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Comments: June 7, 2024

Regarding the Hermosa Critical Minerals Project Scoping Comments

Dear Forest Supervisor Dewberry:

We thank the U.S. Forest Service, Coronado National Forest ("Forest Service") for the opportunity to comment on the Hermosa Critical Minerals Project ("Hermosa Project"). These scoping comments are submitted on behalf of the Circle Z Ranch ("Circle Z"), a dude ranch operating in Patagonia, Arizona that has been bringing significant tourism to the area since 1926. Circle Z specifically requests that the Forest Service thoroughly address and analyze the environmental, cultural, historical, economic, and business impacts of the Hermosa Project, and that the Forest Service consider alternatives to the Hermosa Project's proposed Primary Access Road and above-ground high-voltage power transmission line, as well as the impacts of the proposed facilities and alternatives on National Forest surface resources and Circle Z.

On May 10, 2024, the Forest Service invited the public to participate in the scoping process for the Hermosa Project, which runs through June 10, 2024. See 89 Fed. Reg. 40462 (May 10, 2024). These comments are timely because Circle Z is submitting them within the Hermosa Project's review and comment period.

INTRODUCTION

The Forest Service is required to regulate the "occupancy and use" of national forests and to "preserve the forests thereon from destruction." 16 U.S.C. § 551. The agency's organic statute further permits the Forest Service to develop regulations governing mining activity. 16 U.S.C. §§ 475, 478, 551. As part of that mandate, Forest Service regulations require that mining activity "shall be conducted so as, where feasible, to minimize adverse environmental impacts on National Forest surface resources[.]" 36 C.F.R. § 228.8. Any mining operator must comply with "all state and federal water quality standards, including those promulgated under the Clean Water Act." *Rock Creek Alliance v. U.S. Forest Service*, 703 F. Supp. 2d 1152, 1164 (D. Mont. 2010); see also 36 C.F.R. §§ 228.4(c)(3), 228.8(b). The mining operator must "take all practicable measures to maintain and protect fisheries and wildlife habitat which may be affected by the operations." 36 C.F.R. § 228.8(e). And the mining operator "shall, to the extent practicable, harmonize operations with scenic values through such measures as the design and location of operating facilities, including roads and other means of access, vegetative screening of operations, and construction of structures and improvements which blend with the landscape." *Id.* § 228.8(d).

Under the National Environmental Policy Act ("NEPA"), 42 U.S.C. §§ 4321, et seq., the Forest Service is required "to consider every significant aspect of the environmental impact of the proposed action." *Baltimore Gas & Elec. Co. v. Nat. Resources Def. Council, Inc.*, 462 U.S. 87, 97 (1983). The agency must publish an environmental impact statement addressing these impacts. NEPA requires the agency's environmental impact statement to "describe the impacts of the proposed agency action, any adverse impacts of the proposed action that cannot be avoided, and alternatives to the proposed action which were considered by the agency." *Rock Creek Alliance*, 703 F. Supp. 2d at 1173; see also *Save Our Cabinets v. U.S. Dept. of Agriculture*, 254 F. Supp. 3d 1241, 1260-61 (D. Mont. 2017). The environmental impact statement also must discuss "appropriate mitigation measures." 40 C.F.R. § 1502.14(e). "The definition of 'mitigation' includes minimizing environmental impacts, rectifying impacts by repairing, restoring, or rehabilitating the affected environment, reducing or eliminating the impact over time through preservation or maintenance, and compensating for the impact by providing substitute resources." *Save Our Cabinets*, 254 F. Supp. 3d at 1267.

As to alternatives, NEPA mandates that the Forest Service's environmental impact statement study a "reasonable range of alternatives to the proposed agency action . . . that are technically and economically feasible, and meet the purpose and need of the proposal," 42 U.S.C. § 4332(2)(C)(iii), and "[s]tudy, develop, and

describe technically and economically feasible alternatives," id. § 4332(2)(F). The Forest Service must give "full and meaningful consideration to all reasonable alternatives." *Te-Moak Tribe of Western Shoshone of Nevada v. United States Dep't of the Interior*, 608 F.3d 592, 601-02 (9th Cir. 2010). "The existence of a viable but unexamined alternative renders an environmental impact statement inadequate." Id. at 602.

