

Mr Jon Degotardi
Manager – Technical Services
Metropolitan Collieries Pty Limited
PO Box 402
HELENSBURGH NSW 2508

12/12/2022

Subject: Metropolitan Coal Mine - Longwalls 308-310 Extraction Plan

Dear Mr Degotardi

I refer to the Extraction Plan for Longwalls 308 to 310 (Extraction Plan), dated May 2022 and submitted in accordance with condition 6 of Schedule 3 of the approval for the Metropolitan Colliery (MP 08_0149).

The Department has reviewed the Extraction Plan and has carefully considered agency and stakeholder advice. The Department has also carefully considered the Independent Advisory Panel for Underground Mining's (the Panel) advice and recommendations. The Department is satisfied that the revised Extraction Plan (dated November 2022):

- addresses the agency and stakeholder advice and the Panel's recommendations; and
- meets the requirements of the relevant conditions in the Metropolitan Colliery approval (MP 08_0149).

Accordingly, as nominee of the Planning Secretary, I approve the Extraction Plan for Longwalls 308 to 310 (dated November 2022). The Department's reasons for approval are outlined in Attachment A, appended to this letter.

You are reminded that if there are any inconsistencies between the Plan and the conditions of approval, the conditions prevail.

Please ensure you make the document publicly available on the project website at the earliest convenience.

If you wish to discuss the matter further, please contact Melanie Hollis on 8217 2043.

Yours sincerely



Jessie Evans
Director, Resource Assessments
Resource Assessments

As nominee of the Planning Secretary

ATTACHMENT A

Reasons for Approval for Longwalls 308-310 Extraction Plan

1. BACKGROUND

- The Metropolitan Coal Mine, operated by Metropolitan Collieries Pty Ltd (the company), was approved by the Minister for Planning in June 2009. The project approval has been modified on three occasions and allows the extraction of up to 3.2 million tonnes of run-of-mine coal per year for 23 years using longwall mining methods.
- The approval contains an approved longwall panel layout that permits extraction of coal, including extraction beneath the Woronora Reservoir, subject to preparation and the Department's Secretary (or nominees) approval of an Extraction Plan.

2. EXTRACTION PLAN APPLICATION

- On 17 May 2022, the Department received an Extraction Plan application seeking approval to extract Longwalls 308-310. The Extraction Plan comprises several sub-management plans (i.e. Water, Heritage, Biodiversity) which focus on specific mitigation, management, monitoring and reporting of the potential subsidence impacts and environmental consequences.
- Each sub-management plan contains several Trigger Action Response Plans (TARPs) which form a contingency plan in the event that the consent's performance measures are exceeded or are likely to be exceeded.
- The Extraction Plan for Longwalls 308-310 also includes post-mining monitoring and management of potential subsidence impacts and environmental consequences for previously extracted Longwalls 20 to 22, 23 to 27, 301 to 303, 304 and 305 to 307.
- Longwalls 308-310 would comprise a total void width of 138 m, maximum extraction height of 3.2 m and a tailgate chain pillar width of 70 m.

3. CONSULTATION

- The Department sought advice from relevant State agencies on the application and received comments from its Biodiversity Conservation Division (BCD) and Water Group, the Department of Regional NSW – Mining, Exploration & Geoscience (MEG), WaterNSW, Subsidence Advisory NSW, Transport for NSW, the NSW Resources Regulator, Heritage NSW and Dams Safety NSW.
- BCD, Heritage NSW and WaterNSW raised concerns with aspects of the Extraction Plan including its water, swamp and Aboriginal heritage monitoring programs and TARPs. The Department referred this advice to the Independent Advisory Panel for Underground Mining (the Panel) for consideration.
- DPE Water, MEG, Resources Regulator and Subsidence Advisory NSW reviewed the Extraction Plan and had no further comments.
- Transport for NSW is yet to provide comments. The Department will consider comments once received and consult with the company if necessary.
- Dam Safety NSW advised that Longwalls 308-310 no longer fall within the Notification Area delineated around the Woronora Dam Structure.
- On 12 July 2022, the Department requested that the company provide further information and respond to agency comments. On 1 November 2022, the company provided its responses to the above matters. The company's response included revisions to the Extraction Plan and some sub-plans to address agency comments.

4. INDEPENDENT ADVISORY PANEL FOR UNDERGROUND MINING

- On 27 June 2022, the Department requested advice from the Panel. The Department specifically sought advice on the proposed monitoring programs, subsidence assessments and TARPs.
- On 30 September 2022, the Panel provided its advice, which included five recommendations pertaining mostly to swamps, geological structures and groundwater.
- The company provided its response to the Panel's advice on 1 November 2022. On request from the Department, it provided a final and revised Extraction Plan on 24 November 2022.
- The company generally accepted all recommendations from the Panel. However, it considered that some were relevant for future extraction plans (i.e. longwall 311 onwards).

