

MINING, EXPLORATION & GEOSCIENCE ADVICE RESPONSE

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Dear Clay

Project: Ashton RUM Integration Project
Stage: Modification Report
Development Application: DA 309-11-2001-I & DA 104/96

I refer to Department of Planning, Industry & Environment correspondence dated 22 November 2021 inviting the Department of Regional NSW – Mining, Exploration & Geoscience (MEG) to provide comments on the Ashton RUM Integration Project (the Modification). The Modification is submitted by both Ashton Coal and Ravensworth Underground Mine (the Proponents), wholly owned subsidiaries of Yancoal Australia Limited and Glencore Australia respectively.

Executive summary

The Modification proposed allow for the extraction of additional coal within existing mining tenements located in the Ravensworth Mine Complex (RUM) to the approved operations at the Ashton Coal Complex. The Ashton Mine Complex comprises of the Ashton Coal Project (the completed North East Open Cut and the Ashton Underground Mine) and the approved Ashton South East Open Cut. RUM has been in care and maintenance since 2014. Ashton Underground Mine and RUM share a common mining lease boundary and are both approved to extract coal from similar coal seams. The Modification will access unmined coal resources at the RUM and integrate this part of the approved RUM with the Ashton Underground Mine through a series of Mining Lease (ML) negotiations.

Table 1: MEG determination estimate of total royalties

Parameter	\$m (2021 dollars)
Total Royalties received	\$120 million
Net Present Value (NPV) royalties (7 percent discount rate real)	\$84 million
Annual estimated royalties (average)	\$20 million (approximate)

In addition, the Modification will generate:

- on average 270 full-time equivalent (FTE) continuing jobs during operations from 2022 to 2029
- a value of around \$1.7 billion in current dollars, with the NPV of this revenue stream at around \$1.2 billion

- capital investment of about \$165 million
- recovery of the unmined RUM coal resource.

As noted above RUM has been in care and maintenance since 2014, with no current plans for mining to recommence.

The Ashton RUM Integration Project is considered to be an efficient use of resources. If the Modification does not proceed the economic and social benefits outlined above will not be realised.

Modification strategic considerations

Economic benefits of the modification

All coal from the Modification will be sold on the export semi-soft coal market. The total value of this coal is estimated to be around \$1.7 billion in current dollars with a net present value of around \$1.2 billion using a discount rate of 7 percent. Export income is an important element to the economy of both NSW and Australia. The export income from the Modification would contribute to the around \$14.5 billion of coal exports from NSW in 2020-21, where the total coal value was around 30 percent of total merchandised exports.

A key economic benefit of the Modification is that, if approved, it would extend the life of the current Ashton Underground Mine to 2029. If not approved the existing Ashton mine is expected to close in 2024. The Ashton Underground Mine currently employs around 270 personnel. The Modification supports the continuation of operational jobs to 2029. It is considered that these existing jobs would account for around 1000 additional jobs in both mine and non-mine related employment for the life of the Project. Total capital expenditure reported for the Modification is around A\$165 million.

The Modification would utilise existing major equipment such as the longwall and the existing Ashton Coal Project handling and preparation plant, rail loop and other major surface facilities. Modifications to existing operations usually entails a significant reduction in capital expenditure as is the case with this Modification.

Royalty return to the state

Royalty calculation

The Project is a proposed underground mine and as such a royalty rate of 7.2 percent of net disposal value is applicable. Net disposal value is the price received per tonne minus any allowable deductions. The main allowable deduction is for coal beneficiation which is either; \$3.50 per tonne for coal subjected to a full washing cycle, or \$2.00 per tonne for coal subject to a simple washing process, or \$0.50 per tonne for coal that is washed and screened. As all product coal from the Project will be subject to a full washing cycle, a deduction of \$3.50 per tonne from the value of coal produced applies. A deduction for levies also applies which would amount to no more than \$1.00 per tonne. Hence total allowable deductions for royalty for the Project would amount to \$4.50 per tonne.

Assumptions

All coal from the Project is expected to be sold into the export semi-soft metallurgical market.

