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Subject: Supplemental mitigation list
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Hi Vicky –

Attached please find the supplemental list of mitigation suggestions that we've gleaned from the public comments on the DEIS. Along with the original list submitted to you on March 5, we believe these capture most of the actionable mitigation suggestions from the public comments.

We think it would be useful to reiterate a couple of points that came up in the discussion at Friday's biweekly meeting:

- These two lists (March 5 and May 4) represent only one building block of the eventual suite of mitigation that we intend to capture in the FEIS and ROD. Other building blocks could include:
 - Mitigation/monitoring developed out of the discussions of the Water Resources Workgroup and Geology/Subsidence/Seismic Workgroup.
 - Compensatory mitigation under the 404 permit
 - Additional Conservation Measures or Reasonable and Prudent Measures coming out of Section 7 consultation
 - Cultural resource mitigations coming out of Section 106 consultation
 - Additional tribal-related mitigations developed as envisioned in the NDAA
 - The revised recreation mitigation proposal anticipated from the Forest Service (in response to the RUG proposal)
 - Possible components of the Reclamation and Closure plan
 - Mitigations required by ASLD as part of right-of-way permitting
 - Mitigations potentially developed out of the FMEA process
 - Mitigations/monitoring required under state permits

- We intend for the FEIS (Appendix J) to represent as complete a compilation as possible of mitigation and monitoring that would take place on this project. For this reason, we want to include any mitigation we believe will occur, while also clearly disclosing to the public whether that mitigation ultimately is required or solely voluntary.

- Fundamentally, it remains the responsibility of the Forest Service to review the mitigation suggestions received with the public comments on the DEIS, determine what is actionable, and decide whether it can or cannot be required.

- We are requesting feedback from Resolution on these two lists as one input into the Forest Service review and assessment of the mitigation suggestions. **We are specifically requesting input on those items that Resolution is intending to undertake, voluntarily or under some other regulatory requirement, regardless of the Forest Service position.** With this input in hand, we can continue to identify the voluntary measures that would be included in Appendix

J. However, to be clear, other items on these lists could also end up being required if the Forest Service eventually determines they are appropriate and within the Forest's ability to require.

Thanks and we look forward to discussing these further

- C

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SUPPLEMENTAL MITIGATION PROPOSALS FROM DRAFT EIS PUBLIC COMMENTS

MAY 4, 2020

Overview

On March 5, 2020 a list was provided to Resolution Copper containing a series of 85 mitigation suggestions gleaned from roughly 361 individual public comments on the Draft EIS. Those comments were identified from the initial codes assigned by the comment analysis team.

The public comments have been re-screened in preparation to drafting the responses to comments. An additional 74 comments were identified that potentially contained mitigation suggestions that had not been captured in the March 5 list. The suggestions from these additional comments are provided below.

An additional 58 mitigation suggestions have been identified. In many cases, these additional suggestions are related to mitigation suggestions provided on March 5. Where this is the case, the original suggestion has been noted.

- General monitoring and reporting (3 proposals)
- Air quality (2 proposals)
- Cultural resources (2 proposal)
- Environmental justice (1 proposal)
- Lands (9 proposals)
- Noise (1 proposal)
- Public Health & Safety (6 proposals)
- Recreation (6 proposals)
- Recreation – Arizona National Scenic Trail (4 proposals)
- Socioeconomic (4 proposals)
- Vegetation (1 proposal)
- Water Supply (6 proposals)
- Water –Queen Creek (1 proposal)
- Water – Monitoring (1 proposal)
- Water – Devil’s Canyon (2 proposals)
- Wildlife – Plans (4 proposals)
- Wildlife – Avian and Bat (3 proposals)
- Wildlife – Aquatics (1 proposal)
- Wildlife – Species-specific mitigations (1 proposal)

General Monitoring and Reporting

- (M-G5). Mitigation plans should force a cessation of mining activities until problems are fixed.
Notes: 1) The comment points to a variety of resources this would apply to, including air quality, water quality, wildlife corridors, and resident and migrating wildlife species; 2) We recognize that triggers/actions are likely to be defined primarily by state permitting requirements for air quality and water quality; and 3) With respect to water supply and subsidence, in particular, the ongoing workgroup discussions have (or will) include discussion of the question of appropriate triggers, including cessation of mining.
- (M-G6). Request to take all measures possible to identify and mitigate any public health and safety, water resource, socioeconomic, and quality-of-life impacts of concern to Kearny, Winkelman, Dripping Springs, and other locations in Gila County.
- (M-G7). This comment is being provided in its entirety, as the best way to convey the request. Emphasis from original.

