM (West) Mining Area	26.83	1,990	53,392
Above Grade Stockpile Area on BLM	3.07	1,990	6,109
BLM (East) Mining Area	39.60	1,990	78,804
CR Minerals Roads	0.10	1,990	203
Active Mining Area (CRM)	15.21	1,990	30,268
NW Resource area (CRM)	0.00	1,990	0
	84.81		$168,776

Data Sources: $168,776

RS Means Site & Infrastructure Work Cost Data Total (2026)
Santa Fe location adjustment for site work

Notes

Revegetation costs for some BLM West overburden and topsoil piles on CRM land are not included, as financial assurance for reclamation earthwork and revegetation of this acreage is already held by MMD under existing financial assurance for the Rocky Mountain Mine.

	Per AC
Information from Granite Seed for a different site. Added 20% for increased deliver costs and taxes	430
32 92 1914 0600 - Hydroseeding with mulch and fertilizer - $35.80 / M.S.F	1560
	1990

BOND AMOUNT CALCULATION — Rocky Mountain Mine
New Mexico Mining and Minerals Division — Worksheet #15
Other Reclamation Activity Costs — 04/07/26

Activity	Quantity	Unit	Unit Cost ($/unit)	Item Cost ($)
Rip rap and check dam channel crew (2 people, 1 week)	80	hr	$36.41	2,913
Total				**$2,913**

Notes
Cost of laborer open shop (2026 RS Means B-32C) = $35.25. Used bare costs because overhead and profit are added in tab 16. Adjusted by a factor of 1.033 For Santa Fe NM
The first line supervisor cost was previously removed and the indirect costs associated with revegetation and reclamation was increased by 10% 3/27/17

BOND AMOUNT CALCULATION
New Mexico Mining and Minerals Division
Reclamation Bond Summary

Rocky Mountain Mine
Worksheet #16
04/07/26

DIRECT COSTS	Facility and Structure Removal		$3,675	recalculated CPI over 5 years								
	Earthmoving		$180,994	average CPI for the Western States, 20 year average of 2.35% compounded over a 5 year period would be:								
	Revegetation @ percent bonded		$174,346									
	Other		$2,913	start	361,928.05	0.0235	8505.3093	370,433.36				
	Subtotal		**$361,928**	compounding	370,433.36		8705.184	379,138.55				
	Cost Escalation Period (years)	5		of 2.3% inflation	379,138.55		8909.7559	388,048.30				
	Cost Escalation Rate	2.35	$44,572.82	rate over 5 years	388,048.30		9119.1351	397,167.44				
	Adjusted Subtotal		**$406,501**		397,167.44		9333.4348	406,500.87				
						Total	**44572.819**					
INDIRECT COSTS[1]	Contractor Profit and Overhead ($0 - 1 MM))	0.20	$81,300									
	Reclamation or Closeout Plan Management (($0 - 1 MM)	0.10	$40,650									
	Engineering Redesign Fee($0 - 1 MM))	0.04	$16,260									
	Contingencies ($0 - 1 MM))	0.20	$81,300									
	Procurement Costs ($0 - 1 MM)	0.04	$16,260									
	Mobilization and Demobilization ($0 -0 1 MM)	0.10	$40,650									
	Contract Administration	0.03	$12,195									
	Performance & Payment Bonds	0.03	$12,195									
	Liability Insurance (1.5% of labor costs)	0.015	$279.87		includes labor from Sheet 13 and Sheet 15				15,745		from earthwork sheet 13	
									2913.1		rip-rap from sheet 15	
									18,658		Total	
									279.86683		x1.5%	
TOTAL BOND AMOUNT			**$707,591**									

[1]Indirect Costs are from *Guidance for Calculating Capital Indirect Costs for Mine Reclamation and Closure Cost Estimates*, November 2016. Energy, Minerals and Natural Resources Department, Mining and Minerals Division

Consumer Price Index - All Urban Consumers
12-Month Percent Change

Series Id: CUUR0400SA0
Not Seasonally Adjusted
Area: West urban
Item: All items
Base Period: 1982-84=100
Years: 1997 to 2025

Year	Annual
1997	2.0
1998	1.7
1999	2.5
2000	3.6
2001	1.9
2002	1.7
2003	0.9
2004	2.5
2005	2.8
2006	2.2
2007	3.3
2008	-0.5
2009	1.6
2010	1.0
2011	2.2
2012	1.3
2013	1.4
2014	1.0
2015	2.1
2016	2.0
2017	2.6
2018	2.5
2019	2.6
2020	1.2
2021	6.8
2022	5.3
2023	2.7
2024	2.5
2025	2.9

2.35 20 year average - 2006 to 2025

Attachment 4- Letter of Notice to Concerned Parties

March 28, 2026

Name
Address
City, State, Zip

To Whom It May Concern:

Re: Rocky Mountain Mine, Permit No. RA004RE, Application for Partial Financial Release

CR Minerals Company, LLC (CR Minerals) operates the Rocky Mountain Mine, a pumice mie located approximately 5.5 miles west of Espanola, NM off of 31-Mile Road. The Rocky Mountain Mine's mining area limits are within Sections 33 and 34, T. 21 N., R. 7 E., Rio Arriba County, NM. CR Minerals has applied to the New Mexico Energy, Minerals and Natural Resources Department, Mining and Minerals Division for a modification of Permit No. RA004RE. The modification requests a partial release of financial assurance required for reclamation. The proposed release is for work that CR Minerals has completed. As a nearby property owner or stakeholder, you are being provided the attached copy of the public notice concerning this modification request.

If you have any questions, please feel free to contact the New Mexico Energy, Minerals, and Natural Resources Department, Mining and Minerals Division in Santa Fe at (505) 476-3400 or David Ennis at (505) 372-8634.

Sincerely,

Jeff Whidden, President
CR Minerals Company, LLC

Legal Notice

Pursuant to the New Mexico Mining Act Rules at 19.10.12.1210 NMAC, CR Minerals Company, LLC (CR Minerals) has applied to the Mining and Minerals Division, New Mexico Energy, Minerals, and Natural Resources Department (NM MMD) for partial release of reclaimed areas to be processed as a modification to Mining Act Permit No. RA004RE, as revised or modified, originally approved June of 1999 ("Permit"). CR Minerals operates the Rocky Mountain Mine and currently mines for varying qualities of pumice to supply various industrial and commercial customers.
A copy of the application is available during normal business hours at:

New Mexico Mining and Minerals Division
1220 South St. Francis Drive
Santa Fe, New Mexico 87505

The application can also be viewed or downloaded from the NM MMD website at:
http://www.emnrd.state.nm.us/MMD/MARP/PermitPendMineRegEx.html - to come from NMMD
This application is available for public comments, objections, and a request for a public hearing as provided below.

Permittee Address: CR Minerals Company, LLC, P.O. Box 708, Ohkay Owingeh, NM 87566.

Location: The Rocky Mountain Mine is located 5.5 miles west of Espanola, NM on 31-Mile Road in Sections 33 and 34, Township 21 North, Range 7 East, NMPM and Baseline.

Type of Surface Subject to Partial Release of Financial Assurance Application: CR Minerals has requested the partial release of reclaimed areas for 14.5 acres of earthwork and full release of 32.3 acres of reclaimed areas that have completed the reclamation requirements within the mining area limits under Permit No. RA004RE.

Written comments, objections, or requests for a public hearing shall be submitted to:

David Ennis, Program Manager
Mining Act Reclamation Program
NM Mining and Minerals Division
1220 South St. Francis Drive
Santa Fe, New Mexico 87505

Comments and requests for a public hearing can be submitted to the above listed address within 30 days of the publication of the notice.

Aviso legal

De acuerdo con las Normas de la Ley de Minería de Nuevo México en 19.10.12.1210 NMAC, CR Minerals Company, LLC (CR Minerals) ha solicitado una solicitud a la División de Minería y Minerales de Nuevo México Departamento de Energía, Minerales y Recursos Naturales (NM MMD) para la liberación parcial de áreas recuperadas que se procesarán como modificación al Permiso Nº de la Ley de Minería. RA004RE, tal como revisado o modificado, aprobado originalmente en junio de 1999 ("Permiso"). CR Minerals opera el Rocky Mountain Mine y actualmente explota para extraer diversas calidades de piedra pómez para abastecer a diversas industrias industriales y clientes comerciales.
Una copia de la solicitud está disponible durante el horario laboral habitual en:

División de Minería y Minerales de Nuevo México
1220 South St. Francis Drive
Santa Fe, Nuevo México 87505

La solicitud también puede consultarse o descargarse desde la página web del MMD de NM en:
http://www.emnrd.state.nm.us/MMD/MARP/PermitPendMineRegEx.html
Esta solicitud está disponible para comentarios públicos, objeciones y solicitud de audiencia pública como se indica a continuación.

Dirección del titular: CR Minerals Company, LLC, APARTADO POSTAL 708, Ohkay Owingeh, NM 87566.

Ubicación: La mina Rocky Mountain se encuentra a 5,5 millas al oeste de Espanola, NM, en 31-Mile Road en las secciones 33 y 34, municipio 21 norte, rango 7 este, NMPM y Baseline.

