

MUSWELLBROOK SHIRE COUNCIL
DEVELOPMENT CONSENT



DA DA 2002/205
Approval Date: 27 February
2024
Approved by the Elected
Council

This document forms part of Council's Notice of Determination



Muswellbrook Coal Mine

DA 205/2002 Modification Report

Prepared for:
Muswellbrook Coal Company

April 2022

PREPARED BY:



Integrated Environmental Management Australia Pty LTD

ABN 32 622 237 870

PO Box 3161, MEREWETHER NSW 2291 AUSTRALIA

E: admin@iema.com.au

T: 0409 288 909 | W: www.iema.com.au

DISCLAIMER

This report has been prepared by Integrated Environmental Management Australia (IEMA) with all reasonable skill, care and diligence, and taking account of the timescale and resources allocated to it by agreement the Client. Information reported herein is based on the interpretation of data collected, which has been accepted in good faith as being accurate and valid.

This report is for the exclusive use of the Client. No warranties or guarantees are expressed or should be inferred by any third parties. This report may not be relied upon by other parties without written consent from IEMA.

IEMA disclaims any responsibility to the Client and others in respect of any matters outside the agreed scope of the work.

DOCUMENT CONTROL

Reference	Date	Prepared	Authorised
DA 205/2002 Modification Report	March 2022	Sophie Nicholas	Andrew Hutton
Final draft following client review	4 April 2022	Sophie Nicolas	Andrew Hutton
Final Report	14 April 2022	Andrew Hutton	Andrew Hutton

CONTENTS

1. INTRODUCTION.....	1
1.1. BACKGROUND	1
1.2. OVERVIEW OF MODIFICATION.....	1
1.3. MSC REQUIREMENTS	4
2. PROPOSED MODIFICATION	6
2.1. PROPOSED CHANGES TO DA 205/2002 CONDITIONS.....	6
2.2. PROPOSED CHANGES TO OPERATIONS	6
2.3. REHABILITATION FRAMEWORK	11
2.4. SUBSTANTIALLY THE SAME DEVELOPMENT	11
2.5. NSW LEGISLATION.....	12
2.5.1. <i>Environmental Planning and Assessment Act 1979</i>	12
2.5.2. <i>NSW Environmental Planning and Assessment Regulation 2021</i>	13
2.5.3. <i>Environmental Planning Instruments</i>	13
2.5.4. <i>Mining Act 1992</i>	14
2.5.5. <i>Protection of the Environment Operations Act 1997</i>	14
2.5.6. <i>Water Management Act 2000 and Water Act 1912</i>	15
2.5.7. <i>Biodiversity Conservation Act 2016</i>	15
2.5.8. <i>Muswellbrook Local Environment Plan 2009</i>	15
2.6. COMMONWEALTH LEGISLATION.....	15
2.6.1. <i>Commonwealth Environment Protection and Biodiversity Conservation Act 1999</i>	15
3. STAKEHOLDER ENGAGEMENT.....	16
3.1. REGULATOR CONSULTATION.....	16
3.2. COMMUNITY CONSULTATION.....	17
4. ASSESSMENT OF IMPACTS	18
4.1. OPERATIONAL PHASE TRANSITIONING TO CLOSURE.....	18
4.2. REHABILITATION.....	23
5. JUSTIFICATION OF THE MODIFIED PROJECT.....	24
6. REFERENCES.....	25

TABLES

TABLE 1 – MSC REQUIREMENTS FOR MODIFICATION OF DA 205/2002.....	4
TABLE 2 – CURRENT APPROVED OPERATION AND PROPOSED MODIFICATION TO OPERATIONS	7
TABLE 3 – EP&A REGULATION MODIFICATION REQUIREMENTS	13
TABLE 4 – CONSULTATION UNDERTAKEN WITH REGULATORS FOR PROPOSED MODIFICATION	16
TABLE 5 – ASSESSMENT OF PREDICTED IMPACTS	19

FIGURES

FIGURE 1 – REGIONAL LOCALITY	3
------------------------------------	---

APPENDIX

Appendix A	Proposed Changes to DA 205/2002
Appendix B	Schedule of Lands

1. INTRODUCTION

This Modification Report has been prepared by Integrated Environmental Management Australia (IEMA) on behalf of Muswellbrook Coal Company Limited (MCC) to support an application to Muswellbrook Shire Council (MSC) to modify Development Consent DA 205/2002 (as modified) pursuant to Section 4.55(1A) of the NSW *Environmental Planning and Assessment Act 1979* (EP&A Act).

1.1. Background

Muswellbrook coal mine (MCM) is an open cut coal mine located 3 kilometres (km) north - east of the town of Muswellbrook, in the Muswellbrook local government area (LGA) in New South Wales (NSW) as shown on **Figure 1**. MCM is operated by MCC, a wholly owned subsidiary of Idemitsu Australia Resources Pty Limited (IAR). IAR has been operating in Australia since 1978 and is an Australian subsidiary of Japanese company Idemitsu Kosan Company Limited.

MCC has a long association with coal mining at Muswellbrook, with underground coal mining commencing in 1907 and open cut operations in 1944. Underground operations ceased in the late 1990s; however open cut mining continues.

On 1 September 2003, Development Consent for DA 205/2002 was granted by Muswellbrook Shire Council (MSC) to extend the former MCC No.1 Open Cut. The No.1 Open Cut Extension commenced operations in March 2005 and has a capacity to produce up to 2,000,000 tonnes coal per annum. This approval has subsequently been modified on several occasions with the latest modification granted in 2016 to allow mining in an area known as the “Continuation Project” and to extend the life of the mining operations to 2022. MCC also operates under an approved Mining Operations Plan (MOP) and Environment Protection Licence (EPL) 656, which are available on the MCC website.

MCM operates as a truck and excavator multi-seam coal mine with a production limit of 2 million tonnes per annum. Coal is crushed and washed then hauled to the Ravensworth Coal Terminal, where it is then transported by rail to the Port of Newcastle for export.

Mining operations may be carried out until 31 December 2022 therefore MCC has commenced detailed closure planning for MCM.

1.2. Overview of Modification

Coal mining will cease in December 2022 and MCC have identified that some minor amendments are required as it commences the rehabilitation and closure phases of the mine. The key drivers for the modification of conditions include:

- **Change in Operations** - to accommodate changes as the mine shifts from its operational to rehabilitation and closure phases;
- **Rehabilitation Framework** - to ensure conditions are consistent with the NSW Resources Regulator rehabilitation reforms package being introduced by changes to the Mining Lease conditions prior to 2 July 2022.
- **Environmental and Socially Responsible Operator** - to ensure MCC is compliant with approvals and the requirements of the Resources Regulator in relation to rehabilitation and final landform;
- **Final land use** - to ensure there is flexibility with the mine closure plan to allow future beneficial reuse of the MCC landholdings post tenement relinquishment; and
- **Administrative** – to update government departments, typographical errors and add/update standard definitions in the ‘Glossary of Terms’.

Section 2 details the proposed changes to operations and the proposed changes to the development consent conditions.

Modification to Development Consent DA 205/2002 is sought under the provisions of 4.55(1A) of the *Environmental Planning and Assessment Act 1979* (EP&A Act) due to the minor nature of the changes and that there are no associated environmental impacts.

300000

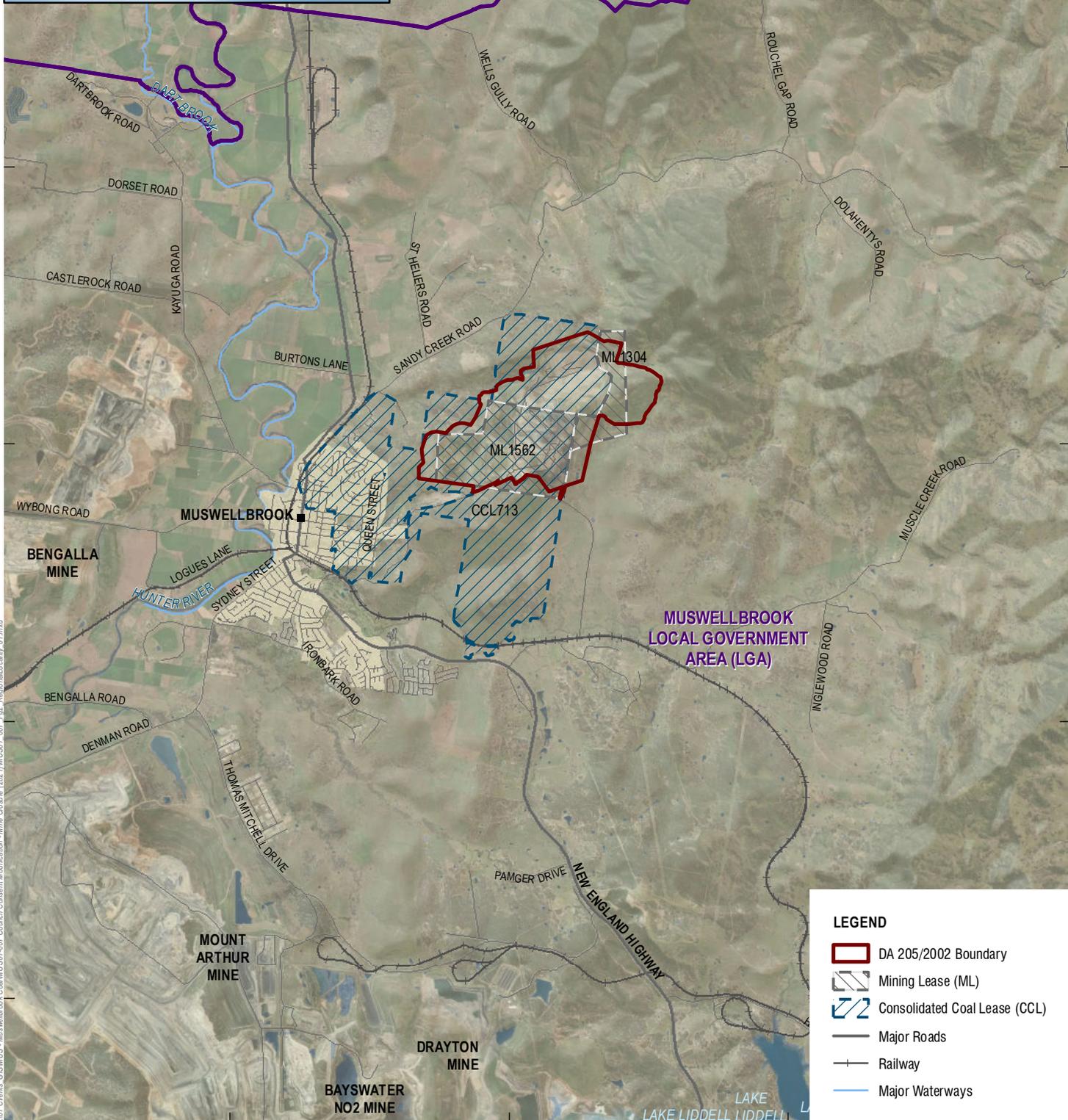
305000

310000

315000

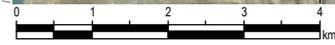


UPPER HUNTER LOCAL GOVERNMENT AREA (LGA)



- LEGEND**
- DA 205/2002 Boundary
 - Mining Lease (ML)
 - Consolidated Coal Lease (CCL)
 - Major Roads
 - Railway
 - Major Waterways

I:\07_Clients_GSMUS - Muswellbrook Coal Mine\504-007 Council Consent Modification - Mine Closure (2021)\MUS1_007_Fig_RegionalLocality_01.mxd



GDA 1994 MGA Zone 56
5/04/2022

Muswellbrook Coal Mine

1.3. MSC Requirements

MCC met with Council on several occasions to introduce the modification and provided feedback on the proposed changes and why they were necessary. A summary of these key dates is included in **Table 4** of the Stakeholder Engagement section below. MSC provided feedback to MCC in a letter dated 18 February 2022 regarding this modification of DA 205/2002 and what aspects they would like to see addressed. **Table 1** includes a summary of the MSC requirements and how they have been addressed in this Modification Report.