Coal price forecasting is inherently difficult and over the life of the Project there will be many variations in coal prices. MEG has used an average price of around A\$140 per tonne for the semi-soft metallurgical coal, (IHS Markit long term semi-soft metallurgical coal), that will be produced over the life of the Project. The current average price as of August 2021 (Coal Services P/L) for this type of coal from NSW mines is around A\$180 per tonne. All coal from the Project would be sold into the export semi-soft metallurgical coal market. A review of coal quality data by MEG has determined that this is achievable.

MEG has estimated that if the Project is approved, around 12.3 million tonnes (Mt) of product coal would be able to be economically mined from the Project area between 2022 to 2029.

Resource Assessment

Background

The Ashton Mine is located within the Newcastle Coalfield, 14 kilometres northwest of Singleton, in the Singleton Local Government Area (LGA) in the Hunter Region, New South Wales. Historic mining has occurred through both open cut and underground mining methods in both the Ravensworth and Ashton areas since the 1950's.

The Ashton Coal Project obtained development consent in 2002 and commenced mining the open cut in 2004, with the underground operations commencing in 2006. The current development approval allows for the extraction of 5.4 million tonnes per annum (Mtpa) through to 26 February 2024. Mining within the North East Open Cut was completed in 2011 and development of the South East Open Cut Project, determined on 20 June 2016, is yet to commence.

Ashton Underground Mine is a four-seam descending longwall operation with the first two seams having been extracted and current mining occurring within the Upper Lower Liddell Seam.

The westerly adjacent Ravensworth Coal Mine Complex comprises the open cut and underground operation (RUM). The RUM has a development consent to July 2024 for up to 7 Mtpa.

Both the Ashton Underground Mine and RUM extract essentially the same coal seams in a similar descending progression. These synergies allow for the proposed modification.

The main elements proposed for the Modification include the following:

- Ashton Mine propose to develop first working mains across the mine lease boundary into the approved RUM areas to access the Pikes Gully and Middle Liddell Seams
- extend the mining operations until approximately December 2029
- Run-of-Mine (ROM) coal mined in RUM will be handled, processed and transported using existing Ashton Coal Project infrastructure
- administrative changes to facilitate the management of the proponent's portion of RUM
- receipt and management of water and gas from the proponent's portion of RUM
- mining will occur in a descending sequence and be undertaken through longwall mining methods
- there will be no changes to the run-of-mine (ROM) production, environmental management, processing limits, hours of operation, handling of rejects, disposal of rejects, transport methods and no significant changes to infrastructure or workforce.

Size and quality of the resource

The RUM ML transfer area will target the Pikes Gully and Middle Liddell Seams (aka Upper Lower Liddell Seam at Ashton). These have a JORC measured resource of around 32.6 Mt (13.45 Mt for Pikes Gully and 19.3 Mt for Middle Liddell Seam).

The depth of cover for the site is relatively shallow at around 200 -300m. Seam thickness for the Pikes Gully is around 2.2m and 3.2m for the Middle Liddell. Pikes Gully longwall averages 1.5 km and Middle Liddell longwall averages 1.76 km. Additional chocks will be used to extend the longwall width from the current 200m to the proposed 250m width.

Coal qualities in the RUM area are comparable with coal currently produced from the Ashton Underground Mine with the product being semi soft coking coal. Yields are estimated for approximately 60 percent.

The RUM areas with Ashton Mine labelling show in the report provided as Longwall (LW) 401 to 406 - Pikes Gully (Ashtons naming for LW 401 correlates to RUMs approved LW 10) and LW401 through to LW406 are generally coincident with RUMs existing approved LW10 through to LW15).

The existing approved Subsidence Management Plan for the RUM areas would be updated (and may become a Plan for Extraction).

MEG has verified around 19.4 Mt ROM for the Middle Liddell and Pikes Gully Seams with a total product of 12.3 Mt (yield on around 60 percent) suitable as a semi soft product.

Resource recovery

The proposed longwall orientation that RUM previously established will be maintained as its optimal for horizontal stress and roof joint orientation associated with the large syncline affecting this area. Accordingly, the geotechnical design is conducive to coal resource extraction.

