

31 August 2017

Minister for Planning
c/- Executive Director, Resource Assessments and Business Systems
Department of Planning & Environment
320 Pitt Street
SYDNEY NSW 2000

Attention: David Kitto

Dear David,

MOOLARBEN COAL COMPLEX STAGE 1 (05_0117) AND STAGE 2 (08_0135) – OPEN CUT OPTIMISATION MODIFICATION (05_0117 MOD 14)/(08_0135 MOD 3)

Moolarben Coal Operations Pty Ltd (MCO) is proposing to optimise open cut mining operations at the Moolarben Coal Complex. These optimisations would require MCO to modify Project Approvals for Stage 1 and Stage 2 (herein referred to as the Open Cut Optimisation Modification [the Modification]) under section 75W of the *Environmental Planning and Assessment Act, 1979* (EP&A Act).

MCO referred the Modification to the Federal Minister for the Environment and Energy under the Commonwealth *Environment Protection and Biodiversity Conservation Act, 1999* (EPBC Act). The Federal Minister determined the Modification to be a 'controlled action' on 24 August 2017. To enable the Modification to be assessed bilaterally, formal environmental assessment requirements are required.

Accordingly, please find herein a request for the Secretary to provide formal Environmental Assessment Requirements for the Modification. Applications to modify Project Approvals (05_0117) and (08_0135) under section 75W of the EP&A Act have been lodged online via the Department's website.

Background

MCO is the operator of the Moolarben Coal Complex on behalf of the Moolarben Joint Venture (Moolarben Coal Mines Pty Ltd [MCM], Sojitz Moolarben Resources Pty Ltd and a consortium of Korean power companies). MCM and MCO are wholly owned subsidiaries of Yancoal Australia Limited (Yancoal).

Mining operations at the Moolarben Coal Complex are approved until 31 December 2038 and are carried out in accordance with Project Approval (05_0117) (Moolarben Coal Project Stage 1) and Project Approval (08_0135) (Moolarben Coal Project Stage 2).

Modification Description

A summary description of the proposed Modification is provided below.

Pit Disturbance Limits

The Modification would involve minor extensions to the disturbance limits of the OC2 and OC3 open cut pits. These extensions are required to enable the following:

- Minor extension of the OC2 western pit limit within the approved OC2 disturbance footprint to provide a stable long-term final landform.
- Straightening of the western pit limits of OC3 to facilitate safe and efficient mining.
- Minor extension of the OC3 eastern pit limit to reflect the latest resource definition results.

The extent of additional disturbance would be within the indicative survey area shown on Figure 1. There would be no change to OC1 or OC4 disturbance limits for the Modification.

Final Landforms

The proposed changes to open cut disturbance limits and results of ongoing mine planning would result in the following changes to final landforms:

- Change in final land use from agriculture to woodland/grassy woodland in OC2 and a portion of OC3.
- Refinements to the size and location of the OC3 final void.
- Retention of additional dams in the final landform.