Table 1 – MSC Requirements for Modification of DA 205/2002

MSC Requirement	Where addressed
1. Form and content to be generally consistent with the Department of Planning Industry and Environment (DPIE)s 'State significant development guidelines – preparing a modification report' (December, 2021)	This report has been prepared to be generally consistent with these guidelines.
2. Preparation by a skilled, qualified and experienced practitioner. It is recommended that this person is registered or certified under the Registered Environmental Assessment Practitioner (REAP) scheme.	This Modification Report has been prepared by IEMA who are experienced practitioners in mining, mine closure planning, approvals, and mine compliance.
3. A description of each phase of the project that corresponds to activity. Phases should be generally consistent with those described in the Rehabilitation Management Plan and include Construction, Operation i.e. mining, Coal Transport, Rehabilitation (Decommissioning, Landform Establishment, Growing Media Development, Ecosystem and Land Use Establishment, Ecosystem and Land Use Sustainability), Closure i.e. lease relinquished on land and end of Closure Plan (TBC). Where applicable, the timing of each phase can be used to justify end of consent conditions and end of management/mitigation measures.	Section 2 and Appendix A
4. A description of activities during each phase and a qualitative (where required) assessment of impacts provided for each phase in comparison to Environmental Impact Statement predictions. The assessment should include (but not be limited to): noise, air, blast, geochemistry (spontaneous combustion), surface water (including relevant water licencing requirements during rehabilitation and mine closure), ground water, historic heritage, Aboriginal cultural heritage, visual, bushfire (confirming no requirement to assist Rural Fire Service under the Rural Fires Act 1997), traffic and transport (including direct reference to Muscle Creek Road) and waste.	Section 2 and Section 5
5. A description of the measures that would be used to avoid, minimise or mitigate likely impacts for each phase.	Section 5
6. A full list of licences and approvals held, and a retirement strategy and planned retirement date for each. A list additional approvals and licences (if any) required prior to Closure.	Section 3 The timing and process of relinquishment of the approvals, leases and licences held by MCC will be determined during detailed mine closure planning for the site as part of the tenement and approvals relinquishment strategy.

MSC Requirement	Where addressed
7. Community Consultation – there should be a clear distinction between consultation required as part of the Closure Plan and general project consultation. It is assumed that complaints handling may be treated the same. Consultation undertaken as part of the Closure Plan should be briefly summarised in the Modification Report, with a detailed description provided in the Closure Plan.	Section 4.2
8. Regulator Consultation – a description of past and future consultation regarding the closure of the site. For consultation that has been undertaken, include method of consultation, issues and where addressed in the Modification Report. Include consultation undertaken with relevant authorities including (but not limited to) the Resources Regulator; Department of Planning, Industry and Environment; Transport for NSW; Natural Resources Access Regulator and Environment Protection Authority.	Section 4.1

2. PROPOSED MODIFICATION

2.1. Proposed Changes to DA 205/2002 Conditions

The key drivers/principles for modifications to conditions in DA 205/2002 have been identified as:

- **Change in Operations** - coal mining will cease in December 2022 and some amendments to the conditions are required to accommodate this significant change from operations to mine closure;
- **Rehabilitation Framework** - to update the conditions to be consistent with the NSW Resources Regulator rehabilitation reforms package being introduced by changes to the Mining Lease conditions prior to 2 July 2022. This is to avoid uncertainty and duplication in the regulation of mine site rehabilitation;
- **Environmental and Socially Responsible Operator** - to ensure MCC is compliant with approvals and the requirements of the Resources Regulator in relation to rehabilitation and final landform;
- **Final land use** - to ensure there is flexibility with the mine closure plan to allow future beneficial reuse of the MCC landholdings post tenement relinquishment; and
- **Administrative** – to update government departments, typographical errors and add/update standard definitions in the ‘Glossary of Terms’.

Appendix A details the proposed changes to the development consent conditions, the key driver/principle behind each proposed change (in coloured text relating to the five areas above) along with reasoning and justification for the proposed changes.

2.2. Proposed Changes to Operations

The Statement of Environmental Effects (SoEE) prepared by EMM (2016) included a detailed description of the changes between the original 2003 approval and the current operations. This involved an extension of open cut mining operations in the development consent boundary to maximise the recovery of coal resources within ML 1304, ML 1562 and CCL 713. The extension enabled recovery of approximately 4.2 Mt of additional coal resources.

It involved mining of a previously disturbed area that was used as an overburden dump, with there being no direct impact to previously undisturbed land. No changes were proposed to the approved maximum production rate of 2 Mtpa, mining methods, coal processing, blasting methods, water management, waste management and handling, coal transport, access to site, employee numbers, and environmental management. These changes as approved are summarised in Table 4.1 of the SoEE.

Some minor amendments to the operational conditions are now required to accommodate the end of mining at MCM in 2022 and assist in the transition from mining into a closure execution phase. **Table 2** summarises the current approved operation (2016) and proposed minor changes which are the subject of this modification. It should be noted that the proposed modification will not result in any changes to the operational phase (current active mining phase) and the changes in the rehabilitation phase (following completion of mining activities) are mostly procedural and administrative to reflect the different activities that will be undertaken on site for the rehabilitation phase and to execute closure of the site.

Table 2 – Current Approved Operation and Proposed Modification to Operations

Aspect	Approved Operations (2016)	Modification
Construction		
Not applicable, no further construction is proposed at MCM		
Operation		
Mine Life	Completion of operations by 31 December 2022	No change
Annual Production	Up to 2 Mtpa of product coal	No change
Mining method	Open cut using an excavator and truck fleet	No change
Mining Footprint	Mining with the approved extraction area.	No change
Coal Processing	ROM coal is crushed on - site in the CCP. High ash coal is washed in the CPP. All product coal is stockpiled prior to transport off site.	No change
Coal Rejects	Belt press filter used at the CPP to treat fines. Coarse and fine reject material then stockpiled and trucked back to the open cut for disposal with overburden.	No change
Overburden	Overburden emplacement to occur sequentially in the voids of both Open Cut 1 and 2.	No change
Site Infrastructure	MIA, coal crushing plant and CPP	No change
Coal Transport	Transport of product coal by road to RCT.	No change
Site Access	Access via Muscle Creek Road off the New England Highway and private access road into the mine site.	No change.
Hours of Operation	Open cut mining up to 24 Hours a day, 7 days a week	No change.
Employee Numbers	Up to 95 full - time equivalents (FTEs) with additional contractors as required.	Reduction in FTE's and contractors to meet changes in mine schedule

Aspect	Approved Operations (2016)	Modification																
Rehabilitation																		
Hours of Operation	Open cut mining up to 24 Hours a day, 7 days a week	Proposed change to DA 205/2002 (see Condition 10 in Appendix A) to allow open cut mining and <u>rehabilitation</u> activities to be conducted up to 24 hours a day, 7 days a week.																
Rehabilitation Objectives	<table border="1"> <thead> <tr> <th style="background-color: #92d050;">Rehabilitation</th> <th style="background-color: #92d050;">Objectives</th> </tr> </thead> <tbody> <tr> <td>Mine site (as a whole of the disturbed land and water)</td> <td>Safe, stable and non-polluting, fit for purpose of the intended post-mining land use(s). Final landforms designed to incorporate natural micro-relief and natural drainage lines, which, where reasonable and feasible, further avoid straight run drainage drop structures, to integrate with surrounding landforms.</td> </tr> <tr> <td>Rehabilitation materials</td> <td>Materials (including topsoils, substrates and seeds of the disturbed areas) are recovered, appropriately managed and used effectively as resources in the rehabilitation.</td> </tr> <tr> <td>Landforms</td> <td>Final landforms sustain the intended land use for the post-mining domain(s). Final landforms are consistent with and complement the topography of the surrounding region to minimise the visual prominence of the final landforms in the post mining landscape. Final landforms incorporate design relief patterns and principles for consistency with natural drainage.</td> </tr> <tr> <td>Final voids</td> <td>Minimise to the greatest extent practicable: <ul style="list-style-type: none"> • The size and depth of the final void • The drainage catchment of the final void • Any high wall instability risk • Risk of flood interaction (flows in and out of the void) Maximise, to the greatest extent practicable, integration of the final void landform with the natural terrain features of the surrounding landscape.</td> </tr> <tr> <td>Water Quality</td> <td>Water retained on site should be fit for the intended land use(s) for the post-mining domain(s).</td> </tr> <tr> <td>Native flora and fauna habitat and corridors</td> <td>Size, locations and species of native tree lots and corridors are established to sustain biodiversity habitats. Species are selected that re-establish and complement regional and local diversity. The Native Vegetation Belt / Fauna Corridor links with the existing vegetation near Bells Mountain and Skelletar Ridge.</td> </tr> <tr> <td>Post-mining agricultural pursuits</td> <td>The land capability classification for the relevant nominated agricultural pursuit for each domain is established and self-sustaining with the aim of being achieved within 5 years of land use establishment.</td> </tr> </tbody> </table>	Rehabilitation	Objectives	Mine site (as a whole of the disturbed land and water)	Safe, stable and non-polluting, fit for purpose of the intended post-mining land use(s). Final landforms designed to incorporate natural micro-relief and natural drainage lines, which, where reasonable and feasible, further avoid straight run drainage drop structures, to integrate with surrounding landforms.	Rehabilitation materials	Materials (including topsoils, substrates and seeds of the disturbed areas) are recovered, appropriately managed and used effectively as resources in the rehabilitation.	Landforms	Final landforms sustain the intended land use for the post-mining domain(s). Final landforms are consistent with and complement the topography of the surrounding region to minimise the visual prominence of the final landforms in the post mining landscape. Final landforms incorporate design relief patterns and principles for consistency with natural drainage.	Final voids	Minimise to the greatest extent practicable: <ul style="list-style-type: none"> • The size and depth of the final void • The drainage catchment of the final void • Any high wall instability risk • Risk of flood interaction (flows in and out of the void) Maximise, to the greatest extent practicable, integration of the final void landform with the natural terrain features of the surrounding landscape.	Water Quality	Water retained on site should be fit for the intended land use(s) for the post-mining domain(s).	Native flora and fauna habitat and corridors	Size, locations and species of native tree lots and corridors are established to sustain biodiversity habitats. Species are selected that re-establish and complement regional and local diversity. The Native Vegetation Belt / Fauna Corridor links with the existing vegetation near Bells Mountain and Skelletar Ridge.	Post-mining agricultural pursuits	The land capability classification for the relevant nominated agricultural pursuit for each domain is established and self-sustaining with the aim of being achieved within 5 years of land use establishment.	The current rehabilitation objectives have been refined to ensure compatibility with potential future land uses of the site. The proposed changes are listed in Condition 15, Appendix A .
Rehabilitation	Objectives																	
Mine site (as a whole of the disturbed land and water)	Safe, stable and non-polluting, fit for purpose of the intended post-mining land use(s). Final landforms designed to incorporate natural micro-relief and natural drainage lines, which, where reasonable and feasible, further avoid straight run drainage drop structures, to integrate with surrounding landforms.																	
Rehabilitation materials	Materials (including topsoils, substrates and seeds of the disturbed areas) are recovered, appropriately managed and used effectively as resources in the rehabilitation.																	
Landforms	Final landforms sustain the intended land use for the post-mining domain(s). Final landforms are consistent with and complement the topography of the surrounding region to minimise the visual prominence of the final landforms in the post mining landscape. Final landforms incorporate design relief patterns and principles for consistency with natural drainage.																	
Final voids	Minimise to the greatest extent practicable: <ul style="list-style-type: none"> • The size and depth of the final void • The drainage catchment of the final void • Any high wall instability risk • Risk of flood interaction (flows in and out of the void) Maximise, to the greatest extent practicable, integration of the final void landform with the natural terrain features of the surrounding landscape.																	
Water Quality	Water retained on site should be fit for the intended land use(s) for the post-mining domain(s).																	
Native flora and fauna habitat and corridors	Size, locations and species of native tree lots and corridors are established to sustain biodiversity habitats. Species are selected that re-establish and complement regional and local diversity. The Native Vegetation Belt / Fauna Corridor links with the existing vegetation near Bells Mountain and Skelletar Ridge.																	
Post-mining agricultural pursuits	The land capability classification for the relevant nominated agricultural pursuit for each domain is established and self-sustaining with the aim of being achieved within 5 years of land use establishment.																	
Progressive Rehabilitation	Rehabilitation activities are generally undertaken on a progressive basis to achieve the approved rehabilitation objectives, final landform and final land use. Rehabilitation is undertaken in accordance with the approved Mining Operation Plan (MOP).	Progressive rehabilitation will be undertaken in accordance with the Rehabilitation Management Plan (RMP) and any approved Forward Program.																

