UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION IX
75 Hawthorne Street
San Francisco, CA 94105-3901

April 14, 2017

Sent via email

Steve Spangle
Field Supervisor
U.S. Fish & Wildlife Service
Arizona Ecological Services Field Office
9828 North 31st Ave, #C3
Phoenix, AZ 85051-2517

Email: **incomingazcorr@fws.gov**

Re: Request Informal Consultation under Section 7 of the Endangered Species Act (ESA) Regarding the UIC Permit for the Gunnison Copper Project

Dear Mr. Spangle:

I am writing to request informal consultation under Section 7 of the Endangered Species Act (ESA) for a proposed project located along Interstate 10 approximately 1.5 miles southeast of the Johnson Camp Mine (JCM), Northeast of Dragoon, in Cochise County, Arizona. The proposed Gunnison Copper Project facility (the "Project") requires an Underground Injection Control (UIC) permit from the United States Environmental Protection Agency, Region IX (EPA). EPA is currently evaluating a UIC permit application from Excelsior Mining Arizona, Inc. (Excelsior) for the Project. Prior to issuance of a UIC permit decision, EPA is reviewing any potential risks to listed species in compliance with 40 CFR 144.4(c), Section 7 of ESA and its implementing regulations at 50 CFR part 402.

Project Description

Excelsior submitted to EPA an application requesting an area Class III UIC permit to install a wellfield consisting of injection and recovery wells, hydraulic control wells, observation and monitoring wells in an area of approximately 192 acres for in-situ recovery of copper. The in-situ recovery (ISR) method involves injecting low-pH solutions into the orebody through an array of injection wells and extracting copper-bearing solutions (pregnant leach solution or PLS) through an array of recovery wells.

The proposed project under evaluation by EPA will be implemented in three production stages over 20 years, with a total project operational life of 23 years. Stage 1 will be years 1-10, Stage 2 will be years 11-13, and Stage 3 will be years 14 -20. Multiple mining blocks will be active during each stage, increasing production as each stage is implemented. As mining of individual blocks is completed, the mining operations will be followed by an aquifer rinsing period while mining proceeds to subsequent blocks. A post production aquifer rinsing period for the last mining block is anticipated to be completed by year 23.

At the surface, existing process solution impoundments at JCM will be used during Stage 1 to hold process solutions. Additional impoundments will be constructed south of the freeway during Stages 2 and 3. Copper will be removed from the PLS at the JCM solvent extraction-electrowinning (SX-EW) plant, producing pure copper cathode. After copper has been removed from the PLS, the remaining raffinate (barren solution), is re-acidified and pumped back to the ISR wellfield to continue the leaching cycle. Additional SX-EW capacity will be built to the east of the ISR wellfield for Stages 2 and 3. Post mining, the wellfield subsurface will be rinsed to meet permit conditions and after appropriate monitoring will be closed according to relevant state and federal regulations.

Project facilities for Stage 1 (see Figure for Stage 1) include the following (items in bold are pre-existing):

- Years 1-10 ISR wellfield with related pipes, power supply and header houses (small manifold and instrumentation control rooms within the ISR wellfield)
- Interconnecting pipe line corridor ("pipe-corridor") from the ISR wellfield to the existing **Johnson Camp Mine SX/EW processing facility, solution ponds, power supply and related infrastructure, roads and office buildings.**
- Pipe conduit under the I-10 freeway.
- Drain-down pond at the low point of the pipe-corridor to collect and temporarily hold solutions contained in the pipes should pipe maintenance be required.
- Access road and guard house on the southwestern edge of the ISR wellfield.
- Evaporation pond located east of the ISR wellfield and on the south side of the I-10 freeway.

Project facilities for Stages 2 and 3 (see Figure for Stages 1-3) include the following (items in bold are pre-existing or are included in Stage 1 above):

- Expanded ISR wellfield with related pipes, power supply and header houses.
- **Interconnecting pipe line corridor ("pipe-corridor") from the ISR wellfield to the existing Johnson Camp Mine SX/EW processing facility, solution ponds, power supply and related infrastructure, roads and office buildings.**
- **Pipe conduit under the I-10 freeway.**
- **Drain-down pond at the low point of the pipe-corridor to collect and temporarily hold solutions contain in the pipes should pipe maintenance be required.**
- **Access road and guard house on the south western edge of the ISR wellfield.**

- **Evaporation pond located east of the ISR wellfield and on the south side of the I-10 freeway**
- Additional SXEW processing facilities with related infrastructure, power supply, office building and process ponds, located on the south side of the I-10 freeway and the east of the ISR wellfield.

Summary of Findings and Determinations

As described in the enclosed Gunnison Copper Project Biological Evaluation (BE), the analysis area as displayed in Figure 1 of the BE is located in T15 S, R22 E, Section 36 and T15 S, R23 E, Section 31. The information from the USFWS IPaC Trust Resources report generated on December 8, 2016 includes six threatened or endangered species and one candidate species within Cochise County that may occur or could potentially be affected by activities in the project area. In addition, there is no critical habitat within the analysis area.

As documented in the enclosed BE, the Analysis Area is undeveloped land that was used historically for ranching, mining, and recreation. No USFWS listed, candidate or experimental species were detected during 2016 and earlier field surveys (2011 through 2015) nor have any federally protected species records been located that would indicate past presence of federally listed or proposed listed species within the Analysis Area in the past.

Based on EPA's review of the BE and available information, EPA has determined that the proposed action will have no effect on the Yellow-Billed Cuckoo, Aplomado Falcon, Mexican Garter Snake, Chiricahua Leopard Frog, Wrights Marsh Thistle or Jaguar because the Analysis Area is outside of their known ranges or though there is some limited habitat potential within the Analysis Area, there are no records of the species presence and no detections in 2011 through 2016 field surveys. EPA also agrees with the BE's conclusion that the proposed action may affect foraging lesser long-nosed bats but is not likely to adversely affect the bats due to the lack of roosts and plant forage species. I request your concurrence with our "not likely to affect" determination for the lesser long-nosed bat, and our "no effect" determinations for the other above listed species.

Please provide a response within 30 days with your concurrence or with comments to the following address:

Nancy Rumrill
U.S. EPA Region IX, (WTR-3-2)
75 Hawthorne Street
San Francisco, CA 94105

If you require additional information or have any questions regarding this letter or the enclosed information, please call me at (415) 972-3971 or Nancy Rumrill of my staff at (415) 972-3293.

Sincerely,

David Albright
Manager, Drinking Water Protection Section

Enclosures

cc (via e-mail): Rebecca Sawyer, Excelsior Mining Arizona, Inc.