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Via email only

9 January 2020

Attn: Valerie Gohlke, Public Affairs Specialist
Bureau of Land Management
Kingman Field Office
2755 Mission Boulevard
Kingman, AZ 86401
vgohlke@blm.gov

RE: Mine Plan of Operations for the Phase III Moss Mine Expansion and Exploration Project Environmental Assessment (DOI-BLM-AZ-C010-2019-0033-EA)

Dear Ms. Gohlke,

The Desert Tortoise Council (Council) is a non-profit organization comprised of hundreds of professionals and laypersons who share a common concern for wild desert tortoises and a commitment to advancing the public's understanding of desert tortoise species. Established in 1975 to promote conservation of tortoises in the deserts of the southwestern United States and Mexico, the Council routinely provides information and other forms of assistance to individuals, organizations, and regulatory agencies on matters potentially affecting desert tortoises within their geographic ranges.

We appreciate this opportunity to provide comments on the above-referenced project. Given the location of the proposed project in habitats likely occupied by Morafka's desert tortoise (*Gopherus morafkai*) (synonymous with "Sonoran desert tortoise") and possibly also by Agassiz's desert tortoise (*Gopherus agassizii*), our comments pertain to enhancing protection of these species during mining activities authorized by the Bureau of Land Management (BLM).

We understand from the BLM's environmental assessment (EA), dated December 2019, that the Proposed Action consists of an expansion of mining operations (including exploration activities) associated with Moss Mine onto 497.10 acres of BLM-managed lands. Section 2.1.1 of the EA describes the construction of leach pads, access roads, and powerlines. Although protective measures given in Appendix C are directed towards not creating any new food sources for

tortoise predators by maintaining a clean workplace, there seem to be no measures affecting design and operation of the mine expansion to avoid subsidizing common ravens, which are a known predator of desert tortoises. We ask that Golden Vertex Corp (GVC) in consultation with BLM design features and implement actions so that, insofar as possible, no additional water sources, nest sites, or food sources are provided for common ravens. Similarly, design features should not provide new water or food sources for coyotes, which are also a tortoise predator.

Section 1.8.1 indicates, "The BLM initiated the public scoping process for the Proposed Action on August 26, 2019, by publishing a press release in several newspapers and mailing a scoping notice to a mailing list of interested persons, organizations, and government agencies. BLM established a 20-day period for submitting scoping comments, ending on September 14, 2019." We note that in numerous comment letters to various BLM offices in Arizona, including the Kingman Field Office that we have asked that the Council be identified as an Interested Party. However, we were not informed of the opportunity to provide scoping comments on this project. In fact, one of our members in Utah made us aware of the current EA. So, we ask that this issue be resolved, and that the BLM Kingman Field Office begin to contact us directly at the email address on the letterhead (eac@deserttortoise.org) for projects that may affect the desert tortoise.

Section 2.1.3 indicates that existing pits would be expanded onto 84.55 acres to the east and 16.7 acres to the northwest. We appreciate that all expansion areas will be subjected to pre-construction surveys within 45 days, and preferably within two weeks (Westland Resources, page 5), to move any tortoises out of harm's way. However, if these activities are occurring between February 15 and November 15, as given on page 6, we suggest that the earlier time period of two weeks be required, as 45 days is too long a time to avoid immigration onto the site. Immediately prior to clearing the area of tortoises, we recommend that perimeter fences be installed in such a way that tortoises occurring in adjacent areas be precluded from entering the area (i.e., desert tortoise exclusion fencing). We also recommend that, following the surveys, all activities that may harm tortoises that are not inside a tortoise perimeter fence, be monitored by qualified biologists, particularly brush clearing.

Insofar as possible, we recommend that the stockpiles described in Section 2.1.4 be situated in areas that are already devoid of vegetation, which may require that the proposed stockpile areas described in this section are reconsidered. If preconstruction surveys determine that tortoises occur in the area along proposed haul roads, as described in Section 2.1.4, in addition to posting 15 mph speed limit signs (Appendix C, 3g), we recommend that tortoise-crossing signs be erected at appropriate intervals and locations.

Section 2.1.7 reports that a 4-to-6-inch diameter PVC water pipe measuring about seven miles in length will be installed. To allow for passage of tortoises, "Placement of the proposed pipeline would be designed such that every 1,000 feet of length would have at least 100 feet of underground pipeline along Silver Creek Road, BLM Road 7922, and BLM Road 7717 as well as at all crossings of existing roads, trails, washes and high-use recreational shooting areas." Although not stated, we assume that installation will require use of heavy equipment. We recommend that pre-installation surveys for tortoises be performed and that a qualified desert tortoise biologist be enlisted during installation to avoid crushing tortoises in their burrows or as they enter the construction area. This recommendation would also apply to construction of the proposed 7717 Bypass Route described in Section 2.1.8 of the EA. In addition, we recommend that the pipe ends be covered when the pipe is delivered and during installation to prevent tortoises and other animals from using the open-ended pipes for shelter and becoming accidentally entrapped.