Aspect	Approved Operations (2016)	Modification
Rehabilitation Plan/Strategy	<p>MCC is currently required to prepare a Rehabilitation Plan that outline all aspects of mine closure and rehabilitation, including post mining land use domain, rehabilitation objectives, completion criteria and rehabilitation monitoring and management. The approved MOP includes these aspects.</p> <p>In addition, a Rehabilitation Strategy is required to discuss the establishment of habitat corridors, re-establishment of native species, stabilisation of slopes, re-forestation, stormwater drainage and rehabilitation timeframes. The Rehabilitation Strategy has been prepared and submitted to MSC for review and approval however to date it has not been approved by MSC.</p>	<p>Amendments to mining leases require rehabilitation to be carried out in accordance with certain plans and programs approved by or submitted to the NSW Resources Regulator. The existing requirement for a Rehabilitation Strategy will conflict with current regulation.</p> <p>It is intended that the RMP will be prepared in accordance with Form and Way guidelines and will replace the Rehabilitation Plan and Rehabilitation Strategy.</p>
Final Landform	<p>The approved conceptual final landform comprises shaped areas of overburden with the majority of slopes less than 10 degrees, steeper in localised areas of up to 14 degrees, excluding the final void batters which are slopes of up to 18 degrees. The maximum heights of the approved conceptual landform is reduced level (RL) 310 m in the Open Cut 2 rehabilitation area and RL 340 m in the eastern emplacement.</p>	<p>There are no material changes to the landform or the location and geometry of the voids. The majority of slopes will be 14 degrees or less, excluding the final void batters which are slopes up to 18 degrees. The establishment of the final landform will be undertaken in accordance with the RMP.</p>
Final Voids	<p>Two final voids in Open Cut 1 and 2.</p>	<p>No change</p>
Final Land Use	<p>The final land use includes a combination of approximately 50% pasture and 50% native vegetation with a vegetation corridor between Bells Mountain and Skelletar Ridge.</p>	<p>No change</p>
Environmental Management	<p>MCC undertakes environmental management in accordance with an Environmental Management Strategy, which provides a strategic context for the approved Environmental Management Plans used at MCM.</p>	<p>Amended versions of the approved Environmental Management Plans will be submitted to MSC within 6 months of ceasing mining operations to account for the transition into the rehabilitation phase.</p> <p>Changes to the DA 205/2002 conditions are proposed (see Appendix A) to make clear that monitoring and/or other obligations with respect to gas, air quality, noise, spontaneous combustion, blast/vibration, visual/lighting and bushfire management are required up to a specific point in the rehabilitation phase and are not necessary afterwards.</p>
Site Access	<p>Access via Muscle Creek Road off the New England Highway and private access road into the mine site.</p>	<p>Proposed change to DA 205/2002 (see Condition 8 in Appendix A) clarifies that the handover of the maintenance responsibility for the relevant section of Muscle Creek Road to Council will occur after coal haulage has ceased.</p>

Aspect	Approved Operations (2016)	Modification
Closure		
Closure Plan	<p>A Closure Plan is required that includes detailed plans showing final landform and drainage detail, objectives and criteria for mine closure, indicative timing and sequence of closure, changes required to management plans, measures to minimise or manage ongoing environmental impacts and the closure monitoring regime.</p> <p>The Closure Plan has been prepared and submitted to MSC for review and approval however to date it has not been approved by MSC.</p>	<p>Condition 19 of DA 205/2002 will be updated to ensure the required content of the Closure Plan focusses on mine closure and final land use matters rather than rehabilitation issues which are regulated by the NSW Resources Regulator under the reforms. The proposed changes are included in Appendix A.</p>
Relinquishment		<p>The timing and process of relinquishment of the approvals, leases and licences held by MCC will be determined during detailed mine closure planning for the site. This will be in the form of a tenement and approvals relinquishment strategy to be included in the Mine Closure Plan.</p>

These proposed changes do not result in any changes to, or any additional off-site environmental impacts. This is discussed further in **Section 5**.

2.3. Rehabilitation Framework

The NSW Resources Regulator regulates rehabilitation activities against the conditions of the mining lease (issued under the Mining Act 1992). The purpose of the lease is to ensure rehabilitation commitments outlined in the development consent are met. As part of the rehabilitation reforms package, the mining lease conditions relating to rehabilitation have been reviewed to improve clarity and enforceability of rehabilitation outcomes. The new conditions will require lease holders to develop, implement and achieve rehabilitation outcomes and implement a forward program to ensure progressive rehabilitation across mines in NSW.

The *Mining Amendment (Standard Conditions of Mining Leases-Rehabilitation) Regulation 2021* prescribes standard conditions of mining leases granted under the Mining Act 1992. The Regulation commenced on 2 July 2021. The new standard rehabilitation conditions will apply to all new mining leases issued from this date, and for mining leases that were in force before this date for "large mines", the conditions apply on 2 July 2022.

The lease conditions require the Secretary approve rehabilitation objectives, rehabilitation completion criteria, a final landform and a rehabilitation plan. Certain existing mines are also required to prepare and implement a Rehabilitation Management Plan that sets out how rehabilitation obligations are fulfilled and a Forward Plan. Rehabilitation objectives and completion criteria submitted to the NSW Resource Regulator as part of this process must be consistent with any final land use and/or rehabilitation objectives approved in the development consent.

MCC have been in consultation with the Resources Regulator concerning these new rehabilitation conditions that will apply to existing mining leases for MCM. MCC have identified that DA 205/2002 requires modification to clearly describe which regulatory authority is responsible for each condition and ensure that the NSW Resources Regulator oversees rehabilitation matters in line with the state's reforms. This will avoid uncertainty and duplication in regulation.

2.4. Substantially the Same Development

A development consent may be modified under Section 4.55 of the EP&A Act provided it is substantially the same development as the development for which consent was originally granted. **Section 2.2** and **Table 2** of this report summarises the impacts of this modification compared with the originally approved development consent in 2003 (as modified). For these reasons, this modification is substantially the same development as that currently approved and has been prepared in accordance with the requirements of 4.55 1(A) – a modification involving minimal environmental impact.

This proposed modification and the originally approved development consent are substantially the same in the sense that:

- the mine is managed through environmental management plans - the modification changes these conditions to refer to the currently approved versions and allow for updated plans
- rehabilitation is managed through the preparation of a Strategy and Plan - now this has been consolidated into a RMP which is prepared for the Resources Regulator
- Mine closure is managed through a Closure Plan - whilst the criteria is proposed to be changed, this plan will deal with closure and final land use matters in line reforms.

This modification proposes three changes:

- administrative changes which are minor and include typographical errors and changes to regulator names;
- small changes are made to conditions to reflect the rehabilitation phase; and
- more substantive changes regarding environmental management and rehabilitation management

The mining operations are not proposed to change, rather they are moving towards closure, and the systems of regulating rehabilitation and mine closure are not proposed to change substantively, but have been revised to reflect the current regulatory frameworks around rehabilitation of mine sites in NSW. Statutory Context

The applicable environmental planning approval process under NSW legislation and details of other NSW legislation relevant to the modification are included below.

2.5. NSW Legislation

2.5.1. Environmental Planning and Assessment Act 1979

On 1 September 2003, Development Consent for DA 205/2002 was granted by MSC to extend the former MCC No.1 Open Cut. This approval has subsequently been modified on several occasions with the latest modification pursuant to Section 96 of the EP&A Act 1979 granted in 2016.

In relation to this modification, Section 4.55 of the EP&A 1979 contains provisions relating to the modification of development consent. Specifically, subclause (1A) refers to modifications involving minimal environmental impact, and states:

(1A) Modifications involving minimal environmental impact. A consent authority may, on application being made by the applicant or any other person entitled to act on a consent granted by the consent authority and subject to and in accordance with the regulations, modify the consent if--

(a) it is satisfied that the proposed modification is of minimal environmental impact, and

(b) it is satisfied that the development to which the consent as modified relates is substantially the same development as the development for which the consent was originally granted and before that consent as originally granted was modified (if at all), and

(c) it has notified the application in accordance with--

(i) the regulations, if the regulations so require, or

(ii) a development control plan, if the consent authority is a council that has made a development control plan that requires the notification or advertising of applications for modification of a development consent, and

(d) it has considered any submissions made concerning the proposed modification within any period prescribed by the regulations or provided by the development control plan, as the case may be. Subsections (1), (2) and (5) do not apply to such a modification.

The nature of this modification is considered minor, as it does not radically transform the operations of the mine site, nor does it result in any additional off-site environmental impacts. Accordingly, the modification meets both the 'minimal environmental impact' and 'substantially the same' tests, and can therefore be assessed under Section 4.55(1A) of the EP&A Act.

2.5.2. NSW Environmental Planning and Assessment Regulation 2021

An application for modification of a development consent under Section 4.55 of the EP&A 1979 must contain the information stipulated in clause 100 of the EP&A Regulation. The required information and where it has been addressed in this report are detailed in **Table 3**.

Table 3 – EP&A Regulation Modification Requirements

Requirement	Where Addressed
The name and address of the applicant.	Muswellbrook Coal Company Limited
A description of the development that will be carried out under the development consent	Section 2
The address and folio identifier of the land on which the development will be carried out	An updated Schedule of Lands is attached as Appendix B. Note the change is administrative. Lot 102 DP578075 is the current Schedule of land has been replaced by Lot 3 DP 1220491 and Lot 4 DP1220491. There is no change in development consent boundary.
A description of the modification to the development consent, including the name, number and date of plans that have changed, to enable the consent authority to compare the development with the development originally approved	Section 2 and Appendix A. No change to mine footprint or layout
Whether the modification is intended to— (i) merely correct a minor error, misdescription or miscalculation, or (ii) have another effect specified in the modification application,	Section 3.1.1
A description of the expected impacts of the modification	Section 5
An undertaking that the modified development will remain substantially the same as the development originally approved	Section 3.1.1
For a modification application that is accompanied by a biodiversity development assessment report—the biodiversity credits information	Not applicable
If the applicant is not the owner of the land—a statement that the owner consents to the making of the modification application	Not applicable
Whether the modification application is being made to— (i) the Court under the Act, section 4.55, or (ii) the consent authority under the Act, section 4.56	Modification application is being made under section 4.55 of the EP&A Act 1979

2.5.3. Environmental Planning Instruments

State Environmental Planning Policy (Resource and Energy) 2021

The State Environmental Planning Policy (Resources and Energy) 2021 (RE SEPP) (formerly the State Environmental Planning Policy (Mining, Petroleum Production and Extractive Industries) 2007 (Mining SEPP)) aims to provide proper management and development of mineral, petroleum, and extractive material resources for the social and economic welfare of the State. Chapter 2 of the RE SEPP also

aims to facilitate the orderly and economic use and development of land containing mineral, petroleum and extractive material resources, and establishes appropriate planning controls to encourage ecologically sustainable development (ESD).

Section 2.9 of the RE SEPP outlines mining activities which may be permitted with consent. Development for the purposes of mining is permissible by virtue of section 2.9(b) because the land was subject to a mining lease under the *Mining Act 1992* prior to the commencement of this section (and the former clause under the Mining SEPP). Furthermore, this modification involves minimal change to approved operations wholly located within the existing development consent boundary.

State Environmental Planning Policy (Biodiversity and Conservation) 2021

Chapter 4 of the State Environmental Planning Policy (Biodiversity and Conservation) 2021 titled "Koala habitat protection 2021" encourages the proper conservation and management of areas of natural vegetation that provide habitat for koalas. The modification would not impact on vegetation that has the potential to provide habitat for koalas as no additional clearing is proposed.

State Environmental Planning Policy (Resilience and Hazards) 2021

Chapter 4 of the State Environmental Planning Policy (Resilience and Hazards) 2021 (**Resilience and Hazards SEPP**) (formerly State Environmental Planning Policy No 55 - Remediation of Land (SEPP 55)) provides a state - wide approach to the remediation of contaminated land for the purpose of minimising the risk to human health and the environment. Under section 4.6, prior to granting consent to the carrying out of any development on land a consent authority is required to give consideration as to whether land is contaminated and, if the land is contaminated, whether the land is suitable for the purpose of the development or whether remediation is required.

This modification will not result in any change to mining methods or coal processing, and no additional onsite infrastructure is proposed. Assessments are being conducted as part of detailed mine closure planning for MCM to identify any contamination associated with the currently approved operations.

2.5.4. Mining Act 1992

The *NSW Mining Act 1992* regulates the granting of mining leases and mining activities generally. The mining leases that apply to MCM are:

- CCL 713;
- ML 1304; and
- ML 1562.

MCC has an approved MOP in place for current operations, which will be replaced by an RMP in July 2022 in accordance with the rehabilitation reforms undertaken by the NSW Resources Regulator. The RMP will be updated with details from this modification where required once approval has been granted.

2.5.5. Protection of the Environment Operations Act 1997

The NSW Protection of the Environment Operations Act 1997 (POEO Act) is the principal environmental protection legislation in NSW and is administered by the EPA. MCM has an existing EPL (EPL 656) issued under the POEO Act. The EPL authorises coal works to a maximum scale of 2 Mt handled and mining for coal to a scale of less than 0.5 – 2 Mt produced.

No changes in production will occur as a result of this modification. MCC will continue operations under EPL 656. Once mining operations are complete, MCC will review the licence conditions to determine if they remain appropriate for activities being undertaken during the rehabilitation phase. At this stage there is not intended to be any changes required. MCC will seek variation or relinquishment of EPL 656 when required.

