Department of Planning and Environment



Our ref: OUT23/18899

Mandana Mazaheri Planning and Assessment Group NSW Department of Planning and Environment

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23 November 2023

 $Subject: \textbf{Rasp Mine - Ventilation Intake and Underground Exploration (MP07_0018-Mod-11) - Response to Submissions (RtS)}\\$

Dear Ms Mazaheri

I refer to your request for advice sent on 30 October 2023 to the Department of Planning and Environment (DPE) Water about the above matter.

Modification 11 is for a ventilation intake and an extension of development workings in Main Lode Blocks 13, 14 & 15 at the Rasp mine. This is to allow for continued access to future ore reserves and to augment safety systems. The proposed modification will be undertaken within the existing disturbed area. No changes to the approved extraction rate, processing rate and water management approach are proposed as part of Modification 11.

DPE Water has reviewed the RtS and has recommendations regarding groundwater impacts and water take. Please see Attachment A for more detail.

Should you have any further queries in relation to this submission please do not hesitate to contact DPE Water Assessments <u>water.assessments@dpie.nsw.gov.au</u>.

Yours sincerely

Rob Brownbill

Manager, Assessments, Knowledge Division

Department of Planning and Environment: Water

Attachment A

Detailed advice to DPE Planning & Assessment regarding the Ventilation Intake and Underground Exploration (MP07_0018-Mod-11) (Rasp mine)—Response to Submissions (RtS)

1.0 Groundwater Impact Assessment

1.1 Recommendation – prior to determination

The proponent undertake an analytical assessment of the impact of the modification against the minimal impact considerations of the NSW Aquifer Interference Policy (2012) to show how the proposed dewatering for the extension would influence the current cone of depression and ensure appropriate monitoring is in place.

1.2 Recommendation – post approval

The proponent develop a numerical groundwater model for the project which is compliant with the requirements of the NSW Aguifer Interference Policy (2012).

Explanation

The proponent has submitted a statement of impacts; however no analysis is provided to support the statements. DPE Water cannot support these statements without requisite supporting analysis and details. Section 3.2.3 of the NSW Aquifer Interference Policy (2012) describes what is required from proponents in assessing impacts, including:

Proponents of any project that may be defined as an aquifer interference activity under the Water Management Act 2000 will also be required to provide estimates of all quantities of water that are likely to be taken from any water source during and following cessation of the activity and all predicted impacts associated with the activity, based on the following minimum requirement:

For any mining or CSG production activity...estimated based on complex modelling platform that is:

- Calibrated and validated (where practical) to the available baseline data that has been collected at an appropriate frequency and scale and over a sufficient period of time to incorporate typical temporal variations. In instances where an activity has a high likelihood of causing more than minimal harm to a "reliable water supply", at least 2 years of baseline data is required; and
- Consistent with the Australian Groundwater Modelling Guidelines; and
- Independently reviewed and determined to be robust and reliable, and deemed fit-forpurpose to the satisfaction of the Minister.

The proponent has identified high priority GDEs that along ephemeral creek lines southwest of the Perilya Broken Hill Operations Pty Ltd South Mine lease areas. Additionally, there are high priority GDEs situated within a 5km radius of the mining lease area. Third-party production bores and basic rights work approvals have been recognized in proximity to the mining lease.

Rasp Mine is the subject of an aquifer interference activity. This necessitates evaluation of how the proposed development may interact with and potentially influence the groundwater resources in the surrounding area.

Assistance to understand DPE Water's reporting standards are as described in the Guidelines for Groundwater Documentation for SSD/SSI Projects. For technical Guidelines visit: https://water.dpie.nsw.gov.au/licensing-and-trade/major-projects/major-projects-groundwater-guidelines

2.0 Water Licencing

2.1 Recommendation – post approval

The proponent obtains additional entitlement to account for the mine's maximum predicted groundwater take if mining rates cause groundwater take to exceed the current volume of entitlement.

Explanation

The water balance indicates groundwater take is proportional to the rate of mining, and at a "worse feasible case" is 0.6 ML of water per kt of ore mined. If the mine extracts the maximum permissible 750 kt of ore in any given year (in accordance with Schedule 2, Condition 6 of Project Approval 07_0018), the maximum groundwater take would be 450 ML in the "worse feasible case". Even with carryover entitlement, the mine does not hold sufficient entitlement on WAL 31065 (370 ML/year) to account for this volume of groundwater take.

End Attachment A