Open Cut Production Increase and Mine Sequence

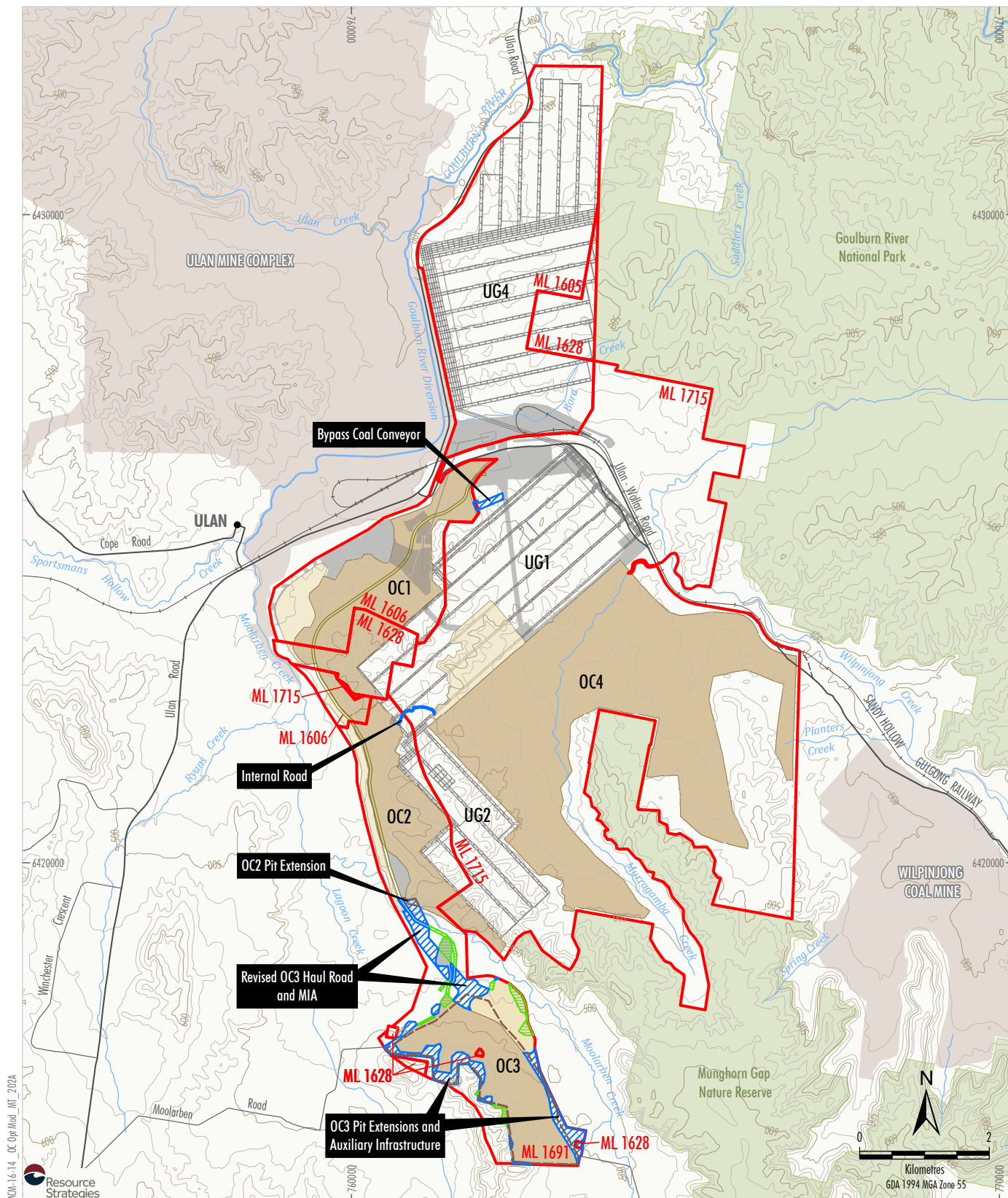
The Stage 1 and Stage 2 Project Approvals authorise the following from open cut operations:

- the extraction of up to 8 million tonnes per annum (Mtpa) of run-of-mine (ROM) coal from Stage 1 open cut pits; and
- the extraction of 12 Mtpa of ROM coal from Stage 2 open cut pits.

However, the combined total of ROM coal able to be extracted from the Stage 1 and Stage 2 open cuts is currently limited to 13 Mtpa.

With no material change to the existing open cut mining fleet, and with changes to the sequencing of open cut mining operations, MCO would be able to optimise operations to achieve the following production (Figure 2):

- up to 10 Mtpa of ROM coal from Stage 1 open cuts (OC2 and OC3);
- up to 16 Mtpa of ROM coal from the Stage 2 open cut (OC4); and
- combined total (Stage 1 and Stage 2) of up to 16 Mtpa of ROM coal.



