



Department of
Primary Industries



OUT12/12824

15 JUN 2012

Major Development Assessments
NSW Department of Planning and Infrastructure
GPO Box 39
Sydney NSW 2001

Attention: Sara Wilson



Dear Ms Wilson

Re: Modification to Dargues Reef Gold Project (10_0054 MOD 1)

I refer to your letter dated 11th May 2012 to the NSW Office of Water (Office of Water), an agency within the Department of Primary Industries, requesting comment on the above project modification. I understand that comment was not required from any other agency within this Department.

The Office of Water has reviewed the Environmental Assessment (EA) and recommends the following comments be considered in determining the project. Recommended conditions of approval are provided in Attachment A.

- The Office of Water has identified considerable uncertainty in assessing the impacts of this proposal. It is recommended this concern be acknowledged and the key issues in this submission be addressed through amendments to the Water Management Plan (WMP).
- The assessment of potential impacts from pastefill leachate in the EA is limited to theories with uncertainty in regards to long term impacts. Whilst the general theories on paste backfill characteristics and geochemical reactivity appear reasonable, it is difficult to validate some of the key parameters at the scale of this proposal. This therefore raises concern over the long term stability of the pastefill and potential impacts to groundwater quality.
- The understanding of groundwater quality in the EA is limited to the depth of the current deepest monitoring bore which is 216 metres. As the proposed mine and pastefill placement is to a depth of 500 metres, the Office of Water requests characterisation of groundwater quality to this maximum depth. This characterisation will need to represent background conditions to the satisfaction of the Office of Water and will need to be completed prior to commencement of pastefill operations.
- It is recommended amendments to the WMP demonstrate an ability to monitor and report on any impacts to groundwater quality associated with the paste backfill to the full depth of operations, both during operation and following completion of the mine. It is to also include a trigger response plan and mitigating options.

For general enquires regarding this response please do not hesitate to contact Tim Baker, Senior Planning and Assessment Coordinator on (02) 6841 7403 at the Office of Water (Dubbo office), or mobile 0428 162 097, or by email at: Tim.Baker@water.nsw.gov.au.

Yours sincerely

A handwritten signature in black ink, appearing to read 'Phil Anquetil', with a stylized flourish at the end.

Phil Anquetil

Executive Director Business Services

Attachment A

NSW Office of Water – Recommended Conditions of Approval Modification to Dargues Reef Gold Project (10_0054 MOD 1)

RECOMMENDED CONDITIONS OF APPROVAL

The Office of Water requests the following conditions be included in any determination issued for the Dargues Reef Gold Project MOD 1 application:

- The proponent must amend the Water Management Plan to detail groundwater management, monitoring and mitigation requirements for the proposed pastefill operations. This plan is to be prepared in consultation with and to the satisfaction of the NSW Office of Water prior to commencement of pastefill operations.
- The proponent must obtain relevant licences under the *Water Act 1912* or *Water Management Act 2000* (whichever is relevant) for additional monitoring piezometers prior to installation of these works.

End of Attachment 1
