

## MINING, EXPLORATION & GEOSCIENCE ADVICE RESPONSE

Andrew Rode  
Energy, Resources & Compliance Division  
Department of Planning, Industry and Environment  
GPO Box 39  
SYDNEY NSW 2001

[andrew.ode@planning.nsw.gov.au](mailto:andrew.ode@planning.nsw.gov.au)

Dear Andrew

**Project: Tahmoor South Coal Project**  
**Stage: Advice on the second Project Modification Report**  
**Development Application: SSD-8445**

I refer to your correspondence dated 4 August 2020 inviting Regional NSW – Mining, Exploration & Geoscience (MEG) to provide comments on the Tahmoor South Coal Project – amendment report (the amended Project). The amendment report is submitted by Tahmoor Coal Pty Ltd, a wholly-owned subsidiary of SIMEC Mining (Tahmoor Coal or the Proponent).

The relevant units internal to MEG have been consulted in generating this advice. The Department of Planning, Industry and Environment and the Proponent should be aware that matters concerning subsidence, subsidence management, mine operator, safety, rehabilitation and environmental impacts of final landform design are not assessed by MEG and advice should be sought from the NSW Resources Regulator.

### Project overview

Tahmoor Coal is seeking approval for an extension of underground coal mining and associated activities at the existing Tahmoor Mine.

Mining at the existing Tahmoor Mine is anticipated to be completed by 2022. The extension project, known as the Tahmoor South Project, would continue to extract up to 4 Million Tonnes Per Annum of Run-of-Mine (ROM) coal with a reduced Life-of-Mine (LOM) of four years until 2032.

The Tahmoor Mine predominantly produces high-quality coking coal from the Bulli coal seam, which is used in the manufacture of steel. Since 2017, the Tahmoor Mine has produced on average 97.5 per cent coking coal with the remainder being thermal coal which is used for power generation.

### Project assessment

In February 2020 Tahmoor Coal submitted an amendment in response to submissions made during the exhibition of the EIS. The resulting amendments to the Project seek to ameliorate potential environmental impacts identified during the initial assessment.

*First amendment affecting mine design dated February 2020*

The initial amendments affecting mine design were:

- the removal of Longwall 109 (LW 109) in the northern part of the Project, beneath Dog Trap Creek.
- the reconfiguration of the longwall panels to two series of shorter panels.

**Regional NSW – Mining, Exploration & Geoscience**

Resource Operations – Assessment Coordination Unit

516 High St Maitland NSW 2320 PO | Box 344 Hunter Region Mail Centre NSW 2310

Tel: (02) 4063 6534 Fax: (02) 4063 6974 Email: [assessment.coordination@planning.nsw.gov.au](mailto:assessment.coordination@planning.nsw.gov.au)

[www.resourcesandgeoscience.nsw.gov.au](http://www.resourcesandgeoscience.nsw.gov.au)

ABN 19 948 325 463

- the reduction of longwall widths from 305 metres to 285 metres; and
- the reduction of the height of extraction within the longwalls from  $\leq 2.85$  metres to  $\leq 2.6$  metres.

#### *Second amendment affecting mine design dated August 2020*

In August 2020 Tahmoor Coal submitted a second amendment of the Project (the subject of this assessment) to further ameliorate potential environmental impacts, particularly potential subsidence and biodiversity impacts.

The second round amendments include:

- the removal of two longwalls, LW107B and LW108B, to reduce subsidence impacts at the township of Bargo.
- containment of the coal reject emplacement area on its approved disturbance footprint to reduce impacts to biodiversity; and
- amendments to the construction layout of the ventilation shafts (TSC1 and TSC2) and associated transmission lines to also reduce impacts to biodiversity.

#### **Change in resource recovery**

The changes to resource recovery in the amended Project is due to the proposed removal of the two longwalls; LW107B and LW108B. This second amendment removes 10 Million Tonnes (Mt) of ROM coal from the first amendment design (Table 1).

**Table1: Tahmoor South Project amendment tonnage changes**

<b>Tahmoor South Project</b>	<b>ROM coal (Mt)</b>	<b>Product coal (Mt)</b>	<b>Coking product (Mt)</b>	<b>Thermal product (Mt)</b>
<b>Original Submission (January 2019)</b>	48	38.5	35	3.5
<b>First Amendment (February 2020)</b>	43	32	30	2
<b>Second Amendment (August 2020)</b>	33	24.4	23	1.4
<b>Total Reduction</b>	15	14.1	12	2.1

#### **Economic benefits of the resource and Royalty**

The market mix does not significantly change with the majority of coal continuing to be sold in the domestic and export metallurgical markets, although a slightly smaller fraction of thermal coal would be produced.

The total number of operational jobs proposed under the amended Project is unchanged at approximately 390 employees. It is noted that the reduced coal production and resulting shortened LOM leads to operational jobs concluding four years earlier in 2032.

The amended Project total revenue has been reduced from the original Resource and Economic Assessment, solely due to a reduction in product tonnes. MEG notes that significant production from the Project will not commence until 2022. At time of writing, MEG has not adjusted its view on coal prices due to COVID-19 related factors and considers that coal prices would have rebalanced from current observed lows by that time.

Total revenue from the amended Project has been reduced to around A\$4 billion in current dollar terms and A\$2.5 billion NPV at a real discount rate of 7%. This compares to the original Resource and Economic Assessment (REA) revenue estimates of A\$6.2 billion in current terms and A\$3.7 billion NPV at a real discount rate of 7%.

Total royalty from the amended Project has been reduced to around A\$285 million in current dollar terms and A\$181 million NPV at a real discount rate of 7%. This compares to the original REA royalty estimate of A\$442 million in current terms and A\$264 million NPV at a real discount rate of 7%.

**Table 2: Comparison of economic benefits and royalty**

Tahmoor South Project	Original project	Amended project	Total reduction
<b>Jobs</b>	390	390	No change
<b>Total Revenue</b>	A\$6.2 billion	A\$4.0 billion	A\$2.2 billion
<b>Royalty</b>	A\$442 million	A\$285 million	A\$157 million

### Summary of assessment

The decision to remove LW107B and LW108B has been made to reduce subsidence in the township of Bargo. In the original mine design there were 751 houses directly above the Project's longwalls. The second amendment reduces this to 143 houses. Most of these houses are located within the urban areas of Bargo township.

The removal of the longwalls will also lessen the subsidence impacts on two tributaries of Dog Trap Creek.

As a result of the reduction in LOM and product tonnes being extracted, both revenue and royalties are substantially reduced from that calculated in the original REA. The proposed changes to the mine design are considered appropriate given the subsidence, environmental, operational and other constraints of the Tahmoor South Project.

MEG concludes that should the amended Project be approved, efficient and optimised resource outcomes can be achieved given the Project constraints, and any identified risks or opportunities can be effectively regulated through the conditions of mining authorities issued under the *Mining Act 1992*.

MEG requests to review the draft conditions of approval before finalisation and any granting of development consent.

For further advice concerning this matter, please contact Adam W. Banister, Senior Advisory Officer Resource Assessments on 02 4063 6534 or [assessment.coordination@planning.nsw.gov.au](mailto:assessment.coordination@planning.nsw.gov.au).

Yours sincerely



Stephen Wills  
**Executive Director Resource Operations**  
**Mining, Exploration & Geoscience**  
**Department of Regional NSW**  
 24 August 2020