

COLORADO

Parks and Wildlife

Department of Natural Resources Northeast Regional Office

6060 Broadway Denver, CO 80216 P 303.291.7227

March 25, 2025

Department of Reclamation, Mining and Safety Attn: Patrick Lennberg 1313 Sherman Street, Room 215, Denver, CO 80203 patrick.lennberg@state.co.us

RE: CPW's Comments on Mining Permit #M1977410

Dear Mr. Lennberg,

Thank you for the opportunity for Colorado Parks and Wildlife (CPW) to comment on the proposed Grand Island Gold Mine Project located in Section 9 of T1S, R73W. It is our understanding that the Grand Island gold mine has been in operation since 1977 and the proposed project consists of increasing the permit area from 9.99 acres to 205.7 acres an increase of 195.71 acres.

The mission of CPW is to perpetuate the wildlife resources of the state, to provide a quality state parks system, and to provide enjoyable and sustainable outdoor recreation opportunities that educate and inspire current and future generations to serve as active stewards of Colorado's natural resources. CPW has a statutory responsibility to manage all wildlife species in Colorado, and to promote a variety of recreational opportunities throughout Colorado. One way we achieve this goal is by responding to referral comment requests, as is the case for this project.

After review of this project and location, CPW has the following recommendations:

RECOMMENDATIONS:

Fencing

CPW recommends that if fencing (project perimeter or internal) is erected, either during or after construction of the project, it should be the type that would allow the free passage of wildlife. This will help to ensure the safety of big game animals such as deer and elk in the project area. Fencing plans should avoid the use of woven wire-type fences that will trap or prevent the movement of wildlife. CPW recommends using three or four-strand smooth-wire



fencing with a minimum bottom strand height of 17 inches above ground level and a maximum top strand height of 42 inches above ground level, along with the installation of double stays between posts. For more information on fencing, please refer to the CPW publication Fencing with Wildlife in Mind:

https://cpw.widencollective.com/assets/share/asset/vlrphdeji6

Noxious Weeds and Native Re-seeding

Also of importance is the revegetation of disturbed soils and the control of noxious weed species through the development of a noxious weed management plan prior to initiating construction activities. The revegetation of disturbed areas and control of invasive weed species are important components of the project and it is critically important that the site be restored back to the native plant community that currently exists on site. It is preferable that native vegetation be retained on-site during the operational lifespan of the project, both as potential habitat for wildlife and to ensure successful reclamation of the project area, as noxious weeds could spread to adjacent habitats outside the project area. CPW recommends that the applicant consult with Boulder County and the Natural Resource Conservation Service (NRCS) for current noxious weed best management practices.

Wildlife Escape Ramps

During any open pit or open trench mining operations, CPW recommends placing temporary backfilling or other material as escape ramps in areas with steep slopes. Escape ramps will allow wildlife to exit an open pit or trench safely if they become entrapped.

Lighting

Nighttime artificial lighting has been documented to affect wildlife species of all sizes, from small macroinvertebrates to large mammals. These effects are often species-specific, and in some cases may be beneficial to one species within a local ecological community, but detrimental to another species within the same ecological community. These impacts could be expected year-round and can affect both local resident species and migrating wildlife, which may lead to collisions with other animals and structures, exhaustion, increased depredation, and direct mortality. Nighttime artificial lighting may also disrupt nocturnal species that are not accustomed to a significant increase in artificial light, leading to temporary blindness and disorientation, which may also increase the likelihood of collisions with infrastructure on site. CPW recommends that all outdoor lighting be down-shielded to minimize disturbance areas and dim the lights as much as practicable.

Per the U.S. Fish and Wildlife Service recommendations¹, all outdoor lighting should be limited to warmer colors with "longer wavelengths (>560 nm) and lower correlated color temperatures (CCT<3000 Kelvin degrees)" ("Threats to Birds: Collisions - Nighttime Lighting |

¹ ⁴ "Threats to Birds: Collisions - Nighttime Lighting | U.S. Fish & Wildlife Service." *FWS.gov*, 4 May 2023, www.fws.gov/story/threats-birds-collisions-nighttime-lighting.

U.S. Fish & Wildlife Service"). Per the American Bird Conservancy, CCTs ranging from 2200 Kelvin Degrees to 2700 Kelvin Degrees is the preferred range of color. (Misguiding Light: The Role Artificial Light Plays in Bird Mortality from Collisions with Glass | Sheppard, PHD²) CPW recommends the latter range of lighting color options for implementation at the project site.

If the timing or scope of this project changes and/or if you have any questions, please contact District Wildlife Manager Tyler Asnicar at 720-357-4464 or tyler.asnicar@state.co.us.

Sincerely,

Atto

Chris Mettenbrink Area 2 Assistant Area Wildlife Manager

Cc: Mark Leslie, Jason Duetsch, Tyler Asnicar, Lexi Hamous-Miller, and file

² Sheppard, PHD, Christine. *Misguiding Light: The Role Artificial Light Plays in Bird Mortality from Collisions with Glass*. American Bird Conservancy, 11 May 2022, chrome-extension://efaidnbmnnnibpcajpcglclefindmkaj/abcbirds.org/wp-content/uploads/2022/05/ABC-lighting-collisions-position-statement-2022,pdf.