

RDOC22/241940  
13 December 2022

Clay Preshaw  
Executive Director Energy and Resource Assessments  
Department of Planning and Environment  
4 Parramatta Square, 12 Darcy Street  
Parramatta NSW 2124

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**ADVICE RESPONSE:** Ulan Coal Complex - Underground Mining Extension Project – Modification 6 (MP08\_0184-Mod-6) – Advice on EIS and Resource and Economic Assessment

Dear Clay,

I refer to Department of Planning and Environment correspondence dated 16 November 2022 inviting the Department of Regional NSW – Mining, Exploration and Geoscience (MEG) to provide comments on the Ulan Coal Complex - Underground Mining Extension Project – Modification 6 (the Modification) submitted by Glencore (the Proponent).

**MEG position**

MEG considers the Modification to be an efficient use of resources and that it will provide an appropriate return to the NSW Government.

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.

**Executive summary**

The Ulan Coal Complex (UCC) is owned by Glencore Coal Pty Limited (Glencore) and operated by Ulan Coal Mines Pty Limited (UCMPL), a subsidiary of Glencore.

The Modification will not alter the current approved extraction rate of 20 Million tonnes per annum (Mtpa) however it would enable access to an additional 25 Million tonnes (Mt) of coal resources from within the Ulan seam.

The Modification will extend the life of the approved UCC operation by approximately two years allowing mining to continue until August 2035. The UCC will continue to utilise the existing approved mine facilities, including the Coal Handling and Preparation Plant and train loading facilities.

The Modification will:

- extend longwall (LW) panels in the complex's Ulan Underground (UUG) and Ulan West Underground (UWUG) operations
- widen UUG Longwall West 11 panel by 30m
- extend the Life-Of-Mine (LOM) for an additional 2 years from 2033 to 2035
- include other minor changes including 3 additional vent shafts, 5 dewatering bores, alternate access tracks and surface infrastructure to service and provide power.

**Table 1: MEG estimate of total royalties**

Resource parameter	\$m (2022 dollars)
Total royalties received	215
Net Present Value (NPV) royalties (7% discount rate, real)	92
Annual estimated royalties (average)	108 (Approximate)

### **Economic benefits of the Modification**

The proposed Modification will generate:

- an additional 25 million tonnes of coal generating \$1,449 million of revenue, \$1,016 million in costs, and \$432 million in profits – in NPV terms (7% discount rate; 2032 to 2035; 2021 dollars).

The Proponent estimates that the project will generate nearly \$298 million in NPV terms of net benefits for NSW as follows:

- \$145 million in direct benefits; \$101 million in royalties, \$2 million in payroll tax and council rates, and \$43 million in company tax apportioned to NSW
- \$147 million in indirect benefits; \$16 million in benefits to NSW workers (98 Full Time Equivalent for 2 years) and \$132 million in net benefits to NSW suppliers
- \$33 million in indirect costs, mainly groundwater impacts, which will be offset by Glencore

Of NSW's \$298 million in estimated net benefits, around \$45 million (NPV terms) are expected in the Lithgow-Mudgee region, based on 19% suppliers and 93% of the workforce being located there.

**Table 2: life-of-project economic contribution**

Estimated economic contribution parameter	Estimate \$m
Net economic valuation benefit - NPV	298
Regional benefit (payroll)	15
Annual non-labour expenditure (regional)	30
Annual regional sum spent in local economy (LGA)	132

If the Modification does not proceed, the economic and social benefits outlined above may not be realised.

MEG estimates that royalties will be \$92 million in NPV terms based on prices of \$123 a tonne, as per the November 2022 Consensus Price forecasts for thermal coal sold on contract. This is adjusted for 8% inflation to be comparable with the Proponents' estimates in 2021 dollars.

Production is assumed to be split evenly between the two years of operation.

## **Royalty return to the state**

### **Assumptions**

The Proponent has estimated royalties of \$101 million in NPV terms for 25 million tonnes of coal sold at around \$94 a tonne in 2021 dollars between 2032 and 2035.

The rate of royalty would be 7.2% for an underground mine and the Proponent intends to claim a beneficiation deduction of \$3.50 a tonne for full-wash of coal.

MEG estimates that royalties will be \$92 million in NPV terms based on prices of \$123 a tonne, as per the November 2022 Consensus Price forecasts for thermal coal sold on contract, adjusted for 8% inflation to be comparable with the Proponents' estimates in 2021 dollars.