MOU-16-14 OC Opt Mod MT 2024

Resource Strategies

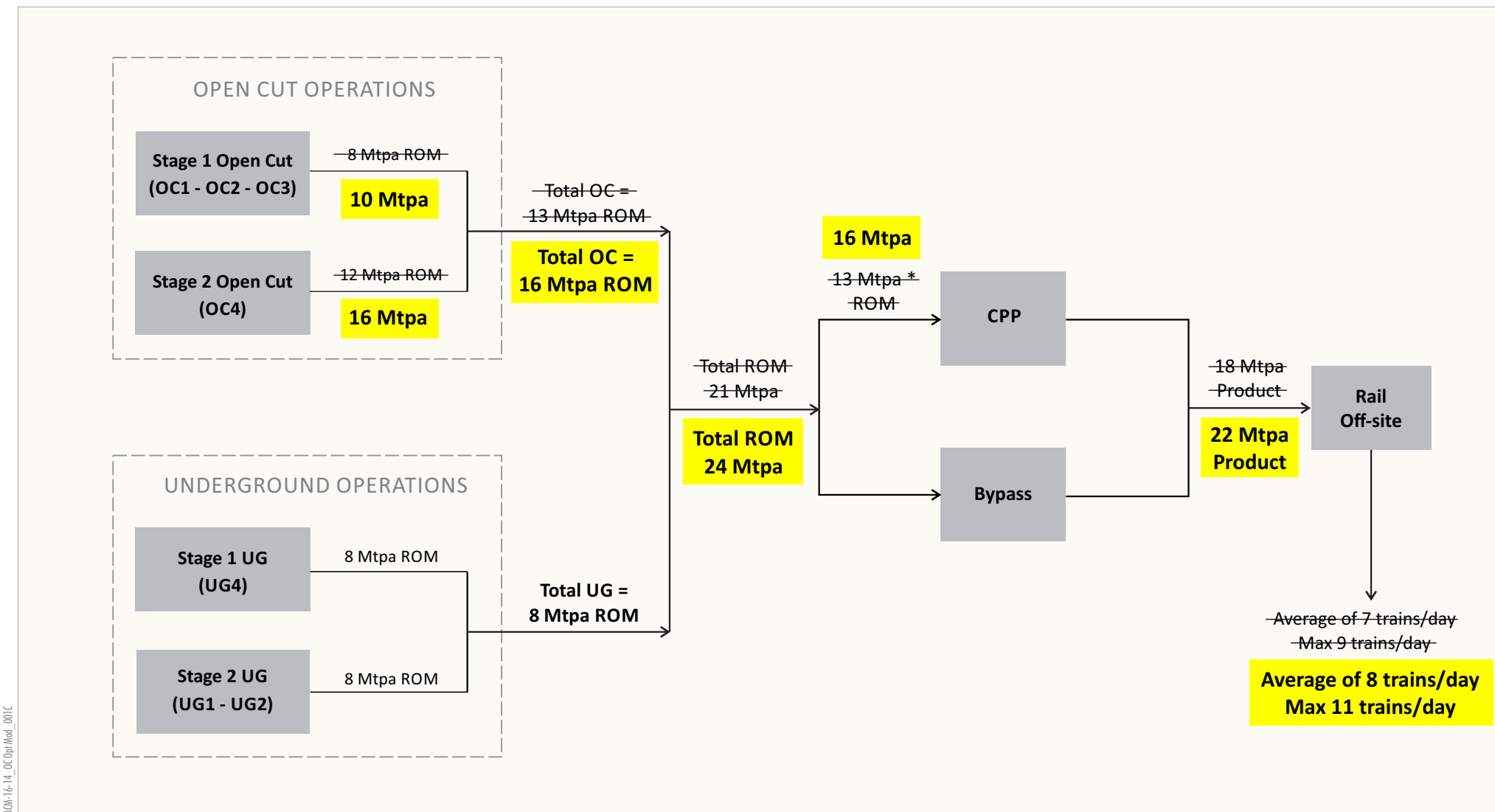
- LEGEND**
- NSW National Parks and Wildlife Service
 - Mining Lease Boundary
 - Existing/Approved Development
 - Open Cut Mining Area
 - Out-of-pit Emplacement
 - Surface Infrastructure Area
 - Underground Longwall Layout
 - Approved Road Realignment (not yet constructed)
 - Approved Haul Road

- Open Cut Optimisation Modification**
- Approximate Extent of Revised Open Cut Mining Area
 - Approximate Extent of Additional Surface Development
 - Approved Open Cut Mining Area, Out-of-pit Emplacement and Surface Infrastructure to be Relinquished

Source: MCO (June 2017); NSW Dept of Industry (2016);
NSW Land & Property Information (2016);
Office of Environment and Heritage NSW (2016)

MOOLARBEN COAL
MOOLARBEN COAL COMPLEX
Open Cut Optimisation Modification
General Arrangement

Figure 1



MOL-16-14_OCOptMod_001C

LEGEND
Modified Component

* Note: 13.5 Mtpa ROM in 2017

Figure 2

These changes in open cut production rates would also result in changes to the following:

- Increase in the combined open cut and underground ROM coal limit from 21 to 24 Mtpa.
- Increase in the coal processing (washing) limit from 13 to 16 Mtpa.
- Increase in the product coal limit from 18 to 22 Mtpa.
- Increase in product coal rail movements (1 additional train per day on average and 2 additional trains per day at peak).
- Increase in the annual rate of coal rejects production.
- Increase in the size of ROM coal stockpiles and product coal stockpiles.

