



January 31, 2020

Clint Chisler, Permit Lead
Mining Act Reclamation Program
Mining and Minerals Division
1220 South St. Francis Drive
Santa Fe, NM 87505

RE: November 4, 2019 MMD Comments on Baseline Data Report Revision 1 to Addendum 1,
Roca Honda Mine, Permit Application No. MK025RN

Dear Mr. Chisler:

In response to the Mining and Minerals Division (MMD) referenced letter of November 4, 2019, attached are revised Replacement Pages for BDR Section 12.0, Prior Mining Operations within the proposed Roca Honda permit area. Note that the pages have been updated to reflect the recent announcement by Rio Grande Resources regarding the Mt. Taylor mine status and current closure plans.

We appreciate MMD's coordination of the agency reviews and look forward to continuing cooperation as the permitting process moves forward. Please contact me at 208-354-0588 or Scott Bakken at 303-389-4132 with any questions.

Sincerely,

A handwritten signature in blue ink that reads "Michael Neumann".

Michael Neumann
Sr. Project Consultant

cc: Jeff Lewellin, MECS
Alan Klatt, SWQB
Ashlyne Winton, GWQB
Holland Shepherd, MMD MARP
Kurt Vollbrecht, NMED

BASELINE DATA REPORT

Section 12.0

Present and Historic Land Use

September 2019

Revision 2

Submitted To:

New Mexico Mining and Minerals Division
&
U.S. Forest Service (Cibola National Forest)
&
New Mexico Environment Department

Prepared by:

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12.0 Present and Historic Land Use

NMAC 19.10.6.602 D.(13) (j)

Baseline data shall include, as applicable:

(j) A description of the present and historic land use of the permit area, the general patterns of land use in the surrounding areas, and a narrative of land capability and productivity based upon U.S. Soil Conservation Service land use capability classes or a similar classification.

12.1 Introduction

The Roca Honda permit area encompasses all of Sections 9, 10, 16, 17 and the SE1/4SE1/4 of Section 8 of T13N R8W in McKinley County, New Mexico. Section 16 is owned by the State of New Mexico with the minerals leased to Roca Honda Resources (RHR) and the surface leased to Fernandez Company, Ltd. (aka the Lee Ranch) as rangeland for grazing. Sections 9 and 10 are public lands within the Cibola National Forest. RHR holds unpatented mining claims on these two sections. The surface of Section 17 and the 40 acre parcel in Section 8 included within the permit area are owned by Fernandez Company and the mineral rights are owned by RHR. There are a total of 2,600 acres within the proposed mine permit area.

12.2 Present and Historic Land Use of the Permit Area

Sections 9 and 10 are owned by the federal government, administered by the USFS, and open to the public. The land is used for a multitude of purposes including grazing, mineral extraction, hunting, hiking, and other outdoor recreation activities. Forest land use also includes commercial logging and personal and commercial gathering of firewood. While there is no evidence of commercial logging having occurred on Sections 9 and 10, there are a sufficient number of trails and roads on the property to provide easy access for wood gatherers.

The Lee Ranch controls a large amount of range land surrounding the project area through private ownership and leases of rangeland including a grazing lease in Section 16. The entire permit area has also been the subject of significant mineral exploration and development activity over many decades. As described in Section 10, Prior Mining Operations, land within the proposed permit area, including Sections 17 and 8, was extensively drilled from the 1960s through the early 80's and a shaft was sunk in Section 17 in the late 1970's. The long-term land use of the permit area has been rangeland, possibly since 1767 when the Fernandez Land Grant was issued and the dominant grazing animals were likely not domestic livestock.

As described in detail in Section 11 of this report, Historic Places and Cultural Properties, together with the supporting archeological survey documents, historic use of the permit area dates back to use by the native peoples of the region to before the birth of Christ. Archeological evidence indicates that the Anasazi, Basketmaker and Pueblo cultures have all used the permit area. More recently, the Navajo and Anglo cultures have made their imprint on the permit area.

12.3 General Patterns of Land Use Surrounding the Permit Area

The general land use patterns in the surrounding area are similar to that of the permit area. It is a mix of state, private and federal ownership dominated by the Lee Ranch and the Cibola National Forest. The area is sparsely populated, rural and largely undeveloped. Predominant land uses are low density grazing and cultivation and recreational activity such as hiking, sightseeing, picnicking and seasonal hunting.