Production is assumed to be split evenly between the two years of operation.

### **Royalty context**

The Proponent's royalty estimate is \$8 million higher than MEG's – this is explained by differences in the price and production profile and is reasonable for the purposes of this analysis.

MEG notes that prices are \$25 higher than was forecast when the Proponent prepared this analysis, and this means that the Proponent's rate of return would increase from around 40% to nearly 100%; an increase from ~\$400 million to nearly \$1 billion. At the same time, royalties would increase by about \$25 million.

## **Resource Assessment**

### **Background**

The UCC is located around 40 kilometres northeast of Mudgee and is located within the same NSW Western Coalfield precinct as the Moolarben Coal Complex and Wilpinjong Open Cut operations that are located to the southeast.

Coal mining has occurred in the Ulan area since the 1920's and continued sporadically until mining operations were expanded to include open cut methods around 1982 and underground longwall methods in 1986. The existing UCC is comprised of underground longwall mining within the UUG and the UWUG mines. The open cut operations are currently in care and maintenance.

### **Size and quality of the resource**

The Modification area is located within the Sydney Basin's Western Coalfield containing the Illawarra Coal Measures which includes multiple coal seams ranging from 0.4 to 10 metres thickness. The Ulan seam is the thickest in this area. Apart from the Ulan seam all the other seams within the mining leases are considered uneconomic in the current market due to their high ash content (Note: Coal quality cut off levels for in-situ Ash in NSW is 35%).

The Ulan Seam is also mined at both the nearby Wilpinjong and Ulan mines. The Ulan seam has up to 10 plies with the lower section of the Ulan seam providing the targeted low-ash working section with a thickness of around 2.7 to 2.8 metres. The Ulan seam generally dips uniformly to the northeast at between 1 and 2 degrees making it conducive to underground extraction.

Most faults in the area are well understood and are generally limited to the mine boundaries and should not impact on resource extraction. Similarly, other geological features (for example, dykes and sills) are generally well understood and can be managed or avoided if encountered.

Generally, the Ulan seam produces a high-quality thermal coal product with round 15% Ash and Specific Energy of around 6900k/cal/kg. The targeted additional 25 Mt would be extracted through extending longwall panels.

### Resource Recovery

Many factors constrain the mine complex, mine planning, extraction methodology and resource recovery. These include (but are not limited to) geological features, environmental constraints, commercial viability, social licence and community support.

UCC have been continuously optimising mine plans for optimised resource recovery and costs over many years. UCC would continue using longwall mining methods into the proposed extension within the northwest portion of Exploration Licence 7542 area using established and proven methods previously and currently implemented at the UCC utilising existing equipment.

The additional resources would be mined through extending the approved east-west orientated UUG (LWW9 to LWW11) panels east to meet up with north-south orientated LW panels from UWUG (LW9-LW12) that would extend north (within ML1468), while also widening UUG LWW11 by 30 metres. Where the LW panels converge is available for future LW options to be considered.

MEG considers that the Modification would be an efficient development of coal resources that would provide an appropriate return to the State. Additionally, giving due consideration to the constraints of the location the 25 Mt of high-quality coal resources would likely be sterilised if the Modification is not approved.

### 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*. Furthermore, in relation to clause 2.21 of the State Environmental Planning Policy (Resources and Energy) 2021, the Modification 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 Act, the Proponent is required to hold appropriate mining title(s) allowing for mineral extraction, such as a mining lease, to undertake mining.

MEG notes that the Proponent has lodged a mining lease application over Exploration Licence 7542. Mining Lease Application 609 (Act 1992) will cover the additional area sought as part of the Modification.

A development application under the *Environmental Planning and Assessment Act 1979* must be approved before a mining lease can be granted. A mining lease will only be granted for activities specified in the development consent.

For ancillary mining activities, in so far as the ancillary activities are to be carried out in connection with and in the immediate vicinity of a mining lease in respect of a mineral, the Proponent is required to hold a Mining Lease for ancillary mining activities or an 'off title' designated ancillary mining activity as defined by clause 7 of the Mining Regulation 2016 (the Regulation).

Where a proposal includes Crown Land the Proponent is required to comply with the Commonwealth *Native Title Act 1993* and undertake the right to negotiate process for the Crown Lands within the current exploration licence area(s) if proof of extinguishment cannot be determined.

