

PERMIT NO. RA004RE
ROCKY MOUNTAIN MINE
EXISTING MINING OPERATION

MINING AND MINERALS DIVISION
ENERGY, MINERALS AND NATURAL RESOURCES DEPARTMENT

Permit No. RA004RE is issued by the Director of the Mining and Minerals Division (MMD) of the New Mexico Energy, Minerals and Natural Resources Department to:

CR Minerals Company New Mexico LLC
PO Box 4305
Santa Fe, NM 87502

(Permittee) for the Rocky Mountain Mine, located in Rio Arriba County, New Mexico.

Section 1. **STATUTES AND REGULATIONS**

- A. This Permit is issued pursuant to the New Mexico Mining Act, NMSA 1978, §69-36-1, *et seq.* (1993).
- B. This permit is subject to all applicable requirements of the New Mexico Mining Act (Act), New Mexico Mining Act Rules, Subparts 1-14 (Rules), and any other regulations which are now or hereafter in force under the Act; and all such regulations are made a part of this Permit by this reference.

Section 2. **PERMIT APPLICATION PACKAGE**

The Permit Application Package (PAP) is comprised of the following Documents:

- A. *CR Minerals Company Rocky Mountain Mine Mining Permit Application and Close Out Plan*, dated June 1999, which includes the Site Assessment, Permit Application, and Closeout Plan;
- B. Site Plans with the following titles:
 - 1) *Rocky Mountain Mine General Location Map* (Figure 1);
 - 2) *Rocky Mountain Mine Existing Topography* (Map No. MPA-01), dated June 16, 1999;
 - 3) *Rocky Mountain Mine Post Mining Topography* (Map No. MPA-02), dated June 16, 1999;
 - 4) *Backfill Mat'l, Reveg Mon. Plan & Public Notice Components for Rocky Mountain Mine Permit Application*, dated October 3, 1997.

Section 3. **PERMIT AREA AND DESIGN LIMITS**

- A. The permit area encompasses a portion of Section 33, Township 21 North, Range 7 East, in Rio Arriba County, New Mexico (NMPM). The approved permit area is delineated in the PAP on the site plan titled *Rocky Mountain Mine General Location Map*.
- B. The approved design limits are delineated in the PAP on the site plan titled *Rocky Mountain Mine Existing Topography*. The following units are approved as existing units and are subject to the reclamation standard of §507.A.
 - 1) West Pit Area;
 - 2) Active Mining Area.
- C. The West Pit Area contains pits and overburden stockpiles which are inactive. The Active Mining Area contains a pit which is concurrently reclaimed.

Section 4. **FINDINGS OF FACT**

- A. The Permit Application and Closeout Plan are complete and contain all of the information required, as required by §503.F.1 and §506.J.1 of the Rules;
- B. The Permittee has provided written information stating the name and official business address of the Permittee and its agent for service of process, as required by §503.F.2 of the Rules;
- C. The Permittee has provided the required signature and certification, as required by §503.F.3 of the Rules.
- D. The Permittee is in compliance with Rule 2 regarding fees.
- E. Public notice for the Permit Application was given as required by Subpart 9 and §503.F.5 of the Rules. Public notice for the Closeout Plan was given as required by Subpart 9 and §506.J.1 of the Rules.
- F. The Permittee has provided satisfactory financial assurance to complete the Closeout Plan in the amount of \$289,810 as required by §506.J.2. The financial assurance instrument is a surety bond in a form acceptable to the Director.