As per Sections 2.1.10 and 3.8.2.1, among others, we understand that GVC would be responsible to reclaim certain mine-related areas during construction, operation, maintenance, and post-construction. The Council interprets reclamation to also include revegetation, so that not only the visual resources are restored, but biological components, particularly native vegetation, are also restored to provide for future habitat use by tortoises and other desert-adapted animals, particularly in the Bullhead Bajada Area of Critical Environmental Concern (ACEC). In 2016, the Council funded the completion of best management practices for habitat restoration (Abella and Berry 2016), which are enclosed with this letter for your consideration and implementation.

Section 3.8.1 reports, "Three desert tortoises, multiple locations of tortoise sign (e.g., scat, scutes), and potential burrows were observed during site visits." This statement does not imply that any focused surveys have been performed for desert tortoises (see also "opportunistic observations" on page 42), so observations were apparently incidental. The occurrence of three tortoises and numerous signs indicates the likelihood that more tortoises occupy/use the area and emphasizes the importance of performing preconstruction surveys, removing tortoises from harm's way, and implementing other protective measures, including perimeter fences, during construction, operation, and maintenance activities.

As per Appendix C, Section 3b, in addition to providing annual Worker Environmental Awareness Programs, GVC in conjunction with their "mitigation coordinator," should develop a brochure describing protective measures that can be given to each new employee, subcontractor, visitor to the site as they arrive rather than relying on an annual approach, as stated.

We note in Appendix D, Biological Evaluation by Westland Resources (2019), on page 32, the following determination is made: "The Analysis Area is within a contact zone between Mojave and Sonoran Desert Tortoise and any individuals are likely to have some degree of genetic admixture between the species (Edwards et al. 2015). For this reason, we have not attempted to distinguish between the species, and *consider both to be present in the area*" (*emphasis* added). Although *Gopherus agassizii* in this area is not listed as threatened because it occurs east of the Colorado River, we still encourage consultants and biologists to treat all tortoises they encounter as if they were listed, and extend to them the same level of protection and care implemented for Agassiz's desert tortoise found west of the river.

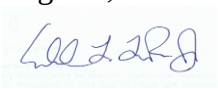
BLM's regulatory requirements for the Sonoran desert tortoise are contained in the Candidate Conservation Agreement (Agreement) with the USFWS (USFWS et al. 2015), which include "BLM Manual 6840 – Special Status Species Management." As a signatory to the Agreement, BLM has committed to implementing "conservation actions for Sonoran desert tortoise in Arizona….to ensure the long-term conservation of the Sonoran desert tortoise." When the conservation actions in this Agreement are implemented effectively, this should preclude the need to list the Sonoran desert tortoise under the Federal Endangered Species Act.

We request that BLM implement the mitigation measures and conservation actions in this Agreement for the Proposed Action. These would include: Educate public land users about Sonoran desert tortoise conservation and best management practices to minimize direct impacts, controlling or eradicating invasive plant species; minimize mortality associated with vehicle strikes; avoid or minimize potential for adverse impacts associated with mining and minerals extraction activities, eliminating potential entrapment; ensure that exposure to contaminants through ingestion or inhalation does not occur; and implement measures to avoid, minimize, or mitigate impacts to achieve Sonoran desert tortoise population and habitat objectives described in land use plans.

We urge BLM to use a scientific process in implementing mitigation measures to offset impacts and recovery/conservation actions to improve the population status and habitats of these two desert tortoise species. Part of this scientific approach includes monitoring to measure the effectiveness of the mitigation measures and recovery/conservation actions, and adaptive management to modify ineffective measures and implement effective ones.

We appreciate this opportunity to provide input and trust that our comments will help protect tortoises during subsequent authorized project activities.

Regards,



Edward L. LaRue, Jr., M.S.
Desert Tortoise Council, Ecosystems Advisory Committee, Chairperson

Literature Cited

Abella S. and K.H. Berry. 2016. Enhancing and restoring habitat for the desert tortoise (*Gopherus agassizii*). Journal of Fish and Wildlife Management 7(1):xx–xx; e1944-687X. doi: 10.3996/052015-JFWM-046.

Edwards, T., K. H. Berry, R. D. Inman, T. C. Esque, K. E. Nussear, C. A. Jones, and M. Culver. 2015. "Testing Taxon Tenacity of Tortoises: Evidence for a Geographical Selection Gradient at a Secondary Contact Zone." Ecology and Evolution 5 (10):2095-114.

U.S. Fish and Wildlife Service and Cooperating Agencies. 2015. Candidate conservation agreement for the Sonoran desert tortoise (*Gopherus morafkai*) in Arizona. May 27, 2015.

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Enclosure

Abella S. and K.H. Berry. 2016. Enhancing and restoring habitat for the desert tortoise (*Gopherus agassizii*). Journal of Fish and Wildlife Management 7(1):xx–xx; e1944-687X. doi: 10.3996/052015-JFWM-046.