

Attachment 1

Mr Mike Young
Executive Director
Energy, Resources and Compliance
Department of Planning, Industry and Environment
320 Pitt Street
SYDNEY NSW 2000

Dear Mr Young,

**Re: Advice to the Department of Planning, Industry and Environment
IEPMC 2020-01: Metropolitan Coal Mine Longwalls 305-307 Extraction Plan**

I write on behalf of Professor Neil McIntyre and myself as the sub-committee of the Independent Expert Panel for Mining in the Catchment (the Panel) responding to your request of 5 March 2020 to:

- review the Department's reasons for approval and the proposed conditions, and
- provide advice as to whether there are additional matters and/or any additional conditions that should be assessed by the Department prior to granting approval for the extraction of the longwalls.

As you are aware, the Panel has had considerable input into the approval of Extraction Plans for longwalls (LWs) 303 and 304 that includes a field inspection, review, analysis and assessment of Trigger Action Response Plans (TARPs) to support an adaptive management approach to extraction. The Panel has been kept informed of outcomes and acknowledges the success to date of modifications to mine design and adaptive management approaches. Subsequently, it has been made aware of the publication of the Stage 2 Report of Woronora Reservoir Impact Strategy (WRIS) Expert Panel and notes that its principal findings are not inconsistent with those contained in the Panel's Part 2 Report.

Against this background, I do not propose to go into detail as to the reasons why the Panel generally endorses the Department's reasons for approving the LWs 305-307 Extraction Plan. Effectively, the Panel's endorsement is based on the success to date of the adaptive management approach of Metropolitan Mine supported by the TARP system and its associated management responses.

Notwithstanding this, the Panel advises that consideration be given to the following points when finalising conditions of approval for the extraction of LWs 305-307:

- The Panel considers there is merit in the view expressed by WaterNSW that the proposed adaptive management strategy should be extended to LW 307 and Waratah Rivulet.
- The Panel agrees with the WRIS Stage 2 report recommendation that a more detailed study of Woronora Reservoir water balance not be undertaken due to difficulties in achieving the accuracy required to detect water losses from the reservoir due to mining. The Panel notes the view of WaterNSW that a detailed water balance study would still have merit as it would be one of the only ways to determine compliance with the Woronora Reservoir performance measure. However, the Panel considers that the variability in the recession behaviour of the reservoir, due primarily to evaporation and inflow uncertainties, would make it difficult to isolate leakage due to mining unless it was the same order of magnitude as the variability. The Panel accepts the view of Metropolitan Mine (Peabody) that a superior method of assessment against a performance measure of negligible leakage from Woronora Reservoir is the mine water balance, albeit that this assumes that any water leakage

from the reservoir due to mining will report to the mine workings. The mine water balance approach needs to be continued to be supported by groundwater modelling.

- In respect of impacts on tributary inflows, the Panel recommends that the proposed condition (f) should be amended to include results of surface water monitoring. The WRIS Stage 1 Report led to the installation of two new flow gauges on west-flowing Woronora tributaries (Catchments I and K). Catchment I has been or will be undermined by LWs 301-305 and catchment K by LWs 305-307. The WRIS Stage 2 Report analysed these data up to January 2019 and concluded that there were no observable impacts from mining. These conclusions are made again in the February 2020 Water Management Plan based on data up to July 2019. The Panel considers that these are reasonable conclusions based on visual analysis of the available data. The Water Management Plan includes continued monitoring at these gauges, which the Panel supports.

Should you have any queries in respect of this advice, please do not hesitate to contact me or Professor McIntyre.

Yours sincerely

A handwritten signature in black ink, appearing to read 'J Galvin', with a stylized, cursive script.

Emeritus Professor Jim Galvin
Chair, Independent Expert Panel for Mining in the Catchment
6 March 2020

Cc: Matthew Sprott, Director Resource Assessments
Paul Freeman, Team Leader Resource Assessments