- G. The approved Post-Mining Land Use (PMLU) for the entire permit area is livestock grazing. The Closeout Plan demonstrates that the work to be done will reclaim disturbed areas within the permit area to a condition that allows for the re-establishment of a self-sustaining ecosystem on the permit area following closure, appropriate for the life zone of the surrounding areas.
- H. The Naturally Reclaimed Areas noted on Map No. MPA-02, *Rocky Mountain Mine Post Mining Topography*, will be reclaimed by interseeding, if needed to achieve revegetation success. Interseeding will be performed by the broadcast method. The seed mix found in Table 6 of *"Vegetation, Wildlife, and Revegetation Components for Rocky Mountain Pumice Mine Permit Application"* (Exhibit 6 of Permit Application), will be applied.
- I. The West Pit Area listed in Section 3.B, excluding the Naturally Revegetated Areas, will be reclaimed by: 1) grading and contouring of the surface to be reclaimed; 2) placement of growth media; 3) seed bed preparation; and 4) seeding. Grading and contouring will provide a smooth, undulating surface consistent with the post mining contours, as shown on Map No. MPA-02, *"Rocky Mountain Mine Post Mining Topography."* Highwalls greater than 10 feet in height will be reduced in slope and recontoured. Overburden averaging one foot depth will be placed on the floors of mined-out pits that are not backfilled and on surfaces that have pumice as their predominant surface material. Seed beds will be ripped to a depth of 1-to-2 feet. Slopes of 4h:1v and steeper will be contour plowed. Seeding will be accomplished appropriately by any combination of the following techniques: drilling, broadcasting, and hydroseeding. The seed mix found in Table 6 of *"Vegetation, Wildlife, and Revegetation Components for Rocky Mountain Pumice Mine Permit Application"* (Exhibit 6 of Permit Application), will be applied.
- J. The Active Mining Area listed in Section 3.B will be reclaimed by: 1) backfilling of mined areas with overburden from un-mined areas; 2) grading and contouring of the surface to be reclaimed; 3) placement of growth media; 4) seed bed preparation; and 5) seeding. Mined-out pits will be backfilled with overburden during mine operations; however, the last pit remaining at closure is not required to be backfilled. Grading and contouring will provide a smooth, undulating surface consistent with the post mining contours, as shown on Map No. MPA-02, *"Rocky Mountain Mine Post Mining Topography."* Highwalls greater than 10 feet in height, including the last pit remaining at mine closure, will be reduced in slope and recontoured. Overburden averaging one foot depth will be placed on the floors of mine-out pits that are not backfilled and on surfaces that have pumice as their predominant surface material. Seed beds will be ripped to a depth of 1-to-2 feet. Slopes of 4h:1v and steeper will be contour plowed. Seeding will be accomplished appropriately by any combination of the following techniques: drilling, broadcasting, and hydroseeding. The seed mix found in Table

6 of “*Vegetation, Wildlife, and Revegetation Components for Rocky Mountain Pumice Mine Permit Application*” (Exhibit 6 of Permit Application), will be applied.

- K. The Active Mining Area and West Pit Area listed in Section 3.B, including the Naturally Revegetated Areas, will be reclaimed to meet the final revegetation success standard or, if not yet approved by MMD, the interim revegetation success standard of the Closeout Plan.
- L. Post-reclamation contours, as shown on Map No. MPA-02, “Rocky Mountain Mine Post Mining Topography,” are conceptual in design and will vary depending on material quantity, quality, depth, and demand for the product. Slopes shown are approximately 3h:1v, excepting Naturally Revegetated Areas, where maximum slopes are angle-of-repose. Upon completion of reclamation the property will contain several small service roads to allow access through and around the property.
- M. Final erosion control measures will be field-fit to the actual reclaimed topography and will be designed, constructed, and maintained to recognized professional standards (e.g., U.S. Natural Resources Conservation Service). There may be one or more permanent impoundments in the post mining topography. All impoundments will have two sampling events (one spring and one fall) conducted at some time after commencement of reclamation and prior to release of financial assurance.
- N. The Secretary of Environment has provided a written determination stating that the Permittee has demonstrated that the activities to be permitted or authorized will be expected to achieve compliance with all applicable air, water quality, and other environmental standards enforced by the New Mexico Environment Department, if carried out as described in the Closeout Plan, as required by §506.J.5.
- O. The Permittee has submitted a notarized statement signed by the Permittee that he agrees to comply with the performance and reclamation standards and requirements of the permit, Subpart 5, and the Act and allows the Director to enter the permit area without delay for the purpose of conducting inspections during mining and reclamation, as required by §503.F.6 and §506.J.6.

Section 5. COMPLIANCE REQUIREMENTS

The Permittee shall comply with the statutes and regulations in Section 1 and with the applicable regulatory and permitting requirements. The issuance of this permit does not relieve the Permittee from the responsibility of complying with other state and federal requirements and standards.

Section 6. **AGENCY RIGHT OF ENTRY**

The Permittee shall allow the authorized representatives of the Director without advance notice or a search warrant, upon presentation of appropriate credentials, and without delay to:

- A. enter as provided for in §503.F.6, and §1101.E.1 of the Rules; and
- B. be accompanied by one or more citizens for the purpose of conducting an inspection in accordance with §1210.B of the Rules when the inspection is in response to a complete financial assurance release application.

Section 7. **PERMIT COVERAGE**

This permit shall be binding on any person or persons conducting mining or reclamation operations under this Permit.

Section 8. **COMPLIANCE WITH THE PERMIT**

The Permittee shall comply with the approved PAP, any and all conditions that are incorporated into the PAP, and any revisions or modifications approved by the Director.

