PERMIT REVISION 11-1 TO PERMIT NO. RA004RE ROCKY MOUNTAIN MINE EXISTING MINING OPERATION

MINING AND MINERALS DIVISION ENERGY, MINERALS AND NATURAL RESOURCES DEPARTMENT

Permit Revision 11-1 to 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, LLC ("CR Minerals")

Whose correct address is: P.O. Box 708

Ohkay Owingeh, NM 87566

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

A. This Permit Revision incorporates the Closeout Plan and New Unit Standards for the New Unit Expansion at the Rocky Mountain Mine into Permit No. RA004RE. The Permittee will disturb up to an additional 42 acres total cumulative acreage in the Rocky Mountain Mine New Unit – BLM East Permit Area. This area includes Mining Blocks E1 and E2. The Permittee is authorized to conduct mining and reclamation operations in additional areas within the Rocky Mountain Mine New Unit – BLM East Permit Area. The Permittee shall provide acceptable financial assurance pursuant to 19.10.12 NMAC prior to disturbing additional areas in the BLM East Permit Area, and/or shall obtain MMD approval of financial assurance release for Mining Blocks E1 and E2, or portions thereof, pursuant to 19.10.12.1210 NMAC The Permittee shall conduct mining and reclamation operations only as described in the 2011 PRP and any other modifications and revisions approved by the Director.

The following sections of Permit No. RA004RE are added or revised to read as follows:

Section 1(11-1). PERMIT APPLICATION PACKAGE

- A. The 2011 Permit Revision Package ("2011 PRP") is comprised of the following documents:
 - 1. Permit RA004RE New Unit Modification, Rocky Mountain Mine BLM East, dated September 21, 2011, submitted by CR Minerals Company, LLC.
 - 2. Proof of Public Involvement Pursuant to 19.10.9.903 NMAC for New Unit Revision to Permit No. RA004RE, dated October 4, 2011, submitted by CR Minerals Company, LLC.

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- 3. Proof of Public Involvement Pursuant to 19.10.9.903(I) NMAC for New Unit Revision to Permit No. RA004RE, dated October 24, 2011, submitted by CR Minerals Company, LLC.
- 4. Letter of Credit Estimate for New Unit Revision, dated November 8, 2011, submitted by CR Minerals Company, LLC.
- 5. Newly Calculated Letter of Credit Estimate, dated January 19, 2012, submitted by CR Minerals Company, LLC.
- 6. Response to New Mexico Mining and Minerals Division (MMD) Furnished Comment; Response to Comments from Other Agencies; and Revised Reclamation Cost Estimate, dated February 27, 2012, submitted by CR Minerals Company, LLC.
- 7. Irrevocable Standby Letter of Credit Number IS0011842, for \$97,354, issued by Wells Fargo Bank, N.A., dated May 10, 2012, submitted by CR Minerals Company, LLC.
- 8. Amendment to Irrevocable Standby Letter of Credit IS0011842, issued by Wells Fargo Bank, N.A., dated June 29, 2012, submitted by CR Minerals Company, LLC.

Section 2(11-1). PERMIT AREA AND DESIGN LIMITS

- A. The Rocky Mountain Mine New Unit BLM East Permit Area, covering 349 acres, encompasses a portion of Sections 33 and 34, T21N, R7E. The following maps from the September 21, 2011 New Unit Modification (revision) application for the Rocky Mountain Mine New Unit BLM East revises the permit boundary designated in Section 3 of Permit No. RA004RE approved on September 29, 1999:
 - 1. Figure 2. BLM-East Mining Phases, Blocks, Stockpiles, and Overburden Movement Directions;
 - 2. Figure 4. Map of Project Area, Active Mine, and Vegetation Reference Area.
- B. The approved design limits are identified in the September 21, 2011 New Unit Modification (revision) application for the Rocky Mountain Mine New Unit BLM East. The units identified as Mining Blocks E1 through E18 will cover 232 disturbed acres: and the remainder of the BLM East Design limits, including the Overburden Piles, Pumice Stockpiles, and Soil Stockpiles covering an additional approximately 117 acres are shown in Figure 2. BLM-East Mining Phases, Blocks, Stockpiles, and Overburden Movement Directions, is approved as a new unit named the Rocky Mountain Mine New Unit BLM East, and is subject to the reclamation standard of 19.10.5.507.A NMAC and the New Unit requirements of 19.10.5.508 of the Rules.