Other Optimisations

MCO has also identified the following additional operational optimisations, which form part of the scope of the Modification:

- Installation of water treatment facilities to support authorised discharge under Environmental Protection Licence (EPL) release conditions, and associated increase in the rate of controlled releases, when required.
- Additional coal handling infrastructure to facilitate transfer (bypass) of open cut ROM coal direct to product stockpiles.
- Minor changes to the alignment of the haul road from OC2 to OC3, and the location of the OC3 Mine Infrastructure Area.
- Additional internal road from OC2 to OC4 via Carrs Gap (Figure 1).
- Ancillary infrastructure (e.g. access tracks, power, services, communications, conveyors and pipelines).
- Ongoing exploration activities within mining lease areas.

Approvals Pathway

The proposed approval pathway for the Modification is a section 75W modification under the NSW *Environmental Protection and Assessment Act, 1979* (EP&A Act). The Moolarben Coal Complex Stage 1 and Stage 2 are 'transitional Part 3A projects' under clause 2 of Schedule 6A of the EP&A Act and therefore section 75W of the EP&A Act continues to apply to modifications to Project Approvals (05_0117) and (08_0135), despite its repeal¹.

¹ Part 3A of the EP&A Act (as in force immediately before its repeal) continues to apply for the Moolarben Coal Project Stage 1. The description and quotations of relevant references to clauses of Part 3A in this document are as if Part 3A of the EP&A Act is still in force.

Section 75W of the EP&A Act relevantly states:

75W Modification of Minister's approval

(1) *In this section:*

Minister's approval means an approval to carry out a project under this Part, and includes an approval of a concept plan.

Modification of approval means changing the terms of a Minister's approval, including:

- (a) *revoking or varying a condition of the approval or imposing an additional condition of the approval, and*
- (b) *changing the terms of any determination made by the Minister under Division 3 in connection with the approval.*
- (2) *The proponent may request the Minister to modify the Minister's approval for a project. The Minister's approval for a modification is not required if the project as modified will be consistent with the existing approval under this Part.*
- (3) *The request for the Minister's approval is to be lodged with the Director-General. The Director-General may notify the proponent of environmental assessment requirements with respect to the proposed modification that the proponent must comply with before the matter will be considered by the Minister.*
- (4) *The Minister may modify the approval (with or without conditions) or disapprove of the modification.*

...

Environment Protection and Biodiversity Conservation Act, 1999

The Federal Government has accredited NSW's environmental assessment processes under Schedule 6A and former section 75W of the EP&A Act in the *Bilateral agreement made under section 45 of the Environment Protection and Biodiversity Conservation Act 1999 (Cth) relating to environmental assessment* between the Commonwealth of Australia and the State of NSW (February 2015) ('the Bilateral Assessment Agreement').

The Secretary's acceptance of this request to modify Project Approval (05_0117) and Project Approval (08_0135) would be required for the Action to be assessed under the Bilateral Assessment Agreement.

Of note, the Bilateral Assessment Agreement requires:

In addition to the standard guidelines and directions, the NSW Minister, the Secretary, the consent authority or the determining authority must issue guidelines to proponents of controlled actions that are designed to ensure that material prepared by the proponent as part of the assessment:

- i) contains an assessment of all impacts that the action has, will have or is likely to have on each matter protected by a provision of Part 3 of the EPBC Act;*
- ii) contains enough information about the controlled action and its relevant impacts to allow the Commonwealth Minister to make an informed decision whether or not to approve the controlled action under the EPBC Act; and*
- iii) addresses the matters outlined in Schedule 4 of the Environment Protection and Biodiversity Conservation Regulations 2000 (Cth).*

Based on the above, MCO formally requests the Secretary notify MCO of environmental assessment requirements with respect to this proposed Modification pursuant to section 75W(3) of the EP&A Act and in accordance with the Bilateral Assessment Agreement.

Proposed Scope of Environmental Assessment

MCO is proposing to prepare an Environmental Assessment to address the potential environmental impacts of the Modification. The Environmental Assessment will describe:

- Existing environment using appropriate baseline data.
- Potential impacts of all elements of the Modification, including comparison with approved impacts and consideration of any cumulative impacts.
- Measures that could be implemented to avoid, mitigate, rehabilitate/remediate, monitor and/or offset the potential impacts of the Modification.
- Contingency plans and/or adaptive management for managing any potentially significant residual risks to the environment.

