



## Department of Primary Industries

OUT16/18920

Ms Elle Donnelley  
Resource Assessments  
NSW Department of Planning and Environment  
GPO Box 39  
SYDNEY NSW 2001

Elle.donnelley@planning.nsw.gov.au

Dear Ms Donnelley

**DPI response to request for comment on proposed Modification to  
Hera Gold Mine (10\_0191 MOD 4)**

I refer to your email dated 26 April 2016 to the Department of Primary Industries in respect to the above matter. DPI has reviewed the Environmental Assessment in support of the proposed modification to the Hera Gold Project and provides the following recommended condition of consent with further detailed comments at **Attachment A**:

- The proponent should revise the Water Management Plan in consultation with DPI Water prior to commencement of activities.

Any further referrals to DPI can be sent by email to [landuse.enquiries@dpi.nsw.gov.au](mailto:landuse.enquiries@dpi.nsw.gov.au).

Yours sincerely

Mitchell Isaacs  
**Director, Planning Policy & Assessment Advice**  
11/5/2016

## Attachment A

### **Hera Gold Mine (10\_0191 MOD 4)**

#### **Detailed comments – DPI Water**

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DPI Water has reviewed the Environmental Assessment in support of the proposed modification to the Hera Gold Project. The following comments and recommended condition of consent are provided to assist in finalising the assessment of the project.

- The proposed modification includes the following:
  - Extension of project to the north outside of the existing project boundary.
  - Establishment of a northern access decline and underground mining area. The mining area consists of similar gold-zinc-lead rich ore to the existing Hera deposit.
  - Installation of an additional fresh air intake rise.
  - No surface disturbance is required in the extended area, however the air intake will require minor surface disturbance within the current project area.
- The groundwater assessment (Appendix 2) indicates inflows to the underground could increase to more than 1ML/d during construction of the air intake or when the workings intersect existing drill holes. It is predicted this increase in inflows would be short term and it is unlikely the current water entitlement would be exceeded. The proponent is aware of the need to ensure sufficient entitlement is held to account for the groundwater take.
- A potential drawdown of 3.0m is predicted at the neighbouring bore GW017385 due to the project. This drawdown exceeds the Level 1 Minimal Impact Considerations of the NSW Aquifer Interference Policy. Make good provisions would therefore apply and the proponent has committed to this. Condition 21 of the existing project approval requires the provision of compensatory water supply for private owners impacted by the project, and this condition is supported by DPI Water for the current modification.
- Potential impacts to the neighbouring bore to the north, GW017385, could be managed effectively if the proposed monitoring regime including trigger levels and monitoring frequency proposed in the report '*Recommended Groundwater Triggers at Aurelia Hera Project*' (December 2015) are adopted within an updated Water Management Plan. The Water Management Plan must detail the procedures if the trigger levels are reached. The trigger level of a 4.3m drawdown at monitoring bore WB015 has been included by DPI Water as a condition of use on the water supply work approval 85WA752586, which covers existing groundwater impacts at the Hera Project site.
- It is recommended the revised groundwater monitoring and mitigation procedures be communicated to the owners of the relevant neighbouring bores.
- The subsidence assessment (Appendix 1) indicates the likelihood of surface subsidence due to the proposed underground mining to be very low with a probability of failure in the range of <10% to <0.5%. Appendix 1 recommended that on the basis the current geotechnical information is not comprehensive, that the mining voids should be filled with rock fill to limit the propagation of any potential failures. Confirmation is requested on whether this recommendation is part of the project. If so, an assessment is requested prior to project approval of potential impacts on groundwater quality due to the rock placement in accordance with the NSW Aquifer Interference Policy.

DPI Water contact details:

Tim Baker, Senior Water Regulation Officer

t: (02) 6841 7403

e: [Tim.Baker@dpi.nsw.gov.au](mailto:Tim.Baker@dpi.nsw.gov.au)

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**End Attachment A**