

**To:** Division of Reclamation and Mining Safety, Colorado Department of Natural Resources  
**From:** Boulder Watershed Collective  
**Date:** March 27, 2025  
**Subject:** Cross Gold Mine conversion application, permit M-1977-410

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Boulder Watershed Collective (BWC) appreciates the opportunity to comment on Grand Island Resources (GIR) application to convert the Cross Gold Mine (permit M-1977-410) to a Designated Mining Operation. BWC works to cultivate partnerships, promote community stewardship, and revitalize social and ecological systems within the Boulder Creek watershed, where the Cross Gold mine is located. BWC values the perspectives, priorities, and concerns of stakeholders within the watershed, including those of the applicant. In reviewing GIR's application and hearing from community members, BWC is bringing forward several questions and concerns that we hope the Division of Reclamation and Mining Safety will consider during the application review process.

**The proposed mining operations and activities at the Cross Gold Mine have the potential to adversely impact groundwater and surface water quality in both the North Boulder Creek and Middle Boulder Creek watersheds. These systems provide critical drinking water sources for nearby well owners and the City of Boulder.**

- The mine application includes a large spatial expansion in operations but is vague about the ground-disturbing impacts, vegetation removal, or other surface disturbances. The proposal also is vague in the impacts to hydrology in the area and does not include a 3D model or engineering reports of the underground workings, hydrological connections, and adits. This information is necessary to understand how contamination could spread within and outside of the property.
- The mine application does not identify what chemicals will be used for operations and ore processing, or how these chemicals will be stored, contained, and in what quantities. Mining operations generally rely on heavy chemical use during operations and processing, and even small releases have the potential to cause long-term and irreversible contamination of drinking water supplies.
- The operation proposes to use explosives to rehabilitate, build, and expand underground operations. The mine application provides no details on how these activities will prevent the upsetting of current hydrology. Explosions in this area pose a risk of causing mine "burps" elsewhere in the upper Boulder Creek watershed leading to temporary or long-term water quality impacts in drinking water supplies.

BWC recommends further assurances that the existing practices, including effluent treatment and surface and well water monitoring are adequate and will continue indefinitely. The application insinuates that monitoring and treatment may discontinue in the near future, despite the fact that the mine is currently required to monitor and treat the continuous effluent discharges under their Colorado Department of Public Health and Environment discharge permit. Even without active mining, the mine's effluent discharges have not met water quality standards without treatment<sup>2</sup>. Therefore, ongoing treatment is necessary. The current surety for the mine is \$323 for a 110c permit. BWC would like to know what the surety will be for the Designated Mining Operation prior to any application approval, and assurances that the amount would be adequate to conduct reclamation, maintain indefinite effluent treatment, clean any spills, and restore any potentially contaminated drinking water supplies – including well water and surface water.

**The application provides inadequate details on how the 20,000 to 40,000 cubic yards of waste rock generated annually will be handled, tested for acid-producing rock and heavy metals, protected from floods and wildfires, stored on site and/or transported elsewhere.**

- The applicant insinuates that the waste rock will be used as road base, donated to others such as Boulder County, or stored on site. However, GIR provides no plan for contaminant storage or testing of the waste rock prior to storage or use, and there is no indication that GIR has had any discussions with road owners such as Boulder County, the Town of Nederland, or Colorado Department of Transportation to guarantee this end use.
- At the rate included in the application, GIR could produce up to two million cubic yards of waste rock over the next 50 years. This is roughly equivalent to 150,000+ dump trucks of material or filling 625 Olympic-sized swimming pools. The property is not physically large enough to hold that amount of material. There is also no indication that road owners would need or use the material as GIR suggests, and the application does not include a transportation plan, which would identify how the material would be removed, at what frequency, and whether the un-maintained county roads could handle that level of traffic. Further, there appears to have been no outreach to the neighbors and Nederland community about what the applicant is proposing.

**The mine is in a wildfire-prone area<sup>1</sup> and the mining operations (which involve the use of explosives) has the potential to ignite a fire, threatening the Nederland community, drinking water supplies, and other values at risk.**

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<sup>1</sup> [Colorado State Forest Service Wildfire Risk Viewer](#) and The Colorado Department of Natural Resources' [Wildfire Ready Wildfire Analysis](#) show that this area is at extremely high risk for a high intensity wildfire and post-fire risks.

- BWC, U.S. Forest Service, Boulder County, the City of Boulder, and the Town of Nederland have worked extensively to educate the public on wildfire risk mitigation, home hardening and campfire bans. These entities have invested hundreds of thousands of dollars to implement forest thinning projects to reduce wildfire spread and post-fire impacts. The mining approach proposed by GIR at the Cross Gold Mine does not include a clear plan for mitigating wildfire risk and any plan for fire suppression plan if a fire ignites.
- The application makes no mention of wildfire risk in the area, nor does the application present any plans for preventing a wildfire while using/storing explosives during mining operations. The application also does not discuss how materials and chemicals would be stored in a way that would minimize the risk for spills and post-fire erosion, sediment transport, debris flows, and flooding.
- The application proposes to store ore, waste rock, chemicals, and explosives on site. BWC has restored numerous mine waste piles in the nearby Fourmile watershed to improve water quality, and has seen firsthand the devastating impacts that can occur when mining operations intersect wildfires and floods. Through this process BWC has seen the level of difficulty involved in grading, managing, and containing tailings piles following wildfire, therefore, BWC is concerned that GIR has a thorough and realistic plan for addressing waste rock and wildfire impacts. Many of these findings regarding wildfire and mining operations have been published by the U.S. Geological Survey in peer-reviewed journals (e.g., [Murphy et al. 2024](#)). Whether a wildfire starts on, or enters the Cross Gold Mine property, the downstream and surrounding impacts could be devastating for the community and water providers.
- The incorporated status and situs of GIR is unclear. The Colorado Secretary of State office contains a record from 2017 citing GIR as delinquent in its good standing filing status. Records also indicate that GIR may be incorporated in Wyoming, but the Wyoming Secretary of State office does not contain such records. Therefore, it is unclear where, and if, GIR is incorporated. In addition, GIR submitted a letter to DRMS dated December 22, 2023, requesting an extension for filing its Operating application citing financial constraints that limited its ability to perform the studies and work required for the preparation of the operating application. This lack of financial capacity indicates that expanding mining operations as proposed

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<sup>2</sup> “Colorado Fines Boulder County Gold Mine \$17,000 for Water Quality Violations”. Colorado Sun, January 20, 2022.

may be done without adequate capital for remediation and maintaining safe and transparent operations.

For the above reasons, BWC does not believe the application provides adequate information or details to assure protection of local drinking water supplies, the environment, or the Nederland community. Thank you for considering these comments as you review the application for permit conversion.

Sincerely,

Preston Brown,

A handwritten signature in black ink, appearing to read "Preston Brown". The signature is fluid and cursive, with the first name "Preston" and last name "Brown" clearly distinguishable.

Watershed Specialist

Boulder Watershed Collective

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