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In Reply Refer to:
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Memorandum

To: Acting Regional Director, Southwest Regional Office, Albuquerque, New Mexico

Through: Acting Assistant Regional Director – Ecological Services, Southwest Regional Office, Albuquerque, New Mexico

From: Field Supervisor, Arizona Ecological Services Field Office, Phoenix, Arizona

Subject: Findings and Recommendations on Issuance of an Enhancement of Survival Permit (PER18439194) for the spikedace (*Meda fulgida*), loach minnow (*Tiaroga cobitis*), Gila chub (*Gila intermedia*), and narrow-headed gartersnake (*Thamnophis rufipunctatus*) to Freeport Minerals Corporation for the *Eagle Creek Multi-Species Conservation Benefit Agreement*, Graham and Greenlee Counties, Arizona

I. DESCRIPTION OF PROPOSAL

Freeport Minerals Corporation (Applicant) has applied to the U.S. Fish and Wildlife Service (Service) for an enhancement of survival permit (EOS permit) under section 10(a)(1)(A) of the Endangered Species Act of 1973, as amended (ESA)(16 U.S.C. § 1531 *et seq.*). The EOS permit is associated with the *Eagle Creek Multi-Species Conservation Benefit Agreement* (CBA). The purpose of the CBA is to protect and enhance habitat conditions for, and increase population sizes of, the Covered Species, which include spikedace (*Meda fulgida*), loach minnow (*Tiaroga cobitis*), Gila chub (*Gila intermedia*), and narrow-headed gartersnake (*Thamnophis rufipunctatus*) in upper Eagle Creek in Greenlee and Graham counties, Arizona.

The requested EOS permit, which is for a period of 50 years, would authorize incidental take of the Covered Species for the Covered Activities and would provide regulatory assurances that the Service will not require additional or different conservation measures beyond those specified in the CBA (50 CFR §§ 17.22(c)(5) and 17.32(c)(5)).

Covered Activities are described in detail in Section IV and Section VI of the CBA, and include:

- The Applicant's ongoing activities as described in Section IV of the CBA.

- The Applicant's commitment to spend up to \$2,100,000 to investigate, design, and construct a fish barrier on their property on Eagle Creek that will protect and enhance aquatic habitat for the Covered Species, as described in Section VI.D. of the CBA.
- As described in Section VII of the CBA, development and implementation of a three-year monitoring program to detect the presence of nonnative invasive crayfish within the upper reach of Eagle Creek, and investigation into the practicability and cost of actions to suppress the populations of these species in the upper segment of Eagle Creek, above the fish barrier site.
- Implementation of a monitoring program on the Applicant's lands along Eagle Creek as described in Section VII of the CBA. This program will include annual surveys on Eagle Creek for the Gila chub, spinedace, loach minnow, and narrow-headed gartersnake as well as other fish species, which can be used to inform future conservation and management activities and assist in recovery.

The Agreement Area includes the Applicant's land ownership along and in the vicinity of Eagle Creek (as depicted in Figure 1, Appendix A of the CBA), Graham and Greenlee counties, Arizona.

Analysis of Effects

The Service fully analyzed the effects of the proposed action on the Covered Species in our National Environmental Policy Act of 1969 (NEPA) Environmental Assessment (EA) and ESA section 7 intra-Service biological opinion. We incorporate both documents herein by reference.

Other non-covered species that are listed under the ESA that may occur in the Agreement Area and that were analyzed include:

- western yellow-billed cuckoo (*Coccyzus americanus*; cuckoo)

In addition, designated critical habitat for the Gila chub also occurs within the Agreement Area.

We do not expect any adverse effects to the cuckoo or designated critical habitat for the Gila chub from implementation of the CBA. Cuckoo is not covered in the CBA or EOS permit; therefore, regulatory assurances (per 50 CFR §17.32(c)(5)) are not applicable for this species. Incidental take of Gila chub, separate from effects to its designated critical habitat, is addressed further below as it is a Covered Species.

After reviewing the status of the Covered Species, the environmental baseline for the action area, the effects of the proposed action, and the cumulative effects, it is the Service's biological opinion that the action, as proposed, is not likely to jeopardize the continued existence of the Covered Species. Furthermore, the CBA will result in a net conservation benefit for the Covered Species.

II. PUBLIC COMMENT

A Notice of Availability of the draft EA, CBA, and EOS permit application published in the Federal Register on January 3, 2025, for a 30-day public comment period. We received six comment letters. The comments did not identify any significant new environmental impacts not addressed in the EA.

Four letters did not provide substantive comments, rather they included statements acknowledging the project with no further information. The remaining two letters provided overall support for the project, but both also provided comments or recommendations for minor edits to the final EA. We have responded to all comments and in some cases made minor edits to the final EA to improve clarity and accuracy of information. Full responses to all comments are in Appendix A of the final EA.

III. ENHANCEMENT OF SURVIVAL PERMIT CRITERIA – ANALYSIS AND FINDINGS

Section 10(a)(1)(A) of the ESA requires that the Service determine, after public comment, that issuance criteria at 50 CFR §§ 17.22(c)(2) and 17.32(c)(2) are satisfied before an EOS permit can be issued. The issuance criteria and our analysis and findings follow.

- i. The take will be incidental to an otherwise lawful activity or purposeful if it is necessary for the implementation of the CBA and will be in accordance with the terms of the CBA (50 CFR §17.22(c)(2)(i) and 50 CFR §17.32(c)(2)(i)).