Many factors constrain mine complexes, mine plans, extraction methodology and resource recovery. These include, but are not limited to, geological features, environmental constraints, and commercial viability, social licence, and community support. The Proponents have assessed options future resource options and determined the RUM/Ashton Underground Mine integration is the most appropriate extraction option. Particularly because of the proven and established methods previously undertaken at the RUM prior to it going into care and maintenance.

Continuing to mine the coal resources in the RUM area via the longwall orientations planned will maximise recovery of coal and is necessary to mitigate against regionalised faulting and jointing and also to mitigate against the diatreme (volcanic plug) within LW501A. Potential for localised cindering associated with this diatreme will likely affect coal quality for a small portion of the LW 501A area in contact with the diatreme.

MEG considers the Modification an efficient development of coal resources that provides an appropriate return to the State, within existing mining leases, giving due consideration to the constraints of the location.

JORC code considerations

The Proponent has completed resource and reserve estimations for the Modification in accordance with the Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves (the JORC code) produced by the Australasian Joint Ore Reserves Committee. The JORC Code is an industry-standard professional code of practice that sets minimum standards for public reporting of mineral exploration results, mineral resources and ore reserves. Reserves are the economically mineable portion of a resource. A JORC compliant reserves report assists in independently assessing the commercial viability of the Modification and the proposed mining method.

In view of the opportunities and constraints outlined in the Proponent's Modification and based on the information currently available, MEG considers that the Modification is consistent with the objects of the *Mining Act 1992*. In addition, in relation to clause 15 of the State Environmental Planning Policy (Mining, Petroleum Production and Extractive Industries) 2007, the Proposal represents an efficient development and utilisation of minerals resources which will foster significant social and economic benefits.

MEG is satisfied that, should the operational outcomes be achieved, the proposed mine design and mining method submissions adequately recover resources and will provide an appropriate return to the state.

Application of section 380AA of the *Mining Act 1992* – restrictions on planning applications for coal mining and titles required to undertake mining

Coal is a prescribed mineral under the Act and the Proponent is required to hold appropriate mining titles from MEG to undertake mining.

Section 380AA states:

(1) An application for development consent, or for the modification of a development consent, to mine for coal cannot be made or determined unless (at the time it is made or determined) the applicant is the holder of an authority that is in force in respect of coal and the land where mining for coal is proposed to be carried out, or the applicant has the written consent of the holder of such an authority to make the application.

(2) For that purpose, an authority in respect of coal need not be in force in respect of the whole of the land to which the application for development consent relates but must be in force for the land where mining for coal is proposed.

Based on current title information MEG advises that the Proponent holds the appropriate titles as required for planning applications for coal as relating to the Modification and satisfies the requirements of section 380AA.

The requirement for a mining authority and royalty liability

The requirement for a mining lease

As coal is a prescribed mineral under the *Mining Act 1992*, the proponent is required to hold an appropriate mining title(s) from MEG to mine the mineral.

MEG notes that the appropriate mining authorities are currently held to undertake extraction within the Modification and that options for sublease or transfer of mining leases are being considered by the proponents.

Royalty Liability

The holder of a mining lease is also liable to pay a royalty for both publicly and privately-owned minerals (refer to section 282-285 of the Act).

Biodiversity offset assessment

MEG requests that the Proponent consider potential resource sterilisation should any future biodiversity offset areas be considered. The Proponent must consult with MEG and any holders of existing mining or exploration authorities that could be potentially affected by the proposed creation of any such biodiversity offsets, prior to creation occurring. This will ensure there is no consequent reduction in access to prospective land for mineral exploration or potential for the sterilisation of mineral and extractive resources.

Summary of review

MEG considers that should the Modification be approved; efficient and optimised resource outcomes can be achieved.

MEG requests that it be provided with an opportunity to review the draft conditions of approval before finalisation and any granting of development consent.

For enquiries on this matter, please contact Katherine Courtney, Project Officer, Industry Advisory & Mining Concierge – Industry Development on 02 4063 6966 or mining.concierge@regional.nsw.gov.au.

Yours sincerely



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Department of Regional NSW – Mining, Exploration & Geoscience
15 December 2021