

Jack Turner
Senior Environmental Assessment Officer
Resources Assessments

Via: Major Project Portal

Dear Mr Turner

Re. Hera Gold Mine Modification 6 (MP10_0191-Mod-6)

I refer to your request of 25 November 2020 for advice regarding the Hera Gold Mine Modification 6 report. The Resources Regulator has reviewed the request.

Assessment

Based on the review of the modification report, we have identified a number of matters requiring comment regarding mine safety and mine rehabilitation in relation to the proposal.

Mine Rehabilitation

The advice provided in our letter dated 18 November 2020 to the proponent providing Mining Development Rehabilitation Standard SEARs do not appear to have been adequately addressed. The following comments are provided for consideration by the Department of Planning and Environment prior to final determination of the Modification:

1. Post mining landuse

The final landuse for the proposed Surface Extraction Area is unclear. Further information is required to clarify and justify the final landuse in this area.

2. Rehabilitation Objectives and domains

Clarification of how the rehabilitation objectives provided in the report apply to the Surface Extraction Area is required.

3. Rehabilitation Methodology

Rehabilitation works to be carried out in the vicinity of the Surface Extraction Area are unclear. Further information on the rehabilitation methodology is required. Further information on the scheduling of rehabilitation activities is also required, noting the modification includes a request to extend mining operations until 31 December 2025.

4. Conceptual Final Landform Design

Figure 13 Proposed Final Landform and landuse should be updated to include a clear indication of final landform across the surface extraction area, including contours of the perimeter sloped landform or highwall.

5. Barriers or limitations to effective rehabilitation

5.1. Tailings Facility: No information has been provided on the suitability of the tailings storage facility to control or mitigate any release to the environment (i.e seepage) resulting from the potential increased concentration of cyanide in the tailings.

5.2. Rehabilitation materials inventories: No information on classification of waste rock to be imported (via backload) from Peak Gold Mine, and potential for this to impact material inventories for rehabilitation at Peak Gold Mine - especially if material is non-acid forming.

Further information on material balances required for rehabilitation of Hera Mine, especially as current modification has resulted in a change of material balances from what has been modelled previously.

Calculation of material required for rehabilitation (including tailings capping) should be a key consideration for the proponent when determining the amount of material required to be imported or extracted from the proposed Surface Extraction Area. This has implications for the nature of the activities associated with this modification.

5.3. Final Void Assessment: Although alternate areas have been considered for material extraction, the report does not include an assessment of final void landform options to assess varying dimensions to allow a final landform more commensurate with surrounding landscape i.e. sloped sidewalls rather than steep highwalls.

Mine Safety

Review of the operator's Safety Management Plan as required under the Work Health and Safety (Mines and Petroleum Sites) Act 2014 and Regulation is necessary given the changes being proposed in particular in relation to the potential for inrush associated with the placement of tailings underground. The Inrush Management Plan with associated procedures and work plans should be reviewed and updated where required.

Additionally as the explosives magazine is to be relocated a review of the Explosives Control Plan is necessary. The requirements of the Explosives Act 2003 must be addressed when the relocation of the magazine is undertaken.

Limitations

It should be noted that the Resources Regulator does not provide any endorsement of the proposed rehabilitation methodologies presented in the proposal. Under the conditions of a mining authority granted under the *Mining Act 1992*, the Resources Regulator requires an authority holder to adopt a risk-based approach to achieving the required rehabilitation outcomes.

The applicability of the controls to achieve effective and sustainable rehabilitation is to be determined based on site-specific risk assessments conducted by the authority holder. An authority holder may also be directed by the Resources Regulator to implement further risk control measures required to achieve effective rehabilitation outcomes during the life of the mine.

Regulatory requirements if approved

The proponent will be required to submit a revised Mining Operations Plan for approval by the Resources Regulator prior to the commencement of the works associated with the proposed modification.

The Resources Regulator may undertake assessments of the mine operators' proposed mining activities under the *Work Health and Safety (Mines and Petroleum Sites) Act 2013* and Regulation as well as other WHS regulatory obligations.

Background

The Mining Act Inspectorate within the Resources Regulator has responsibility for providing strategic advice on environmental issues as they relate to or affect mine rehabilitation.

The Mine Safety Inspectorate within the Resources Regulator is responsible for ensuring the mine operators' compliance with the Work Health and Safety (WHS) legislation, in particular the effective management of risks associated with the principal hazards as specified in the *Work Health and Safety (Mines and Petroleum Sites) Regulation 2014*.

Contact

Should you require any further information or clarification, please contact the Office of the Executive Director (ED.ResourcesRegulator@planning.nsw.gov.au)

Yours sincerely,



Anthony Keon
Executive Director
Resources Regulator

11 December 2020