“Require a 5 BILLION DOLLAR non-refundable cash deposit, paid in full, to be held by a specific United States agency to be used for the following. Payments from interest of the sum to be dispersed on a bi-annual basis to the affected parties/entities from the mine's operation. These payments would be made on an equitable basis depending on need, size of entity, property at stake/risk, etc. These entities could be the Town of Superior/residents, Native American Tribes, residents of Oak Flat/Top of the World, Queen Valley, Pinal County, USFS and Tonto National Forest, etc. These payments would not take the place of any other mitigations but would be over and above. At the end of the mine's operation the principal would be used as additional funds for clean up and restoration of the area and other payments to affected entities. Obviously this proposal would require more detail than I may provide in this comment section. At the end of the mine's operation, title/deed/ownership of the land originally involved in the land swap would automatically revert back to it's original owners for a token payment amount of the smallest amount possible to make the swap legal. I propose \$1.00. The 5 Billion Dollar deposit would be required before any further mining operations would be allowed to continue. Given profit statements, fund dispersed to shareholders, operating capital, etc, this amount should not be considered excessive by any means.”

Air Quality

- (M-AQ4). The length of the overland portion of the conveyor at the West Plant Site should be minimized and enclosed to reduce possible dust in the area.
- (M-AQ5). The stockpiled ore needs to be enclosed (as opposed to "covered") to reduce dust in the area.

Cultural Resources

The development of cultural and tribal mitigations is being undertaken through a separate and extensive process, both through Section 106 consultation and separate discussions as required under the NDAA. Very few of the ideas currently being developed arose from the public comments.

- (M-C4). Provide jobs for tribal members through the tribal monitoring program.
- (M-C5). Allow unfettered access to Emory Oak resources.

Environmental Justice

- (M-EJ1). Provide a reasonable and reasonably complete suite of plans and options to avoid and mitigate the adverse impacts on environmental justice communities.
Notes: 1) It is recognized that this mitigation suggestion is too generic to be directly actionable; and 2) that many of the specific socioeconomic mitigation suggestions possibly are pertinent to environmental justice communities. However, this suggestion has been included in order to identify that mitigating impacts to environmental justice communities in particular were a focus of the public comments.

Lands

The March 5 list of mitigation suggestions included item M-L1, calling for a partnership with The Nature Conservancy for management of 7B Ranch. The following include more specific requests from letter from The Nature Conservancy (Letter 1137) and Audubon Arizona (Letter 1441).

- (M-L10). Staff a position with a new BLM employee, preferably operating somewhere in the greater San Pedro Watershed.
- (M-L11). Develop a strategy (prior to FEIS) to facilitate Interior's assumption of management of 7B Ranch and Appleton Ranch.
- (M-L7). Fencing repair and replacement, and additional cultural site fencing.
- (M-L8). Retire degraded irrigation ditches and berms; remove dilapidated structures and access roads.
- (M-L9). Undertake bosque restoration prior to BLM assuming ownership.

The March 5 list of mitigation suggestions also included Item M-L4, calling for additional acreage within the lower San Pedro watershed be obtained to achieve a "no net loss" in habitat value. The BHP "Broken Hills Property" was one specific suggestion. Below are additional related suggestions.

- (M-L12). Restoration and Enhancement of H&E Farm property owned by The Nature Conservancy.
- (M-L13). Specific to the BHP Property: 1) protection of riparian forest, wetlands, and springs; 2) restricting development of these areas; 3) limiting water use and/or withdrawals; 4) active management of this property for wildlife; and 5) partnering with conservation organizations to hold and manage these lands in fee or hold conservation easements.
- (M-L14). Address the tailings at the Grand Reef Mine.

- (M-L15). Set up an endowment to fund long-term management of the Lower San Pedro River sites, as well as the Appleton Ranch parcel, by non-profits. These sites would not have sufficient funding for a federal agency to manage them for ecological purposes.

Noise

- (M-N4). Mitigate noise to residents along Dripping Springs Road.
Note: This is a more specific version of M-N2 from the March 5 mitigation list.