Tipo de superficie sujeta a liberación parcial de garantía financiera Solicitud: CR Minerals ha solicitado la liberación parcial de áreas recuperadas para 14,5 acres de terraplenes y la liberación total de 32,3 acres de áreas recuperadas que hayan cumplido los requisitos de recuperación dentro de los límites de la zona minera bajo el Permiso No. RA004RE.

Los comentarios escritos, objeciones o solicitudes de audiencia pública deberán ser sometidos a:

David Ennis, Director de Programas
Programa de Recuperación de Minerales según la Ley de Minería
División de Minería y Minerales de Nuevo México
1220 South St. Francis Drive
Santa Fe, Nuevo México 87505

Los comentarios y solicitudes de audiencia pública pueden enviarse a la dirección mencionada anteriormente dentro de
30 días desde la publicación del aviso.

Attachment 5- Updated Reclamation Seed Mix

Updated Reclamation Seed mix for the Rocky Mountain Pumice Mine in Rio Arriba County, New Mexico (2026)

Scientific Name	Common Name	Rate (pls lbs/acre)
Cool Season Grasses		
Achnatherum hymenoides	Indian ricegrass	4.0
Pascopyrum smithii	Western wheatgrass	1.2
Warm Season Grasses		
Bouteloua gracilis	Blue grama	1.75
Schizachyrium scoparium	Little bluestem	1.7
Forb		
Sphaeralcea coccinea	Scarlet globemallow	0.3
Shrub		
Rhus trilobata	Oakbrush sumac	2.0

Attachment 6- 2025 Vegetation Monitoring

CR Minerals Rocky Mountain Mine 2025 Vegetation Monitoring

NM Permit No. RA004E

2011, 2012/2013, 2014 East and 2014 West

Reclamation Units

Prepared by
Barr Engineering Co.

320 Osuna Road NE, Suite G-4
Albuquerque, NM 87107
505.954.1570

barr.com

1 Contents

2 Introduction

The 2025 Vegetation Monitoring study at CR Minerals' Rocky Mountain Mine evaluates reclamation progress by assessing vegetative cover, shrub density, and production across 2011, 2012/2013, 2014 East, 2014 West, and Reference units. Transect locations and directions were randomly generated using ArcGIS, with a total of 45 transects established to ensure consistent and unbiased sampling. On September 2 through 5, 2025, Barr Engineering Co. (Barr) sampled 45 vegetation transects in the four reclaimed areas and corresponding reference areas.

Field data was collected using GPS-enabled devices and standardized protocols, with all observations transcribed into Excel for analysis. The primary goal is to determine whether reclamation units are meeting revegetation success standards, using statistical comparisons to the reference area to guide ongoing reclamation efforts.

3 Methodology

3.1 Study Design

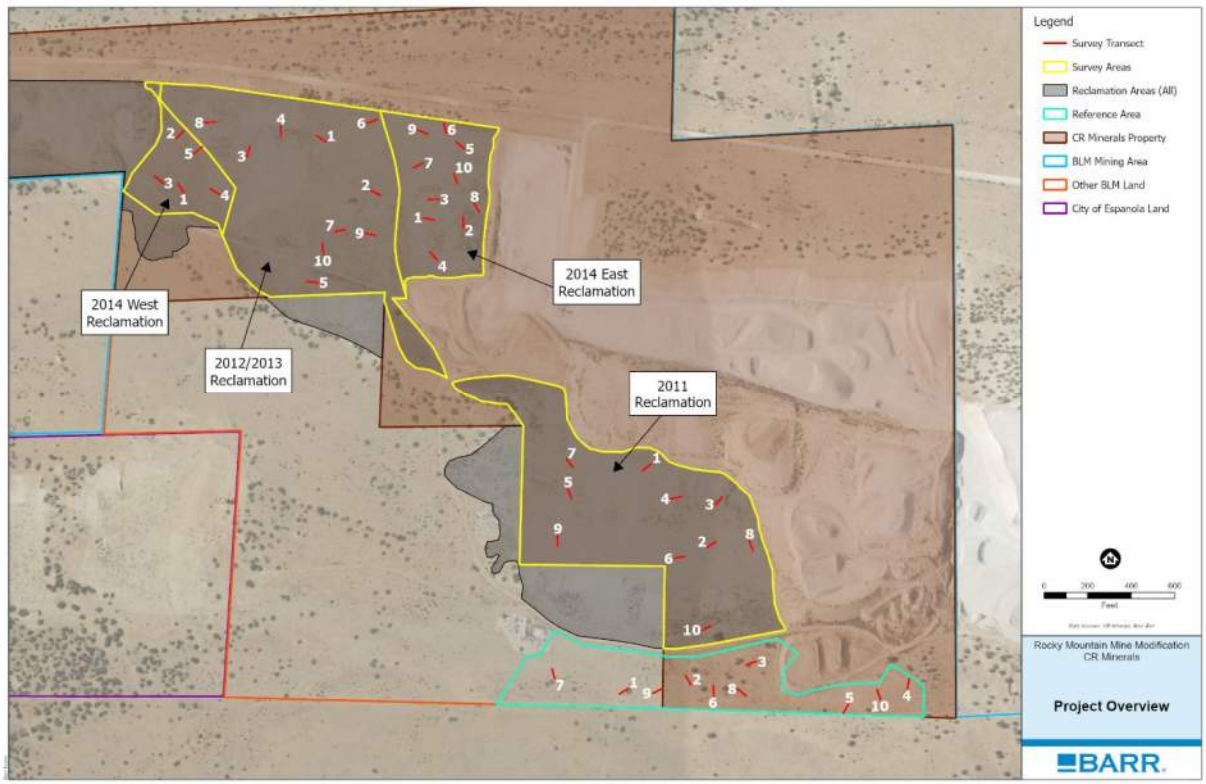


Figure 1. Project overview depicting the 5 separate study units with the transects that were observed.

The spatial alignments (KMZ files) of the 2011, 2012/2013, 2014 West, 2014 East, and Reference units were provided by CR minerals and were used in the development of the vegetation transects. Transect start points and the direction of transects were randomly produced using ArcGIS software. 10 randomly selected transects were produced for each 2011, 2012/2013, 2014 East, and Reference Units, and 5 randomly selected transects were produced for the 2014 West unit; totaling 45 transects. The same 45 transects were used for the studies on vegetative cover, shrub density, and vegetative production.

In the field, an integrated global positioning system (GPS) device and smartphones were used to locate the mapped starting point and determine the predetermined direction. Standard unit tapes were laid as straight and as close to the ground as feasible, and photographs were taken from both sides of the tape (transect) looking towards the middle. Vegetation cover, shrub density, and vegetation production were all observed on the working side of the tape, which is the left side if looking from start to end.

At each location and for each method, standard data sheets were used to record the observations. After all the field data was recorded, it was transcribed into Excel spreadsheets in preparation for the various calculations.

The determination of revegetation success was calculated by comparing each reclamation unit to the reference using a two-sample t-test, assuming equal variance and 90% statistical significance.

3.2 Vegetation Cover

Vegetation cover (cover) of the reclamation and reference areas was determined using the line-point intercept method on a 50-foot-long tape, sampled every 2 feet for a total of 25 point-intercept observations per transect. Only the dominant plant species was recorded per point; if the point did not intercept any vegetation, either bare ground or litter was recorded for that point.

Cover was calculated using only perennial plants; if an annual plant was recorded on the data sheet, it was converted to and calculated as litter. Cover was calculated using all the transects per unit, totaling 250 observations per area, except for the 2014 west unit, with 5 transects totaling 125 observations. Total vegetative cover was calculated using the total number of perennial plants observations divided by the total number of observations. Relative vegetative cover for an individual species is calculated as the total number of a specific species encountered at all the transects in the unit, divided by the total number of plants observed.

3.3 Shrub Density

The shrub density at each transect was observed in a 250 square foot area called the shrub belt. This shrub belt was created by counting all the shrubs and sub-shrubs that are rooted within 5 feet of the entire length of the transect. Shrubs were counted and totaled per species and expressed and compared as shrubs per acre.

3.4 Vegetative Production

3.4.1 Field protocol for green weights

Vegetative production was measured and estimated at each transect. At each transect, a 1 square meter quadrant was used at the 0, 10, 20, 30, and 40-foot locations along the transect, totaling 5 square meter observations per transect. Only the current year's vegetative growth (production) was measured and estimated. At each transect, only the first quadrant was measured; the other 4 were visually estimated. Each species growing in the first quadrant was clipped at the base, past years' production and debris were removed, and the plants were placed in paper bags and weighed. Green weights were measured in the field immediately after clipping using Pescola spring scales and recorded in grams. Clipped vegetation were kept in the labeled paper bags for drying. The remaining 4 quadrants were visually estimated and recorded in grams.

3.4.2 Dry weight

Samples were dried in the office by laying them out evenly spaced on a wire rack in a room with air conditioning. Samples were officially weighed on October 13th, after the subset of sample weights had stabilized and no longer decreased.