### *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).

## **Application of section 65 of the *Mining Act 1992* – development consents under the *Environmental Planning and Assessment Act 1979***

A development application under the *Environmental Planning and Assessment Act 1979* must be approved before a mining lease can be granted. A mining lease will only be granted for activities specified in the development consent.

Section 65 states:

*The Minister must not grant a mining lease over land if development consent is required for activities to be carried out under the lease unless an appropriate development consent is in force in respect of the carrying out of those activities on the land.*

## **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 and further information on this matter, please contact the Industry Advisory & Mining Concierge Unit within the Industry Development Branch on 02 4063 6860 or [mining.concierge@regional.nsw.gov.au](mailto:mining.concierge@regional.nsw.gov.au)

Yours sincerely,



### Scott Anson

Acting Director Industry Development  
Department of Regional NSW - Mining, Exploration and Geoscience

Attachment A – Resources Regulator Advice

## Attachment A

**Resources Regulator**  
Department of Regional NSW



Friday 9<sup>th</sup> December 2022

Jack Turner  
Department of Planning and Environment  
Jack.Turner@planning.nsw.gov.au

Via: Major Projects Portal

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Dear Jack,

I refer to the Ulan Coal Modification 6 Project submitted to the Resources Regulator on 17<sup>th</sup> November 2022 (MP08\_0184-Mod-6).

Based on the review of the Modification report the Resources Regulator provides the following comments:

Our assessment of the Ulan Coal Modification 6 Project (MP08\_0184-Mod-6) indicates the proposed modification does not alter the existing subsidence risk profile at the site. It is expected that the risks due to subsidence arising from the proposed modification can be managed using established practices already in place.

It should be noted the mining operation will be regulated in relation to safety by the Resources Regulator under relevant provisions of work health & safety laws, including in relation to subsidence Section 35 - Notification of high-risk activities and Section 70 - Subsidence of the *Work Health and Safety (Mines and Petroleum Sites) Regulation 2022*.

Any strategy, plan or program required under the Development Consent for the project that has an intended outcome related to the health and safety people affected by the proposed mining should also be developed and implemented consistent with the relevant provisions of WHS law as described above.

It is not expected that the proposed modifications will vary any previously assessed environmental impacts.



## **LIMITATIONS**

It should be noted that the Resources Regulator does not provide any endorsement of the proposed rehabilitation methodologies presented in the plans provided. Under the conditions of a mining authorisation granted under the *Mining Act 1992*, the Resources Regulator requires the holder to adopt a risk-based approach to achieving the required rehabilitation outcomes.

The applicability of the controls to achieve effective and sustainable rehabilitation is to be determined based on site-specific risk assessments conducted by the authorisation holder. An authorisation holder may also be directed by the Resources Regulator to implement further risk control measures required to achieve effective rehabilitation outcomes during the life of the mine.

## **REGULATORY REQUIREMENTS IF APPROVED**

The proponent will be required to comply with rehabilitation requirements under the mining authorisations prior to the commencement of the works associated with the proposal.

The Resources Regulator may undertake assessments of the mine operators' proposed mining activities under the *Work Health and Safety (Mines and Petroleum Sites) Act 2013* and Regulation as well as other WHS regulatory obligations.

## **BACKGROUND**

The Mining Act Inspectorate within the Resources Regulator undertake risk-based compliance and enforcement activities in relation to obligations under the *Mining Act 1992*. This includes undertaking assessment and compliance activities in relation to mine rehabilitation activities and determination of security deposits. To ensure consistency, the Regulator requests the opportunity to review a copy of the draft development consent prior to any approval of the project.

The Mine Safety Inspectorate within the Resources Regulator is responsible for ensuring the mine operators' compliance with the Work Health and Safety (WHS) legislation, in particular the effective management of risks associated with the principal hazards as specified in the *Work Health and Safety (Mines and Petroleum Sites) Regulation 2014*.

## **CONTACT**

Should you require any further information or clarification, please contact the Regulator on 1300 814 609 (Press Option 2 Press Option 5) or email [nswresourcesregulator@service-now.com](mailto:nswresourcesregulator@service-now.com).

Yours sincerely,



## **Garvin Burns**

Chief Inspector of Mines  
Resources Regulator