2.5.6. Water Management Act 2000 and Water Act 1912

The *NSW Water Act 1912* and *NSW Water Management Act 2000* (WM Act) regulate water resources and use and outline provisions for the licensing of water capture and use. MCC holds the following water licences for MCM:

- WAL39806;
- WAL41503; and
- WAL41521.

No alterations to surface water management infrastructure or management are proposed as part of this modification, and there will be no changes to mining operations that would impact on groundwater. Once mining operations are complete, MCC will review the water licence conditions to determine if appropriate for activities being undertaken during the rehabilitation and closure execution phases. MCC will vary, transfer, sell or relinquish water licences as required.

2.5.7. Biodiversity Conservation Act 2016

The *Biodiversity Conservation Act 2016* aims to maintain a healthy, productive and resilient environment for the greatest well-being of the community, now and into the future, consistent with the principles of ecologically sustainable development.

The Act requires that any vulnerable, endangered, or critically endangered species, population or ecological community associated with a proposed development are identified. It also requires that acceptable recovery and management strategies are implemented if a project is likely to have a significant impact.

This modification will not have any impacts in this regard as no additional clearing is proposed.

2.5.8. Muswellbrook Local Environment Plan 2009

MCM is subject to the Muswellbrook Local Environmental Plan 2009 (**Muswellbrook LEP**). Land within the development consent boundary is a combination of RU1 Primary Production, C3 Environmental Management and SP2 Infrastructure land use zones.

Whilst development for the purposes of "open cut mining" is a permissible form of development consent in the RU1 Primary Production zone, it is not expressly permissible under the other zones. The development is permissible by virtue of the RE SEPP provisions and also its existing approval.

2.6. Commonwealth Legislation

2.6.1. Commonwealth Environment Protection and Biodiversity Conservation Act 1999

The *Commonwealth Environment Protection and Biodiversity Conservation Act 1999* (EPBC Act) aims to protect matters deemed to be of national environmental significance (MNES) that is:

- World heritage properties;
- Places listed on the National Heritage Register;
- Ramsar wetlands of international significance;
- Threatened flora and fauna species and ecological communities;
- Migratory species;
- Commonwealth marine areas;

- Nuclear actions (including uranium mining); and
- Actions of development for coal seam gas or large coal mining on water resources.

If an action (or proposal) would, or is likely to, have a significant impact on any MNES, it is deemed to be a controlled action and requires approval from the Commonwealth Environment Minister or the Minister's delegate. To determine whether a proposed action would or is likely to be a controlled action, an action may be referred to the Commonwealth Department of Agriculture, Water and the Environment.

The Statement of Environmental Effects (SoEE) (EMM 2016) concluded that MCC was unlikely to significantly affect MNES and a referral was not required. As this proposed modification is mostly administrative and results in no change to mine life, mine footprint or mining method there remains no requirement to refer this modification.

3. STAKEHOLDER ENGAGEMENT

3.1. Regulator Consultation

MCC undertakes regular consultation with a range of regulators are part of day to day operations. The consultation undertaken in relation to this modification is summarised in **Table 4**.

Table 4 – Consultation Undertaken with Regulators for Proposed Modification

Date	Government Department	Method of Consultation	Items Discussed
23 September 2021	MSC	Meeting	Initial discussions with MSC regarding development consent changes proposed by MCC.
28 September 2021	Resources Regulator	Meeting	Outlined the development consent changes being proposed in discussions with MSC. Clarified the role of RR during rehabilitation and aimed to understand the limit of MSCs role in the regulation of rehabilitation under the NSW Resources Regulator Rehabilitation Reforms.
7 February 2022	MSC	Meeting	Further discussion around the development consent modification. A number of issues were raised regarding conditions to be modified, including a discussion on the mine closure plan requirements.
21 March 2022	MSC	Meeting	Further discussion around the development consent modification and maximising opportunities for alternate future land uses.
22 March 2022	Resources Regulator	Meeting	Provided an update on the process of the application to modify the development consent.

Date	Government Department	Method of Consultation	Items Discussed
3 March 2021 24 November 2021 2 February 2022 9 March 2022	Transport for NSW	Multiple Meetings	Modification process has been mentioned and expected to have no impacts on the Muswellbrook Bypass.
None to date	NRAR	Email/call/meeting etc	Ongoing consultation during the approval process.
	DPIE		
	EPA		

There will be ongoing consultation undertaken with a range of Regulators during detailed mine closure planning. This will be included in the MCC Closure Stakeholder Engagement Strategy which will outline the timing and mode of consultation leading up to and beyond the cessation of mining activities at the site.

3.2. Community Consultation

MCC undertakes regular consultation through the Community Consultative Committee (CCC), through discussions with employees and community members and by operating a toll free 24-hour Environmental Contact Line (1800 600 205). The CCC is comprised of one Councillor, one council staff representative, five community representatives (including one from the Wanaruah Local Aboriginal Lands Council) and two MCC representatives.

To date, mine closure generally has been discussed at the CCC meetings, including at meetings held in December 2021 and April 2022. The modification was discussed with the CCC at the meeting held in April 2022. Copies of the minutes from the CCC meetings are available on the MCC website.

The local community will be notified of the modification through MCC's annual community newsletter that is due for distribution in April 2022.

A detailed description of the stakeholder consultation to be undertaken during mine closure will be included in the MCC Closure Stakeholder Engagement Strategy which will outline the timing and mode of consultation leading up to and beyond the cessation of mining activities at the site.

4. ASSESSMENT OF IMPACTS

4.1. Operational Phase Transitioning to Closure

Section 2.2 and **Table 2** of this report summarises the impacts of this modification compared with the originally approved development consent in 2003 (as modified). The SoEE (EMM 2016) approved for the previous modification to DA 205/2002 for continuation of mining until 31 December 2022 addressed:

- The provisions of all relevant environmental planning instruments.
- The likely impacts of the development – environmental, social and economic.
- The suitability of the site for the development; and
- The public interest.

The assessment of this proposed modification remains unchanged with respect to the above considerations in the operational phase given this modification:

- Does not propose any change of mine life, mining method or mining footprint;
- Does not propose any changes to coal processing, coal reject or overburden management, site infrastructure or coal transport method; and
- Considers rehabilitation and mine closure execution activities where there will be considerably less activity and the cessation of mining related activities at the site.

On this basis, MCC will continue to manage the environmental impacts of mining operations and the activities required for rehabilitation and mine closure under the approved Environmental Management Strategy (EMS) and associated Environmental Management Plans. Further it is intended that as MCM moves into closure following the cessation of coal mining, these plans will be reviewed and updated to only include reference to rehabilitation and mine closure execution activities.

Table 5 summarises the current management and mitigation measures employed at MCM to manage any environmental impacts.

Table 5 – Assessment of Predicted Impacts

Statement of Environmental Effects (EMM 2016) Predictions	Current Management/Mitigation Measures	Impacts/changes as a Result of this Modification
Noise and Blasting		
<p>Noise emissions for the 2016 modification were predicted to be substantially the same at assessment locations for which noise limits apply under DA 205/2002. Noise levels were predicted to only marginally exceed DA limits at four locations. Predicted noise emission levels satisfied the relevant acquisition criteria and sleep disturbance criteria at all assessment locations.</p> <p>The frequency of attended noise monitoring would be increased from twice a year to monthly.</p> <p>The 2016 modification predicted that the blast emissions criteria would continue to be met throughout the life of the modification.</p>	<p>MCC operate in accordance with the approved Noise Management Plan, which details the management measures used to minimise the impact of noise from mining operations on the environment and nearby residences.</p> <p>MCC manage blasting impacts in accordance with the Blast Management Plan (BMP).</p> <p>Noise, overpressure and vibration emissions from mining operations at MCM typically satisfy the relevant criteria at all monitoring locations.</p>	<p>No change.</p> <p>The modification does not propose to change the mining method, coal processing, overburden management or coal transport methods already approved at MCM therefore the noise profile and vibration level associated with operations is not predicted to change. Noise levels would generally be expected to decrease following the cessation of mining.</p> <p>Blasting will be required following the cessation of mining to assist rehabilitation activities in accordance with the BMP.</p>
Air Quality and Greenhouse Gas (GHG)		
<p>The 2016 modification was predicted to result in incremental exceedances of the 24 - hour average PM10 criterion at a single assessment location to the north of MCM. The cumulative impact assessment predicted impacts at two assessment locations on two to three additional days which correspond to days where background levels are already elevated.</p> <p>Relocation of an existing monitor to the north of MCM (near R25) and installation of a new monitor to the south - southeast of MCM are proposed to supplement the existing air quality monitoring network.</p> <p>Existing blast fume management practices were expected to be adequate for continued operations under the modification.</p> <p>Estimated annual average GHG emissions for the modification were predicted to be insignificant compared to total NSW and national GHG generation.</p>	<p>MCC operate in accordance with the approved Air Quality Management Plan (AQMP).</p> <p>The primary objective of air quality management at MCC is to manage and minimise the impact of dust from the operations on the environment and nearby residences.</p>	<p>No change</p> <p>The modification does not propose to change the mining method, coal processing, overburden management or coal transport methods already approved at MCM therefore the air quality impacts of operations are expected to decrease.</p> <p>The estimated annual average GHG emissions are not anticipated to change. GHG emissions would generally be expected to decrease as less vehicle emissions would result from the cessation of mining and coal haulage operations.</p>

Statement of Environmental Effects (EMM 2016) Predictions	Current Management/Mitigation Measures	Impacts/changes as a Result of this Modification
Geochemistry		
<p>The 2016 modification permitted the overburden emplacement to occur sequentially in the voids of both Open Cut 1 and 2. There were no changes proposed to the approved minimum and maximum RL of overburden emplacement as a result of the modification and spontaneous combustion was to continue to be managed in accordance with Spontaneous Combustion Management Plan and the MOP.</p>	<p>MCC operates in accordance with the Spontaneous Combustion Management Plan and the MOP.</p>	<p>No change.</p> <p>The proposed modification will not change the likelihood of spontaneous combustion at the site or alter the management/mitigation measures.</p> <p>The rehabilitation works to be executed as part of mine closure will aim to further mitigate the likelihood of spontaneous combustion by covering areas with a suitable layer of inert material in accordance with the Spontaneous Combustion Management Plan.</p>
Surface Water		
<p>All changes proposed as part of the modification would occur within the catchments of Open Cut 1, Open Cut 2 and Dams 1 and 2. Surface water would continue to be managed in accordance with the existing SWMP. With the exception of relocating the existing raw water supply tanks (and associated pipelines) and redistribution of the catchment areas between Open Cut 1, Open Cut 2 and Dams 1 and 2 no significant changes to the water management system would occur as part of the modification.</p> <p>No change to the existing water supply arrangements were proposed.</p>	<p>MCC manage surface water impacts in accordance with the Water Management Plan (WMP).</p> <p>MCC undertake a surface water monitoring program that consists of monthly, quarterly and annual monitoring.</p>	<p>No change.</p> <p>The modification will not result in a change to surface water impacts during the operational phase as no change to water management infrastructure or management is proposed.</p> <p>There is no additional water management infrastructure required, and some of the current licenced features will be decommissioned and removed at closure if not required for the post mining land use.</p>

Statement of Environmental Effects (EMM 2016) Predictions	Current Management/Mitigation Measures	Impacts/changes as a Result of this Modification
Groundwater		
<p>The groundwater assessment for the modification predicted that the incremental groundwater impacts as a result of the modification would be negligible. Groundwater inflows to MCM under the modification were expected to be in the range of previous predictions for approved operations. A maximum radius of drawdown of approximately 1 km is estimated, which is consistent with the monitoring data to date.</p>	<p>MCC manage groundwater impacts in accordance with the Water Management Plan (WMP). MCC undertake a groundwater monitoring program that consists of monthly and annual monitoring.</p>	<p>No change. The modification will not result in a change to groundwater impacts during the operational phase as no change to mining footprint, void geometry, mining method or water management infrastructure is proposed. Any amendments to the water licencing requirements during rehabilitation and closure will be assessed during detailed closure planning for the site.</p>
Heritage (Historic and Aboriginal)		
<p>No impacts to historical or Aboriginal heritage were predicted as part of the previous modification given the area where mining was to be extended had been extensively disturbed as part of historical mining operations.</p>	<p>There is one known Aboriginal cultural site located within the mine lease boundary, but outside of the disturbance footprint. There are no European Heritage sites located at MCC that require ongoing management. A ground disturbance permit is used whenever any clearing is required outside of areas already assessed.</p>	<p>No change. The existing approved mine footprint will not be altered by the modification.</p>
Biodiversity		
<p>The 2016 modification was unlikely to significantly impact biodiversity values as the expansion was located within a rehabilitated area of MCM. While the modification would disturb an area of partially completed rehabilitation, the modification area would be progressively rehabilitated following mining in accordance with the MOP.</p>	<p>MCC manage impacts on flora and fauna in accordance with the requirements of the approved MOP.</p>	<p>No change. The modification does not intend any change to the existing mine footprint therefore no additional clearing is proposed. The RMP will replace the MOP in July 2022 and include management of biodiversity at the site.</p>