5. WORONORA RESERVOIR IMPACT STRATEGY PANEL

- On 2 November 2022, the company submitted a report from the WRIS Panel which stated that:
 - No abnormal or higher than predicted water inflow to the mine workings has occurred following secondary extraction of multiple longwall panels through several faults at the mine;
 - Hydraulic conductivities were comparable to those recorded for the unfractured host rock;
 - The mine water balance confirms that there is no abnormal leakage of water from the Woronora Reservoir to the underground workings, including from Longwalls 305 to 307 which are the first longwalls to extend directly underneath the reservoir;
 - Mine water inflows have averaged 0.11 Megalitres per day (ML/day) during the extraction of Longwalls 305 to 307, which is less than the 0.2 ML/day predicted by the groundwater modelling for the Project; and
 - Mine water inflows are not materially different when mining directly below the reservoir compared to mining away from the reservoir.
- The Panel reviewed the WRIS Panel report and provided supplementary advice which considered that based on the information provided there is little likelihood of excess inflows to the mine from the Woronora Reservoir.

6. ASSESSMENT

Subsidence and monitoring

- The Department notes that the Extraction Plan condition in the consent allows for staged Extraction Plans which cover a defined area of second workings.
- The Department accepts that several of the Panel recommendations relate to subsidence effects and impacts that would occur as a result of the extraction of longwall 311 and beyond.
- The Department also notes that the Panel concluded that the mine layout is conservative and is unlikely to result in a significant increase in impacts.
- The Department is satisfied that the monitoring programs and TARPs would allow early identification of any potential exceedances of performance indicators.

Leakage from the Reservoir

- Mine water inflow is currently equal or less than predicted. The Department is satisfied that there remains a low risk of leakage from the Woronora Reservoir to the mine. The Department considers that the groundwater monitoring program, including of the mine water balance and TARPs continue to be appropriate to ensure there are no exceedances of the performance measure for leakage from the Woronora Reservoir.

Swamps

- In response to the Panel's advice, the company accepted most recommendations and revised the Extraction Plan for longwalls 308-310 accordingly. The company proposes to address the other recommendations prior to submitting an extraction plan for subsequent longwalls.
- It was noted that an exceedance of the groundwater performance indicator should not be considered an exceedance of the biodiversity performance measure unless vegetation monitoring demonstrates an associated impact to threatened species and populations has occurred.
- While the Department accepts the view, it is important to note that water levels within the swamp may present an early warning in being able to limit impacts and as such should be monitored.
- The company notes that there have been previous concerns with the significant surface disturbance that can occur when drilling a monitoring bore. The company proposes to consult further with WaterNSW to address this recommendation prior to submitting an Extraction Plan for subsequent longwalls. The Department accepts that further consultation is required to ensure there is balance between monitoring sites for the protection of a feature and surface disturbance.
- Condition 4 of Schedule 3 of the consent requires the company to include in the relevant Extraction Plan an additional assessment of the potential subsidence impacts and environmental consequences of Swamps 76, 77 and 92 before they are undermined.
- Swamps 76 and 77 are located outside of the predicted 20 mm subsidence contour and/or the 35° angle of draw line and are considered to not likely be impacted by the extraction of Longwalls 308-310. The majority of Swamp 92 is also outside of the predicted 20 mm subsidence contour and/or the 35° angle of draw line. As a result, the company proposes to address all recommendations for these swamps in subsequent extraction plans.

- The Department notes that the area of Swamp 92 within the extraction plan area is small compared to the overall size of the swamp, and it would not be directly undermined.
- The Department notes that the Panel concluded that “*mining of LW308 to LW310 is unlikely to impact Swamps 76, 77 and 92 but mining of subsequent panels may do so*”.
- As further assessment is required prior to undermining of Swamps 76, 77 and 92, the Department considers that the Panel recommendations provide additional guidance and targeted advice for development of future extraction plans.

7. SOCIO-ECONOMIC ISSUES


- The Department estimates that the remaining coal in the northern domain at the mine would provide about \$233 million in State Government revenue through royalties over the next 10 years.
- The mine provides for 412 direct jobs (employees and contractors) and is a significant contributor to regional employment.
- The mine produces metallurgical coking coal, which is transported by rail to Port Kembla Coal Terminal (employing 120 persons) for shipping to domestic and overseas markets.
- In the 2021/22 financial year, the mine contributed approximately \$31 million in royalties to the NSW economy and injected \$121.2 million in wages and business to the local economy.

8. RECOMMENDED CONDITIONS

- The Department considers that no additional conditions to the approval of the Extraction Plan are required.

9. CONCLUSION

- Based on its consideration of agency advice, and the advice of the Panel and WRIS Panel, the Department considers that the Extraction Plan for Longwalls 308-310 (Version B, dated November 2022) should be approved.



Jessie Evans
Director
Resource Assessments
as nominee of the Secretary