The community of San Mateo is located approximately four miles to the southeast of the permit area. There are estimated to be less than 200 persons living there. The Lee Ranch headquarters and residence are also located approximately two miles southeast of the permit area. In addition, the Lee Ranch owns a house on private property in Section 17 currently used by a ranch hand. Several other rural residences are located along the San Mateo Valley west of the permit area.

Rio Grande Resources Corp. (RGR) owns the Mt. Taylor uranium mine located approximately four miles east of the project site. The mine is currently not operating and had been on stand-by status until December 2017 when it was approved to resume operations. However RGR notified the State of its intention to permanently close the mine in December 2019. It operated from the late 1970's to the mid 1990's producing approximately 675,000 tons of uranium during that period.

As noted earlier the Cibola National Forest administers two sections of land within the permit area. Its responsibilities for these lands include general administration, management of timber and grazing resources, and development of specific land use management plans.

The permit area is located in an area known as the Grants Uranium District. More than 340,000,000 pounds of uranium have been produced from this mining district. The city of Grants and Village of Milan are the largest communities in the general project area and historically have provided a nearby source of mine workers.

The Grants Uranium Belt is an area about 100 miles long by 20 miles wide and extends from Gallup on the west to Rio Puerco on the east. It is located in one of the most diversified major energy-producing regions in the United States. Within or adjacent to the area are large oil and gas fields, and abundant accessible coal deposits. The Grants region was historically the major producer of uranium in the United States. It still contains approximately half of the nation's economically recoverable uranium reserves. A number of mines and mills operated in the region until the mid-to-late 1980s. Grants-Milan is primarily a mixture of state-owned and private land, although small parcels of BLM natural-resource lands are scattered throughout the area. BLM lands are managed under a multi-use land management system. The BLM lands in the area are generally used for grazing purposes.

12.4 Land Capability and Productivity

Section 6, Topsoil, of this BDR discusses the soil capability classifications on the Roca Honda permit area obtained from two separate soil surveys. Both studies use the nomenclature "good," "fair," and "poor." The first survey was conducted by the USFS (Strenger et al. 2007) and covered Sections 9 and 10 of the permit area. The second survey covered Section 16 of the permit area and was conducted by the U.S. Department of Agriculture, Natural Resources Conservation Service (formerly Soil Conservation Service) in cooperation with the BLM, the Bureau of Indian Affairs, and the New Mexico Agricultural Experiment Station (NRCS 2006). The results of the two surveys indicate similar capability classes. Class 6 soils are typically restricted to use for pasture, rangeland, forestland, and wildlife habitat.

Soils within Sections 17 and 8 were mapped by the NRCS and confirmed by Marron Associates in 2015. Six primary soil types were identified as reported in the July 2018 Roca Honda Mine Baseline Data Report, Addendum 1. The six soil types identified by the NRCS in the area vary from fine sand, sandy loams to soils previously disturbed by uranium mining . The most abundant soil type within the study area is the Celavar-Atarque complex, which consists mostly of sandy clay loams with bedrock as shallow as 31 inches. The next most abundant is Sprank-San Mateo-Zia complex, which is principally a clay soil type. In aggregate, the Celavar-Atarque complex and the Sprank-San Mateo-Zia complex constitute 89.7 percent of the soils within the study area. As with soils in the balance of the permit area, those in Sections 17 and 8 are of limited use, primarily for pasture, rangeland, forestland and wildlife habitat.

12.5 References

NRCS (Natural Resources Conservation Service), 2006. *Soil Survey of McKinley County Area, New Mexico, McKinley County and Parts of Cibola and San Juan Counties*, U.S. Department of Agriculture, Natural Resources Conservation Service, in cooperation with U.S. Department of Interior, Bureau of Land Management and Bureau of Indian Affairs, and the New Mexico Agricultural Experiment Station.

Strenger, S., S. Sebring, W. Robbie, F. Escobedo, C. Vaandrager, V. Andrew, E. Brooks, C. Krasine, B. Nielsen, *Terrestrial Ecosystems Survey of the Cibola National Forest and National Grasslands*, USDA Forest Service, Southwestern Region.

Biological Survey of Proposed Section 17 Expansion Area, Cibola and McKinley Counties, New Mexico, February 2018. Marron and Associates.