

Our reference: DOC21/121543-38

Department of Planning, Industry and Environment Returned via the Major Projects Portal

Attention: Mr Jack Turner

17 March 2021

Dear Mr Turner

Planning Referral – Aurelia Metals Ltd for Peak Gold Mines Pty Ltd State Significant Development SSD 10419 – Request for additional information

Thank you for the invitation from the Department of Planning, Industry and Environment (DPIE) sent to the Environment Protection Authority (EPA) on 19 February 2021 seeking comment on Peak Gold Mines Pty Ltd's (Proponent) Environmental Impact Assessment for the New Cobar Complex Project Proposal (SSD 10419).

The EPA has reviewed the Environmental Impact Assessment titled "New Cobar Complex Project, State Significant Development (SSD10419), Environmental Impact Assessment" prepared by EMM Consulting Pty Limited on behalf of the Proponent dated February 2021 and accompanying attachments and understands that the Proposal relates to the following:

- The amalgamation of existing approved underground mining of the New Cobar, Chesney and Jubilee deposits;
- The development of new underground workings of the Great Cobar and Gladstone deposits with associated infrastructure; and
- The utilisation of the Peak Complex for mineral processing and tailings disposal.

The Proposal would be subject to Environment Protection Licence 3596 (Licence) issued by the EPA under the *Protection of the Environment Operations Act 1997* (POEO Act) for the scheduled activities of mining for minerals, mineral processing and general chemical storage.

The EPA has reviewed the Environmental Impact Assessment and accompanying attachments and requests further information from the Proponent before providing DPIE with its final advice. This information is in relation to the Noise and Vibration Impact Assessment and the Air Quality and Greenhouse Gas Impact Assessment.

Noise

1. The EPA requests that the Proponent revise the Noise and Vibration Impact Assessment (NVIA) to show the actual predicted noise levels at each receiver in Tables 6.1, 6.2 and 6.3.

The NVIA provides the results of the construction and operational noise assessment in Section 6. While the EPA notes that the NVIA predicts compliance with the relevant criteria, Tables 6.1, 6.2 and 6.3 generally only show the predicted noise levels as being a value less than the criterion (e.g. <40 dBA) rather than the actual predicted value (e.g. 32 dBA) at the assessment point. This approach

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L1, 48-52 Wingewarra Street info@epa.nsw.gov.au DUBBO NSW 2830 www.epa.nsw.gov.au Australia does not provide the EPA with sufficient information about the available noise level margin between the predicted level and the criterion, or the relative predicted noise levels at different receiver locations, which makes a full and proper review difficult.

2. The EPA requests that the Proponent clarify the text within Section 3.5.2 of the NVIA to reflect the findings of the meteorological assessment as appropriate following the detailed comments below.

The NVIA states in Section 3.5.2 that stability category F and G combined temperature inversions 'did occur for 30% or greater of the night-time period' and then goes on to state that 'temperature inversion conditions are not considered significant in accordance with the Noise Policy for Industry (EPA, 2017). While the EPA acknowledges that the ISO9613 prediction method reflects noise propagation under a moderate temperature inversion condition, Section 3.5.2 of the NVIA needs to be updated to clarify the findings.

Air

3. The EPA requests that the Proponent provides additional information to describe the activities undertaken at both the New Cobar and Peak complexes, including the processing circuit, to demonstrate that the Air Quality and Greenhouse Gas Impact Assessment (AQIA) has accounted for all significant emission sources.

The New Cobar and Peak complexes are inherently interlinked and are covered by one environment protection licence. While the AQIA states that the "processing of ore will only take place at the Peak Complex, therefore is outside the scope of this project", it is noted that the Proposal will produce ore within current development approvals in relation to the New Cobar and Peak complexes (800,000 tpa) and that the AQIA has assessed cumulative impacts due to activities undertaken at both complexes, including the processing circuit. However, the AQIA does not include a detailed description of the activities undertaken at the Peak complex including the processing circuit and therefore it is unclear whether all relevant emission sources from this facility have been assessed.

