



Department of Planning and Environment

Mr Trent Cini
Environment and Community Manager
Moolarben Coal Operations Pty Limited

Via email: Trent.Cini@yancoal.com.au

14 July 2022

Dear Mr Cini,

Moolarben Coal Stage 1 – Underground 4 Extraction Plan (LW401-LW408)

I refer to Moolarben Coal Mines Pty Limited (the Proponent) application in January 2022 for the Department's approval of an Extraction Plan for the proposed Longwalls 401 – 408 at the Underground 4 mining area as part of the Moolarben Coal Project Stage 1 approved under project consent MP05_0117.

The Department has carefully considered this application following consultation with relevant agencies and the Independent Advisory Panel for Underground Mining (the Panel). The Department has also considered Moolarben Coal's responses to advice from the Panel and agencies.

Following this assessment, the Secretary provides conditional approval of the revised Extraction Plan submitted in June 2022. The approval is subject to the conditions outlined in **Table 1**.

Table 1: Conditional approval

Condition	Details
1	The Proponent must prepare a site-specific subsidence monitoring and mitigation program for Aboriginal heritage site S1MC 280 to the satisfaction of the Secretary prior to the commencement of longwall mining of LW402. The program must include: a) a suitable "early warning" subsidence monitoring site above the LW402/LW403 row of chain pillars, at least several pillars inbye of the site, to monitor the subsidence effects and impacts of both LW402 and LW403 to determine the actual subsidence, tilt and strain figures, by comparison to the predicted values; b) a comprehensive Trigger Action Response Plan for both the "early warning" site listed in (a) above, and for monitoring at the site; c) a comprehensive mitigation plan for the site, to cover all actions to prevent any significant subsidence impact to Site S1MC 280 due to subsidence, tilt or strain, including i. the planned stress-relief slotting design ii. consideration of temporary support of the rock shelter overhang; and iii. design of a LW403 Panel face shortening, to leave some additional coal in the vicinity of the site. For the purposes of this condition, significant subsidence impact means: • overhang collapse; or • cracking of sandstone that coincides with the Aboriginal heritage feature(s) of the site that make it significant; or • rock fall that damages the Aboriginal heritage feature(s) of the site that make it significant that cannot be attributed to natural weathering or deterioration.
2	The Proponent must prepare a Final Geological Structural Analysis that extends over the entire UG4 area prior to the commencement of longwall mining of LW404 or as otherwise agreed by the Secretary. The analysis must include an assessment of whether there are any natural defects in the geology that could enhance or restrict groundwater migration and flow, and necessitate expanded monitoring and/or updated modelling
3	Prior to the commencement of longwall mining of LW404 or as otherwise agreed by the Secretary, the Proponent must update the numerical groundwater model and predictions to the satisfaction of the Secretary, including: a) review and update the model conceptualisation for the leakage between the Triassic sandstones and the Permian overburden; b) review and update the model conceptualisation of surface water – groundwater connectivity; c) reassess aquifer drawdown predictions and water balance estimates particularly mine water inflow volumes and groundwater baseflow losses to the Goulburn River;

Condition	Details
	d) reassess the predicted groundwater take; e) complete an independent peer review of the current and updated model by a technical expert endorsed by the Secretary f) consideration of the Final Geological Structural Analysis in Condition 4; g) provide revised predictions based on the updated numerical model including a detailed technical report on: (i) predicted cumulative impacts from approved mining; and (ii) predicted impacts of only the LW401-408 panels.
4	The Proponent must install groundwater monitoring sites PZ195 and PZ194 prior to the commencement of longwall mining of LW401.
5	Prior to 30 June 2023, or as otherwise agreed by the Secretary, the Proponent must install at least two water monitoring sites in the Goulburn River, upstream and downstream of the Drip respectively, within the State Conservation Area or National Park. The monitoring sites must have continuous monitoring of water level, pH, temperature, EC; and monthly monitoring of other water quality parameters. For the purposes of Condition 6, water monitoring data can be used from existing water monitoring sites outside the State Conservation Area or National Park with the agreement of the Secretary.

The Department has prepared a report setting out its Reasons for Decision in respect of the application for approval of the Extraction Plan and the above conditions which will be made available on the Department's major projects website. You must publish a copy of the approved Extraction Plan and the Department's conditional approval on your project website in accordance with Schedule 5 Condition 11 of the project approval.

If you have any enquiries regarding this matter, please contact Jack Turner on 9995 5387.

Yours sincerely,



Steve O'Donoghue
Director Resource Assessments
as nominee of the Secretary