Section 9. **CONDITIONS**

This permit is subject to the following conditions:

- A. The Permittee may be subject to enforcement action according to Subpart 11 of the Rules for failing to conduct reclamation and closeout operations as described in the Closeout Plan or for failing to submit any of the following:
 - 1) annual reports as required by §509;
 - 2) annual fees as required by §202.
- B. The Permittee shall submit an application for permit revision for standby status pursuant to §505 and Subpart 7 if: 1) cessation of mining operations exceeds 180 days after approval of the Closeout Plan and 2) the Permittee desires to suspend reclamation pursuant to the Closeout Plan.

- C. If the Permittee conducts exploration within the permit area, the following criteria must be met, unless otherwise provided in the Closeout Plan. First, all roads and drill sites will be constructed to the minimum size to safely access and conduct exploration activities. Second, all areas affected by exploration activities, including roads and drill sites, will be seeded and water bars and other sediment control structures will be constructed to control sediment loss until areas are established with stabilizing vegetation. The Permittee shall identify any areas of new disturbance due to exploration activities in each annual report submitted to MMD. If the Permittee conducts exploration within the permit area which exceeds 5 acres, financial assurance shall be provided for exploration associated disturbances.
- D. MMD approval of the final revegetation success standard is contingent upon MMD approval of a reference area.
- E. Highwalls greater than 10 feet in height will be reduced to a slope of 3h:1v or flatter.
- F. The Naturally Revegetated Areas will be reclaimed by: 1) grading and contouring of the surface to be reclaimed; 2) seed bed preparation; and 3) augmented seeding, if reclamation specified in Section 4.H does not result in compliance with the final revegetation success standard or, if not yet approved by MMD, the interim revegetation success standard. The Permittee shall provide an annual status report on the Naturally Revegetated Areas to MMD with the annual report due every April 30th.
- G. The Permittee shall prevent the crest of pit slopes from exceeding approved design limits through highwall failures by implementing pit wall monitoring, geotechnical evaluation, slope reduction, erosion control measures, or other preventive measures. The Permittee shall notify MMD if crests of pit slopes exceed design limits through highwall failures, which may create new disturbances not included in approved design limits and may change affected areas. The Permittee shall provide an annual summary of all actions taken to control pit highwall failure to MMD with the annual report due every April 30th.
- H. The Permittee shall prevent material from waste dumps from exceeding approved design limits through surface water runoff to adjacent land by implementing berms, sediment ponds, or other erosion control measures. The Permittee shall notify MMD if waste material exceeds design limits through surface water runoff to adjacent land, which may create new disturbances not included in approved design limits and may change affected areas.
- I. The Permittee shall evaluate the adequacy of the financial assurance approved as a part of the permit every two years, beginning April 30, 2001. This evaluation to MMD shall be provided with the annual report due every April 30th.

- J. The Permittee shall notify MMD 30 days prior to performing reclamation activities upon closure of the mine.

Section 10. **CONCLUSIONS OF LAW**

- A. The Director has jurisdiction over the Permittee and the subject matter of this proceeding.
- B. The PAP is complete, accurate and complies with the requirements of the Act and §502, §503, §506, and §507.A of the Rules.
- C. The Permittee, CR Minerals Company New Mexico LLC, is permitted to conduct mining and reclamation operations at the Rocky Mountain Mine in Rio Arriba County, New Mexico, upon the condition that the Permittee complies with the requirements of the Order, the Act, the Permit Conditions and requirements imposed by this permit.

CERTIFICATION

I certify that I have personally examined and am familiar with the information submitted herein, and based on my inquiry of those individuals responsible for obtaining the information, I believe the submitted information is true, accurate, and complete.

I certify that I have read, understand and will comply with the requirements of this Permit. I also agree to comply with the performance standards and requirements of this permit, the Rules, and the Act, and allow the Director to enter the Rocky Mountain Mine permit area without delay for the purpose of conducting inspections.



Authorized Representative of the Permittee

PLANT MANAGER

Title

CR Minerals Company New Mexico LLC

Subscribed and sworn to before me this 29 day of September, 1999



Notary Public

My Commission Expires

March 14, 2002


ORDER

NOW THEREFORE, IT IS HEREBY ORDERED that the Permit Application of CR Minerals Company New Mexico LLC to conduct mining, closeout, and reclamation operations at the Rocky Mountain Mine in Rio Arriba County, New Mexico is approved. The Permit may not be transferred without approval by the Director. The Permit is subject to all conditions set out in the Director's Findings of Fact, Conditions, Conclusions of Law, and Order.

By Order of the Director, Mining and Minerals Division, Energy, Minerals and Natural Resources Department, of the State of New Mexico.

Mining and Minerals Division

The State of New Mexico

BY: 
Douglas M. Bland, Director
Mining and Minerals Division
Energy, Minerals and Natural
Resources Department

DATED: 9/29/99