Standardization of the observed dry weights of the clipped vegetation for quadrant 1 to the estimated green weights of the quadrants 2-5, we used the average observed ratio of green to dry weights to calculate the dry weights of all the estimated green weights (see calculation example). The dry weights used in the calculations are a result of the estimated green weights multiplied by the observed desiccation factor from the clipped quadrant of each transect. The calculated dry weights were calculated per transect; thus, the desiccation factor was specific to each transect and was developed from the observed weights from the clipped vegetation of quadrant 1.

Calculated dry weight example: If observed green weight is 20g, and observed dry weight is 15gm the calculated desiccation factor would be 15g/20g = 0.75. To determine calculated dry weights, 0.75 would be multiplied by the estimated green weights of the quadrants within that transect.

Dry weights of the plants observed in the quadrants were expressed as kilos/hectares. The total perennial vegetative production per transect was used to compare reclamation and reference units.

4 Results

4.1 2011 Reclamation Unit

The 2011 Reclamation Unit showed continued progress in 2025, with perennial vegetation cover averaging 36%. This represents a modest improvement over the 28.4% cover observed in 2022, indicating a positive trend in plant establishment. Shrub density was strong at 7,457 shrubs per acre, surpassing the 75% reference threshold and demonstrating successful shrub recruitment and survival. However, total dry weight production remained low at 881 grams (49.8 kg/ha). While the unit meets shrub density standards and shows incremental gains in cover, the limited biomass production suggests that perennial grass and forb establishment is still lagging. Compared to 2022, the unit is on a stable or slightly improving trajectory, but further efforts may be needed to boost herbaceous productivity and overall ecological function.

4.1.1 Vegetation Cover

Transect	2011 Reclamation
1	36%
2	56%
3	60%
4	32%
5	28%
6	24%
7	20%
8	36%
9	36%
10	28%
Mean	**36%**

4.1.2 Shrub Density

Transect	2011 Reclamation Unit
1	11151.36
2	6098.4
3	7318.08
4	14113.44
5	9060.48
6	5227.2
7	8189.28
8	5227.2
9	1916.64
10	6272.64
Mean	**7457.47**

4.1.3 Vegetative Production

2011 Reclamation Unit Vegetative Production		
Transect	**Total Dry weight**	**Kilo/Hectare Average**
1	57.7	28.8
2	124.6	47.9
3	141.9	88.7
4	164.3	102.7
5	93.7	72.0
6	73.6	30.7
7	56.3	31.3
8	43.9	24.4
9	48.5	23.1
10	77.0	48.2
Total	**881.5**	**49.8**

4.2 2012-2013 Reclamation Unit

The 2012/2013 Reclamation Unit exhibited the most notable improvement among all reclamation areas in 2025. Vegetation cover increased to 51%, a substantial gain from the 35.6% recorded in 2022. Shrub density also rose to 9,287 shrubs per acre, well above both the reference and the 2022 value of 6,377 shrubs per acre. Total dry weight production nearly doubled, reaching 1,672 grams (82.2 kg/ha). These results indicate that the unit is making successful progress toward its long-term reclamation goals, with both perennial cover and shrub establishment exceeding the 75% reference threshold. The marked improvement since 2022 highlights the effectiveness of ongoing management and suggests that this unit is approaching a stable, self-sustaining plant community.

4.2.1 Vegetation Cover

Transect	2012-2013 Reclamation
1	68%
2	68%
3	32%
4	52%
5	80%
6	32%
7	72%
8	24%
9	40%
10	44%
Mean	**51%**

4.2.2 Shrub Density

Transect	2012-2013
1	12196.8
2	5924.16
3	11499.84
4	14461.92
5	1045.44
6	3484.8
7	8712
8	13939.2
9	14810.4
10	6795.36
Mean	**9286.99**

4.2.3 Vegetative Production

2012-2013 Reclamation Unit Vegetative Production		
Transect	**Total Dry weight**	**Kilo/Hectare Average**
1	190.0	95.0
2	300.8	111.4
3	114.6	57.3
4	136.3	68.1
5	272.7	151.5
6	97.1	57.1
7	133.0	78.2
8	84.0	30.0
9	170.3	65.5
10	173.3	108.3
Total	**1672.0**	**82.2**

4.3 2014 West Reclamation Unit

In 2025, the 2014 West Reclamation Unit demonstrated strong performance in both vegetation cover and shrub density. Perennial cover averaged 54% and shrub density soared to 17,389 shrubs per acre—a dramatic increase from the previous count of 819 shrubs per acre. Despite these gains, total dry weight production remained relatively low at 781 grams (85.4 kg/ha), similar to the 2022 result. The unit clearly meets or exceeds the 75% reference threshold for both cover and shrub density, but the persistent gap in biomass production suggests that perennial herbaceous growth is still limited. Overall, the 2014 West unit is highly successful in terms of structural vegetation metrics, but continued monitoring of species composition and productivity is warranted.

4.3.1 Vegetation Cover

Transect	2014 W Reclamation
1	88%
2	56%
3	68%
4	32%
5	24%
Mean	**54%**

4.3.2 Shrub Density

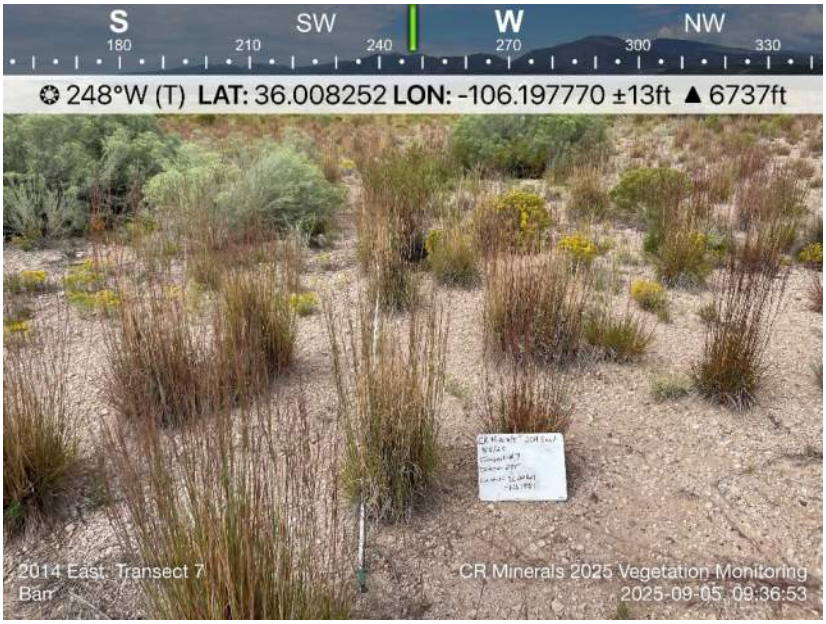
Transect	2014 West
1	17598.2
2	28749.6
3	27007.2
4	5053.0
5	8537.8
Mean	**17389.2**

4.3.3 Vegetative Production

2014 W Reclamation Unit Vegetative Production		
Transect	**Total Dry weight**	**Kilo/Hectare Average**
1	243.5	115.9
2	120.3	63.3
3	265.2	139.6
4	75.2	53.7
5	76.5	54.7
Total	**780.7**	**85.4**

4.4 2014 East Reclamation Unit

The 2014 East Reclamation Unit continued its gradual performance in 2025. Vegetation cover averaged 41%, an improvement over the 27.6% observed in 2022. Shrub density reached 6,429 shrubs per acre, meeting the 75% reference threshold and more than doubling the 2022 value of 2,596 shrubs per acre. Total dry weight production also increased to 1,140 grams (60.3 kg/ha), though it remains below the reference standard. These results indicate that while perennial cover and biomass are still developing, shrub establishment has become robust. The positive trends since 2022 suggest that the unit is on a path toward greater ecological stability, but additional efforts to enhance perennial grass and forb cover may be beneficial for long-term success.



4.4.1 Vegetation Cover

Transect	2014 E Reclamation Unit
1	28%
2	36%
3	36%
4	60%
5	52%
6	40%
7	52%
8	56%
9	20%
10	28%
Mean	**41%**

4.4.2 Shrub Density

Transect	2014 E
1	5227.2
2	7143.84
3	5575.68
4	4878.72
5	5227.2
6	9234.72
7	8363.52
8	4704.48
9	3659.04
10	10280.16
Mean	**6429.45**

4.4.3 Vegetative Production

2014 E Reclamation Unit Vegetative Production		
Transect	**Total Dry weight**	**Kilo/Hectare Average**
1	60.8	43.4
2	134.5	74.7
3	108.8	72.5
4	121.4	71.4
5	134.6	61.2
6	175.1	76.1
7	143.3	75.4
8	123.8	68.8
9	64.2	27.9
10	73.5	32.0
Total	**1139.9**	**60.3**

4.5 Reference Area

In 2025, the reference area at CR Minerals Rocky Mountain Mine continued to provide a benchmark for reclamation success. Vegetation cover averaged 64%, with shrub density at 8,520 shrubs per acre and total dry weight production reaching 2,869 grams (223 kg/ha). These values are consistent with the high standards set in previous years, although the 2022 study reported an even higher vegetation cover of 89%. It is important to note that the reference area may be situated in a slight depression, which likely allows it to capture and retain more surface water than the surrounding reclamation units. This hydrologic advantage could contribute to consistently higher vegetation cover, shrub density, and productivity observed in the reference area compared to the reclamation sites. As a result, the reclamation units may be facing an inherent challenge in reaching the same ecological benchmarks, despite ongoing improvements in vegetation establishment. Given these site differences, it may be worth reconsidering whether the current reference area provides a fully appropriate or attainable target for evaluating reclamation success at the Rocky Mountain Mine. A more nuanced or site-adjusted standard could offer a fairer assessment of reclamation progress under the actual landscape conditions.