The National Forest area that would be impacted by the Hermosa Project's proposed use is subject to a Special Use Permit issued by the Forest Service to Circle Z, granting Circle Z the right to run guided horseback trips and engage in other uses. Under the terms of that permit, the Forest Service only may allow others to use the permit area to the extent such use "is not inconsistent with the holder's rights and privileges under" the permit and only "after consultation with all parties involved." See Appendix A (attached hereto), § G.

BACKGROUND

The Hermosa Project has requested that the Forest Service authorize construction of a new permanent Primary Access Road, for what will become a heavily used haul road, and a high-voltage power transmission line, both of which would be built near and along Forest Service Road 4653. See Appendix B (attached hereto) (Map of Hermosa Project's proposed permanent Primary Access Road and high-voltage power transmission line). As proposed, the Hermosa Project's Primary Access Road and transmission line will adversely affect Circle Z and will cause many substantial, detrimental impacts on Circle Z's operations and to the local environment, including National Forest surface resources. A brief summary of those impacts is included in these comments.

Circle Z was established in 1926 and is one of Arizona's original dude ranches, promoting nature-based tourism in the Patagonia community. The ranch's deeded property borders the U.S. Forest Service to the east; Arizona State Parks land to the south, and Nature Conservancy land to the west. The current owners purchased the property in 1975, at a time when there were many abandoned mines in the area, with toxic mine tailings, open mine shafts, and mine adits in the area. Since purchasing the ranch, the current owners of Circle Z have been dedicated to the preservation of the land, securing a perpetual conservation easement through the Arizona Land and Water Trust. Circle Z has received a Heritage Trails Ranch designation by the AZ state parks.

Circle Z is a popular tourist destination serving 500-600 guests yearly during an October to April guest season. Circle Z leads guided horseback riding trips on established trails on Circle Z's private lands as well as on adjacent Coronado National Forest Service land. These trails currently are established under a Special Use Permit first granted in 1992 but have been in the use at least since the 1940s. Circle Z has renewed the 10-year permit four times. The current permit language allows the Forest Service to permit others to use the permit area but only to the extent such use "is not inconsistent with the holder's rights and privileges under" the permit and only "after consultation with all parties involved." See Appendix A, § G.

As proposed, the Primary Access Road and high-voltage power line would run directly through the Circle Z permit area and would transect multiple developed Circle Z trails. The current proposal would cross or infringe on at least ten established and frequently used riding trails, rendering them unsafe and unfit for use for the first time in many decades. Authorizing the proposed permanent Primary Access Road and high-voltage power line across Circle Z's riding trails would run contrary to the letter and spirit of the permit already granted to Circle Z. See Appendix A, § G. Circle Z's operations will be significantly and negatively impacted by the Hermosa Project's requested Primary Access Road and power line. This mining use would violate the plain terms of the Circle Z Special Use Permit and the requirements of this permit must be examined by the Forest Service before authorizing the Hermosa Project's proposed permanent Primary Access Road and high-voltage power line. Although the Hermosa Project has labeled the road along which the permanent Primary Access Road would run as a U.S. Forest Service road, the existing road is only rarely accessed by motor vehicles for occasional gas-line administrative activities. The Hermosa Project's proposed use would be a material change in use of the road both in kind and in intensity and would directly adversely impact Circle Z's riding trails and its business and National Forest surface resources including air quality, wildlife, wildlife habitat, plants, scenic values, trail stability, noise, and potentially water quality and stream flow. Moreover, it will be impossible for Circle Z to re-route its riding trails due to the terrain's steepness, deep arroyos, and rock formations in the area.

