MGO
MT OWEN / GLENDELL
GLENCORE

23 March 2022

Mr Stephen Barry
Planning Director
Office of the Independent Planning Commission

Dear Stephen,

Glendell Continued Operations Project (SSD 9349) and Mount Owen Continued Operations (SSD 5850) Modification – Response to Point 7 and MineCraft Mine Plan Peer Review Report

We refer to the Independent Planning Commission's (Commission) letter dated 11 March 2022 seeking a response to questions posed by the Commission at the Applicant Meeting on 10 March 2022 (Request for Information), and the Commission's comments at the Public Hearing dated 18 March 2022 in relation to the redacted MineCraft mine plan peer review report (MineCraft Report).

We have considered the Commission's requests and attach an unredacted version of the MineCraft Report for the Commission's consideration (Attachment 1). We also attach Glencore's Response to the MineCraft Report (Response Report) dated August 2021 (Attachment 2) and ask that it be considered as part of the Commission's review of the MineCraft Report and assessment of the Glencore Preferred Mine Plan (PMP) for the Glendell Continued Operations Project.

We note that '*MineCraft believes that Glencore has identified all the feasible alternatives for the continuation of mining at Glendell given the site's complex geology and the numerous surface constraints. MineCraft also concludes that Glencore's reasons for deciding on the final PMP footprint are sufficiently justified…*'.

It should be noted that MineCraft arrived at their conclusions independent of Glencore. The financial modelling contained in the MineCraft Report was not carried out by Glencore, however whilst not commenting on the exact financial outcomes, we agree with the relativity of the analysis in terms of the alternative mine plan options.

In addition to these reports we also provide the following response to Point 7 contained in the Commission's Request for Information.

> **7) What are the commercial considerations (including up front capital costs) for each of the mine design options and why are options that involve leaving Ravensworth Homestead in situ prohibitive? Please include a description of the capital costs of a shortened mine plan versus the longer (proposed) mine plan.**

Glencore response:

> Large projects, such as the Glendell Continued Operations Project (the Project), generally require a substantial upfront capital investment. Such mining projects also require the development of a large resource area with a long mine life in order to achieve a suitable economic outcome.
>
> In the case of the Project, the ability to achieve the best economic outcome is a key consideration in assessing the commercial viability of the PMP and 500m standoff option (Option 7 in the Mine Planning Options Report (Appendix 1 of Environmental Impact Study)).

It is noted that the other options presented in the Mine Planning Options Report and/or suggested in the MineCraft Report have been ruled out due to either technical constraints (the 100m and 200/300m Homestead mine around options are not considered feasible due to geotechnical and blasting impacts that could damage the Homestead), environmental grounds or a combination of economics, environmental or technical considerations. These discounted options are considered more fully in the Mine Planning Options Report and the Response Report.

Below we provide a high level overview of the Glencore PMP and Option 7.

Glencore Preferred Mine Plan

Figure 1 shows cumulative capital and cumulative mining ratio (ratio of overburden to coal) for the PMP. All mine plan options that involve continuation of the existing Glendell Pit highwall to the north utilising the Glendell void, including those that involve leaving Ravensworth Homestead in-situ, have a similar initial mining cost and mobile fleet capital profile to the PMP for the first eight to ten years of mining.

The early years of mining have high capital spend and high mining costs that are driven by the relatively high (unfavourable) mining ratio of overburden to coal and the complexity of mining through the narrow zone between the current and proposed mining areas. Further, high mining ratios are also experienced for a number of years as the mining footprint widens out beyond the narrow zone before reaching the pit floor. During this widening of the mining footprint limited additional void volume is created for the emplacement of overburden resulting in the need for mine overburden to be hauled longer and higher to the in-pit dump. By around Year 8, the mine progresses northwards at its full width with the mining ratio declining further as mining progresses through and beyond the location of the Homestead, whilst also mining down to the Hebden Seam.

Figure 1 below illustrates the cumulative mining ratio with the development of the PMP leading to the initial high operating cost period when mining ratios are high. This coupled with initial capital spend early in the Project results in negative cash flows in the first few years of development.

