

May 20, 2013

David Clark New Mexico Mining and Minerals Division Energy, Minerals and Natural Resources Department 1220 South St. Francis Drive Santa Fe, NM 87505

# Re: Response to NM MMD Review Comments Mine Operations Plan, Revision 1 & Baseline Data Report, Revision 1 Roca Honda Resources, LLC Permit No. MK025RN

Dear Mr. Clark:

On February 28 and March 1, 2013 you provided us with additional agency comments to the Roca Honda Mine Operations Plan Revision 1 and Baseline Data Report Revision 1, respectively. Submitted herewith are four (4) copies of Roca Honda Resources LLC (RHR) responses to these comments. Consistent with our past response to comment submittals, we have organized our responses utilizing the table format whereby we have restated MMD's comment followed by RHR response immediately below each comment. This will allow you to lay our response to comments next to the documents and more easily evaluate the comment resolution.

This submittal contains a package of "replacement pages" to be inserted into your copy of the documents. RHR's response to comments to the BDR and its replacement pages are contained in the clipped package in the envelope. More specifically, in our response table, a revised Table 5-1(revised pages 5-5 and 5-6) per RHR's response to comment no. 4, revised page 9-36 per RHR's response to comment no. 7, a revised Section 8.0, Surface Water, and a new Appendix 8-E, Baseline Survey of San Lucas Arroyo, to address response to comment no. 2. Also, clipped to the BDR package is a CD containing a complete updated version of the BDR Revision 1 should you wish to update the version posted on the MMD web site.

With respect to the Mine Operations Plan we have provided a larger binder so that you can more easily accommodate the changes to the document that were made as a result of our response to comments. In that binder you will find our response to comments table followed by a new Table

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of Contents, revised page 5 (Figure 1-3) of Section 1, revised pages 15 and 16 of Section 3, revised page 47 of Section 4, revised pages 63, 63a, 64, 70, 71, 83, 85 thru 89 of Section 5, revised page 90 of Section 6, revised pages 91 thru 97 of Section 7and a new Attachment 3, the geochemical characterization report for the shaft excavation material which we committed to perform in previous responses to comments. The reason for their revision is contained within RHR's comment response to which the page(s) relate. Please replace those pages in your copies of the January 2012 Mine Operations Plan and insert the entire document in the new larger binder. Also included within the binder is a CD containing a complete updated version of the MOP Revision 1 should you wish to update the version posted on the MMD web site.

Regarding the geochemical characterization of the shaft excavation material, RHR contracted with Key Agricultural Services, Inc. (Key-Ag) to characterize geological material produced from construction of the RHR mine shaft. NMED and NM MMD were concerned with the potential for formation of acid and other toxic drainage from excavated materials in particular, the material produced from shaft sinking activities and stockpiles on the surface (see pages 70 and 83 of the MOP) {(NMAC 19.10.6.603 C.(4)a and NMAC 19.10.6.603 D. (4) and (5)}. As described in the MOP, the excavated material will be collected and stockpiled in designated locations in Section 16 and 10. The material will be generated as the production shaft(s) is excavated through various geologic units to the bottom of the shaft(s) and from the bottom unit (Westwater Canyon Member) to establish the stationing areas before ore is contacted. The vent/escape shafts excavation material will also be added to the stockpile.

To obtain samples of these materials RHR collected core from a borehole at the Section 16 production shaft location and provided 25 samples from each geologic unit for analysis. NMED staff participated in collection of these samples. Four procedures were performed by Energy Laboratories in Casper, WY to include, whole rock analysis, synthetic precipitate leachate procedure, radionuclide activity, and acid-base accounting. The Key-Ag report and the laboratory data are attached as Attachment 3 to the revised MOP.

The results of the testing as discussed in the Key-Ag report indicate that the Dilco coal was the only unit to exhibit acid production potential. The Dilco coal is a member of the Crevasse Canyon Formation and is composed of sandstone, shale, siltstone, and minor coal. Table 1, attached, shows that the Dilco is approximately 207 feet thick and contains 9 separate thin layers of coal all less than 2 ft. thick. The total Dilco represents 9.2 % by volume of all the shaft material planned to be excavated and the coal portion comprises 0.4% of the volume of excavated shaft material, as shown in Table 2. The total estimated amount of material to be

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excavated from the production shaft is 60,431 tons. The coal seam portion of this would be approximately 233 tons or 12 haul truck loads of material.

As described in the MOP, while the shaft excavated material is stored on-site any water that flows from the stockpile will be collected in a retention pond. The impact to surface water is stated to exceed chronic aquatic life criteria in the Key-Ag report. However, this does not take into account the fact that captured water will be pumped to the water treatment plant before it is discharged with the mine dewatering water. Only storm water that has not fallen on the process areas will leave the site and flow to San Mateo Creek via the existing arroyos and the discharge of treated water will be to an ephemeral arroyo which cannot support aquatic species. Therefore, there will be no impact to surface water.

Likewise, no impacts to groundwater during operations are expected. The Menefee and Point Lookout Sandstone aquifers, aquifers typically thought of as the first potential water supply sources in the area, do not exist in the area of the Section 16 shaft and other surface facilities and therefore, will not be impacted. The Gallup Sandstone is the first aquifer at this location and is an artesian aquifer. It, therefore, cannot be impacted by seepage from surface activities.

Also as discussed in the MOP, the shaft excavation material will be placed back into the mine at reclamation. There will be no impact to the Westwater aquifer from this activity as the amount of coal-containing material will be minimal as compared to the total large volume of shaft excavation material that will be placed back into the mine.