In addition to these direct adverse impacts, the Hermosa Project's proposed Primary Access Road and high-voltage power line also would indirectly impact Circle Z's trails (which are built on lands subject to conservation easements) and Circle Z's guests and employees by (1) visually polluting the area via the installation and use of 100-foot-tall transmission lines with spans averaging between 750 and 1,000 feet; (2) imposing noise impacts

from ore hauling and other trucks; (3) generating potentially harmful levels of dust and other pollutants that could adversely impact breathing and cause respiratory illness, displace wildlife, adversely impact scenic views; and (4) generally disrupting the enjoyment of Circle Z's guests. The Hermosa Project's proposed Primary Access Road and high-voltage power line are sure to override decades of work that Circle Z has done to maintain its riding trails and promote tourism in the Patagonia area. The Hermosa Project's proposed use will adversely impact the economic viability of Circle Z's business, will adversely impact the conservation efforts of Circle Z and neighboring landowners, will adversely impact Circle Z's historical use of the affected lands, will create profound visual pollution, and will adversely impact the overall value of Circle Z's land. Each of these potential impacts on Circle Z is described in further detail in the sections below.

Viable alternative routes for both the Primary Access Road and the proposed transmission line exist. See Appendix C (attached hereto). Pursuant to 42 U.S.C. §§ 4332(2)(C)(iii) & 4332(2)(F), Circle Z respectfully submits that the Forest Service is required to both consider and take a hard look at the viability and impacts of these alternatives. Pursuant to 16 U.S.C. § 551 and 36 C.F.R. § 228.8, the Forest Service is required to choose one of these alternatives. Circle Z requests that one of these alternatives be utilized in lieu of the current proposed locations for both the Primary Access Road and the proposed transmission line.

THE FOREST SERVICE MUST THOROUGHLY ADDRESS AND ANALYZE EVERY SIGNIFICANT ASPECT OF THE ENVIRONMENTAL IMPACT OF THE HERMOSA PROJECT

NEPA imposes a procedural requirement "(1) to ensure the agency will have detailed information on significant environmental impacts when it makes its decisions; and (2) to guarantee that this information will be available to a larger audience." *Te-Moak Tribe of Western Shoshone of Nevada*, 608 F.3d at 599. The NEPA procedures used by agencies "must insure that environmental information is available to public officials and citizens before decisions are made and before actions are taken." *Id.* "The NEPA process is intended to help public officials make decisions that are based on [an] understanding of environmental consequences, and take actions that protect, restore, and enhance the environment." *Id.*

To fulfill NEPA's requirements, the Forest Service's environmental impact statement for the Hermosa Project must thoroughly address and take a hard look at the environmental, cultural, historical, economic, and business impacts of the Hermosa Project including without limitation alternatives to the project's proposed permanent Primary Access Road and above-ground high-voltage power transmission line and the impacts of the proposed facilities and alternatives on National Forest surface resources and Circle Z. These impacts include the direct impacts of the Hermosa Project on the riding trails authorized by Circle Z's special use permit and the surface resources in the vicinity of those trails. These resources include air quality, pristine natural resources, wildlife, wildlife habitat, plants, scenic values, scenic vistas, stable trails, water quality, and stream flow. Furthermore, the impacts that the Forest Service must study in its environmental impact statement include the impacts of the Hermosa Project on the Circle Z trails located on non-Forest Service land and the surface resources in the vicinity of those trails. Again, these resources include air quality, pristine natural resources, wildlife, wildlife habitat, plants, scenic values, scenic vistas, stable trails, water quality, and stream flow. For all trails, the Forest Service must study the impacts of the Hermosa Project on the use and enjoyment of those trails including impacts on human health for both healthy and sensitive individuals.

As explained above and below, viable alternative routes for both the Primary Access Road and high-voltage power line exist. The Forest Service must closely review and analyze those alternative routes, the environmental impacts of those alternatives, and compare the impacts of the alternative routes with the impacts of the permanent Primary Access Road and high-voltage power line.

The Forest Service must also ensure compliance with 36 C.F.R. § 228.8, which mandates that "[a]ll operations shall be conducted so as, where feasible, to minimize adverse environmental impacts on National Forest surface resources." Because the alternative routes will dramatically minimize the impacts of the Hermosa Project on National Forest surface resources, including the riding trails used by Circle Z, the Forest Service must issue a decision that selects one of those alternative routes.

The Forest Service also must ensure compliance with 36 C.F.R. § 228.8(d), which mandates that operators "shall, to the extent practicable, harmonize operations with scenic values through such measures as the design and location of operating facilities, including roads and other means of access" Because the alternative routes make it practicable to harmonize the Hermosa Project's operations with Circle Z's trail rides and the scenic

values of those rides, the Forest Service must issue a decision that selects one of the alternative routes.