4.5.1 Vegetation Cover

Transect	Reference Area
1	60%
2	80%
3	64%
4	64%
5	56%
6	76%
7	64%
8	44%
9	64%
10	60%
Mean	**64%**

4.5.2 Shrub Density

Transect	Shrub Density-
1	348.5
2	1742.4
3	6446.9
4	9409.0
5	20734.6
6	4530.2
7	1916.6
8	9757.4
9	18992.2
10	11325.6
Mean	**8520.3**

4.5.3 Vegetative Production

Reference Area Vegetative Production		
Transect	**Total Dry weight**	**Kilo/Hectare Mean**
1	219.5	219.5
2	360.4	450.5
3	386.3	257.6
4	317.1	211.4
5	307.8	171.0
6	404.1	252.6
7	242.9	303.7
8	302.9	189.3
9	142.5	71.2
10	186.0	103.3
Total	**2869.6**	**223.0**

5 Comparison to Reference Area

Reclamation Units Compared to Reference Area						
	2011	**2012.2013**	**2014 W**	**2014 E**	**Reference**	**75% of**
Vegetation Coverage Percent	36%	51%	54%	41%	64%	48%
Shrub Density- Shrubs/Acre	7457.5	9287.0	17389.2	6429.5	8520.3	6390.3
Total Dry Weight (gr)	881.5	1672.0	780.7	1139.9	2869.6	2152.2
Kilo/Hectare Average	49.8	82.2	85.4	60.3	223.0	167.3

6 Conclusion

The 2025 vegetation monitoring at CR Minerals Rocky Mountain Mine highlights meaningful progress across all reclamation units. Each unit is showing positive trends in perennial cover, shrub density, and biomass production, with several units now meeting or exceeding the 75% reference threshold for shrub density and perennial cover. While some units have not yet reached the reference area's benchmarks in every category, their steady improvements since 2022 reflect successful ongoing reclamation and adaptive management. Importantly, these results demonstrate that the reclamation units are developing resilient plant communities and moving toward long-term ecological goals.

7 Discussion

The results from 2025 reveal a landscape making encouraging strides toward ecological recovery. Improvements in perennial cover and shrub density are evident across the board, and even units that have not yet met reference standards show clear upward trajectories. These gains are a testament to the effectiveness of reclamation strategies and the commitment to adaptive management.

It is also important to recognize that site-specific factors, such as the hydrologic advantage of the reference area, may make its standards particularly challenging for some reclamation units to achieve.

The reference area's location in a depression likely allows it to retain more moisture, supporting higher vegetation cover and productivity. This context suggests that while the reference area remains a valuable benchmark, a flexible approach that considers local site conditions may provide a fairer assessment of reclamation success.

Overall, the 2025 monitoring results are encouraging. All reclamation units are well-positioned to achieve their ecological and regulatory objectives soon.

8 Appendix

8.1 2011 Reclamation Unit Data

Cover - Late Summer (September) 2025

2011 Reclamation Monitoring Transects

Common Name	Scientific Name	USDA Plant Symbol	1	2	3	4	5	6	7	8	9	10	Sum by Species	Rel.% Cover by Species
Grasses														
Alkali sacaton	*Sporobolus airoides*	SPAI											0	0.000
Blue grama	*Bouteloua gracilis*	BOGR	1					1	1		3		6	0.067
False buffalograss	*Munroa squarrosa*	MUSQ											0	0.000
Foxtail barley	*Hordeum jubatum*	HOJU											0	0.000
Indian ricegrass	*Achnatherum hymenoides*	ACHY			1						1	1	3	0.034
James' galleta	*Pleuraphis jamesii*	PLJA											0	0.000
Little bluestem	*Schizachyrium scoparium*	SCSC										1	1	0.011
Ring muhly	*Muhlenbergia torreyi*	MUTO											0	0.000
Sand dropseed	*Sporobolus cryptandrus*	SPCR		1									1	0.011
Sideoats grama	*Bouteloua curtipendula*	BOCU											0	0.000
Western wheatgrass	*Pascopyrum smithii*	PASM						2			1		3	0.034
Wheatgrass hybrid	*Agropyrum hybrid*	AGROPYRUM											0	0.000
Forbs	**Forbs**													
Adonis blazingstar	Mentselia multiflora	MEMU											0	0.000
Aster sp.	*Machaeranthera* species	MABI											0	0.000
Buckwheat species	*Eriogonum* species	ERIOGONUM											0	0.000
Buffalo bur	*Solanum rostratum*	SORO											0	0.000
Evening primrose	*Oenothera sp.*	OENOT									1		1	0.011
Field sagewort	*Artemeisa campestris*	ARCA		1	1								2	0.022
Greenleaf five-eyes	*Chamaesaracha coronopus*	CHCO											0	0.000
Hoary tansyaster	Machaeranthera canescens	MACA											0	0.000
Long-flowered skyrocket	*Ipomopsis longiflora*	IPLO			1		1						2	0.022
Milkvetch sp.	*Astragalus sp.*	ASTRAGALUS											0	0.000
Prickly Russian thistle	*Salsola tragus*	SATR											0	0.000
Rocky Mountain penstemon	*Penstemon strictus*	PEST											0	0.000
Russian thistle	*Salsola kali*	SAKA											0	0.000
Sweetclover	*Melilotus officinalis*	MEOF	2	4	2	5	1	1	2	2			19	0.213
Unknown forb (basal rosette)	Unknown forb species	UNK FORB											0	0.000
Shrubs and subshrubs	**Shrubs and Subshrubs**													
Broom snakeweed	Gutierrezia sarothrae	GUSA											0	0.000
False tarragon	*Artemesia dracunculoides*	ARDR	1			1							2	0.022
Fringed sagebrush	*Artemesia frigida*	ARFR								1	2		3	0.034
Greene's rabbitbrush	*Chrysothamnus greenei*	CHGR											0	0.000
Rubber rabbitbrush	*Ericamerica nauseosus*	ERNA	5	8	10	2	5	2	2	5	1	5	45	0.506
Three leaf sumac	*Rhus trilobata*	RHTR								1			1	0.011
Tree cholla	*Cylindropuntia imbricata*	CYIM											0	0.000
Trees														
One-seed juniper	*Juniperus monospera*	JUMO											0	0.000
Twoneedle pinyon	*Pinus edulis*	PIED											0	0.000
													89	1.000
Total vegetative cover			9	14	15	8	7	6	5	9	9	7	89	35.600
Bare ground			15	10	9	14	17	16	19	15	14	17	146	58.400
Litter			1	1	1	3	1	3	1	1	2	1	15	6.000
			25	**25**	**25**	**25**	**25**	**25**	**25**	**25**	**25**	**25**	**250**	**100.000**

Shrub Density

2011 Reclamation Unit	**1**	**2**	**3**	**4**	**5**	**6**	**7**	**8**	**9**	**10**		
Sept 2025											Total	Average
CHGR	0	0	0	0	0	0	0	0	0	0	0	0
ARFR	0	2	1	2	0	0	0	9	3	4	21	2.1
ERNA	25	31	41	74	50	14	45	14	7	31	332	33.2
FAPA	0	0	0	0	0	0	0	0	0	0	0	0
GUSA	0	0	0	0	2	0	0	6	0	0	8	0.8
RHTR	2	1	0	0	0	1	2	1	1	0	8	0.8
JUMO	0	1	0	0	0	0	0	0	0	1	2	0.2
ARDR	37	0	0	5	0	15	0	0	0	0	57	5.7
Total	64	35	42	81	52	30	47	30	11	36	428	42.8
Shrubs/acre	11151.36	6098.4	7318.08	14113.44	9060.48	5227.2	8189.28	5227.2	1916.64	6272.64	74574.72	7457.472