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Section 3 (11-1). FINDINGS OF FACT

- A. The 2011 PRP is complete and contains all of the information required, with the conditions outlined in this revision document, as required by 19.10.5.503.F.1 and 19.10.5.506.J.1-6 NMAC.
- B. The Permittee submitted the permit revision fee of \$5,000 on August 29, 2011as required by 19.10.2.201.J NMAC.
- C. The Permittee has provided written information stating the name and official business address of the applicant and its agent for service of process, as required by 19.10.5.503.F.2 NMAC.
- D. The Permittee has provided the required signature and certification, as required by 19.10.5.503.F.3 NMAC.
- E. The Permittee is in compliance with 19.10.2 NMAC regarding fees.
- F. The 2011 PRP has been determined to be administratively complete, as required by 19.10.5.506.D NMAC.
- G. The Director has consulted with other government agencies, pursuant to 19.10.5.505.B(3)
- H. The 2011 PRP has been determined to be approvable, as required by 19.10.5.506.G NMAC.
- I. The Permittee has provided proof that the public notice for the 2011 PRP was provided and an opportunity for a public hearing was provided Pursuant to 19.10.9, 19.10.5.503.F.5, and 19.10.5.506.J.1 NMAC. A public hearing pursuant to 19.10.9.904 NMAC was not requested and MMD did not hold a public hearing absent of a request for a public hearing.
- J. The Permittee has provided adequate financial assurance to complete the Closeout Plan for Mining Blocks E1 and E2 (approximately 42 acres) in the amount of \$97,354.00 as required by 19.10.5.506.J.2 NMAC. The financial assurance instrument is an Irrevocable Standby Letter of Credit issued by the Wells Fargo Bank, N.A. and is in a form acceptable to the Director.
- K. The approved Post-Mining Land Use ("PMLU") for the Permit expansion area is livestock grazing. The 2011 PRP, subject to conditions in this Permit Revision, 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.
- L. Pursuant to 19.10.5.506.J(5) NMAC, The Secretary of the Environment Department provided

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a written determination on December 9, 2011, 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 if carried out as described in the Closeout Plan.

Section 8 (11-1). COMPLIANCE WITH THE PERMIT AND OTHER PERMITS

This permit revision incorporates the language and obligations of Permit No. RA004RE.

Section 9 (11-1). GENERAL OBLIGATIONS AND CONDITIONS

The conditions outlined in this section are required for the Permittee to meet the requirements of the New Mexico Mining Act Rules.

This Permit is subject to the following conditions:

- A. The Permittee is authorized to disturb no more than 42 acres total cumulative acreage in the Rocky Mountain Mine New Unit BLM East Permit Area. This area includes Mining Blocks E1 and E2 and stockpiling areas on BLM and CR Minerals land. The Permittee may conduct mining and reclamation operations in additional areas within the Rocky Mountain Mine New Unit BLM East Permit Area only after obtaining a release of financial assurance for reclamation performed in Mining Blocks E1 and E2 in accordance with 19.10.12.1210 NMAC, and/or after obtaining MMD approval of additional financial assurance in accordance with 19.10.12 NMAC.
- B. The Permittee shall conduct mining and reclamation operations only as described in the 2011 PRP and any other modifications and revisions approved by the Director, pursuant to 19.10.5.505 NMAC. The Permittee shall comply with any and all conditions that are incorporated into the Permit.
- C. A minimum setback of 50 feet, from any watercourse within the area will be required. (Watercourse means any channel having definable beds and banks capable of conducting generally confined runoff from adjacent lands. During floods water may leave the confining beds and banks but under normal flows water is confined within the channel. A watercourse may be perennial, intermittent, or ephemeral).
- D. The Permittee shall implement erosion control measures or Best Management Practices ("BMP's") that are designed, constructed and maintained using professionally recognized standards (e.g., Natural Resource Conservation Service standards) for surface disturbances during mining and reclamation activities as needed for erosion control, spill prevention and the avoidance or damage to ephemeral stream channels in the area. Placement of water bar structures or other appropriate measures should be taken to reduce head-cutting adjacent to roads and to prevent roadways from channelizing surface flow.