VIABLE ALTERNATIVES

"The alternatives section is the heart of the environmental impact statement." 89 Fed. Reg. 35442, 35502, 35565 (May 1, 2024). See also *Monroe Cty Conservation Council, Inc. v. Volpe*, 472 F.2d 693, 697-98 (2d Cir. 1972) ("The requirement for a thorough study and a detailed description of alternatives . . . is the linchpin of the entire impact statement."). Viable alternatives for the Primary Access Road and high-voltage power line exist here. The Hermosa Project itself has proposed several alternate routes that would mitigate the concerns Circle Z has raised in these scoping comments.

The alternate Lochiel Route would use the already established and maintained U.S. Forest Service Road 49, which leads directly from the Hermosa Project to the south onto the already established and maintained Forest Service Road 49. There are two further options for this route: (1) having the Primary Access Road enter Scenic Highway 82 (near the airport) by way of Forest Service Road 61; or (2) reopening the Lochiel border crossing for direct transport from the mine to Mexico, where the ore will need to go for processing. Maps showing these alternate routes are attached to this comment as Appendix C. The proposed power line also would run along the chosen Lochiel Route. Circle Z requests that the Forest Service take a hard look at the viability and impacts of each alternate route, as it is required to do under NEPA and Forest Service regulations. 42 U.S.C. §§ 4332(2)(C)(iii), 4332(2)(F); 36 C.F.R. 228.8. It is imperative that the chosen route be of minimal impact to Scenic Highway 82 because thousands of tourists and local citizens drive this highway daily to access services, recreate at Lake Patagonia, and view the scenic vistas that are at the heart of this area.

Circle Z respectfully requests that the Forest Service consider and take a hard look at alternatives related to the proposed high-voltage power transmission line: either (1) burying the entire high voltage transmission line, or (2) moving the transmission line so that it follows the Lochiel Route. These alternatives will diminish or prevent visual pollution and fire risk imposed by an above-ground power source.

Another alternative would be to require the mine to use renewable energy solar power to boost their energy needs—a requirement that would transform the Hermosa Project into a more sustainable operation. Finally, transmitting power from Patagonia via Harshaw Road would provide a more direct link to the mine, as opposed to crossing the scenic and undisturbed vista. This transmission could potentially be done through the SSVE Coop, which serves the north and east portions of Santa Cruz County.

THE HERMOSA PROJECT'S PROPOSED PRIMARY ACCESS ROAD AND HIGH-VOLTAGE POWER LINE WILL ADVERSELY IMPACT THE ECONOMIC VIABILITY OF CIRCLE Z'S BUSINESS

Circle Z brings approximately 500-600 visitors to the area yearly, with its guests staying in the area for an average of seven days. Circle Z estimates that 70% of its guests are repeat customers who come to the dude ranch because of the opportunity to ride into the open and pristine natural landscapes on deeded and adjacent Forest Service land. Circle Z specifically markets trail rides in this undeveloped landscape to its prospective guests. Without the ability to continue to use those spaces, Circle Z would suffer significant, negative economic impacts on its business because Circle Z would be forced to curtail (or eliminate) one of its signature tourist offerings.

Circle Z respectfully requests that the Forest Service conduct an economic impact analysis of the Hermosa Project on Circle Z's business, which would undoubtedly suffer a loss of guests if its riding trails were compromised.

THE HERMOSA PROJECT'S PROPOSED PRIMARY ACCESS ROAD AND HIGH-VOLTAGE POWER LINE WILL ADVERSELY IMPACT CIRCLE Z'S EXISTING CONSERVATION EASEMENT

Circle Z has a conservation easement on 3,600 acres of land directly adjacent to the area of Hermosa Project's proposed use. In exchange for this conservation easement, Circle Z gave up its development and mineral exploration rights, committing instead to the preservation of a pristine, visually stunning, and inherently valuable protection zone for the watershed of Sonoita Creek. As part of these efforts, Circle Z not only purchased the 3-R Mine to ensure that it would remain closed but also has partnered with the Arizona Department of Environmental Quality to secure a federal grant to clean up the toxic mine tailings, close the open mine shafts, and close the old mine adits. These efforts have had a dramatic and positive effect on the health of Sonoita Creek, which is in the Patagonia Mountains watershed.