8.2 2012/13 Reclamation Unit Data

Cover - Late Summer (September) 2025

2012/2013 Reclamation Unit Monitoring Transects

Common Name	Scientific Name	USDA Plant Symbol	1	2	3	4	5	6	7	8	9	10	Sum by Species	Rel.% Cover by Species
Grasses														
Alkali sacaton	*Sporobolus airoides*	SPAI	3					1	1			1	6	0.047
Blue grama	*Bouteloua gracilis*	BOGR	1	4	4		7		3		2	2	23	0.180
False buffalograss	*Munroa squarrosa*	MUSQ											0	0.000
Foxtail barley	*Hordeum jubatum*	HOJU											0	0.000
Indian ricegrass	*Achnatherum hymenoides*	ACHY				2							2	0.016
James' galleta	*Pleuraphis jamesii*	PLJA		3			3					1	7	0.055
Little bluestem	*Schizachyrium scoparium*	SCSC	2		2	2		5		1			12	0.094
Ring muhly	*Muhlenbergia torreyi*	MUTO											0	0.000
Sand dropseed	*Sporobolus cryptandrus*	SPCR					9						9	0.070
Sideoats grama	*Bouteloua curtipendula*	BOCU											0	0.000
Western wheatgrass	*Pascopyrum smithii*	PASM	2	4					1			3	10	0.078
Wheatgrass hybrid	*Agropyrum hybrid*	AGROPYRUM											0	0.000
Forbs	**Forbs**													
Adonis blazingstar	Mentselia multiflora	MEMU											0	0.000
Aster sp.	*Machaeranthera* species	MABI											0	0.000
Buckwheat species	*Eriogonum* species	ERIOGONUM											0	0.000
Buffalo bur	*Solanum rostratum*	SORO											0	0.000
Evening primrose	*Oenothera sp.*	OENOT											0	0.000
Field sagewort	*Artemeisa campestris*	ARCA											0	0.000
Greenleaf five-eyes	*Chamaesaracha coronopus*	CHCO											0	0.000
Hoary tansyaster	Machaeranthera canescens	MACA		1									1	0.008
Long-flowered skyrocket	*Ipomopsis longiflora*	IPLO											0	0.000
Milkvetch sp.	*Astragalus sp.*	ASTRAGALUS		1				1					2	0.016
Prickly Russian thistle	*Salsola tragus*	SATR					1						1	0.008
Rocky Mountain penstemon	*Penstemon strictus*	PEST											0	0.000
Russian thistle	*Salsola kali*	SAKA											0	0.000
Sweetclover	*Meliotus officinale (Meliotus alba)*	MEOF											0	0.000
Unknown forb (basal rosette)	Unknown forb species	UNK FORB											0	0.000
Shrub, subshrubs, and succulents	**Shrub, subshrubs, and succulents**													
Broom snakeweed	Gutierrezia sarothrae	GUSA		1		1							2	0.016
False tarragon	*Artemesia dracunculoides*	ARDR			1	4			1	1			7	0.055
Fringed sagebrush	*Artemesia frigida*	ARFR											0	0.000
Greene's rabbitbrush	*Chrysothamnus greenei*	CHGR											0	0.000
Rubber rabbitbrush	*Ericamerica nauseosus*	ERNA	9	3	1	4		1	12	4	8	4	46	0.359
Three leaf sumac	*Rhus trilobata*	RHTR											0	0.000
Tree cholla	*Cylindropuntia imbricata*	CYIM											0	0.000
Trees														
One-seed juniper	*Juniperus monospera*	JUMO											0	0.000
Twoneedle pinyon	*Pinus edulis*	PIED											0	0.000
													128	1.000
Total vegetative cover			17	17	8	13	20	8	18	6	10	11	128	51.200
Bare ground			7	5	15	10	2	15	5	13	11	13	96	38.400
Litter			1	3	2	2	3	2	2	6	4	1	26	10.400
			25	**25**	**25**	**25**	**25**	**25**	**25**	**25**	**25**	**25**	**250**	**100.000**

Shrub Density

2012.2013 Reclamation Unit	**1**	**2**	**3**	**4**	**5**	**6**	**7**	**8**	**9**	**10**		
Sept 2025											**Total**	**Average**
CHGR	0	0	0	0	0	0	0	0	0	0	0	0
ARFR	0	2	0	3	0	6	0	10	5	0	26	2.6
ERNA	32	12	44	32	0	9	41	24	76	22	292	29.2
FAPA	0	0	0	0	0	0	0	0	0	0	0	0
GUSA	0	14	1	4	3	3	1	2	1	17	46	4.6
RHTR	0	0	0	2	0	1	0	1	0	0	4	0.4
JUMO	0	0	0	0	0	0	0	0	0	0	0	0
ARDR	38	5	21	42	3	1	8	43	2	0	163	16.3
CYIM	0	0	0	0	0	0	0	0	0	0	0	0
PIED	0	0	0	0	0	0	0	0	0	0	0	0
OPPO	0	0	0	0	0	0	0	0	1	0	1	0.1
OPPH	0	1	0	0	0	0	0	0	0	0	1	0.1
Total	70	34	66	83	6	20	50	80	85	39	533	53.3
shrubs/acre	12196.8	5924.16	11499.84	14461.92	1045.44	3484.8	8712	13939.2	14810.4	6795.36	92869.92	9286.992

8.3 2014 East Reclamation Unit Data

Cover - Late Summer (September) 2025

2014 East Reclamation Unit Monitoring Transects

Common Name	Scientific Name	USDA Plant Symbol	1	2	3	4	5	6	7	8	9	10	Sum by Species	Rel.% Cover by Species
Grasses														
Alkali sacaton	*Sporobolus airoides*	SPAI											0	0.000
Blue grama	*Bouteloua gracilis*	BOGR		2			3	1			1		7	0.069
False buffalograss	*Munroa squarrosa*	MUSQ											0	0.000
Foxtail barley	*Hordeum jubatum*	HOJU											0	0.000
Indian ricegrass	*Achnatherum hymenoides*	ACHY			4	2			2		1	2	11	0.108
James' galleta	*Pleuraphis jamesii*	PLJA											0	0.000
Little bluestem	*Schizachyrium scoparium*	SCSC	4	2	5	1	8	5	6	3	3	3	40	0.392
Ring muhly	*Muhlenbergia torreyi*	MUTO											0	0.000
Sand dropseed	*Sporobolus cryptandrus*	SPCR						1					1	0.010
Sideoats grama	*Bouteloua curtipendula*	BOCU											0	0.000
Western wheatgrass	*Pascopyrum smithii*	PASM						1	1				2	0.020
Wheatgrass hybrid	*Agropyrum hybrid*	AGROPYRUM											0	0.000
Forbs	**Forbs**													
Adonis blazingstar	Mentselia multiflora	MEMU											0	0.000
Aster sp.	*Machaeranthera* species	MABI											0	0.000
Buckwheat species	*Eriogonum* species	ERIOGONUM											0	0.000
Buffalo bur	*Solanum rostratum*	SORO											0	0.000
Evening primrose	*Oenothera sp.*	OENOT											0	0.000
Field sagewort	*Artemeisa campestris*	ARCA											0	0.000
Greenleaf five-eyes	*Chamaesaracha coronopus*	CHCO											0	0.000
Hoary tansyaster	Machaeranthera canescens	MACA											0	0.000
Long-flowered skyrocket	*Ipomopsis longiflora*	IPLO											0	0.000
Milkvetch sp.	*Astragalus sp.*	ASTRAGALUS											0	0.000
Prickly Russian thistle	*Salsola tragus*	SATR											0	0.000
Rocky Mountain penstemon	*Penstemon strictus*	PEST											0	0.000
Russian thistle	*Salsola kali*	SAKA											0	0.000
Sweetclover	*Meliotus officinale (Meliotus alba)*	MEOF											0	0.000
Unknown forb (basal rosette)	Unknown forb species	UNK FORB											0	0.000
Shrubs and subshrubs	**Shrubs and Subshrubs**													
Broom snakeweed	Gutierrezia sarothrae	GUSA						2	1				3	0.029
False tarragon	*Artemesia dracunculoides*	ARDR							2	1			3	0.029
Fringed sagebrush	*Artemesia frigida*	ARFR							1				1	0.010
Greene's rabbitbrush	*Chrysothamnus greenei*	CHGR											0	0.000
Rubber rabbitbrush	*Ericamerica nauseosus*	ERNA	3	5		12	2			10		2	34	0.333
Three leaf sumac	*Rhus trilobata*	RHTR											0	0.000
Tree cholla	*Cylindropuntia imbricata*	CYIM											0	0.000
Trees														
One-seed juniper	*Juniperus monospera*	JUMO											0	0.000
Twoneedle pinyon	*Pinus edulis*	PIED											0	0.000
													102	1.000
Total vegetative cover			7	9	9	15	13	10	13	14	5	7	102	40.800
Bare ground			18	13	16	10	10	15	8	8	17	18	133	53.200
Litter			0	3	0	0	2	0	4	3	3	0	15	6.000
			25	**25**	**25**	**25**	**25**	**25**	**25**	**25**	**25**	**25**	**250**	**100.000**

Shrub Density

2014 East Reclamation Unit	**1**	**2**	**3**	**4**	**5**	**6**	**7**	**8**	**9**	**10**		
Sept 2025											**Total**	**Average**
CHGR												
ARFR		6		2	11	2	4	5	7	3	40	5
ERNA	14	31	3	22	2	1	7	12	8	25	125	12.5
FAPA											0	0
GUSA	15	4	27		15	49	32	6	6	30	184	20.4
RHTR					2			1			3	1.5
JUMO								1			1	1
ARDR	1		2	4		1	5	2		1	16	2.3
Total	30.0	41.0	32.0	28.0	30.0	53.0	48.0	27.0	21.0	59.0	369.0	36.9
shrubs/acre	5227.2	7143.8	5575.7	4878.7	5227.2	9234.7	8363.5	4704.5	3659.0	10280.2	64294.6	6429.5