Public Health & Safety

- (M-PH10). The subsidence area boundary should be fenced off to prevent cattle from entering the area if there is a safety hazard to the mine or the livestock.
- (M-PH6). All components of the pipeline should be engineered and constructed pursuant to best management practices to reduce the possibility of a breach or spill occurring on Arizona State Trust land. These design methods may include using thick single-walled or double-walled pipe sections lined with high-density polyethylene, installing a comprehensive pipeline monitoring network, and peer-review of the construction and design.
- (M-PH7). Continue ITRB reviews with public transparency through subsequent design, construction, operations, and closure of the selected tailings alternative.
- (M-PH8). Address potential rock/boulder slide that sits on the northern slope of the mountain between Milepost 228, going east to Queen Creek Tunnel.
Note: This comment was specifically brought forward through the Subsidence/Geology/Seismic workgroup, for consideration in the revised Subsidence Monitoring Plan.
- (M-PH9). Subsidence monitoring should be made available in real-time through a website.
Note: This comment is similar to item M-G1 brought forward in the March 5 mitigation list.
- (M-PH11). Conduct InSAR monitoring of any areas of potential subsidence, including the Oak Flat area and Desert Wellfield area.
Note: Remote sensing of subsidence has already been conducted at Oak Flat and has been brought forward through the Subsidence/Geology/Seismic workgroup, for consideration in the revised Subsidence Monitoring Plan. The potential to use InSAR also has been raised in the context of the Desert Wellfield potential subsidence and may be further discussed with the Water Resources Workgroup.

Recreation

- (M-R31). Access routes established for the tailings pipeline corridor should remain open to the public for access to the east side of Oak Flat so long as the access does not interfere with operations or public and worker safety.
Note: This is related to items M-R23 and M-R24 from the March 5 mitigation list.

- (M-R33). For climbing, replacement of the USFS roads that are lost with reasonable alternative alignments/replacements and improvements. Specific reference to Upper and Lower Devils Canyon, the Mine Area and Apache Leap. Include parking lots and trailheads along with the roads.
Note: This is related to items M-R8 and M-R9 from the March 5 mitigation list.
- (M-R34). Further details are requested on the Inconceivables mitigation potential.
Note: This is related to items M-R8 and M-R9 from the March 5 mitigation list.
- (M-R35). Identify funding strategies for the Superior Trail Network.
Note: This is related to item M-R18 from the March 5 mitigation list.
- (M-R36). Keep the Hackberry Creek off-road trail open.
- (M-R37). With respect to measure RC-216 (page J-17 in DEIS: “Develop access to Oak Flat Campground while safe per MSHA regulations”): Include alternative vehicular access for parking and trails to Devils Canyon on Forest Service lands upstream of the Grotto area as a part of access mitigation.

Recreation – Arizona National Scenic Trail

- (M-RAZ1). If the pipelines cross over the AZNST they should contain sound deadening materials.
- (M-RAZ2). Further details are needed for the crossings of the AZNST by any project components; with respect to crossings of the MARRCO Corridor, formally grant permission for users of AZNST to cross the corridor.
- (M-RAZ3). Incorporate construction measures into any road crossings, pipeline crossings, or reroutes of the AZNST to minimize impediments to trail use and minimize visual impacts on trail users.
- (M-RAZ4). Any construction closures should not last longer than one hour if there are AZNST users waiting to continue, and safety procedures must be a high priority.

Socioeconomics

- (M-S26). Compensatory mitigation for reduced property values (applies to impacts from water supply impacts from water quantity or water quality changes, impacts from traffic, and impacts from proximity to tailings/mine facilities).
- (M-S27). Establish a fund with a percentage of profits to the Town of Superior, as Superior will be impacted the most by the mine, but receives no or little tax income.

Note: This is related to a number of items on the March 5 mitigation list, including M-S13 and M-S15.

- (M-S28). With respect to ranching impacts, develop timely, economically viable alternatives for the ranchers who want it.
- (M-S29). Establish a longer-term agreement or an education to offset this loss of funding to schools.

Note: This is related to item M-S10 on the March 5 mitigation list.

Vegetation

- (M-V4). From AGFD: comply with the Arizona Native Plant Law regulations. Determine if a Native Plant Inventory should be conducted to identify, record, and coordinate plant salvage efforts for species that are Protected under the Arizona Native Plant Law.

Water Supply

A number of additional comments are related to the potential mitigation to replace residential wells if impacted by drawdown (item M-WS2 on the March 5 mitigation list). Note that these comments are also slated to be part of the discussion on mitigation and monitoring that will take place with the Water Resources Workgroup.

