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Comments: June 3, 2024

Kerwin S. Dewberry, Forest Supervisor

Coronado National Forest

ATTN: Hermosa Critical Minerals Project

300 W. Congress St.

Tucson, Arizona 85701

Dear Mr. Dewberry,

This letter offers comments on the Hermosa Critical Minerals Project.

According to South 32's revised Mine Plan of Operation (MPO), the mine plans to install at least one Rapid Infiltration Basin (RIB) within the boundaries of the San Rafael Valley watershed (Official name: Mowry Wash-Santa Cruz River_150503010102 / Upper Santa Cruz_15050301 / <https://mywaterway.epa.gov/community/150503010102/overview>). I wish to object to the proposed placement of some of these RIBs, support my objection, and offer an alternative. Please consider these comments generally, but also from the perspective of properly following the National Environmental Policy Act's concepts of indirect and cumulative impacts, alternatives selection, and mitigation (in particular avoidance), as well as historic preservation procedures given the cultural significance of these undisturbed grasslands that have been the backdrop for multiple films, precisely because of their pristine condition. That the water table is a critical component of preserving this ecosystem is obvious.

Aside from road construction, these proposed RIBs would be the first major intervention to potentially affect the ecological integrity of the San Rafael Valley, thereby upsetting the balance among community, environmental and economic elements, key factors in a sustainable landscape.

The object of a RIB is to return treated water to the aquifer. The ultimate water quality after treatment will certainly not return it to its original pristine condition and therefore will be of lesser quality and likely containing some degree of contamination. The extent to which this will negatively alter the aquifer is, of course, unknown. But this is a mining operation. There is a quantifiable chance that negative impacts will occur. The recently issued CEQ NEPA regulations emphasize the role of mitigation, and avoidance is first in the commonly accepted mitigation hierarchy that practitioners have followed for years. There is no shortage of already disturbed areas where the RIB could be located; therefore, this action should be avoided in the San Rafael Valley watershed.

Relatedly, the Forest Service or any other involved Federal agency should be considering the unique nature of the San Rafael Valley in its alternatives analysis, to the extent it conducts one, with an eye towards avoidance of impacts entirely (not limited to RIB location). Similarly, in considering applying any categorical exclusions (CE), Federal agencies should consider the presence of endangered species, the ecological, cultural, and historic significance of this area as extraordinary circumstances that could require more detailed analysis depending upon the CE to be applied.

The San Rafael Valley (SRV) is one of the finest shortgrass prairie ecosystems in the country. In addition, the Santa Cruz River headwaters emerge from the Canelo Hills and run for approximately eight miles south through the Valley. Unlike many overburdened waters in the arid southern Arizona climate, the water quantity of this segment of the river has not diminished over time, and the water quality remains uncompromised. This river also

holds profound Native American importance in Southern Arizona, flowing beyond the SRV through three nations: Mexico, the U.S. and the Tohono O'odham Nation. Additionally, any human caused alterations to the water or the aquifer may impact international relations and international water law. The Santa Cruz River headwaters and the watershed that feeds it must be protected.

This watershed provides habitat for at least 17 threatened and endangered species. American Rivers has named the Santa Cruz River as the 4th most endangered in the United States on their 2024 list of most endangered rivers.

While the Santa Cruz River from Nogales to Marana is under continual restoration, this stretch in the San Rafael Valley remains uncompromised. There also may be communities with environmental justice concerns in the Nogales to Marana corridor that could be disproportionately overburdened should the Santa Cruz headwaters become compromised. Yet another reason among many why it is critical that we not risk negatively impacting the river's headwaters, the only stretch of river that is safeguarded at this time. Unexpected hydrologic changes by nearby mining activities could cause changes in groundwater flow and connectivity, making it difficult to determine where the treated water will go. In addition, the post-treatment water quality is uncertain. If the treatment process were foolproof, there would be no need to install monitoring wells to ensure that the groundwater is not being degraded.

For over 50 years, the residents of the San Rafael Valley and surrounding area have monitored and protected the health of this ecologically unique and beautiful watershed in southern Arizona. In 1970, the non-profit - San Rafael Valley Association - was formed to eliminate all forms of environmental pollution and to preserve Nature's ecological balance. In 2009, the non-profit - A Land in Balance - was incorporated to counter the threat of mining. Close to 30,000 acres of private land in the valley have been protected by conservation easements ensuring that the valley remains unspoiled for future generations. The land is of such a unique character that a portion has also become an Arizona State park.

Because the quality of water after treatment is uncertain, all proposed RIBs should be located outside of the San Rafael Valley watershed, and every effort to mitigate (through avoidance) impacts to this historic, cultural, and ecological treasure should be taken, documented, disclosed to the public for comment, and implemented. There should be early, continuous, and meaningful engagement and consultation with the people who have protected this Valley for generations. According to the MPO, alternative sites have been identified. There is no question that these should be used instead. Doing so will ensure that the Hermosa Project aids in the protection of one of the last unspoiled waterways in the Southwest.

Water is life. More so in southern Arizona than almost anywhere. If objections are raised regarding cost, we encourage a simple risk reward analysis. On one side of the scale: relocating some injection basins to other already-identified sites and avoiding impacts to the Valley generally. On the other: risk of unquantifiable damage and potential remediation costs from poisoning this pristine landscape. There is a clear pragmatic solution here.

Thank you for your time and consideration, we look forward to engaging with you and other stakeholders as this project progresses.

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