Circle Z's ability to preserve this easement property in perpetuity will be significantly adversely impacted by the

operation of the Hermosa Project's ore trucks along the proposed permanent Primary Access Road. Constructing the permanent Primary Access Road will require the construction of large bridges, along with the cutting and filling of natural arroyos and canyons. The construction phase likely will involve blasting and the use of heavy equipment, and will have numerous adverse impacts related to noise, air pollution, disruption of habitat, and visual pollution on U.S. Forest Service lands. Constructing the high-voltage power line will have similar impacts.

There are several endemic plant species, listed as endangered by NatureServe, in this area including those described below. Circle Z asks the Forest Service to complete a thorough botanical analysis and take a hard look at the effect of the proposed permanent Primary Access Road and high-voltage power line on these species. Circle Z also requests that the Forest Service take a hard look at the cumulative effects of the permanent Primary Access Road and high-voltage power line on the protection of the water source for Sonoita Creek.

THE HERMOSA PROJECT WILL ADVERSELY IMPACT CIRCLE Z'S LAND VALUE

The value of Circle Z's land already is reduced by the conservation easement. The addition of the permanent Primary Access Road and power transmission line across Circle Z's trails will result in a further, significant decrease to the land value of the ranch. Circle Z's tourism audience is receptive to Circle Z's conservation efforts; marketing a conservation property to that audience would become extremely difficult-if not impossible-with the addition of a heavy mineral hauling road and power transmission line on the border of the ranch. Erosional impacts on Circle Z's land also are a factor. Circle Z's land is adjacent and downhill to the proposed permanent Primary Access Road. Circle Z asks the Forest Service to conduct an analysis of the erosional effects of the proposed high-intensity and high-use hauling road. Circle Z also requests that the Forest Service analyze the impact of the permanent Primary Access Road on the economic valuation of Circle Z's conservation land.

THE HERMOSA PROJECT WILL ADVERSELY IMPACT CULTURAL RESOURCES ON THE FOREST SERVICE'S AND CIRCLE Z'S LAND

The Patagonia Valley and Patagonia Mountains are the ancestral homelands of several present-day Indigenous communities and are abundant in petroglyphs, inhabited and decorated caves, pictographs, metates and cupules, remnant objects, habitation structures, and medicine collection/processing places. Many of these sites are intentionally located in inconvenient, difficult to access locations.

The Forest Service must comply with all laws, orders, and policies related to heritage management and Tribal consultation. Many Indigenous heritage sites, adversely affected by mining operations, may be deemed eligible for inclusion in the National Register of Historic Places under Criterion C & D. See U.S. Dept. of Interior, National Park Service, National Register Bulletin: How To Apply the National Register Criteria for Evaluation at 23-30, available at https://www.nps.gov/subjects/nationalregister/upload/NRB-15_web508.pdf.

Circle Z asks the Forest Service to consider the adverse impacts to significant cultural sites that may result from the permanent Primary Access Road and transmission line. These impacts include changes in the local environment; the degradation of viewsheds; the loss of culturally significant plants sometimes correlated with springs or otherwise impacted by changes in groundwater; changes in access (such as creating or improving roads) that may proliferate vandalism, looting, surface collecting, or the creation of illegally pioneered trails that may impact archaeological sites; and desecration to the Patagonia mountains.

THE FOREST SERVICE MUST TAKE A HARD LOOK AT THE BIOLOGICAL AND BOTANICAL IMPACTS OF THE HERMOSA PROJECT AND ENSURE COMPLIANCE WITH THE ENDANGERED SPECIES ACT

"Section 7(a)(2) of the Endangered Species Act requires federal agencies to consult with the Fish and Wildlife Service or the NOAA Fisheries Service to ensure that any action authorized, funded or carried out by the agency is not likely to jeopardize the continued existence of any endangered species or threatened species or result in destruction or adverse modification of critical habitat for such species." Rock Creek Alliance, 793 F. Supp. 2d at 1188; 16 U.S.C. § 1536(a)(2).

