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**Subject:** Las Cruces BLM comments on MIP OT006MN (Iron Duke Mine - Gulf Coast Mining, received July 22, 2011)  
**Date:** Friday, August 5, 2011 8:09:05 AM

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Chris:

Thank you for providing the Las Cruces BLM with the opportunity to review the subject proposed permit. This office is submitting the following comments:

1. Access: As you are aware, the proponents widened and incised approximately 5000' of roadway on BLM administer Federal land without authorization. LC BLM is currently processing a ROW application from the proponent. Until this ROW is granted, they do not have legal access across Federal land (c.f. NMMA 304.D.1).
2. Archaeology: Sites were damaged during the unauthorized road work. LC BLM is currently evaluating the extent of affects and will be prescribing remedial activities. The Federal ROW cannot be issued until archeology remediation has been complete.
3. P. 12 (attachment 1 p. 1 and plates 2 & 3) review of mineral surveys suggests that some of the disturbance shown on BLM land south of the Virginia patent may actually be on private land. How accurate are private boundaries designated in the field? If the applicant has not already done so, they should hire a licensed surveyor to delineate the boundaries of their property
4. P. 13 (attachment 1 p. 2) "the only improvement to the existing road to the mining district from pavement was a 0.4 acre widening across a drainage " Not true; a considerable length of road across Public Domain and NM State Trust Land was widened without authorization from either agency. Aerial photographs show that the existing road averaged 15-17 feet in width. The road now averages 30 ' in width for most of its length.
5. P 16 (attachment 1 p. 5): section F - although possibly limited, any topsoil that may be present should be recovered and used in reclamation.
6. P. 16 (attachment 1 p. 5 & appendix A) Seed mix: Where did this recommended seed mix come from? There is no record that the proponent contacted BLM for this information.
7. Sensitive Species: Roetter's hedgehog cactus (*Echinocereus x roetteri* var. *roetteri*) occurs in several mountainous areas of New Mexico west of the Guadalupe Mountains, and in west Texas in El Paso and Hudspeth counties. A related hybrid taxon (*E. x roetteri* var. *neomexicanus*) occurs in NM east of the Guadalupe Mountains in the remainder to Trans-Pecos Texas east and south of Hudspeth county. Both of these varieties were once named Lloyd's hedgehog cactus (*Echinocereus lloydii*) and were afforded protection as an endangered species under the Endangered Species Act. Both were delisted in the 1990's due to their hybrid nature. The hybrid taxon has

been shown experimentally to be a cross between 2 common cacti of southern New Mexico, the rainbow cactus (*Echinocereus dasyacanthus*) and the claret cup cactus (*Echinocereus coccineus*).

Roetter's hedgehog cactus is known from 3 areas of BLM land in the Las Cruces District, the Jarilla Mountains, the Sacramento Escarpment, and the East Potrillo Mountains. Currently the hybrid taxon has no official protection under Federal or State law. However, the taxon has had unofficial BLM status in the Las Cruces District since its ESA delisting, primarily due to its uniqueness and due to a significant loss of plants on public land due to collecting.

The Roetter's hedgehog cactus population in the Jarilla Mountains, approximately 30 miles south of Alamogordo, NM, occurs as a large hybrid swarm that varies throughout the Jarillas – north to south. Known locations occur on public lands immediately adjacent to the proposed private mine lands. It is highly likely that these plants also occur on the adjacent private lands as well.

Hybrids have backcrossed with the parent species to produce a population that varies in both stem and spine morphology and flower color; reflecting various mixes between both parental lines. In addition to hybridization with the 2 parent species mentioned previously, it is believed that hybrids with *Echinocereus fendleri* and *Echinocereus viridiflorus* are involved in the hybridization occurring in the Jarillas. Probably most attractive to collectors is the unusual flower colors which range from the yellow of the parent rainbow cactus to the red of the claret cup cactus, and include a wide range of unique pink and orange flowered plants.

Due to the attractiveness of this hybrid taxon to collectors, and the reported loss of the more attractive plants over time, BLM views this species as a public resource worthy of management and protection, regardless of its genetic status. The public lands portion of the Jarilla Mountains adjacent to and surrounding the proposed private land Iron Duke Mine was nominated to receive special protection as an Area of Critical Environmental Concern (ACEC) in 1992 due to the presence of both a high diversity of cactus species and the presence of Roetter's hedgehog cactus. Possible designation of an ACEC for this area is to be analyzed in a future revision of the BLM land use plan for the BLM Las Cruces District. The BLM Las Cruces District requests that the NM Mine and Minerals Division consider the potential impacts to this sensitive species when processing their permit for the proposed Iron Duke Mine operation in the Jarilla Mtns.

Should the applicant propose any new mining activity on Federal land, the proponent would be required to submit a Federal Mine Plan of Operations (MPO) due to their prior history in the area. The approval of this MPO would include mitigations to monitor and protect for Roetter's hedgehog cactus (i.e. preferably avoidance; transplantation if avoidance is not possible).

In closing: the BLM will pursue a separate Federal reclamation bond for

road work on public domain lands and part of the ROW grant. Please contact me if you have any questions regarding these comments.

Regards,

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