4. The EPA requests that the Proponent confirms, or provides additional information, that the assumed throughputs outlined in the AQIA adequately represent a reasonable worst-case scenario with consideration given to any potential variations in annual operations and processing capacities at the New Cobar and Peak complexes.

The Environmental Impact Assessment states that current development approvals at the New Cobar and Peak complexes allow for the operations to process up to 800,000 tonnes per annum (tpa) of ore. It is also indicated that the Proposal will produce ore within the existing processing limits (800,000 tpa). However, the Environmental Impact Assessment does not include a breakdown of the proposed annual capacities at the New Cobar and Peak complexes. Table B.2 in the AQIA shows that the assumed ore throughputs are 200,000 tpa for the New Cobar complex and 600,000 tpa for the Peak complex. The EPA is seeking clarification, or further information on the extraction rates from the various mine areas. This should include, but need not be limited too, the following:

- Information on the potential for extraction rates to vary from those assessed in the AQIA; and
- Demonstration that the scenario assessed in the AQIA adequately represents a reasonable worst-case scenario, with consideration of any potential variations in annual operations and processing capacities through the different mine complexes.
- 5. The EPA requests that the Proponent revises the AQIA to include a step by step detailed discussion regarding the methodology used to establish emission sources parameters.

Based on Figure B.1 in the AQIA, the EPA understands that a number of sources representative of different activities have been combined and modelled as one source. For instance, although it is not clear, it is likely that loading, unloading and wind erosion activities at the New Cobar complex were potentially modelled as either a combined area or a combined area line source. Whilst the EPA recognises the merits of the approach, detailed information is required to allow for a robust and

transparent review. The EPA is seeking that the AQIA give consideration to, but need not be limited too, the following:

- Providing a summary of individual modelled sources and their corresponding parameters (e.g. emission rates, initial vertical dimension -if used-, side length, aspect ratio, release heights, etc);
- In the case where various sources were combined into one modelled source, provide a segregated list of the activities included in the modelled source;
- In the case various sources were combined into one modelled source, provide detailed discussion on how the 'combined' total emission rate was estimated and how it accounts (where applicable) for any potential differences in times of the day each activity is proposed to be undertaken; and
- Including any other relevant information that is not specified in points a -c above.
- 6. The EPA requests that the Proponent revises the AQIA to benchmark the proposed mitigation measures against best practice dust control measures.

It is noted that the AQIA does not predict additional exceedances at any of the identified privatelyowned receptor locations and that it includes mitigation measures primarily through the use of water for dust suppression. Nonetheless, considering the proximity to Cobar, a detailed review of best practice dust control measures is necessary to demonstrate that the proponent has evaluated and/or committed to all reasonable and feasible mitigation measures to prevent and minimise air pollution. Particular emphasis should be given to the largest emissions sources such as the proposed ventilation shaft, the existing ventilation shafts, and activities related to hauling and wind erosion. The EPA is seeking that the AQIA give consideration to, but need not be limited too, the following:

- Any measures to minimise emissions from the ventilation shafts, including those that can be implemented when undertaking underground works;
- The use of chemical suppressants to reduce emissions from haulage on unpaved roads; and
- The use of alternative methods (i.e. conveyors, subsurface transportation) to transport ore from the proposed New Cobar complex to the peak complex.
- 7. The EPA recommends that the Proponent nominates and commits to the implementation of mitigation measures during the construction phase of the Proposal, if approval is granted.

The AQIA indicates that the construction phase of the Proposal is expected to take six months and therefore the potential emissions will be minor and shorth term in nature. Nonetheless, considering the proximity of the proposed construction works to Cobar, the EPA considers that the Proponent must nominate and commit to specific mitigation measures to be undertaken during the construction works as required.

If you have any questions about this matter, please contact me on 4908 6830 or by email at <u>central.west@epa.nsw.gov.au</u>.

Yours sincerely

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