8.4 2014 West Reclamation Unit Data

Cover - Late Summer (September) 2025

2014 West Reclamation Unit Monitoring Transects

Common Name	Scientific Name	USDA Plant Symbol	1	2	3	4	5	Sum by Species	Rel.% Cover by Species
Grasses									
Alkali sacaton	*Sporobolus airoides*	SPAI	1		4			5	0.075
Blue grama	*Bouteloua gracilis*	BOGR	5			1		6	0.090
False buffalograss	*Munroa squarrosa*	MUSQ						0	0.000
Foxtail barley	*Hordeum jubatum*	HOJU						0	0.000
Indian ricegrass	*Achnatherum hymenoides*	ACHY		2			1	3	0.045
James' galleta	*Pleuraphis jamesii*	PLJA			1			1	0.015
Little bluestem	*Schizachyrium scoparium*	SCSC		1		4		5	0.075
Ring muhly	*Muhlenbergia torreyi*	MUTO						0	0.000
Sand dropseed	*Sporobolus cryptandrus*	SPCR	5					5	0.075
Sideoats grama	*Bouteloua curtipendula*	BOCU						0	0.000
Western wheatgrass	*Pascopyrum smithii*	PASM	2	1				3	0.045
Wheatgrass hybrid	*Agropyrum hybrid*	AGROPYRUM						0	0.000
Forbs	**Forbs**								
Adonis blazingstar	Mentselia multiflora	MEMU						0	0.000
Aster sp.	*Machaeranthera* species	MABI						0	0.000
Buckwheat species	*Eriogonum* species	ERIOGONUM						0	0.000
Buffalo bur	*Solanum rostratum*	SORO						0	0.000
Evening primrose	*Oenothera sp.*	OENOT						0	0.000
Field sagewort	*Artemeisa campestris*	ARCA						0	0.000
Greenleaf five-eyes	*Chamaesaracha coronopus*	CHCO						0	0.000
Hoary tansyaster	Machaeranthera canescens	MACA						0	0.000
Long-flowered skyrocket	*Ipomopsis longiflora*	IPLO						0	0.000
Milkvetch sp.	*Astragalus sp.*	ASTRAGALUS						0	0.000
Prickly Russian thistle	*Salsola tragus*	SATR						0	0.000
Rocky Mountain penstemon	*Penstemon strictus*	PEST						0	0.000
Russian thistle	*Salsola kali*	SAKA						0	0.000
Sweetclover	*Meliotus officinale (Meliotus alba)*	MEOF						0	0.000
Unknown forb (basal rosette)	Unknown forb species	UNK FORB						0	0.000
Shrub, subshrubs, and succulents	**Shrub, subshrubs, and succulents**								
Broom snakeweed	Gutierrezia sarothrae	GUSA	5	1	10	1	1	18	0.269
False tarragon	*Artemesia dracunculoides*	ARDR	4	5	2		1	12	0.179
Fringed sagebrush	*Artemesia frigida*	ARFR						0	0.000
Greene's rabbitbrush	*Chrysothamnus greenei*	CHGR						0	0.000
Rubber rabbitbrush	*Ericamerica nauseosus*	ERNA		4		2	3	9	0.134
Three leaf sumac	*Rhus trilobata*	RHTR						0	0.000
Tree cholla	*Cylindropuntia imbricata*	CYIM						0	0.000
Trees									
One-seed juniper	*Juniperus monospera*	JUMO						0	0.000
Twoneedle pinyon	*Pinus edulis*	PIED						0	0.000
								67	1.000
Total vegetative cover			22	14	17	8	6	67	53.600
Bare ground			3	6	6	15	17	47	37.600
Litter			0	5	2	2	2	11	8.800
			25	**25**	**25**	**25**	**25**	**125**	**100.000**

Shrub Density

2014 West Reclamation Unit	**1**	**2**	**3**	**4**	**5**		
Sept 2025						**Total**	**Average**
CHGR						0	0
ARFR						0	0
ERNA		40	1	5	11	57	14.25
FAPA						0	0
GUSA	68	39	133	19		259	64.75
RHTR				3	1	4	2
JUMO				2		2	2
ARDR	33	86	21		37	177	44.25
CYIM						0	0
PIED						0	0
Total	101	165	155	29	49	499	99.8
shrubs/acre	17598.24	28749.6	27007.2	5052.96	8537.76	86945.76	17389.152

8.5 Reference Area Data

Cover - Late Summer (September) 2025

Reference unit Monitoring Transects

Common Name	Scientific Name	USDA Plant Symbol	1	2	3	4	5	6	7	8	9	10	Sum by Species	Rel.% Cover by Species
Grasses														
Alkali sacaton	*Sporobolus airoides*	SPAI											0	0.000
Blue grama	*Bouteloua gracilis*	BOGR	8	17	13	10	1	12	16	6	5	6	94	0.584
False buffalograss	*Munroa squarrosa*	MUSQ											0	0.000
Foxtail barley	*Hordeum jubatum*	HOJU				2							2	0.012
Indian ricegrass	*Achnatherum hymenoides*	ACHY											0	0.000
James' galleta	*Pleuraphis jamesii*	PLJA											0	0.000
Little bluestem	*Schizachyrium scoparium*	SCSC											0	0.000
Ring muhly	*Muhlenbergia torreyi*	MUTO			1					4			5	0.031
Sand dropseed	*Sporobolus cryptandrus*	SPCR	2				3	1			4	2	12	0.075
Sideoats grama	*Bouteloua curtipendula*	BOCU											0	0.000
Western wheatgrass	*Pascopyrum smithii*	PASM											0	0.000
Wheatgrass hybrid	*Agropyrum hybrid*	AGROPYRUM											0	0.000
Forbs	**Forbs**													
Adonis blazingstar	Mentselia multiflora	MEMU											0	0.000
Aster sp.	*Machaeranthera* species	MABI											0	0.000
Buckwheat species	*Eriogonum* species	ERIOGONUM											0	0.000
Buffalo bur	*Solanum rostratum*	SORO											0	0.000
Evening primrose	*Oenothera sp.*	OENOT											0	0.000
Field sagewort	*Artemeisa campestris*	ARCA											0	0.000
Greenleaf five-eyes	*Chamaesaracha coronopus*	CHCO											0	0.000
Hoary tansyaster	Machaeranthera canescens	MACA											0	0.000
Long-flowered skyrocket	*Ipomopsis longiflora*	IPLO											0	0.000
Milkvetch sp.	*Astragalus sp.*	ASTRAGALUS											0	0.000
Prickly Russian thistle	*Salsola tragus*	SATR				1	1	1					3	0.019
Rocky Mountain penstemon	*Penstemon strictus*	PEST											0	0.000
Russian thistle	*Salsola kali*	SAKA											0	0.000
Sweetclover	*Meliotus officinale (Meliotus alba)*	MEOF											0	0.000
Unknown forb (basal rosette)	Unknown forb species	UNK FORB											0	0.000
Shrub, subshrubs, and succulents	**Shrub, subshrubs, and succulents**													
Broom snakeweed	Gutierrezia sarothrae	GUSA		2	2	1	6	1			5	7	24	0.149
False tarragon	*Artemesia dracunculoides*	ARDR					4	3		1	2		10	0.062
Fringed sagebrush	*Artemesia frigida*	ARFR											0	0.000
Greene's rabbitbrush	*Chrysothamnus greenei*	CHGR											0	0.000
Rubber rabbitbrush	*Ericamerica nauseosus*	ERNA											0	0.000
Three leaf sumac	*Rhus trilobata*	RHTR											0	0.000
Tree cholla	*Cylindropuntia imbricata*	CYIM		1									1	0.006
Trees														
One-seed juniper	*Juniperus monospera*	JUMO	3			3							6	0.037
Twoneedle pinyon	*Pinus edulis*	PIED	2					2					4	0.025
													161	1.000
													Total	percent cover
Total vegetative cover			15	20	16	17	15	20	16	11	16	15	161	64.400
Bare ground			8	3	6	6	1	3	2	10	5	7	51	20.400
Litter			2	2	3	2	9	2	7	4	4	3	38	15.200
			25	**25**	**25**	**25**	**25**	**25**	**25**	**25**	**25**	**25**	**250**	**100.000**

Shrub Density													
Reference Unit		**1**	**2**	**3**	**4**	**5**	**6**	**7**	**8**	**9**	**10**		
Sept 2025												**Total**	**Average**
	CHGR	0	0	0	0	0	0	0	0	0	0	0	0
	ARFR	0	0	0	0	0	0	0	0	0	0	0	0
	ERNA	0	0	0	0	0	0	0	0	0	0	0	0
	FAPA	0	0	0	0	0	0	0	0	0	0	0	0
	GUSA	0	9	35	44	82	15	8	50	53	58	354	35.4
	RHTR	0	0	0	0	0	0	0	0	0	0	0	0
	JUMO	1	0	1	0	0	0	0	0	0	0	2	0.2
	ARDR	0	0	0	10	37	11	3	6	56	7	130	13
	CYIM	0	1	0	0	0	0	0	0	0	0	1	0.1
	PIED	1	0	1	0	0	0	0	0	0	0	2	0.2
	Total	2	10	37	54	119	26	11	56	109	65	489	48.9
	shrubs/acre	348.48	1742.4	6446.88	9408.96	20734.56	4530.24	1916.64	9757.44	18992.16	11325.6	85203.36	8520.336

Attachment 7-
Rocky Mountain Mine
Close Out Plan

Rocky Mountain Mine Closeout Plan

CR Minerals Company New Mexico LLC
Permit No. RA004RE
Rio Arriba County, New Mexico

Prepared for
CR Minerals Company

Prepared by
Barr Engineering Co.

