

TO: Patrick Lennberg

FROM: Erin Dodge, Boulder County Public Health

SUBJECT: Grand Island Resources, LLC for Cross Gold Mine (File Number M1977410)

Dear Mr. Lennberg,

Boulder County Public Health (BCPH) submits the following comments regarding the application submitted by Grand Island Resources, LLC for Cross Gold Mine (File Number M1977410). We also acknowledge and support comments from partner agencies, including the City of Boulder, Boulder County Public Works, Boulder County Parks and Open Space, and Boulder County Community Planning and Permitting. While we have aimed to minimize redundancy among agency comments, we endorse their concerns and recommendations.

Should this project advance, we anticipate the need for detailed operational plans addressing materials storage, dust control, stormwater management, and protection of both surface and groundwater resources. We recognize that some of these issues may be addressed through other permitting processes, but we request that the following concerns be addressed before operations are approved.

Wastewater

- 1. Any new, replacement, or repaired onsite wastewater treatment systems (OWTS) with flows under 2,000 GPD must be permitted by Boulder County Public Health. If site activity increases, such as an increase in the number of employees, a change in use for existing OWTS may be required.
 - a. OWTS permitting details can be found at www.septicsmart.org.

Water Quality and Quantity

- 2. Additional information is requested regarding water quality monitoring and protection measures to prevent both short- and long-term contamination.
 - a. The watershed surrounding the mine drains directly into Barker Reservoir, a primary drinking water source for the City of Boulder.
 - b. Many residents in unincorporated areas near the mine rely on shallow private wells. The highly fractured local groundwater network makes pollutant tracing difficult. Blasting and drilling activities could disrupt hydrology and increase risks to these wells.
 - c. Appendix F states that no state-permitted wells exist within the compliance boundary. BCPH requests a map showing nearby state-permitted wells relative to the compliance boundary.
 - d. Further details are needed regarding potential impacts on instream flows and groundwater availability if surface water is re-routed or groundwater treatment is required.

- e. Mining operations can impact existing adits and potentially cause abandoned mines to release contaminated water into local watersheds.
- f. The application appears to propose discontinuing water quality sampling and treatment, but it is unclear when and under what circumstances this would occur. We request a more detailed long-term water quality monitoring plan that extends beyond the current 50-year mining permit timeframe, including testing of waste rock storage areas to mitigate acid mine runoff concerns.

Solid/Hazardous Waste, Onsite Materials Management, and Operations

- 3. More details are needed regarding mining operations and material storage practices.
 - a. Contingency storage plans should be specified, particularly for mined and processed materials, including how runoff will be managed if stored outdoors.
 - b. The waste rock storage area is projected to contain up to 20,000 cubic feet of material. The plan should include details on how these materials will be managed to prevent contamination from stormwater runoff.
 - c. Information on chemical processing methods should be provided to aid emergency response planning and water quality monitoring.
- 4. The submitted spill response plan lacks specific details.
 - a. Several contact numbers are incorrect, including those for Boulder County Public Health.
 - b. It is unclear whether environmental remediation contractors listed in the plan have pre-determined contracts.
- 5. Assurance is needed that Grand Island Resources is both technically and financially prepared to manage a Designated Mining Operation, given past compliance challenges.
 - a. In July 2024 and November 2024, compliance advisories were issued because the Operator in Responsible Charge lacked the required certification for the WWTF. As of February 26, 2025, no response or corrective action has been taken by Grand Island Resources.
 - b. Provide details regarding proper certification of staff or contractors that will provide operations or services requiring proper certification (i.e. wastewater treatment).
- 6. Further details regarding the Whirlwind Waste Dump and any pre-law waste dumps are requested. Boulder County requests the opportunity to review specifications for these sites before permitting continued use due to their environmental risk.
- 7. Provide details regarding proper certification of staff or contractors that will provide operations or services requiring proper certification (i.e. wastewater treatment).

Air Quality

- 8. Several air quality concerns remain unaddressed:
 - a. A Fugitive Dust Mitigation Plan, including frequent dust suppression applications, should be agreed upon before temporary mining/haul road construction.
 - b. APEN requirements for the portable generator must be determined (https://cdphe.colorado.gov/apens-and-air-permits/air-permits-for-diesel-engines).
 - c. Standby and emergency generators must meet EPA Tier 2 and 3 standards.
 - d. The company name change from Calais Resources to Grand Island Resources requires an updated APEN. The previous APEN submission (September 24, 2020) was rejected, leaving the company currently out of compliance with AQCC Regulation 3 reporting requirements.

Reclamation and Closure

9. Boulder County requests additional details on site reclamation and closure plans and associated financial surety requirements.

- a. Strategies for addressing ongoing seepage, discharges, and long-term water treatment should be included.
- b. Boulder County has historic mine sites with severe watershed impacts, some of which are now Superfund sites. These remediation efforts are costly. Assurances are needed that Grand Island Resources is prepared for post-reclamation responsibilities. We request that plans be provided for oversight extending beyond the immediate closure requirements.
- 10. Assurance that past compliance challenges will be mitigated through improved operating plans.
 - a. Six months after state cease-and-desist orders were lifted, WQCD inspections identified additional monitoring and management violations.
 - b. In July 2024 and November 2024, compliance advisories were issued because the Operator in Responsible Charge lacked the required certification for the WWTF. As of February 26, 2025, no response or corrective action has been taken by Grand Island Resources.

We appreciate the opportunity to provide these comments and look forward to your response.

Sincerely,

Erin Dodge
Water Quality Cont.

Water Quality Control Program Boulder County Public Health