Based on the scope of the Modification and a review of the key issues, the following environmental assessments/studies are being prepared for the Modification Environmental Assessment:

- Biodiversity Assessment.
- Aboriginal Cultural Heritage Assessment.
- Noise Assessment.
- Air Quality Assessment.
- Groundwater Assessment.
- Surface Water Assessment and Site Water Balance Review.
- Controlled Release Impact Assessment.
- Aquatic Ecology Assessment.
- Geochemistry Review.
- Historical Heritage Review.
- Agricultural Resources Review.
- Rehabilitation Strategy Review.

MCO will consult with relevant government agencies and stakeholders during preparation of the Modification Environmental Assessment to seek validation on the particulars of the assessments described above.

Proposed Scope of Secretary's Environmental Assessment Requirements

MCO kindly requests that any environmental assessment requirements issued by the Secretary are targeted and scoped for the Modification, consistent with the current direction of NSW Government policy reforms.

In relation to the proposed scope of the Modification Environmental Assessment, it should be noted:

- Substantial assessment of biodiversity impacts has been undertaken for the Modification using data collected in accordance with the *Framework for Biodiversity Assessments* (FBA) in both the Modification disturbance area and at potential offset properties. The calculation of offset credit requirements for the Modification disturbance area will be conducted consistent with the FBA, and described in the Biodiversity Assessment to be included in the Modification EA. It is not considered necessary for the Biodiversity Assessment for the Modification to meet all reporting requirements for a 'Biodiversity Assessment Report and Biodiversity Offset Strategy' (i.e. as would be required for a new 'major project').
- As the Modification proposes no change to employment or the life of the Moolarben Coal Complex (Attachment 1) a socio-economic assessment is not considered to be required. Notwithstanding, quantification of incremental direct benefits (e.g. royalties) to the State of NSW would be included in the Environmental Assessment with respect to the proposed increase in the maximum coal production rate (note a full Socio-Economic Assessment prepared consistent with the *Guidelines for the Economic Assessment of Mining and Coal Seam Gas Proposals* is not proposed given the minor nature of the Modification compared to the level of cost involved in preparing a compliant assessment).
- As the Modification proposes no change to site access or the number of employees (Attachment 1) a road transport assessment is not considered to be required.
- While a review of potential agricultural impacts and the final landform is proposed, as the proposed areas of additional disturbance are minor (in comparison to the approved Moolarben Coal Complex), located immediately adjacent to existing/approved mining areas and are not currently used for agriculture, an Agricultural Impact Statement is not considered to be required.

Summary

In summary, MCO is seeking the following:

- This request for a Modification under section 75W is accepted as lodged by the Secretary.
- The Secretary notifies MCO of environmental assessment requirements with respect to this proposed Modification pursuant to section 75W(3) of the EP&A Act.

Please do not hesitate to contact the undersigned if the Department requires further information.

Yours sincerely,

A handwritten signature in black ink, appearing to read 'Mark Jacobs', with a large, stylized loop at the bottom.

Mark Jacobs

General Manager, Environment & Community
Yancoal Australia Ltd

ATTACHMENT 1

COMPARISON OF THE APPROVED AND MODIFIED MOOLARBEN COAL COMPLEX UNDER
PROJECT APPROVAL (05_0117) AND PROJECT APPROVAL (08_0135)

A summary comparison of the Approved Moolarben Coal Complex and the Modification is provided in Table 1.