The Patagonia Mountains are unique and spectacular natural phenomena, and host an array of endangered and critically imperiled species, including Mexican spotted owls; *Graptopetalum bartramii*, a fall-blooming succulent with the common name Patagonia Mountain Leather-petal; *Cynanchum ligulatum*, commonly known as Mexican swallow-wort; *Vaejovis patagonia*, a small brown scorpion found only in the Patagonia Mountains, and which already was observed in August 2023 being crushed by mining trucks; *Pseudouroctonus santarita*, another rare scorpion found only in the Patagonia Mountains and Santa Rita Mountains; *Gagea arizonica*, the Arizona lip-fern,

observed for the first time in the Patagonia Mountains in late 2023; and the extremely sensitive Patagonia eyed silkmoth. Elsewhere in the Patagonia Mountains, where transportation corridors are currently projected to be built, *Metastelma mexicanum* and *Amsonia grandiflora* can be seen growing in areas that would likely be destroyed by the proposed haul road. Both are imperiled, according to NatureServe.

Much of the biology of the Patagonia Mountains is little understood. Many other endangered species, not mentioned here, likely reside in the area, or could do so in the future. The Forest Service must investigate and take a hard look at the impacts of the Hermosa Project on the local botanical and biological species that are (or are likely to be) at risk or may be affected. See 42 U.S.C. §§ 4332(2)(C)(ii), 4332(2)(K); 50 C.F.R. § 402.14(a). This investigation should focus on those species who live at surface or near-surface springs, perennial and seasonal water sources, and other areas likely to be impacted by changes in groundwater and waterborne pollutants. The Forest Service also must address impacts to Sonoita Creek, a vital resource for uncountable species, and all other impacted surface and ground water resources. Further, the Forest Service must take a hard look at any and all biological and botanical impacts of the Hermosa Project on Circle Z's land.

THE FOREST SERVICE MUST TAKE A HARD LOOK AT THE RISK OF FIRES POSED BY THE HERMOSA PROJECT'S PROPOSED HIGH-VOLTAGE TRANSMISSION LINE AND PRIMARY ACCESS ROAD

An above-ground high-voltage transmission line would pose a fire risk in this native grasslands area. The Circle Z property and surrounding environment regularly receive high gusting winds which can knock over trees, and, potentially, power lines. Circle Z requests that the Forest Service take a hard look at the potential fire risks of the Hermosa Project's proposed high-voltage power line and Primary Access Road.

VISUAL POLLUTION

The Circle Z property looks over the pristine grasslands and jutting mountain ranges of the Patagonia Mountains. Because of these vistas, the Circle Z property is regularly used for photography shoots and as a back drop for high-paying film productions. The Circle Z trails are widely known as the most scenic in Arizona, which would no longer be the case with the placement of power lines and an ore road in the immediate vicinity. We request that the Forest Service take a hard look at the impacts of the proposed Primary Access Road and high-voltage power line on scenic vistas (including from the Circle Z Ranch) and the disturbance this will cause to Circle Z's property and business interests.

THE HERMOSA PROJECT'S IMPACT ON CIRCLE Z'S WATER RIGHTS

The dewatering of the aquifer to gain access to the ore likely will cause a cone of depression, foreseeably causing a dewatering of Circle Z's well supply. Circle Z has twelve wells, several seeps and springs, and over two miles of the Sonoita Creek on its property. Circle Z relies on its well supply to water its cattle and horses and to operate its guest accommodations. Without adequate water supply from the aquifer, there likely will be a substantial decrease in the production of Circle Z's wells. The Forest Service must conduct a detailed hydrogeology analysis to ensure that Circle Z's wells and Sonoita Creek are not affected by the Hermosa Project's operations over time. Circle Z requests that the Forest Service engage in a broad study and conduct a detailed impact analysis of the Hermosa Project on the area's water resources. In particular, Circle Z asks the Forest Service conduct studies that include at least a Flux Total Maximum Daily Load study and a Comprehensive Surface and Groundwater Study on Harshaw Creek.

We appreciate the opportunity to comment and look forward to providing more information in the future. Please include Circle Z in any and all future correspondence and notices regarding this project.

Sincerely,

Richard and Diana Nash
Circle Z Ranch