Statement of Environmental Effects (EMM 2016) Predictions	Current Management/Mitigation Measures	Impacts/changes as a Result of this Modification
Visual		
<p>The 2016 modification predicted a negligible incremental visual impact on people living in, and travelling through, the area around MCM over and above currently approved operations, with existing views from receptor locations remaining substantially the same.</p>	<p>MCC operate in accordance with the Visual Amenity, Lighting and Landscaping Management Plan (VALLMP).</p>	<p>No change. The modification does not include any change to maximum height of the landform, any additional mining expansion or increase in mining footprint therefore the visual impact of the mine is predicted to the same.</p>
Bushfire		
<p>There was no bushfire assessment undertaken as part of the 2016 modification.</p>	<p>Management of bushfire risks are undertaken in accordance with the Bushfire Management Plan (BFMP).</p>	<p>No change.</p>
Traffic and Transport		
<p>There was no traffic impact assessment undertaken as part of the previous modification as volumes of product coal being transported offsite were not changed.</p>	<p>Product coal is trucked off site via Muscle Creek Road and the New England Highway to the Ravensworth Coal Terminal (RCT) for train loading.</p>	<p>The modification will not result in changes to the approved volumes of coal produced or transported from MCM, and no change to employee numbers. Following the cessation of mining, vehicle movements and coal haulage truck movements will reduce significantly, lessening any impacts. It is intended that the maintenance responsibility for Muscle Creek Road will be transferred to Council after coal haulage has ceased.</p>
Waste		
<p>There was no new waste streams predicted to be generated by the 2016 modification therefore a waste assessment was not undertaken.</p>	<p>Waste streams are segregated and removed from site by a licensed waste contractors.</p>	<p>No change during operational phase. When decommissioning the plant and infrastructure there will be an increase in waste volumes, however there is not expected to be any changes to the waste streams.</p>

4.2. Rehabilitation

Whilst the previous modification to DA 205/2002 (EMM 2016) did not specifically assess the environmental impacts following the cessation of coal extraction there is expected to generally be less impacts as activities on site are dramatically reduced. Leading up to and following the cessation of mining activities, rehabilitation activities are proposed to be undertaken up to 24 hours a day, 7 days a week and will generally consist of the following which will be addressed in greater detail in the RMP:

- **Decommissioning** – removal of fixed plant and built infrastructure that isn't required for beneficial re-use post mining;
- **Landform Establishment** – shaping of the final landform;
- **Growth Medium Development** – reinstatement of material with the initial physical, chemical and biological characteristics required to establish the desired vegetation community;
- **Ecosystem and Land Use Establishment** – seeding/planting of desired vegetation community and activities to support establishment such as weed and pest control and erosion control;
- **Ecosystem and Land Use Sustainability** – ongoing maintenance of rehabilitation including weed and pest control, erosion control and repair as required.

Changes to the DA 205/2002 conditions are proposed (see **Appendix A**) to make clear that monitoring and/or other obligations with respect to air quality, noise, spontaneous combustion, blast/vibration, visual/lighting and bushfire management are only required up to a specific point in the rehabilitation phase and are not necessary afterwards. It is intended that amended versions of the approved Environmental Management Plans will be submitted to MSC within six months of ceasing mining operations to account for the transition into the rehabilitation phase.

Further studies are being undertaken as part of detailed mine closure planning to ensure any impacts associated with activities post-mining are appropriately managed, including contamination, hazardous material, surface water, groundwater and geochemistry.

5. JUSTIFICATION OF THE MODIFIED PROJECT

MCM is an existing mine which has successfully operated since 1907 and continues to do so within its existing mining authorities and development consent boundary. This modification is substantially the same development as that which is originally approved.

This modification does not require any change to mining footprint or area.

The purpose of the amendment is to change in conditions to align with mine closure phase as well as rehabilitation legislation reform changes whilst providing flexibility for future beneficial uses post closure. It is intended to align the existing consent approval with the expectations of the NSW Resources Regulator rehabilitation reforms package and are generally administrative. Any changes are minor in nature and there are no associated environmental impacts. As the site moves to closure there is expected to be a reduction in impacts given the reduced activity at the site.

Precautionary Principle

The precautionary principle, in summary, holds that if there are threats of serious or irreversible environmental damage, the lack of full scientific certainty should not be used as a reason for postponing measures to prevent environmental degradation.

The environmental impacts in the operational phase remain unchanged to those previously predicted in the previous modification (EMM 2016). The potential implications of the modification remain unchanged given the existing environmental management and mitigation measures in place at MCM.

As the MCM transitions into rehabilitation and closure, the environmental impacts are expected to lessen following cessation of mining. Environmental management at the site will be reviewed by MCC and the Environmental Management Plans amended as required to account for the changing activities.

Inter-generational Equity

The principle of inter - generational equity puts an onus on society to ensure that the health, diversity and productivity of the environment are maintained, or enhanced, for the benefit of current and future generations.

The modification has negligible potential to adversely affect the health, diversity or productivity of the environment and, therefore, would not adversely impact the current or future generations.

The existing environmental management and mitigation measures used by MCC minimise the risk of the modification resulting in a significant impact to the local environment and assist in ensuring that current and future generations can enjoy equal and equitable access to social, environmental and economic resources.

Conservation of Biological Diversity and Maintenance of Ecological Integrity

The modification does not pose a significant threat to local biological diversity or ecological integrity as there is no proposed change to mining footprint as part of the modification. Rehabilitation will be undertaken in accordance with the RMP once mining operations are completed.

Improved valuation and pricing of environmental resources

The cost associated with using or impacting upon an environmental resource is seen as a cost incurred to protect that resource.

MCC do not propose to increase the amount of coal mining, mining footprint or time period of mining at MCM.

The modification aims to aligns DA 205/2002 with current legislation in relation to rehabilitation and decommissioning of the site and allows flexibility to utilise the site post-mining for a beneficial use. Detailed mine closure planning is currently in progress, including the identification of future opportunities that the MCC mining and buffer land could be used for.

Ongoing consultation with regulators, the community and other stakeholders will be undertaken by MCC regarding closure of MCM.

6. REFERENCES

- DPIE (2021a) *State significant development guidelines – preparing an environmental impact statement* (Appendix B to the state significant development guidelines)
- DPIE (2021b) *State significant development guidelines – preparing a modification report* (Appendix E to the state significant development guidelines)
- EMM (2016) *Muswellbrook Coal Continuation Project, Statement of Environmental Effects*
- MCC (2019) *Mining Operations Plan and Rehabilitation Plan, Amendment A (January 2017 to December 2023)*



APPENDIX A
Proposed Changes to DA 205/2002

Existing Condition		Proposed Condition (text marked in RED shows the proposed changes)		Reason
Glossary of Terms				
-		Definition		
	Agricultural Productivity	as defined by the Agricultural Suitability Classification System used by NSW Agriculture.	Agricultural Productivity	as defined by the Agricultural Suitability Classification System used by NSW Agriculture.
	AEMR	Annual Environmental Management Report	AEMR	Annual Environmental Management Report
	BCA	Building Code of Australia (also known as the National Construction Code)	BCA	Building Code of Australia (also known as the National Construction Code)
	CCC	Community Consultative Committee	CCC	Community Consultative Committee
	Construction	Construction of associated surface facilities and infrastructure, such as dams, new access roads, culverts, level crossing etc	CCL713	Consolidated Coal Lease 713 as amended or renewed.
	Council	Muswellbrook Shire Council	Construction	Construction of associated surface facilities and infrastructure, such as dams, new access roads, culverts, level crossing etc
	DA	Development Application	Council	Muswellbrook Shire Council
	DA area	Development Application area Shown in Appendix B of this consent.	DA	Development Application
	EMP	Environmental Management Plan	DA area	Development Application area Shown in Appendix B of this consent.
	EMS	Environmental Management Strategy	EMP	Environmental Management Plan
	EP&A Act	Environmental Planning and Assessment Act 1979	EMS	Environmental Management Strategy
	EP&A Reg	Environmental Planning and Assessment Regulation 2000	EP&A Act	Environmental Planning and Assessment Act 1979
	EPL	Environment Protection Licence	EP&A Reg	Environmental Planning and Assessment Regulation 2000
	Feasible	Feasible relates to engineering considerations and what is practical to build or implement	EPL	Environment Protection Licence
	Incident	A set of circumstances that: <ul style="list-style-type: none"> - Causes or threatens to cause material harm to the environment; and/or - Breaches or exceeds the limits or performance measures/criteria in this consent 	Feasible	Feasible relates to engineering considerations and what is practical to build or implement
	Independent Dispute Resolution	defined in a flow chart where Muswellbrook Shire Council will appoint an independent dispute facilitator to deal with the matters of concern (refer to Appendix D)	Forward Program	Has the same meaning as in clause 13(1), Schedule 8A of the Mining Regulation 2016 (or any amended or equivalent future clause)
	LGA	Local Government Area	Incident	A set of circumstances that: <ul style="list-style-type: none"> • Causes or threatens to cause material harm to the environment; and/or • Breaches or exceeds the limits or performance measures/criteria in this consent
	Material harm to the environment	Actual or potential harm to the health or safety of human beings or to ecosystems that is not trivial	Independent Dispute Resolution	defined in a flow chart where Muswellbrook Shire Council will appoint an independent dispute facilitator to deal with the matters of concern (refer to Appendix D)
	MHRDC	Maximum Harvestable Rights Dam Capacity	LGA	Local Government Area
	MCC	Muswellbrook Coal Company Limited		
				Administrative <ul style="list-style-type: none"> - Update of government authorities to reflect current regulators - Additional definitions included in Glossary of Terms, including 'rehabilitation' which now reflects the statutory definition in the <i>Mining Act 1992</i>

Existing Condition			Proposed Condition (text marked in RED shows the proposed changes)			Reason
Mining Operations	Includes the removal of overburden and extraction, processing, handling, storage and transportation of coal on site.		Material harm to the environment	Actual or potential harm to the health or safety of human beings or to ecosystems that is not trivial		
Mtpa	Million Tonnes per annum		MHRDC	Maximum Harvestable Rights Dam Capacity		
Operations	Any work undertaken under this consent		MCC	Muswellbrook Coal Company Limited		
POEO Act	Protection of the Environment Operations Act 1997		Mining Operations	Includes the removal of overburden and extraction, processing, handling, storage and transportation of coal on site.		
Privately owned land	Land that is not owned by the Crown or a mining company (or its subsidiaries)		ML 1304	Mining Lease 1304 as amended or renewed.		
Reasonable	Reasonable relates to the application of judgement in arriving at a decision, taking into account: mitigation benefits, cost of mitigation versus benefits provided, community views and the nature and extent of potential improvements.		ML 1562	Mining Lease 1562 as amended or renewed.		
Mtpa	Million Tonnes per annum		Mtpa	Million Tonnes per annum		
Operations	Any work undertaken under this consent		Operations	Any work undertaken under this consent		
POEO Act	Protection of the Environment Operations Act 1997		POEO Act	Protection of the Environment Operations Act 1997		
Privately owned land	Land that is not owned by the Crown or a mining company (or its subsidiaries)		Privately owned land	Land that is not owned by the Crown or a mining company (or its subsidiaries)		
Reasonable	Reasonable relates to the application of judgement in arriving at a decision, taking into account: mitigation benefits, cost of mitigation versus benefits provided, community views and the nature and extent of potential improvements.		Reasonable	Reasonable relates to the application of judgement in arriving at a decision, taking into account: mitigation benefits, cost of mitigation versus benefits provided, community views and the nature and extent of potential improvements.		
Rehabilitation	The restoration of land disturbed by the development to a good condition, and ensure it is safe, stable and non-polluting.		Rehabilitation	Means the treatment or management of disturbed land or water for the purpose of establishing a safe and stable environment. The restoration of land disturbed by the development to a good condition, and ensure it is safe, stable and non-polluting.		
ROM	Run of Mine		Rehabilitation Management Plan	A plan required to be prepared by the holder of a mining lease as a standard condition of a mining lease and as set out in clause 10, Schedule 8A of the Mining Regulation 2016 (or any amended or equivalent future clause) including any amendments to that plan.		
SEE	Statement of Environmental Effects		ROM	Run of Mine		
VPA	Voluntary Planning Agreement		Secretary	Secretary of the Department of Planning, Industry and Environment (or his or her delegate) or any equivalent body with the same or similar roles and responsibilities at the applicable time.		
SEE	Statement of Environmental Effects		SEE	Statement of Environmental Effects		
VPA	Voluntary Planning Agreement		VPA	Voluntary Planning Agreement		
Government Authorities			Government Authorities			
DP&E	Department of Planning and Environment	Or the State Agency applicable at the time	DP&E	Department of Planning, Industry and Environment (Planning Division)	Or the State Agency applicable at the time	
DRE	Department of Resources and Energy		DRE-RR	Department of Resources and Energy		
EPA	Environment Protection Authority					