We find that the potential take of the Covered Species would be incidental to otherwise lawful activities. The EOS permit would include incidental take associated with the CBA Covered Activities, which include the Applicant's ongoing activities, as well as operations and maintenance of existing facilities. Incidental take of Gila chub, spikedace, and loach minnow authorized under the EOS permit would be in the form of harm and/or harassment associated with seasonal reduction in available habitat from ongoing groundwater pumping and increased sediment resulting from the use of heavy equipment to repair/maintain existing facilities. Incidental take of narrow-headed gartersnake authorized under the EOS permit would be in the form of harm and/or harassment from construction, ground vibration, compaction, and heavy equipment use during any operations, repairs, or maintenance associated with ongoing activities.

- ii. The implementation of the terms of the CBA is reasonably expected to provide a net conservation benefit to the Covered Species on the enrolled property that is included in the permit and for each individual property within a programmatic CBA, based upon: condition of the species or habitat, effects of conservation measures, and anticipated impacts of any permitted take (50 CFR § 17.22(c)(2)(ii) and/or 50 CFR § 17.32(c)(2)(ii)).

The Applicant has developed the CBA according to the requirements in the implementing regulations and the issuance criteria for an EOS permit. The effects from the Applicant's

Covered Activities on Gila chub, spokedace, loach minnow, and narrow-headed gartersnake on lands covered by the CBA (Covered Area) are ongoing and will continue to occur regardless of our issuance of the EOS permit and CBA approval. However, our issuance of the EOS permit and CBA approval will provide multiple conservation actions and benefits that protect and enhance habitat for Gila chub, spokedace, loach minnow, and narrow-headed gartersnake above the constructed fish barrier. The Applicant's financial commitments related to the investigation, design, and construction of the fish barrier will provide long term benefits and protections from harmful nonnative fish species below the fish barrier. In addition, the Applicant's commitment to develop and implement a three-year monitoring program (nonnative crayfish study) above the fish barrier and a separate monitoring program on Covered Area lands along Eagle Creek will help inform conservation and management activities to assist in the future recovery of Gila chub, spokedace, loach minnow, and narrow-headed gartersnake. In return, the net conservation benefit from conservation actions outlined in the CBA will protect 22.4 stream miles (36.0 km) of potential Gila chub habitat, 8.4 stream miles (13.5 km) of suitable spokedace and loach minnow habitat, and 124 narrow-headed gartersnake home ranges in upper Eagle Creek above the constructed fish barrier. The baseline for the three fish species is 0 stream miles (0 km) of protected habitat, and the baseline for the narrow-headed gartersnake is 0 protected homeranges; therefore, the proposed CBA is expected to result in a net conservation benefit for the Covered Species.

- iii. The direct and indirect effects of any authorized take are unlikely to appreciably reduce the likelihood of survival and recovery in the wild of any listed species (50 CFR § 17.22(c)(2)(iii) and/or 50 CFR § 17.32(c)(2)(iii)).

The ESA's legislative history establishes the intent of Congress that this issuance criteria be identical to a regulatory finding of "no jeopardy" under ESA section 7(a)(2). As a result, the Service reviewed the proposed action according to provisions of section 7 of the ESA. In the intra-Service section 7 biological opinion, the Service concludes that issuance of the EOS permit will not jeopardize the continued existence of the Covered Species. The taking associated with implementation of the CBA will be incidental to conservation activities that will provide a net conservation benefit to the Covered Species and otherwise lawful land use activities. Although we anticipate some incidental take to occur, the implementation of the conservation actions proposed in the CBA should ultimately result in avoidance and minimization of adverse effects.

- iv. Implementation of the terms of the conservation benefit agreement will not conflict with any ongoing conservation or recovery programs for listed species and the covered species included in the permit (50 CFR § 17.22(c)(2)(iv) and/or 50 CFR § 17.32(c)(2)(iv)).

We are unaware of any law or regulation that would prevent implementation of the CBA and the accompanying EOS permit. The EOS permit includes conditions that revoke the take provisions of the EOS permit if any applicable State, Federal, or Tribal law or regulation is broken.

- v. The applicant has shown a capability for and commitment to implementing all terms of the conservation benefit agreement (50 CFR § 17.22(c)(2)(v) and/or 50 CFR § 17.32(c)(2)(v)).

The Applicant is committed to the CBA, and funds to accomplish the agreement and implementation of the conservation measures are described in Section VIII of the CBA. Based on conservation measures described in the CBA and provisions of the EOS permit, we do not expect any unforeseen circumstances to occur that would preclude the Applicant's funding and implementation of the CBA. All assurances and the EOS permit coverage are based on the proper implementation of the CBA.

IV. GENERAL CRITERIA AND DISQUALIFYING FACTORS - ANALYSIS AND FINDINGS

We have no evidence that the EOS permit should be denied on the basis of the criteria and conditions set forth in 50 CFR 13.21 (b)-(c). The Applicant has met the criteria for the issuance of the EOS permit and does not have any disqualifying factors that would prevent the EOS permit from being issued under current regulations.

V. RECOMMENDATION ON PERMIT ISSUANCE

Based on the foregoing findings with respect to the proposed action, we recommend issuance of an EOS permit to authorize incidental taking of the Covered Species by the Applicant, in accordance with the CBA.

Acting Deputy Regional Director,
Southwest Region