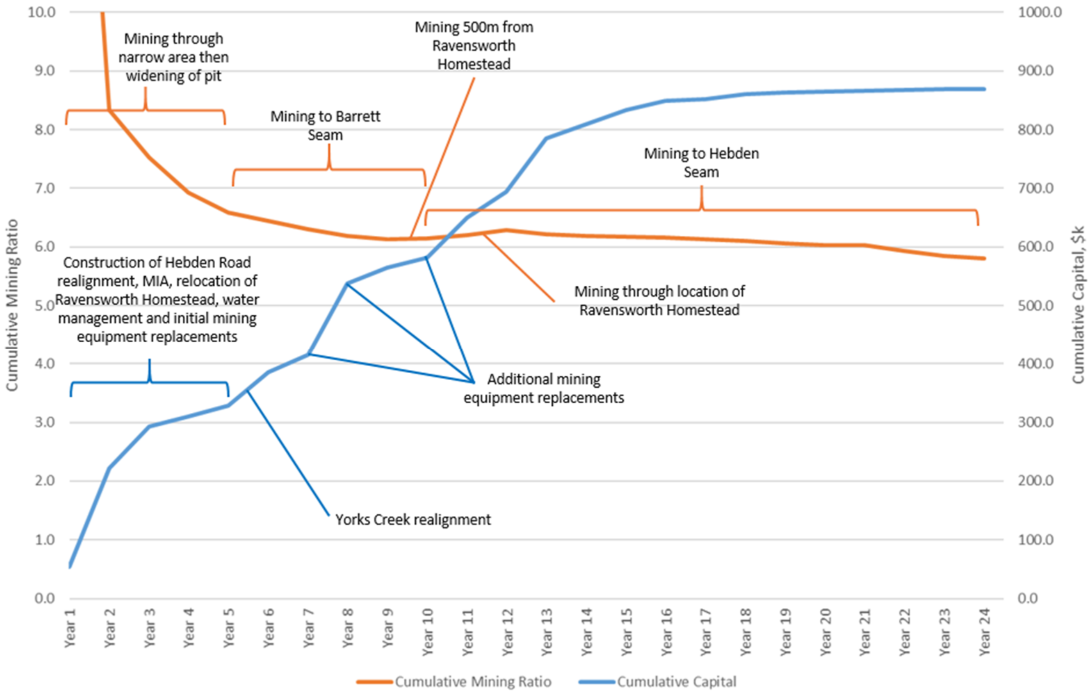

Figure 1 **Cumulative mining ratio and capital over the life of the PMP**

Option 7 – 500m Homestead Stand Off

Option 7 involves mining to within 500m of the Homestead. The 500m setback is considered to represent the maximum mining scenario that would have minimal impacts on the heritage values of the Homestead while enabling it to remain in situ. This option would involve a mine life of approximately 13 years (inclusive of the remaining life in the existing Glendell Mine) due to the restricted mining footprint, which in comparison to the PMP, is a reduction in mine life of approximately 11 years.

Option 7 has slightly reduced capital requirements compared to the PMP due to not having to relocate Ravensworth Homestead, and realign Hebden Road and Yorks Creek. However, capital spend is still required on a new mine infrastructure area (MIA) including the need to provide access to this MIA, heavy vehicle access road including crossings (bridge) over the existing Hebden Road and Yorks Creek, water management structures and mobile mining fleet replacements.

Comparison of PMP and Option 7

Figure 2 shows the cumulative capital profile and cumulative coal tonnes for the PMP and Option 7. We note that the total project capital for the PMP and Option 7 is $870 million and $499 million respectively, as per Table E.1 of Appendix E to the EY Economic Impact Assessment provided as Attachment 2 to the Response Report.