Existing Condition			Proposed Condition (text marked in RED shows the proposed changes)			Reason
	MSB	Mine Subsidence Board		NSW Resources Regulator		
	MSC	Muswellbrook Shire Council	EPA	Environment Protection Authority		
	OEH	Office of Environment and Heritage	MSB-SA	Mine Subsidence Board NSW Subsidence Advisory		
	DPI	Department of Primary Industries	MSC Council	Muswellbrook Shire Council		
	DPI Water	Department of Primary Industries - Water	OEH	Office of Environment and Heritage		
	RMS	Road and Maritime Services	DPI	Department of Primary Industries		
			DPI Water	Department of Primary Industries—Water		
			NRAR	NSW Department of Natural Resources Access Regulator		
			RMS	Road and Maritime Services		
			TfNSW	Transport for NSW		
General Conditions						
2	<p>Adherence to Adherence to terms of DA, EIS, etc.</p> <p>The development must be carried out in accordance with the conditions of this consent and generally in accordance with:</p> <p>i. The accompanying SEE titled "Muswellbrook Coal Continuation Project, 1 & 2" by EMM dated April 2016.</p> <p>ii. "Muswellbrook Coal Continuation Project Response to Submissions" dated 20 July 2016.</p> <p>iii. the EIS titled "Muswellbrook Coal Company Limited, No. 1 Open Cut Extension Environmental Impact Statement 2002" dated July 2002, prepared by HLA-EnviroSciences Pty Limited and certified in accordance with Section 78A(8) of the EP&A Act;</p> <p>iv. The accompanying Statement of Environmental Effects document by Hansen Bailey dated August 2010.</p> <p>Where there is an inconsistency between two or more of the above documents, the most recent document prevails to the extent of that inconsistency. However, the conditions of this consent shall prevail to the extent of any inconsistency.</p>		<p>Adherence to Adherence to terms of DA, EIS, etc.</p> <p>The development must be carried out in accordance with the conditions of this consent and generally in accordance with:</p> <p>i. Modification Report prepared by IEMA dated April 2022.</p> <p>ii. The accompanying SEE titled "Muswellbrook Coal Continuation Project, 1 & 2" by EMM dated April 2016.</p> <p>iii. "Muswellbrook Coal Continuation Project Response to Submissions" dated 20 July 2016.</p> <p>iii. iv. the EIS titled "Muswellbrook Coal Company Limited, No. 1 Open Cut Extension Environmental Impact Statement 2002" dated July 2002, prepared by HLA-EnviroSciences Pty Limited and certified in accordance with Section 78A(8) of the EP&A Act;</p> <p>iv. v. The accompanying Statement of Environmental Effects document by Hansen Bailey dated August 2010.</p> <p>Where there is an inconsistency between two or more of the above documents, the most recent document prevails to the extent of that inconsistency. However, the conditions of this consent shall prevail to the extent of any inconsistency.</p>		Administrative	This Modification Report will become an approved document, outlining all proposed changes that will form part of this Modification Application and therefore will need to be included in Condition 2
4	<p>Period of Approval</p> <p>The Applicant may out carry mining operations until 31 December 2022.</p> <p>Note: Under this consent, the Applicant is required to rehabilitate the site to the satisfaction of Council and the DRE. Consequently, this consent will continue to apply in all other respects other than the right to conduct mining operations until the rehabilitation of the site has been carried out satisfactorily.</p>		<p>Period of Approval</p> <p>The Applicant may carry out mining operations until 31 December 2022.</p> <p>Note: Under this consent, the Applicant is required to rehabilitate the site to the satisfaction <u>having regard to the requirements of RR Council and the DRE.</u> Consequently, this consent will continue to apply in all other respects other than the right to conduct mining operations until the rehabilitation of the site has been carried out satisfactorily.</p>		Rehabilitation Framework	Reflects the NSW Resource Regulator's position as the relevant regulator of mine rehabilitation under the <i>Mining Act 1992</i> .
5	<p>Project Commencement</p> <p>The Applicant must:</p> <p>a) notify Council in writing of the date of commencement of the development under this consent; and</p> <p>b) certify that it has obtained all the necessary approvals required to commence the development.</p> <p>c) ensure that employees, contractors and sub-contractors are aware of, and comply with, the conditions of this consent relevant to their respective activities.</p>		<p>Project Commencement</p> <p>The Applicant must:</p> <p>(a) notify Council in writing of the date of commencement of the development under this consent; and</p> <p>(b) certify that it has obtained all the necessary approvals required to commence the development.; <u>and</u></p> <p>(c) ensure that employees, contractors and sub-contractors are aware of, and comply with, the conditions of this consent relevant to their respective activities.</p>		Administrative	Addition of 'and'

Existing Condition		Proposed Condition (text marked in RED shows the proposed changes)	Reason
6	<p>Dispute Resolution</p> <p>In the event that the Applicant or a Government agency, other than integrated planning bodies, cannot agree on the specification or requirements applicable under this consent, the matter shall be referred by either party to Council or if not resolved, to the Minister for Planning, whose determination of the disagreement shall be final and binding on the parties.</p>	<p>Dispute Resolution</p> <p>In the event that the Applicant or a and a Government agency Authority (other than Council), other than integrated planning bodies cannot agree on the specification or requirements applicable under this consent, the matter shall be referred by either party to Council or if not resolved, to the Minister for Planning <u>Secretary of DPIE</u>, whose determination of the disagreement shall be final and binding on the parties.</p> <p><u>In the event that the Applicant and Council:</u></p> <p><u>(a) cannot agree on a matter for which Council's approval or satisfaction is required by a condition of this consent; or</u></p> <p><u>(b) disagree as to a requirement specified by Council pursuant to the terms of Condition 3 of this consent;</u></p> <p><u>the matter can be referred by either party to the Secretary of DPIE, whose determination of the disagreement shall be final and binding on the parties.</u></p>	<p>For efficiency reasons</p> <p>The intention of these changes is to make clear the avenues available if there are disputes with respect to the consent which cannot be readily resolved.</p> <p>The condition has been amended to make clear that if there is a dispute between the Applicant and a Government Authority with respect to a condition of consent this can be resolved by either Council or the Secretary of DPIE. If there is a dispute between the Applicant and Council this can be resolved by the Secretary of DPIE.</p>
Mine Management			
8	<p>Hours of Operation</p> <p>The maximum hours of operation at the development shall be as follows:</p> <ul style="list-style-type: none"> Open Cut Mining up to 24 hours, 7 days Blasting 9am-5pm Mondays to Fridays. <p>Note: Blasting hours may be extended outside these times where there is a demonstrated safety need and with the approval of Council.</p>	<p>Hours of Operation</p> <p>The maximum hours of operation at the development shall be as follows:</p> <ul style="list-style-type: none"> Open Cut Mining <u>and Rehabilitation</u> up to 24 hours, 7 days Blasting 9am-5pm Mondays to Fridays. <p>Note: Blasting hours may be extended outside these times where there is a demonstrated safety need and with the approval of Council.</p>	<p>Change in Operations</p> <p>To allow rehabilitation activities to be undertaken up to 24 hours a day, 7 days a week</p>
10	<p>Section 138 Permit – Maintenance on Muscle Creek Road</p> <p>The section of Muscle Creek Road from the internal haul road to the New England Highway is to be maintained by the Applicant to the satisfaction of the road authority being Council and must be in a well maintained, safe and appropriate condition at the end of all coal mining operations. At the end of coal mining operations the Road must be in a well maintained, safe and appropriate condition prior to Council taking responsibility for ongoing maintenance.</p> <p>NB: The required maintenance standard is detailed in RMS Specification "QA Specification M3 Routine Services".</p> <p>The Applicant must obtain a Section 138 Consent under the Roads Act 1993 prior to any maintenance works being undertaken by the Applicant on Muscle Creek Road. The application for consent must include an assessment of the road's Subnetwork ranking and a Routine Maintenance Annual Plan (RMAP) and shall generally be granted for a year for minor maintenance activities. Major activities including renewal works will require a separate 138 Consent. A contact person must be nominated for all matters dealing with Council roads</p>	<p>Section 138 Permit – Maintenance on Muscle Creek Road</p> <p>The section of Muscle Creek Road from the internal haul road to the New England Highway is to be maintained by the Applicant to the satisfaction of the road authority being Council and must be in a well maintained, safe and appropriate condition at the end of all coal haulage mining operations. At the end of coal haulage mining operations the Road must be in a well maintained, safe and appropriate condition prior to Council taking responsibility for ongoing maintenance.</p> <p>NB: The required maintenance standard is detailed in RMS Specification "QA Specification M3 Routine Services".</p> <p>The Applicant must obtain a Section 138 Consent under the Roads Act 1993 prior to any maintenance works being undertaken by the Applicant on Muscle Creek Road. The application for consent must include an assessment of the road's Subnetwork ranking and a Routine Maintenance Annual Plan (RMAP) and shall generally be granted for a year for minor maintenance activities. Major activities including renewal works will require a separate 138 Consent. A contact person must be nominated for all matters dealing with Council roads</p>	<p>Change in Operations</p> <p>Proposed changes clarify that the handover of the maintenance responsibility for relevant section of Muscle Creek Road to Council will occur after coal haulage has ceased.</p>
Land and Site Environmental Management			
13	<p>Appointment of Environmental Officer</p> <p>(a) The Applicant must ensure that a suitably qualified or experienced Environmental Officer, to the satisfaction of Council is available throughout the life of the mine. The Environmental Officer shall:</p> <p>(i) be responsible for the co-ordination of the preparation of the Environmental Management Plan</p> <p>(ii) be responsible for considering and advising on matters specified in the conditions of this consent and compliance with such matters;</p> <p>(iii) be responsible for establishing systems to receive and respond to complaints;</p> <p>(iv) facilitate an environmental induction and training program for all persons involved with mining and rehabilitation activities; and</p>	<p>Appointment of Environmental Officer</p> <p>(a) The Applicant must ensure that a suitably qualified or experienced Environmental Officer, to the satisfaction of Council is available throughout the life of the mine. The Environmental Officer shall:</p> <p>(i) be responsible for the co-ordination of the preparation of the Environmental Management Plan</p> <p>(ii) be responsible for considering and advising on matters specified in the conditions of this consent and compliance with such matters;</p> <p>(iii) be responsible for establishing systems to receive and respond to complaints;</p> <p>(iv) facilitate an environmental induction and training program for all persons involved with mining and rehabilitation activities; and</p>	<p>Administrative</p> <p>Minor changes to the condition reflect practical realities that the relevant Environmental Officer is selected by MCC and that Council is the best agency to be notified of an appointment as it is the regulator of the development consent.</p>