May 2026

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Tables

Appendices

Executive Summary

CR Minerals Company New Mexico LLC operates the Rocky Mountain Mine, a long-standing surface pumice mining operation in Rio Arriba County, New Mexico, under New Mexico Mining Act Permit No. RA004RE. The mine has been in continuous operation since the mid-20th century and was formally permitted under the New Mexico Mining Act in June 1999. Since original permit issuance, reclamation and closeout obligations have been refined and implemented through a series of approved permit modifications and revisions, including Modifications 08-1, 10-1, 11-2, 12-1, 14-1, 16-1, 17-1, and 19-1.

This Closeout Plan consolidates approved reclamation standards, post-mining land use commitments, financial assurance milestones, and performance criteria contained in historic permit decisions and subsequent revisions into a single document consistent with current Mining and Minerals Division (MMD) expectations. The purpose of this document is to provide a comprehensive and transparent framework for final reclamation of all disturbed areas, including open pits, overburden stockpiles, haul roads, and ancillary disturbance areas, to a stable condition capable of supporting the approved post-mining land use of livestock grazing.

The Closeout Plan emphasizes concurrent reclamation, progressive reduction of reclamation liability through documented completion of grading and revegetation, and performance-based evaluation of reclamation success. Reclamation activities are designed to restore stable landforms, minimize erosion, protect surface and groundwater resources, and establish self-sustaining native vegetation communities consistent with surrounding rangeland ecosystems.

Concurrent with the preparation of this consolidated Closeout Plan, CR Minerals submitted Permit Revision 26-1, which documents additional completed reclamation and updates to the financial assurance framework and revegetation standards. Revision 26-1 builds on prior permit modifications, which collectively established reclamation performance requirements, expanded and refined the permit area, and documented progressive reclamation and partial financial assurance release.

Revision 26-1 includes completion of grading and revegetation on approximately 16 acres, final reclamation liability release for previously reclaimed areas (2011, 2012/2013, and 2014 West units), updates to financial assurance to reflect current cost assumptions, and refinement of revegetation success criteria based on site-specific performance.

1 Project Description

1.1 Introduction

CR Minerals Company New Mexico LLC (CR Minerals) owns and operates the Rocky Mountain Mine, a surface pumice mining operation located approximately 5.5 miles west of Española, New Mexico, in Rio Arriba County. The mine operates under New Mexico Mining Act Permit No. RA004RE, originally approved in June 1999.

This Closeout Plan is submitted to consolidate and clarify the approved reclamation and closure requirements developed through the original permit, subsequent permit modifications, and approved revisions. Historic closeout provisions for this mine are distributed across multiple permit actions; this document synthesizes those requirements into a single, comprehensive, regulator-ready Closeout Plan consistent with the Mining and Minerals Division (MMD) Closeout Plan Guidelines and 19.10 NMAC.

The objective of this Closeout Plan is to ensure that all disturbed areas are reclaimed to a stable condition capable of supporting the approved post-mining land use of livestock grazing and open rangeland, and to provide a clear framework for final reclamation, monitoring, and bond release.

1.2 Site and Permitting History

Pumice extraction at the Rocky Mountain Mine began as early as the mid-20th century under prior ownership. CR Minerals acquired the mine in 1997 and consolidated earlier filings into Permit No. RA004RE in 1999. Since original permit issuance in 1999, the Mining and Minerals Division (MMD) has approved a series of permit modifications and revisions that collectively define the current reclamation framework:

Modification 08-1 (2010) refined reclamation requirements, established financial assurance, and approved vegetation reference areas;

Modification 10-1 (2011) expanded the permit area through approval of the Northwest Resource Area;

Modifications 11-2, 12-1, and 14-1 (2012–2015) documented completed reclamation and approved partial releases of financial assurance based on grading, seeding, and revegetation progress;

Modification 16-1 (2016) updated post-mining topography and grading design;

Modification 17-1 (2017) updated financial assurance instruments and calculations in accordance with revised cost guidance;

Modification 19-1 (2020) approved an additional mining unit and associated closeout requirements and financial assurance adjustments.

These permit actions document a continuous progression of mining, concurrent reclamation, and staged financial assurance release. Revision 26-1 (2026) represents the next step in this progression by documenting completion of additional reclamation areas and transitioning previously partially released areas to final liability release status following fulfillment of revegetation monitoring requirements.

2 Site-Specific Characteristics

2.1 Permit Area and Disturbance

The approved permit area encompasses approximately 542 acres across Sections 33 and 34, Township 21 North, Range 7 East, Rio Arriba County, New Mexico. Cumulative disturbance is approximately 82 acres and includes open pits, overburden and topsoil stockpiles, haul roads, and temporary disturbance areas associated with active mining blocks.

Mining is conducted in discrete units, allowing reclamation of previously mined areas while mining continues elsewhere within the permit boundary.

Disturbance accounting has been refined through multiple permit modifications, including expansion of mining units (Modification 10-1 and 19-1) and progressive reclamation of previously mined areas. As of Revision 26-1, approximately 16 acres of mined-out areas have completed grading and seeding and are no longer included in active earthwork reclamation liability.

Previously reclaimed areas (2011, 2012/2013, and 2014 West units) have completed the required revegetation monitoring period and are eligible for final release from reclamation liability, consistent with the staged bond release provisions established under Modifications 11-2, 12-1, and 14-1.

2.2 Past and Current Mining Methods

Mining consists of surface excavation of pumice using conventional earth-moving equipment. Overburden is removed to expose pumice deposits, and extracted pumice is stockpiled for shipment off-site. Overburden from subsequent cuts is placed into mined-out areas, integrating backfilling into ongoing operations.

Pits are shallow and do not intersect groundwater. No permanent buildings, processing plants, tailings impoundments, leach pads, or chemical treatment systems are present within the permit area.

Mining methods have remained consistent throughout the permit term; however, permit modifications (including 10-1 and 19-1) introduced additional mining units within the approved permit boundary. Reclamation continues to be integrated into mining operations, with overburden placement, grading, and revegetation occurring concurrently. This approach has enabled the progressive reclamation and staged reduction of reclamation liability documented in Modifications 11-2, 12-1, 14-1, and Revision 26-1.

2.3 Climate and Hydrology

The site is located in a semi-arid, high-desert climatic setting characterized by low annual precipitation, high evapotranspiration rates, and episodic storm events. Surface drainage within the permit area is ephemeral and dominated by sheet flow. No perennial or intermittent streams occur within the permit boundary, and mining activities do not encounter groundwater.

Stormwater management during operations is covered under applicable NPDES/Multi-Sector General Permit requirements

2.4 Geology

The Rocky Mountain Mine exploits near-surface pumice deposits. Mined materials are non-acid forming and do not present chemical water quality concerns based on historical permitting records.

2.5 Soils and Vegetation

Native soils in the area are generally thin and rocky. Reclamation relies on grading, surface roughening, and natural soil development and topsoil salvage. Native vegetation communities are dominated by perennial grasses and shrubs adapted to grazing.

2.6 Wildlife

Wildlife species present are typical of high-desert rangeland ecosystems. Reclamation activities are designed to restore habitat suitable for existing wildlife use. No wetlands, riparian areas, or critical wildlife habitat occur within disturbed areas.

2.7 Cultural Resources

No known cultural resources have been identified within areas disturbed by mining activities. Operations are conducted in accordance with applicable cultural resource protection requirements.

3 Post-Closure Land Use

3.1 Proposed Post-Mining Land Use

The approved post-mining land use for the Rocky Mountain Mine is livestock grazing, and has remained unchanged through all permit modifications and revisions. All reclamation activities continue to be designed to meet the performance standards necessary to support long-term rangeland use consistent with surrounding land uses.

3.2 Future Land Use and Ownership

Reclamation methods are designed to establish stable landforms, accessible slopes, and self-sustaining native vegetation communities compatible with long-term grazing. Surrounding land uses are predominantly grazing and undeveloped open land, and the post-mining land use is consistent with existing land use patterns. No zoning changes or changes in ownership are proposed. No change in land ownership or zoning is proposed following completion of reclamation activities.