- (M-W22). Ensure that mitigation of water supplies replaces the full value of what is lost (“restitution” is the term used by the commenter); is fully funded and in place prior to loss of water supply to avoid delays; and has clear triggers with data gathered relative to possibly affected wells provided to ADWR, Forest Service, the well owners, the Town of Superior, and Top-of-the World on an annual basis.
- (M-W23). The water supply mitigation agreed to right now is specific to possible drawdown impacts the mine site. Additional requests were made by the public for similar mitigation to be put in place near the Desert Wellfield (due to drawdown impacts), and residents along Dripping Springs Wash (due to water quality impacts).
- (M-W24). The mitigation should be extended to include not just replacement of water supplies, but compensation for other impacts due to groundwater drawdown, such as increased pumping costs.
- (M-W27). Financial resources should be set aside to mitigate the impact of land subsidence due to groundwater pumping.
- (M-W31). Partially mitigate impacts by withdrawing the Phoenix AMA Long-term storage credits from within the Area of Impact of storage.

- (M-W32). Arizona Water Company requests that appropriate funding or bonding be in place to ensure the project will not cause any significant water level declines or water quality impacts .

Water – Queen Creek

- (M-W33). Place new shafts and exhaust raises well away from the centerline of Queen Creek by an appropriate distance, say 500 feet.

Note: This mitigation suggestion is related to M-W16 from the March 5 mitigation list, which is concerned about lost water in Queen Creek due to fracturing.

Water – Monitoring

A number of additional comments are related to the potential monitoring and mitigation of GDEs. Note that these comments are also slated to be part of the discussion on mitigation and monitoring that will take place with the Water Resources Workgroup.

- (M-W28). More detail is needed in the monitoring and mitigation plan, including:
 - Exactly how we intend to differentiate the impacts from mine dewatering from other variables
 - Whether GDEs reliant on shallow fracture flow (as determined by the Forest Service for the DEIS) would be exempt from monitoring and mitigation requirements.
 - Clear quantitative triggers for each GDE (i.e., groundwater decline of greater than X feet over Y monitoring events).

Water – Devil’s Canyon

- (M-W26). Divert existing flows across the subsidence area around or away from this site, to preserve downstream flows, if possible.
Note: This is related to item M-W18 from the March 5 mitigation list.
- M-W30). More specifics are needed for mitigation and avoidance at crossings of Devils Canyon for Alternative 6 pipeline routes (north and south).

Wildlife – Plans

A number of measures were previously captured under the overarching requirement to develop a Wildlife Management Plan (M-WL23) in the March 5 mitigation list. The comments below likely fall under the same category.

- (M-WL39). From AGFD: 1) consider referencing the ERT and clarify ERT reports will be updated every 6 months to ensure the latest conditions/species are assessed over the life of the project; 2) consider coordinating with the Project Evaluation Program before, during, and after construction to assist with mitigation.
- (M-WL41). From AGFD: develop an Aquatic Species and Habitat Biomonitoring and Response Strategy (detailing physical and chemical parameters to sample)

- (M-WL45). From AGFD: consider the need, intensity, direction, duration, and spectrum of lighting. Options to consider include: eliminate any upward facing lights, use minimum needed for safety, shield, canter or cut lighting to ensure light only reaches areas needing illumination and reduce glow, light only high stretches of roads (i.e. crossings, etc.), do not install lighting in areas of wildlife linkage or connectivity.
Note: This item is also related to item M-WL11 from the March 5 mitigation list.
- (M-WL47). From AGFD: continue collaboration on a voluntary compensatory plan, beyond what is legally mandated, to achieve a no net loss of habitat.

Wildlife – Avian and Bat

- (M-WL42). From AGFD: Conduct nesting bird surveys no later than one week prior to any disturbance. The description of actions to be taken should include procedures for what to do if an active nest is discovered. In addition, if adult birds are present and nesting, ground and vegetation disturbing activities must be avoided until the young have fledged.
Note: This item is related to items M-WL36 and M-WL3 from the March 5 mitigation list.
- (M-WL43). From AGFD: Mitigate loss of habitat for bats, specifically roosting/maternity roost areas. Identify mines/adits/shafts with known bat roosting areas. If activities are adjacent to bat roosting/maternity sites, develop BMPs to reduce human encroachment.
Note: This item is related to item M-WL7 from the March 5 mitigation list.
- (M-WL45). From AGFD: Identify the actions to be taken if a new breeding pair of Golden Eagles appears in the project vicinity.

Wildlife – Aquatics

- (M-WL40). Stock tanks should be surveyed to determine what species are impacted and a mitigation plan should be developed if T&E species are identified.

Wildlife – Species-specific mitigations

- (M-WL49). Provide more detail on “establishing tortoise crossings for concentrate and tailings pipeline corridors in areas containing habitat” (Applicant-Committed Environmental Protection Measures, Section 3.8, DEIS p. 458).