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- E. No storage of fuels or chemicals shall take place within any drainage areas that are in the permit area. Appropriate spill clean-up materials, such as absorbent pads, must be available on-site at all times during road construction, site preparations, and mining activities, to address potential spills.
- F. No excavation or filling shall take place within an ephemeral watercourse until the required permits or consultations are obtained from the U.S. Army Corps of Engineers.
- G. Haul road drainage control structures shall be used, as necessary to, control runoff and to minimize erosion, sedimentation and flooding. Drainage facilities shall be installed as road construction progresses and shall be capable of handling a 10-year, 24-hour precipitation event unless site-specific characteristics indicate a different standard is appropriate. The surfaces of haul roads shall be reclaimed by ripping to a minimum depth of 24 inches. Culverts, if used, shall be removed on all haul roads where practicable. The ripped road surfaces shall be graded for stormwater control. Revegetation of haul roads shall be performed in accordance with Condition 9.I of Permit Revision 11-1.
- H. The Permittee shall report all reportable spills immediately to the New Mexico Environment Department as required by the New Mexico Water Quality Control Commission regulations 20.6.2.1203 NMAC. For non-emergencies during normal business hours, call 505-428-2500. For non-emergencies after hours, call 866-428-6535 or 505-428-6535 (voicemail, 24 hrs. /day). For emergencies only, call 505-827-9329, 24 hours/day to contact the New Mexico Department of Public Safety.
- I. The Rocky Mountain Mine New Unit BLM East Permit Area shall be reclaimed by:
 - 1) grading and contouring of the surface to be reclaimed; and
 - 2) placement of growth media; and
 - 3) seed bed preparation; and
 - 4) seeding and mulching.

Grading and contouring shall provide slopes no steeper than 3 Horizontal: 1 Vertical (3H:1V) and a smooth, undulating surface consistent with the post mining contours shown on Figure 7, Approximate Post Mining Topography at the Rocky Mountain Mine, Figure 8, Cross-Sections A, B, and C (from Figure 7), and Figure 8, Cross-Sections D, E and F (from Figure 7) of the 2011 PRP. Highwalls greater than 10 feet in height shall be reduced in slope and contoured. Overburden and/or topsoil averaging one-foot in depth shall be placed on the floors of the mined-out pit that are not backfilled and on surfaces that have pumice as their predominant surface material. Seed beds shall be ripped to a depth of one to two feet. Slopes of 4H:1V and steeper shall be contoured plowed. Seeding shall be accomplished by drill seeding, broadcast and harrow, or hydroseeding. After drill seeding, straw or native

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grass, weed free mulch shall be applied at a rate of two tons per acre and stabilized by crimping. If broadcast and harrow seeding, or hydroseeding is utilized, a tackifier shall be applied to hold seed in place. Seeding rates for broadcast and harrow, or hydroseeding, shall be approved by MMD prior to seeding. The reclamation seed mix found in Table 6 of "Vegetation, Wildlife, and Revegetation Components for Rocky Mountain Pumice Mine Permit Application" of the of the *CR Minerals Company Rocky Mountain Mine Permit Application and Close Out Plan*, dated June 1999 shall be supplemented to include at least two additional shrub species. The Permittee shall within 30 days of approval of Permit Revision 11-1, submit to MMD an updated reclamation seed mix including the additional shrub species.

- J. Following the reclamation including revegetation, monitoring shall be conducted by the Permittee to assure successful establishment of vegetation and stabilization of the site. The success of the revegetation of the Rocky Mountain Mine New Unit BLM East Permit Area shall be evaluated in accordance with the Revegetation Monitoring Plan in the *CR Minerals Company, Rocky Mountain Mine, Mining Permit Application and Close Out Plan*, dated June 1999. The Permittee shall notify MMD at least two weeks prior to any monitoring conducted pursuant to this permit to allow MMD an opportunity to accompany personnel of the Permittee.
- K. The Permittee shall monitor the reclaimed areas for noxious weeds in accordance with a monitoring plan approved by the U.S. Bureau of Land Management ("BLM") Environmental Assessment dated December 2011. If noxious weeds are observed in Rocky Mountain Mine New Unit BLM East Permit Area, an eradication plan shall be submitted to MMD and implemented within 30-days after MMD approval.
- L. The Permittee shall take measures during mining and at closeout at the Rocky Mountain Mine New Unit BLM East Permit Area, to minimize adverse impacts to wildlife, based on site-specific characteristics, by taking the following measures:
 - 1) for the protection of migratory birds, vegetation removal shall be timed to take place outside the general bird nesting season (April 1 through August 31); and
 - 2) a minimum 50-foot buffer zone of native vegetation shall be maintained between ephemeral drainages and new mining surface disturbance.
- M. If buried cultural material is discovered during mining activities, all work shall immediately cease within the area of discovery, the remains should be protected in place, and the New Mexico Department of Cultural Affairs, Historic Preservation Division shall be immediately notified.
- N. All lands to be disturbed will be addressed under the performance and reclamation standards and requirements of 19.10.5.507 NMAC and in accordance with the