Table 1
Summary Comparison of Approved and Modified Moolarben Coal Complex

Relevant Approval Component	Moolarben Coal Complex		Moolarben Coal Complex (including the Modification)	
	Stage 1 Project Approval (05_0117)	Stage 2 Project Approval (08_0135)	Stage 1 Project Approval (05_0117)	Stage 2 Project Approval (08_0135)
Operational Mine Life	Mining operations can be carried out until 31 December 2038.		Unchanged.	
Hours of Operation	Mining operations can be carried out 24 hours a day, 7 days a week.		Unchanged.	
Coal Extraction Limits	Up to 8 million tonnes (Mt) of ROM coal can be extracted from the open cut mining operations in any calendar year.	Up to 12 Mt of ROM coal can be extracted from the open cut mining operations in any calendar year.	Up to 10 Mt of ROM coal extracted from the open cut mining operations in any calendar year.	Up to 16 Mt of ROM coal extracted from the open cut mining operations in any calendar year.
	Up to 13 Mt (total) of ROM coal can be extracted from the open cut operations at the Moolarben Coal Complex in any calendar year.		Up to 16 Mt (total) of ROM coal extracted from the open cut operations at the Moolarben Coal Complex in any calendar year.	
Underground Coal Extraction Limits	Up to 8 Mt (total) of ROM coal can be extracted from the underground mining operations at the Moolarben Coal Complex in any calendar year.		Unchanged.	
Coal Processing and Offsite Transport	Up to 13 Mt (total) of ROM coal from the Moolarben Coal Complex can be processed (washed) in any calendar year, except in the year 2017.	The Proponent shall ensure that all coal extracted from the site is sent to the Moolarben Stage 1 mine surface infrastructure area for processing (washing) and/or transport to market.	Up to 16 Mtpa of ROM coal from the Moolarben Coal Complex can be processed (washed) in any calendar year.	Unchanged.
	Up to 13.5 Mt (total) of ROM coal from the Moolarben Coal Complex can be processed (washed) in 2017.			
	Total coal production of 18 Mtpa.		Total coal production of 22 Mtpa.	
	All coal is to be transported from the site by rail (average of 7 trains per day and peak of 9 trains per day).		Average of 8 trains per day and peak of 11 trains per day.	
Blasting Frequency Limits	A maximum of 2 blasts per day and 9 blasts per week (averaged over a calendar year) can be carried out at the Moolarben Coal Complex.		Unchanged.	
	Blasting can be carried out on site between 9:00 am and 5:00 pm Monday to Saturday inclusive. No blasting allowed on Sundays, public holidays, or at any other time without written approval of the secretary.			
Biodiversity Offset Strategy	The Biodiversity Offset Strategy is shown in Appendix 8 of the Project Approval (05_0117).	The Biodiversity Offset Strategy is shown in Appendix 7 of the Project Approval (08_0135).	Updated Biodiversity Offset Strategy to account for additional disturbances to Stage 1 open cut pits as required.	No change is expected to be required.
Site Access	Site access via Ulan-Wollar Road.		Unchanged.	Unchanged.

Table 1 (Continued)
Summary Comparison of Approved and Modified Moolarben Coal Complex

Relevant Approval Component	Moolarben Coal Complex		Moolarben Coal Complex (including the Modification)	
	Stage 1 Project Approval (05_0117)	Stage 2 Project Approval (08_0135)	Stage 1 Project Approval (05_0117)	Stage 2 Project Approval (08_0135)
Water Management Design and Objectives	Design, install and maintain the dams generally in accordance with the series <i>Managing Urban Stormwater: Soils and Construction – Volume 1 and Volume 2E Mines and Quarries</i> .		Unchanged.	
	Ensure there is sufficient water for all stages of the project in accordance with Condition 29, Schedule 3 of Stage 1 Project Approval (05_0117) and Condition 25, Schedule 3 of Stage 2 Project Approval (08_0135).			
	Maximise as far as reasonable and feasible the diversion of clean water around disturbed areas on site.			
	Mine water storage infrastructure is designed to store a 50 year average recurrence interval 72 hour storm event.	Mine water storage infrastructure is designed to store a 100 year average recurrence interval 72 hour storm event.		
Water Management Design and Objectives (Continued)	On-site storages (including tailings dams, mine infrastructure dams, groundwater storage and treatment dams) are suitably lined to comply with a permeability standard of less than 1×10^{-9} metres per second (m/s).	On-site storages (including tailings dams, mine infrastructure dams, groundwater storage and treatment dams) are suitably lined to comply with a permeability standard of less than 1×10^{-9} m/s.	Unchanged.	
	Unless an EPL authorises otherwise, MCO will comply with s120 of the NSW <i>Protection of the Environment Operations Act, 1997</i>		Unchanged. Water treatment facilities to support authorised discharge under EPL water release limits and increase in maximum rate of controlled releases, when required.	
Coal rejects	Co-disposal of coal rejects in the open cut voids.		Unchanged.	
Employment	Peak workforce of 740 personnel during 2017. Average operational workforce of 667 personnel.		Unchanged.	