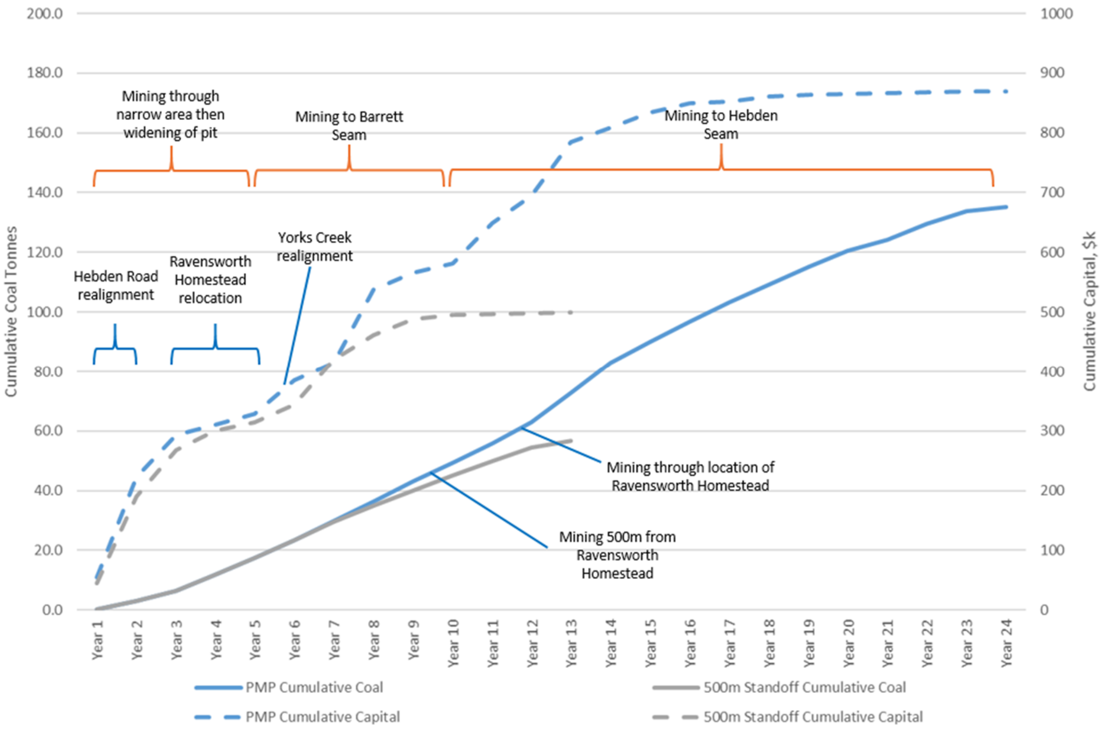

Figure 2 **Cumulative capital and coal tonnes for PMP and Option 7**

Option 7 results in the sterilisation of 78 Mt of coal, which is approximately 60% of the total PMP resource. Further, restricting the extent of the mining footprint, as would be the case under Option 7, sterilises low mining ratio (and low mining cost) coal that would otherwise be mined as part of the PMP.

Given the similar initial mining and capital costs between the PMP and Option 7, proceeding with Option 7 would pose a significant financial risk to Glencore. Further, the reduced mine life that Option 7 provides means that there is a limited time available to recover the associated high upfront capital spend and high operating costs attached to the early years of mining, and generate suitable economic value for investors. The ability to confidently recover upfront capital costs and generate the best economic outcome for shareholders is therefore a key investment decision.

Glencore has developed the PMP to leverage off existing infrastructure at the Mount Owen Complex and the GRAWTS infrastructure, assisting in the feasibility of the Project. Notwithstanding this, substantial upfront capital is still required for new on site and off site infrastructure and mining equipment. The construction of a new MIA is a key aspect of these capital costs which will arise regardless of the mine plan options pursued. As shown in Figure 1, the construction activities and a large number of mining equipment replacements for the PMP occur within the first ten years of mining, and the capital cost associated with this (which represents two thirds of the total capital spend for the PMP) necessitates the development of the full coal resource within the proposed mining footprint to ensure that the Project is economically viable.

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The different mine plan options (including Option 7) considered by Glencore to avoid relocation of the Ravensworth Homestead do not result in an economically viable Project. The short mine life (and limited coal tonnage) of Option 7, coupled with the early high mining ratio (and high mining cost) and initial capital spend that is experienced by all mine plan options including Option 7, presents a level of financial risk to the Project that does not justify the upfront capital expenditure.

For the above reasons, Glencore does not consider Option 7 to be feasible and would not proceed with the Project if an approval for a restricted mining footprint was granted.

Should you require any further information or clarification on the above then please do not hesitate to contact the undersigned.

Yours sincerely,

[redacted]

Shane Scott
Coal Assets Australia, GLENCORE
[redacted]

Attachment 1 – Review of Glendell Continued Operations Project Mine Plan and Mine Plan Options by MineCraft (October 2020)

Attachment 2 – Response to MineCraft Report, Glendell Continued Operations Project, by Umwelt (August 2021)