By way of copies of this correspondence to the indicated distribution, RHR is also providing copies of these documents to the Cibola National Forest Office, the New Mexico Environment Department and the State Land Office.

We look forward to continuing to work with your staff as we move toward ultimate approval of our mine permit application for the Roca Honda Project.

Sincerely,

Juan R. Velasquez

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cc: Diane Tafoya USFS (4 copies) Michael Mariano NMSLO (1 copy) NMED Kurt Vollbrecht (2 copies)

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TABLE 1									
From (ft) <sup>1</sup>	To (ft) <sup>1</sup>	Width (ft) Lithology		Volume (cu. ft)	Formation/Member				
0.0	33.0	33.0	Alluvium	12,543	Alluvium				
33.0	73.2	40.2	Sandstone	15,280	Dalton S.S.				
73.2	341.2	268.0	Shale	101,867	Mulatto Tongue				
341.2	342.2	1.0	Coal	380					
342.2	362.8	20.6	Shale	7,830					
362.8	364.4	1.6	Coal	608					
364.4	451.6	87.2	Shale	33,145					
451.6	456.2	4.6	Coal	1,748	3				
456.2	462.2	6.0	Shale	2,281					
462.2	466.4	4.2	Coal	1,596					
466.4	473.4	7.0	Shale	2,661					
473.4	475.2	1.8	Coal	684	Dilco Coal				
475.2	505.4	30.2	Shale	11,479					
505.4	507.4	2.0	Coal		- I				
507.4	509.2	1.8	Shale	684					
509.2	510.6	1.4	Coal	532					
510.6	524.8	14.2	Shale	5,397	-				
524.8	526.4	1.6	Coal	608					
526.4	533.2	6.8	Shale	2,585	. <sub>0</sub>				
533.2	534.6	1.4	Coal	532					
534.6	547.6	13.0	Shale	4,941					
547.6	615.4	67.8	Sandstone	25,771					
615.4	645.8		Shale		Gallup S.S.				
645.8	661.0	15.2	Sandstone	5,778	Mancos Shale				
661.0	1,546.0	885.0	Shale	336,389					
1,546.0	1,655.8	109.8	Sandstone	41,735	Two Wells S.S. Whitwater Arroyo				
1,655.8	1,668.6	12.8	Shale	4,865	Tongue				
1,668.6	1,676.0	7.4	Sandstone	2,813	· ·				
1,676.0	1,685.0	9.0	Shale	3,421					
1,685.0	1,705.6	20.6	Sandstone	7,830	Dakota S.S.				
1,705.6	1,716.4	10.8	Shale	4,105					
1,716.4	1,725.4	9.0	Sandstone	3,421					
1,725.4	1,810.0	84.6	Shale	32,156	Brushy Basin				
1,810.0	1,840.0	30.0	Sandstone	11,403	-				
1,840.0	1,861.0	21.0	Shale	7,982	-				
1,861.0	1,902.0	41.0	Sandstone	15,584	-				
1,902.0	1,912.0	10.0	Shale	3,801					
1,912.0	1,958.0	46.0	Sandstone	17,485	Westwater Canyon				
1,958.0	1,963.0	5.0	Shale	1,901					
1,963.0	1,976.0	13.0	Sandstone	4,941	-				
1,976.0	1,995.0	19.0	Shale	7,222	-				
1,995.0	2,014.0	19.0	Sandstone	7,222					
2,014.0	2,100.0	86.0	Shale	32,689	Recapture				

<sup>1</sup>From and To values picked from geophysical log of shaft core hole

			TABLE 2				
Formation	Lithology	Volume <sup>1</sup> (cu. ft)	Volume (cu. yd)	Percent Vol	Density (lbs/cu. ft.)	Tons	Percent Tons
Alluvium	Alluvium	12,543	465	1.6%	161.1	1,010	1.7%
Dalton S.S.	Sandstone	15,280	566	1.9%	161.1	1,231	2.0%
Mulatto Tongue	Shale	101,867	3,773	12.8%	149.8	7,630	12.6%
Dilco Coal	Shale	71,003	2,630	8.9%	149.8	5,318	8.8%
	Coal	7,450	276	0.9%	62.43	233	0.4%
Gallup Sandstone	Sandstone	31,548	1,168	4.0%	161.1	2,541	4.2%
	Shale	11,555	428	1.4%	149.8	865	1.4%
Mancos Shale	Shale	336,389	12,459	42.1%	149.8	25,195	41.7%
Two Wells S.S.	Sandstone	41,735	1,546	5.2%	161.1	3,362	5.6%
Whitewater Arroyo Tongue	Shale	4,865	180	0.6%	149.8	364	0.6%
Dakota Sandstone	Sandstone	14,064	521	1.8%	161.1	1,133	1.9%
	Shale	7,526	279	0.9%	149.8	564	0.9%
Brushy Basin	Shale	32,156	1,191	4.0%	149.8	2,409	4.0%
Westwater Canyon	Sandstone	56,635	2,098	7.1%	161.1	4,562	7.5%
	Shale	20,906	774	2.6%	149.8	1,566	2.6%
Recapture	Shale	32,689	1,211	4.1%	149.8	2,448	4.1%
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Alluvium	Alluvium	12,543	465	1.6%	161.1	1,010	1.7%
Sandstone Total	Sandstone	159,262	5,899	20.0%	161.1	12,829	21.2%
Shale Total	Shale	618,955	22,924	77.5%	149.8	46,360	76.7%
Coal Total	Coal	7,450	276	0.9%	62.43	233	0.4%
TOTAL	All	798,210	29,563	100.0%		60,431	100.0%

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<sup>1</sup>Volume assumes a 22 ft. excavated diameter shaft