Existing Condition	Proposed Condition (text marked in RED shows the proposed changes)	Reason												
<p>(v) take reasonable steps to avoid or minimise adverse environmental impacts. The Environmental Officer shall advise the Mine Manager to issue instructions to stop work if a significant adverse impact on the environment is likely to occur.</p> <p>(b) The Applicant must notify Council, DRE, MSB, EPA, OEH, DPI-Water and the CCC of the name and contact details of the Environmental Officer and any changes to that appointment.</p>	<p>(v) take reasonable steps to avoid or minimise adverse environmental impacts. The Environmental Officer shall advise the Mine Manager to issue instructions to stop work if a significant adverse impact on the environment is likely to occur.</p> <p>(b) The Applicant must notify Council, DRE, MSB, EPA, OEH, DPI-Water and the CCC of the name and contact details of the Environmental Officer and any changes to that appointment.</p>													
<p>14 Environmental Management Strategies and Plans</p> <p>(a) The Applicant must prepare an Environmental Management Strategy, providing a strategic context for the Environmental Management Plans. The Environmental Management Strategy must be prepared following consultation with the OEH, EPA, DRE, DPI Water and the CCC and to the satisfaction of Council.</p>	<p>Environmental Management Strategies and Plans</p> <p>(a) The Applicant <u>must implement the Environmental Management Strategy, V5 dated October 2020 or any amended strategy approved by Council. Any amended strategy prepare an Environmental Management Strategy, providing a strategic context for the Environmental Management Plans. The Environmental Management Strategy</u> must be prepared following consultation with the DPI/OEH, EPA, RRDRE, DPI Water<u>NRAR</u> and the CCC and <u>be</u> to the satisfaction of Council.</p>	<p>Rehabilitation Framework</p> <p>Change in Operations</p> <p>This revised condition refers to the current Environmental Management Strategy (EMS) and Environmental Management Plans (EMPs) approved under the consent.</p>												
<p>14 (b) The Environmental Management Strategy must include, but not be limited to:</p> <p>(i) statutory and other obligations which the Applicant is required to fulfil during mining, including all approvals and consultations and agreements required from authorities and other stakeholders, and key legislation and policies;</p> <p>(ii) definition of the role, responsibility, authority, accountability and reporting of personnel relevant to environmental management, including the Environmental Officer;</p> <p>(iii) overall environmental management objectives and performance outcomes, during mining and decommissioning of the mine, for each of the key environmental elements for which management plans are required under this consent;</p> <p>overall ecological and community objectives for the project, and a strategy for the restoration and management of the areas affected by Mining Operations, including elements such as wetlands and other habitat areas, creek lines and drainage channels, within the context of those objectives;</p> <p>(iv) identification of cumulative environmental impacts and procedures for dealing with these at each stage of the development;</p> <p>(v) steps to be taken to ensure that all approvals, plans, and procedures are being complied with, namely procedures:</p> <ul style="list-style-type: none"> • to receive, handle, respond to and record complaints; • to respond to any non-compliances; and • to respond to emergencies. <p>(vi) processes for conflict resolution in relation to the environmental management of the project; and</p> <p>(vii) documentation of the results of consultations undertaken in the development of the Environmental Management Strategy.</p>	<p>(b) The Environmental Management Strategy must include, but not be limited to:</p> <p>(i) statutory and other obligations which the Applicant is required to fulfil during mining, including all approvals and consultations and agreements required from authorities and other stakeholders, and key legislation and policies;</p> <p>(ii) definition of the role, responsibility, authority, accountability and reporting of personnel relevant to environmental management, including the Environmental Officer;</p> <p>(iii) overall environmental management objectives and performance outcomes, during mining and decommissioning of the mine, for each of the key environmental elements for which management plans are required under this consent;</p> <p>overall ecological and community objectives for the project, and a strategy for the restoration and management of the areas affected by Mining Operations, including elements such as wetlands and other habitat areas, creek lines and drainage channels, within the context of those objectives;</p> <p>(iv) identification of cumulative environmental impacts and procedures for dealing with these at each stage of the development;</p> <p>(v) steps to be taken to ensure that all approvals, plans, and procedures are being complied with, namely procedures:</p> <ul style="list-style-type: none"> • to receive, handle, respond to and record complaints; • to respond to any non-compliances; and • to respond to emergencies. <p>(vi) processes for conflict resolution in relation to the environmental management of the project; and</p> <p>(vii) documentation of the results of consultations undertaken in the development of the Environmental Management Strategy.</p>	<p>Instead of the condition requiring the preparation of plans in the future, it requires compliance with those currently approved plans or any future amended versions. The only exception is the Rehabilitation Management Plan and Mine Closure Plan which are to be prepared in accordance with conditions 15 and 19.</p> <p>The EMS and EMPs need to deal with the upcoming closure of mine operations and transition into the rehabilitation phase. To facilitate this, the condition requires the submission of amended versions for approval within 6 months of ceasing mining operations. It also permits further amendments to plans which gives the Applicant the flexibility to amend plans to deal with possible operational changes, all subject to approval.</p>												
<p>14 (c) The Applicant must make copies of the Environmental Management Strategy available to EPA, OEH, DRE, MSB, DPI Water and the CCC and be placed on the Applicant's website following approval by Council.</p>	<p>(c) The Applicant must make copies of the Environmental Management Strategy available to EPA, OEH/DPI, RRDRE, SAMS, DPI Water<u>NRAR</u> and the CCC and be placed on the Applicant's website following approval by Council.</p>													
<p>14 (d) The Applicant must prepare the following Environmental Management Plans and submit to Council for review at the times listed below, or at other times as agreed by Council, following approval of the Continuation Project Modification:</p> <table border="1" data-bbox="305 1629 869 1900"> <thead> <tr> <th>Document</th> <th>Timeframes following approval date of Continuation Project</th> </tr> </thead> <tbody> <tr> <td>Environmental Management Strategy</td> <td>6 months</td> </tr> <tr> <td>Spontaneous Combustion Management Plan</td> <td>3 months</td> </tr> </tbody> </table>	Document	Timeframes following approval date of Continuation Project	Environmental Management Strategy	6 months	Spontaneous Combustion Management Plan	3 months	<p>(d) The <u>following Applicant must prepare the following</u> Environmental Management Plans <u>apply to the development in accordance with the terms of the relevant conditions in the below table:</u></p> <table border="1" data-bbox="1308 1604 1872 1829"> <thead> <tr> <th><u>Environmental Management Plan</u></th> <th><u>Relevant Condition of Consent</u></th> </tr> </thead> <tbody> <tr> <td><u>Rehabilitation Management Plan</u></td> <td><u>15</u></td> </tr> <tr> <td><u>Mine Closure Plan</u></td> <td><u>19</u></td> </tr> </tbody> </table>	<u>Environmental Management Plan</u>	<u>Relevant Condition of Consent</u>	<u>Rehabilitation Management Plan</u>	<u>15</u>	<u>Mine Closure Plan</u>	<u>19</u>	
Document	Timeframes following approval date of Continuation Project													
Environmental Management Strategy	6 months													
Spontaneous Combustion Management Plan	3 months													
<u>Environmental Management Plan</u>	<u>Relevant Condition of Consent</u>													
<u>Rehabilitation Management Plan</u>	<u>15</u>													
<u>Mine Closure Plan</u>	<u>19</u>													

Existing Condition			Proposed Condition (text marked in RED shows the proposed changes)		Reason
Visual Amenity Lighting and Landscaping Management Plan	6 months		Visual Amenity Lighting and Landscape Management Plan	22	<p>and submit to Council for review at the times listed below, or at other times as agreed by Council, following approval of the Continuation Project Modification:</p> <p>These Environmental Management Plans and strategies may also form part of the overall Site Environmental Management Plan.</p>
Bushfire Management Plan	12 months		Bushfire Management Plan	23	
Mine Closure Plan	12 months		Water Management Plan	25	
Water Management Plan	6 months		Air Quality Management Plan	29	
Rehabilitation Plan	6 months		Spontaneous Combustion Management Plan	31	
Rehabilitation Strategy	6 months		Blast Management Plan	33	
Air Quality Management Plan	3 months		Noise Management Plan	39	
Blast/Vibration Management Plan	3 months				
Noise Management Plan	3 months				
These Environmental Management Plans and strategies may also form part of the overall Site Environmental Management Plan.					
			Document	Timeframes following approval date of Continuation Project	
			Environmental Management Strategy	6 months	
			Spontaneous Combustion Management Plan	3 months	
			Visual Amenity Lighting and Landscaping Management Plan	6 months	
			Bushfire Management Plan	12 months	
			Mine Closure Plan	12 months	
			Water Management Plan	6 months	
			Rehabilitation Plan	6 months	
			Rehabilitation Strategy	6 months	
			Air Quality Management Plan	3 months	
			Blast/Vibration Management Plan	3 months	
			Noise Management Plan	3 months	
<p>(e) The Management Plans or Strategies are to be reviewed, and updated every three years or at other reasonable times as directed by Council, in consultation with the relevant government agencies. With the agreement of Council, the Applicant may prepare any revised plan or strategy without consultation with all parties under the applicable condition of this consent.</p> <p>The review should consider contemporising environmental requirements or changes in technology/operational practices. Any changes which are proposed shall be made and approved in the same manner as the initial Environmental Management Plan or Strategy. The Management Plans or Strategies shall be made publicly available within two weeks of approval by Council.</p>			<p>(e) Any amendment to the approved Environmental Management Strategy and Environmental Management Plans specified in the above table other than the Rehabilitation Management Plan is to be prepared to the satisfaction of Council.</p> <p>The Applicant is required to submit an amended Environmental Management Strategy and amended Environmental Management Plans (other than a Rehabilitation Management Plan and Mine Closure Plan) for approval within 6 months of ceasing mining activities.</p> <p>The Applicant may prepare and submit for approval an amended Environmental Management Strategy or an amended Environmental Management Plan at any time.</p>		

