

12 May 2021

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**Re: SSD 10367 - CGO Underground Development Project - Response to request for information**

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Dear Steve,

Thank you for your letter dated 3 May 2021 requesting comments regarding the recommendations made by the Department's Water Group (DPIE Water) on the CGO Underground Development Project. Your letter was referred to Evolution Mining (Cowal) Pty Limited (Evolution), which has asked EMM to respond.

Evolution wishes to thank the Department for its comprehensive assessment of the groundwater issues and welcomes the recommendations DPIE Water it has made in regard to the project.

In general, Evolution accepts DPIE Water's recommendations. It has provided the following comments, shown in Table 1.

**Table 1 Evolution comments on DPIE Water recommendations**

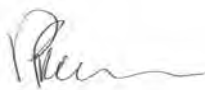
Recommendation	Evolution response
<p>1. Install a minimum of two nested monitoring bore sites, both with separate pipes which are screened in the alluvium (Transported Unit) and the underlying Lachlan Fold Belt sequence (saprolite/saprock). These are to be installed parallel to and adjacent to the proposed underground mine alignment within the mining lease covering Lake Cowal.</p>	<p>Evolution will commit to installing nested pair of piezometers to target the Transported and Saprolite/Saprock layers each in separately drilled locations. The piezometers will be installed prior to the development of the stopes, subject to being able to access the lake. A plan showing the indicative locations of the proposed new piezometers is attached (see Appendix 1).</p>
<p>2. Maintain and undertake extension to the groundwater monitoring program as outlined in this RtS for the duration of the current and future Cowal Gold Operations. Any extensions or changes to the groundwater monitoring network will need to be reflected in an update to the Water Management Plan.</p>	<p>Evolution will commit to maintaining and extending the groundwater monitoring program for the current and future operations of the mine and reflect the changes in the Water Management Plan. This will include gathering data from the additional nested piezometers.</p>
<p>3. The proponent must account for the groundwater take (direct and indirect) not only for the physical stages of the Cowal Gold operation but also between the respective groundwater sources. These also need to be reviewed and reported against existing water licences in the annual environmental report.</p>	<p>Evolution will continue to account for groundwater take and report against licence limits in the Annual Review. The reporting requirement of the indirect take from the CGO and between the respective groundwater sources may be challenging. However the groundwater monitoring network will be augmented by the new piezometers which will measure both the transported unit and the saprolite/saprock unit.</p>

**Table 1 Evolution comments on DPIE Water recommendations**

<b>Recommendation</b>	<b>Evolution response</b>
4. Submit to DPIE- Water for review an updated Water Management Plan (WMP) for the Cowal Gold Operations to reflect the updated hydrogeological assessment and groundwater modelling outcomes.	Evolution plans to update the existing Cowal Gold Operations Water Management Plan to cover the underground development project, the updated hydrogeological assessment and groundwater modelling outcomes. The updated plan will be submitted to DPIE Water for review as required by the condition of consent.
5. The updated WMP to outline the adopted planned management strategy to extract at an average rate of 4.0 ML/day from Bland Creek Palaeochannel Borefield and 1.5 ML/day from East Side Borefield, to ensure an annual groundwater take from the Upper Lachlan Alluvium remains within the licensed limit.	The updated Water Management Plan will include details of the management strategy to ensure an annual groundwater take from the Upper Lachlan Alluvium remains within the licensed limit.
6. Update the WMP to include the two additional nested monitoring sites.	The updated Water Management Plan will include the additional nested piezometers.
7. Undertake periodic review of the measured groundwater monitoring data against the modelled outcomes and update the model to reflect the actual measured values if there is significant difference or notable concern raised by stakeholders. This information should inform an update to the Water Management Plan.	The measured groundwater monitoring data will be checked against the modelled outcomes on a regular basis, as required by the conditions of consent. This will allow the modellers to review and assess how the predictions are performing with real data, and inform potential changes that may be needed in the next model validation/re-calibration.
8. The Proponent is to validate the model after two years of commencement of the project, and every five years thereafter throughout the life of the mines (pit and stopes).	Evolution will commit to validate the groundwater model at intervals determined under the conditions of consent.