4 Waiver from Self-Sustaining Ecosystem or Land Use

No waiver from the requirement to establish a self-sustaining ecosystem or the approved post-mining land use is requested. All disturbed areas will be reclaimed in accordance with Mining Act performance and reclamation standards.

5 Description of Closeout Activities

5.1 Facilities and Equipment Removal

The Rocky Mountain Mine has no permanent structures requiring demolition. All equipment is mobile and will be removed upon cessation of mining activities.

5.2 Grading and Landform Reclamation

Final reclamation includes reducing highwalls greater than 10 feet to stable slopes (generally 3H:1V or flatter), grading pit floors and stockpiles to smooth, erosion-resistant landforms, and ensuring positive surface drainage. Final slopes are designed to blend with surrounding topography and minimize long-term erosion potential.

5.3 Growth Media Placement and Surface Preparation

Overburden and salvaged topsoil are used as growth media. Growth media is placed on pit bottoms and other surfaces with exposed pumice or unsuitable material. Other surfaces (roads, compacted areas…) are ripped to depths of approximately 1–2 feet to improve infiltration and rooting. Slopes steeper than approximately 4H:1V are contour-plowed where necessary to control erosion.

5.4 Revegetation

Revegetation is performed using drill seeding, broadcast seeding, harrowing, or hydroseeding depending on slope and surface conditions. Mulch and tackifiers are applied as needed. Seed mixes consist of native grasses, forbs, and shrubs approved by MMD and refined over time based on site performance.

Revision 26-1 includes an updated seed mix emphasizing native species that have demonstrated successful establishment under site conditions. The updated mix removes species with limited success and prioritizes grasses, forbs, and shrubs that have performed well based on recent vegetation monitoring results, while remaining consistent with the revegetation objectives established in the original permit and subsequent modifications

5.5 Revegetation Monitoring and Success Criteria

Revegetation monitoring requirements were originally established in the 1999 closeout plan and further implemented through subsequent permit modifications, including Modifications 11-2, 12-1, and 14-1, which supported partial financial assurance release based on demonstrated reclamation success.
In accordance with Revision 26-1, revegetation success will be evaluated using performance-based criteria including:

- Shrub Density: Equal to or greater than 75 percent of the approved reference area with a 90% statistical confidence limit.
- Total Cover, Perennial Species: Equal to or greater than 75 percent of the approved reference area with a 90% statistical confidence interval.
- Evidence of self-sustaining vegetation communities
- Long-term surface stability and erosion control

The total vegetative productivity requirement previously included in the success criteria has been removed to better reflect site-specific conditions and long-term monitoring results.

5.6 Roads

Temporary haul roads that do not have a post-mining use will be reclaimed through ripping, regrading, and revegetation. Any roads retained for post-mining access will be stabilized and maintained to minimize erosion. Unnecessary access will be discouraged through surface reclamation and natural revegetation.

6 Environmental Standards Compliance

Mining and reclamation activities are expected to comply with all applicable federal and state environmental standards, including air quality, surface water, and groundwater protection requirements. The mine operates under applicable NPDES/MSGP coverage for stormwater discharges. Mined materials are non-acid forming, and no acid rock drainage is expected. Reclamation areas demonstrate stable surfaces, no evidence of ongoing erosion, and no direct hydrologic connection to defined drainage channels. Surface water movement occurs primarily as sheet flow across reclaimed areas, consistent with site conditions and reclamation design standards established in the permit and subsequent modifications. Rainfall in the area is low and the underlying sandstone layer is assumed to have a high infiltration rate. This leads to the conclusion that any impounded water would be ephemeral in nature. Keeping in mind these expectations, CR Minerals has designed a sampling program as follows:

The site will be visited during the early spring months of each year for the first 5 years following closure and searched for impounded water. If water is found, it will be sampled. Samples will be analyzed for pH, SC, TDS, TSS, calcium, magnesium, sodium, potassium, total alkalinity, bicarbonate, carbonate as C03, sulfate, total Kjeldahl nitrogen, and nitrate plus nitrite as N.

7 Closeout Plan Schedule

Reclamation is conducted concurrently with mining throughout the life of the operation. Final reclamation will occur upon cessation of mining and completion of economically recoverable pumice extraction. Revegetation monitoring will continue through the established liability period, after which final bond release may be requested.

Activity	Begin	Duration	End
Backfilling	Ongoing	Life of mine	End of mine life
Grading and Contouring	Ongoing	Life of mine plus one year	One year after end of mine life
Growth Media Placement	One year prior to the completion of mining	Two Years	One year after end of mine life
Seed Bed Preparation	One year prior to completion of Mining	Two Years	One year after end of mine life
Seeding	At first favorable season after completion of mining	One Month	First favorable season following one year after end of mine life

Table 1: Reclamation Work Schedule

8 Closeout Plan Permitting Requirements

This Closeout Plan will be updated as required under 19.10 NMAC and in conjunction with revisions to the approved financial assurance.

9 Post-Closeout Maps

Post-reclamation surface configurations are depicted on approved post-mining topography maps included in the permit and subsequent modifications. These maps illustrate the anticipated landform configuration upon completion of closeout activities.

10 Cost Estimate and Financial Assurance

Financial assurance for the Rocky Mountain Mine has been updated progressively through multiple permit modifications, including Modifications 08-1, 11-2, 12-1, 14-1, 17-1, and 19-1, which established, adjusted, and partially released financial assurance based on reclamation progress and updated cost models.

Under Revision 26-1, financial assurance has been updated to reflect:

- Completion of grading and revegetation on approximately 16 acres
- Final reclamation liability release for the 2011, 2012/2013, and 2014 West reclamation units
- Updated reclamation cost assumptions, including unit cost escalation

The total financial assurance amount is updated to approximately $707,591 based on the NM MMD reclamation cost model and current cost data. The financial assurance instrument remains in place, and acreage released from reclamation liability is reallocated within the model to support ongoing and future reclamation obligations within the approved permit area.

Table 2- History Of FA Calculations

Rocky Mountain Mine History Of FA Calculations

Permit/Modification/Revision	Permit Date	Cost Estimate	Acres of Disturbance (Permit Area on CR Minerals = 193 acres; Permit Area on BLM = 349 acres)	Cumulative Disturbance	Acres Reclaimed (EW or seed)	Cumulative Acres Reclaimed	Change in FA	Total FA amount		Notes
RA004RE	2/29/99		145	145			$289,810.00	$ 289,810.00		
Mod 08-1	8/18/2010	$355,342.00		145			$65,532.00	$ 355,342.00	Change FA assessment to 5 year interval	
Mod 10-1	1/24/2011		6.1	151.1			$0.00	$ 355,342.00		
Mod 11-2	3/21/2012			132.6	18.5	18.50	-$42,810.00	$ 312,532.00		18.5 (EW); 17.5 (seed) co-located
Rev 11-1	7/6/2012	$409,179.00	42	174.6		18.50	$97,354.00	$ 409,886.00		Disturbance = 164.02 acres in disturbance area (156.42 ac on BLM, 7.6 ac on CRM)
Mod 12-1	2/12/2013			156.65	17.95	36.45	-$37,838.00	$ 372,048.00		17.95 (EW)
Mod 14-1	2/10/2015			135.65	21	57.45	-$23,764.00	$ 348,284.00		10.76 (EW); 28.19 (seed - colocated with 17.95 acres reclaimed in 12-1)
Mod 16-1	8/29/2016			135.65		57.45	$0.00	$ 348,284.00		reduced post-mining surface elevations; no FA change
Mod 17-1	5/31/2017	$505,366.00		135.65		57.45	$157,082.00	$ 505,366.00		FA review
Mod 19-1	8/28/2020		14.12	149.77		57.45	$127,616.00	$ 632,982.00		
Rev 26-1	May-26		16.4	150.1	16	73.50	$74,609.00	$ 707,591.00		

Appendix 1

Project Location Map

Legend

- County Boundary
- U.S. Highway
- State Route

0 2 4 6

Miles

Data Sources: CR Minerals, Barr, Esri

Rocky Mountain Mine Modification
CR Minerals

Project Location

BARR

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Appendix 2

Mining and Reclamation Areas Map

BLM West Mining Area

BLM East Mining Area

7.8 acres

8.4 acres

4.8 acres

20.7 acres

7.5 acres

25.4 acres

W1 NW W2 W3

C1 C2 C3 C4 C5 C6 C7

E18 E17 E16 E15 E14 E13 E12 E11 E10 E9 E8 E7 E6 E5 E4 E3 E2 E1

31 MILE ROAD

Legend

- Mining Block
- 2011 Reclamation Area
- 2012/2013 Reclamation Area
- 2014 East Reclamation Area
- 2014 West Reclamation Area
- 2024 Reclamation Area
- Reclamation Area
- BLM Mining Area
- CR Minerals Property
- Other BLM Land
- Fence
- Road

0 500 1,000

Feet

Data Sources: CR Minerals, Barr, Esri

Rocky Mountain Mine Modification
CR Minerals

Mining Reclamation Areas and New Disturbance

February 2026

BARR

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