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reclamation plan provided in the 2011 PRP and the CR Minerals Company, Rocky Mountain Mine, Mining Permit Application and Close Out Plan, dated June 1999.

- O. The Permittee shall notify MMD at least 30 days prior to initiating any reclamation approved pursuant to this permit.
- P. Any changes, modifications or amendments to the approved permit must be approved by MMD prior to implementation.
- Q. The following conditions are required to ensure that adequate financial assurance is provided for the site, pursuant to 19.10.5.506.J.2, 19.10.12.1202.B, 19.10.12.1204.A, 19.10.12.1206.A, and 19.10.12.1210 NMAC:

The Permittee may apply for and obtain release of financial assurance in accordance with 19.10.12.1210 NMAC.

- 1) The Director may require the Permittee to evaluate the adequacy of the financial assurance approved as a part of the Permit. If upon review of the evaluation, MMD determines that a change to the financial assurance amount or form is required, the Permittee shall submit to MMD a request to revise the Permit. The Permittee may request a change to the financial assurance in accordance with §19.10.12 NMAC.
- 2) The Permittee has provided financial assurance in the amount of \$97,354.00, using an Irrevocable Standby Letter of Credit, dated May 10, 2012, as amended June 29, 2012, issued by the Wells Fargo Bank, N.A. to MMD and the BLM as beneficiaries.
- R. Pursuant to 19.10.5.509.C NMAC, during the term of the permit issued pursuant to 19.10 NMAC, the Permittee must maintain environmental permits required for the Rocky Mountain Mine New Unit BLM East Permit Area. Revocation or termination of such a permit or the forfeiture of financial assurance related to the Rocky Mountain Mine New Unit BLM East Permit Area by another governmental agency is adequate grounds for the Director to issue a cessation order pursuant to 19.10.11 NMAC.

All other provisions, modifications, and revisions for mining and reclamation contained in the Rocky Mountain Mine Permit No. RA004RE, remain unchanged.

Section 10 (11-1). CONCLUSIONS OF LAW

- A. The Director has jurisdiction over the Permittee and the subject matter of this proceeding.
- B. The 2011 PRP is complete, accurate, and complies with the requirements of the Act and 19.10.5.502 and 19.10.5.503 NMAC with conditions described in this Permit Revision document.

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C. The 2011 PRP is complete, accurate, and complies with the requirements for Closeout Plans in the Act and 19.10.5.505, 19.10.5.506, and 19.10.5.507.A NMAC. The Permittee, CR Minerals, is permitted, pursuant to the New Mexico Mining Act, to conduct mining and reclamation operations at the Rocky Mountain Mine, Rio Arriba County, New Mexico, upon the condition that the Permittee complies with the requirements of the Order, the Act, the Rules, the Permit Conditions, and requirements imposed by this permit.

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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 Revision. I also agree to comply with the performance and reclamation standards and requirements of the permit, the Rules, and the Act, and allow the Director to enter the Permit area without delay for the purpose of conducting inspections.

Authorized Representative of the Permittee

Title

CR HINERALS COMPANY, ILC

Subscribed and sworn to before me this

Am

My Commission Expires

7-30- A013

KATHY S. FELIX
Notary Public
STATE OF TEXAS
My Comm. Exp. 07-30-2013

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ORDER

NOW THEREFORE, IT IS HEREBY ORDERED that Permit Revision 11-1 of Permit No. RA004RE, incorporating New Unit and New Unit Closeout Plan for the Rocky Mountain Mine and allowing CR Minerals Company, LLC to conduct closeout and reclamation operations in Rio Arriba County, New Mexico, is approved.

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:

Fernando Martinez, Director Mining and Minerals Division Energy, Minerals and Natural Resources Department

DATED: 1/6/2012