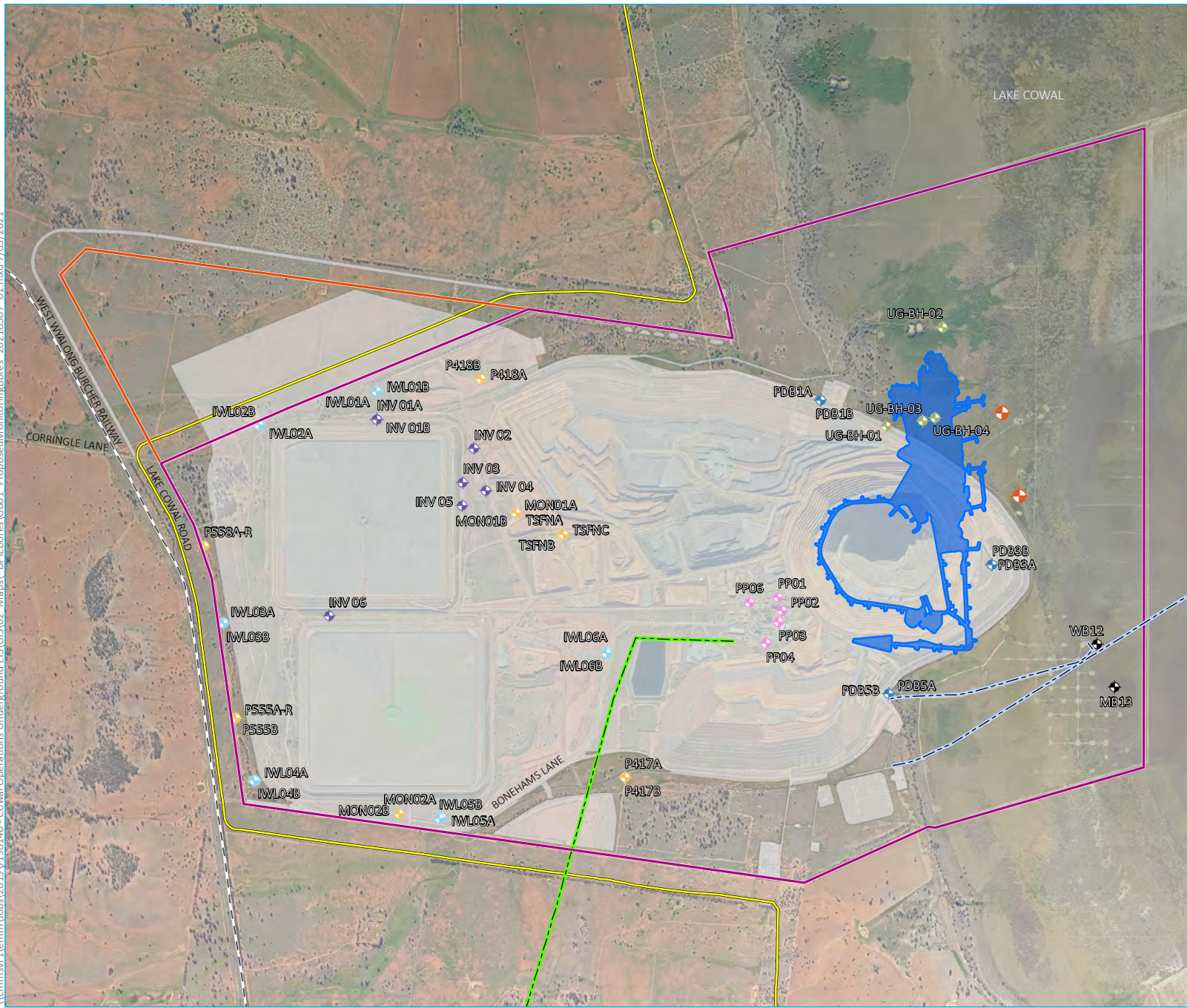
We trust that the above information is clear. We look forward to receiving the draft conditions of consent for the project in due course. If you wish to discuss the above further, do not hesitate to contact me on 0407 102 898.

Yours sincerely



**Paul Freeman**  
Associate Director  
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- KEY**
- ◆ Proposed monitoring bore
  - Proposed underground development
  - Mining lease (ML1535)
  - Mining lease (ML1791)
  - DA14/98 approved surface disturbance
  - Electricity transmission line
  - Water supply pipeline
  - - Rail line
  - Main road
- Existing monitoring bores**
- ◆ INV bore
  - ◆ IWL bore
  - ◆ Pit bore
  - ◆ Processing bore
  - ◆ Site saline bore
  - ◆ TSF bore
  - ◆ UG bore

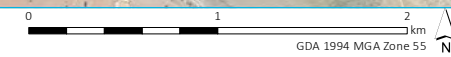
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Proposed monitoring bore locations

Evolution Mining  
Cowal Gold Operations  
DPIE submission  
Figure 1



Source: EMM (2021); Evolution (2021); DFSI (2017)



GDA 1994 MGA Zone 55