Existing Condition		Proposed Condition (text marked in RED shows the proposed changes)	Reason																										
	The Applicant must implement the approved management plans as approved from time to time by Council.	<p>(e) The Management Plans or Strategies are to be reviewed, and updated every three years or at other reasonable times as directed by Council, in consultation with the relevant government agencies. With the agreement of Council, the Applicant may prepare any revised plan or strategy without consultation with all parties under the applicable condition of this consent.</p> <p>The review should consider contemporising environmental requirements or changes in technology/operational practices. Any changes which are proposed shall be made and approved in the same manner as the initial Environmental Management Plan or Strategy. The Management Plans or Strategies shall be made publicly available within two weeks of approval by Council.</p> <p>The Applicant must implement the approved management plans as approved from time to time by Council.</p>																											
15	<p>Rehabilitation</p> <p>(a) The Applicant must rehabilitate the site to the satisfaction of the DRE.</p> <p>(b) Rehabilitation must be substantially consistent with the rehabilitation Objectives described in the SEE (EMM April 2016) Appendix B.</p> <p>(c) Rehabilitation must be in accordance with the Rehabilitation Plan.</p> <table border="1" data-bbox="305 743 1240 1869"> <thead> <tr> <th>Rehabilitation Feature</th> <th>Objectives</th> </tr> </thead> <tbody> <tr> <td>Mine site (as a whole of the disturbed land and water)</td> <td>Safe, stable and non-polluting, fit for purpose of the intended post-mining land uses(s). Final landforms designed to incorporate natural microrelief and natural drainage lines, which, where reasonable and feasible, further avoid straight run drainage drop structures, to integrate with surrounding landforms.</td> </tr> <tr> <td>Rehabilitation materials</td> <td>Materials (including topsoils, substrates and seeds of the disturbed areas) are recovered, appropriately managed and used effectively as resources in the rehabilitation.</td> </tr> <tr> <td>Landforms</td> <td>Final landforms sustain the intended land use for the post-mining domain(s). Final landforms are consistent with and complement the topography of the surrounding region to minimise the visual prominence of the final landforms in the post mining landscape. Final landforms incorporate design relief patterns and principles for consistency with natural drainage.</td> </tr> <tr> <td>Final voids</td> <td>Minimise to the greatest extent practicable: <ul style="list-style-type: none"> The size and depth of the final void The drainage catchment of the final void Any high wall instability risk Risk of flood interaction (flows in and out of the void) Maximise, to the greatest extent practicable, integration of the final void landform with the natural terrain features of the surrounding landscape.</td> </tr> <tr> <td>Water Quality</td> <td>Water retained on site should be fit for the intended land use(s) for the post-mining domain(s).</td> </tr> <tr> <td>Native flora and fauna habitat and corridors</td> <td>Size, locations and species of native tree lots and corridors are established to sustain biodiversity habitats. Species are selected that re-establish and complement regional and local diversity. A Native Vegetation Belt / Fauna Corridor links with the existing vegetation near Bells Mountain and Skelletar Ridge.</td> </tr> <tr> <td>Post-mining agricultural pursuits</td> <td>The land capability classification for the relevant nominated agricultural pursuit for each domain is established and self - sustaining with the aim of being achieved within 5 years of land use establishment (first planting of vegetation).</td> </tr> </tbody> </table>	Rehabilitation Feature	Objectives	Mine site (as a whole of the disturbed land and water)	Safe, stable and non-polluting, fit for purpose of the intended post-mining land uses(s). Final landforms designed to incorporate natural microrelief and natural drainage lines, which, where reasonable and feasible, further avoid straight run drainage drop structures, to integrate with surrounding landforms.	Rehabilitation materials	Materials (including topsoils, substrates and seeds of the disturbed areas) are recovered, appropriately managed and used effectively as resources in the rehabilitation.	Landforms	Final landforms sustain the intended land use for the post-mining domain(s). Final landforms are consistent with and complement the topography of the surrounding region to minimise the visual prominence of the final landforms in the post mining landscape. Final landforms incorporate design relief patterns and principles for consistency with natural drainage.	Final voids	Minimise to the greatest extent practicable: <ul style="list-style-type: none"> The size and depth of the final void The drainage catchment of the final void Any high wall instability risk Risk of flood interaction (flows in and out of the void) Maximise, to the greatest extent practicable, integration of the final void landform with the natural terrain features of the surrounding landscape.	Water Quality	Water retained on site should be fit for the intended land use(s) for the post-mining domain(s).	Native flora and fauna habitat and corridors	Size, locations and species of native tree lots and corridors are established to sustain biodiversity habitats. Species are selected that re-establish and complement regional and local diversity. A Native Vegetation Belt / Fauna Corridor links with the existing vegetation near Bells Mountain and Skelletar Ridge.	Post-mining agricultural pursuits	The land capability classification for the relevant nominated agricultural pursuit for each domain is established and self - sustaining with the aim of being achieved within 5 years of land use establishment (first planting of vegetation).	<p>Rehabilitation</p> <p>(a) <u>The Applicant shall prepare and implement a Rehabilitation Management Plan for the project, in accordance with the conditions imposed on Mining Leases ML 1304, ML 1562 and CCL 713 or any other mining lease under the Mining Act 1992 issued in respect of the development.</u></p> <p>(b) <u>The Rehabilitation Management Plan must incorporate the following rehabilitation objectives:</u></p> <p>(a) The Applicant must rehabilitate the site to the satisfaction of the DRE.</p> <p>(b) Rehabilitation must be substantially consistent with the rehabilitation Objectives described in the SEE (EMM April 2016) Appendix B.</p> <p>(c) Rehabilitation must be in accordance with the Rehabilitation Plan.</p> <table border="1" data-bbox="1314 930 2228 1869"> <thead> <tr> <th>Rehabilitation Feature</th> <th>Objectives</th> </tr> </thead> <tbody> <tr> <td>Mine site (as a whole of the disturbed land and water)</td> <td><u>The final landform is stable for the long-term and does not present a risk of environmental harm downstream/downslope of the site or a safety risk to the public/stock/native fauna.</u> Safe, stable and non-polluting, fit for purpose of the intended post-mining land uses(s). Final landforms designed to incorporate natural microrelief and natural drainage lines, which, where reasonable and feasible, further avoid straight run drainage drop structures, to integrate with surrounding landforms.</td> </tr> <tr> <td><u>Removal of mining infrastructure</u></td> <td><u>All infrastructure that is not to be used as part of the final land use is removed to ensure the site is safe and free of hazardous materials.</u> <u>There will be no residual soil contamination on site that is incompatible with the final land use(s) or that poses a threat of environmental harm or a risk to public safety.</u></td> </tr> <tr> <td>Rehabilitation materials</td> <td><u>Where available, rehabilitation materials (including topsoils, substrates, and seeds of the disturbed areas) are recovered, appropriately managed, and used effectively as resources in the rehabilitation.</u> <u>Where there is a shortage of rehabilitation materials MCC will investigate alternatives sources of growth media to enhance the success of the rehabilitation.</u> Materials (including topsoils, substrates and seeds of the disturbed areas) are recovered, appropriately managed and used effectively as resources in the rehabilitation.</td> </tr> <tr> <td>Landforms</td> <td>Final landforms sustain the intended land use for the post-mining domain(s) <u>whilst not prohibiting any beneficial reuse of the site following lease relinquishment.</u> Final landforms are consistent with and complement the topography of the surrounding region to minimise the visual prominence of the final landforms in the post mining landscape.</td> </tr> </tbody> </table>	Rehabilitation Feature	Objectives	Mine site (as a whole of the disturbed land and water)	<u>The final landform is stable for the long-term and does not present a risk of environmental harm downstream/downslope of the site or a safety risk to the public/stock/native fauna.</u> Safe, stable and non-polluting, fit for purpose of the intended post-mining land uses(s). Final landforms designed to incorporate natural microrelief and natural drainage lines, which, where reasonable and feasible, further avoid straight run drainage drop structures, to integrate with surrounding landforms.	<u>Removal of mining infrastructure</u>	<u>All infrastructure that is not to be used as part of the final land use is removed to ensure the site is safe and free of hazardous materials.</u> <u>There will be no residual soil contamination on site that is incompatible with the final land use(s) or that poses a threat of environmental harm or a risk to public safety.</u>	Rehabilitation materials	<u>Where available, rehabilitation materials (including topsoils, substrates, and seeds of the disturbed areas) are recovered, appropriately managed, and used effectively as resources in the rehabilitation.</u> <u>Where there is a shortage of rehabilitation materials MCC will investigate alternatives sources of growth media to enhance the success of the rehabilitation.</u> Materials (including topsoils, substrates and seeds of the disturbed areas) are recovered, appropriately managed and used effectively as resources in the rehabilitation.	Landforms	Final landforms sustain the intended land use for the post-mining domain(s) <u>whilst not prohibiting any beneficial reuse of the site following lease relinquishment.</u> Final landforms are consistent with and complement the topography of the surrounding region to minimise the visual prominence of the final landforms in the post mining landscape.	<p>Rehabilitation Framework</p> <p>Final Land Use</p> <p>Changes to this condition reflect the new legislative framework for rehabilitation under the <i>Mining Act 1992</i> and <i>Mining Regulation 2016</i>. MCC is required to prepare a Rehabilitation Management Plan for the mine, as stated in new standard conditions set out in the schedule to the Mining Regulation. This plan will outline the proposed modified rehabilitation for the site and final land use that is consistent with the new proposed end uses of the site.</p> <p>Condition 15 will still specify the 'rehabilitation objectives' which the Rehabilitation Management Plan must reflect.</p>
Rehabilitation Feature	Objectives																												
Mine site (as a whole of the disturbed land and water)	Safe, stable and non-polluting, fit for purpose of the intended post-mining land uses(s). Final landforms designed to incorporate natural microrelief and natural drainage lines, which, where reasonable and feasible, further avoid straight run drainage drop structures, to integrate with surrounding landforms.																												
Rehabilitation materials	Materials (including topsoils, substrates and seeds of the disturbed areas) are recovered, appropriately managed and used effectively as resources in the rehabilitation.																												
Landforms	Final landforms sustain the intended land use for the post-mining domain(s). Final landforms are consistent with and complement the topography of the surrounding region to minimise the visual prominence of the final landforms in the post mining landscape. Final landforms incorporate design relief patterns and principles for consistency with natural drainage.																												
Final voids	Minimise to the greatest extent practicable: <ul style="list-style-type: none"> The size and depth of the final void The drainage catchment of the final void Any high wall instability risk Risk of flood interaction (flows in and out of the void) Maximise, to the greatest extent practicable, integration of the final void landform with the natural terrain features of the surrounding landscape.																												
Water Quality	Water retained on site should be fit for the intended land use(s) for the post-mining domain(s).																												
Native flora and fauna habitat and corridors	Size, locations and species of native tree lots and corridors are established to sustain biodiversity habitats. Species are selected that re-establish and complement regional and local diversity. A Native Vegetation Belt / Fauna Corridor links with the existing vegetation near Bells Mountain and Skelletar Ridge.																												
Post-mining agricultural pursuits	The land capability classification for the relevant nominated agricultural pursuit for each domain is established and self - sustaining with the aim of being achieved within 5 years of land use establishment (first planting of vegetation).																												
Rehabilitation Feature	Objectives																												
Mine site (as a whole of the disturbed land and water)	<u>The final landform is stable for the long-term and does not present a risk of environmental harm downstream/downslope of the site or a safety risk to the public/stock/native fauna.</u> Safe, stable and non-polluting, fit for purpose of the intended post-mining land uses(s). Final landforms designed to incorporate natural microrelief and natural drainage lines, which, where reasonable and feasible, further avoid straight run drainage drop structures, to integrate with surrounding landforms.																												
<u>Removal of mining infrastructure</u>	<u>All infrastructure that is not to be used as part of the final land use is removed to ensure the site is safe and free of hazardous materials.</u> <u>There will be no residual soil contamination on site that is incompatible with the final land use(s) or that poses a threat of environmental harm or a risk to public safety.</u>																												
Rehabilitation materials	<u>Where available, rehabilitation materials (including topsoils, substrates, and seeds of the disturbed areas) are recovered, appropriately managed, and used effectively as resources in the rehabilitation.</u> <u>Where there is a shortage of rehabilitation materials MCC will investigate alternatives sources of growth media to enhance the success of the rehabilitation.</u> Materials (including topsoils, substrates and seeds of the disturbed areas) are recovered, appropriately managed and used effectively as resources in the rehabilitation.																												
Landforms	Final landforms sustain the intended land use for the post-mining domain(s) <u>whilst not prohibiting any beneficial reuse of the site following lease relinquishment.</u> Final landforms are consistent with and complement the topography of the surrounding region to minimise the visual prominence of the final landforms in the post mining landscape.																												

Existing Condition		Proposed Condition (text marked in RED shows the proposed changes)		Reason
	Demonstrate the long - term sustainable grazing of rehabilitated pasture is achieved, including sloping landforms.	<p>Final landforms incorporate design relief patterns and principles for consistency with natural drainage.</p> <p>Final landforms geometry will be shaped to have slopes less than or equal to 14 degrees.</p> <p>Residual waste materials stored on site (e.g. coarse rejects and other wastes) will be appropriately contained so they do not pose any hazards or constraints for the intended land use.</p>		
		<p>Final voids</p> <p>Minimise to the greatest extent practicable:</p> <ul style="list-style-type: none"> The size and depth of the final void The drainage catchment of the final void Any high wall instability risk Risk of flood interaction (flows in and out of the void) <p>Maximise, to the greatest extent practicable, integration of the final void landform with the natural terrain features of the surrounding landscape <u>whilst ensuring that it doesn't prohibit any potential beneficial reuse of the site following lease relinquishment.</u></p> <p><u>Void will not pose a risk to the public.</u></p>		
		<p>Water Quality</p> <p>Water retained on site should be fit for the intended land use(s) for the post-mining domain(s).</p> <p><u>Any water management structures retained will be suitable for the preferred final land use.</u></p> <p><u>Runoff water quality from mine site is similar to water quality of the receiving waters.</u></p>		
		<p>Native flora and fauna habitat and corridors</p> <p>Size, locations and species of native tree lots and corridors are established to sustain biodiversity habitats.</p> <p>Species are selected that re-establish and complement regional and local diversity <u>that provide habitat for a range of fauna species found in the proximity.</u></p> <p><u>A Habitat Corridor will be established across the site. The corridor will be located to achieve connectivity with established vegetation around the site whilst not prohibiting the potential beneficial reuse of the site following lease relinquishment.</u></p> <p><u>A Native Vegetation Belt / Fauna Corridor links with the existing vegetation near Bells Mountain and Skelletar Ridge.</u></p>		
		<p>Post-mining agricultural pursuits land use</p> <p>The land capability classification for the relevant nominated agricultural pursuit for each domain is established and self-sustaining with the aim of being achieved within 5 years of land use establishment (first planting of vegetation).</p> <p>Demonstrate the long - term sustainable grazing of rehabilitated pasture is achieved, including sloping landforms.</p> <p><u>Levels of ecosystem function be established that demonstrate the rehabilitation is self-sustainable.</u></p> <p><u>Revegetation is sustainable for the long-term and the landforms, soils, hydrology, and flora require no greater maintenance than the surrounding established analogue sites.</u></p> <p><u>The vegetation structure of the rehabilitation is recognisable as or is trending towards (based on ongoing monitoring data) the target vegetation community commensurate with the preferred post mining land use(s).</u></p>		
16	<p>Progressive Rehabilitation</p> <p>The Applicant must carry out all surface disturbance activities (e.g. pre-stripping in advance of mining) in a manner that, as far as is reasonably practicable, minimises potential for dust emissions and shall carry out rehabilitation of disturbed areas progressively, as soon as reasonably practicable, to the satisfaction of the Director, Environmental Sustainability, of DRE.</p>	<p>Progressive Rehabilitation</p> <p>The Applicant must carry out all surface disturbance activities (e.g. pre-stripping in advance of mining) in a manner that, as far as is reasonably practicable, minimises potential for dust emissions and shall carry out rehabilitation of disturbed areas progressively, as soon as reasonably practicable, to the satisfaction of the Director, Environmental Sustainability, of DRE in accordance with the Rehabilitation Management Plan and where applicable, the Forward Program.</p>	<p>Rehabilitation Framework</p> <p>Changes to this condition reflect the new legislative framework for rehabilitation.</p> <p>Progressive rehabilitation is to be carried out in accordance with the Rehabilitation Management Plan prepared for the mine and any approved Forward Program.</p>	

Existing Condition	Proposed Condition (text marked in RED shows the proposed changes)	Reason
<p>17</p> <p>Rehabilitation Plan</p> <p>The Applicant must prepare a Rehabilitation Plan to the satisfaction of the Director, Environmental Sustainability, DRE.</p> <p>The Rehabilitation Plan must:</p> <p>a) Be consistent with the Rehabilitation Strategy;</p> <p>b) Be approved by the Director, Environmental Sustainability prior to carrying out any surface disturbance activities, on land subject of the Modification, unless otherwise agreed by Council.</p> <p>c) Be prepared in accordance with the DRE guidelines and in consultation with DRE, OEH, Council and the Community Consultative Committee;</p> <p>d) Incorporate and be consistent with the rehabilitation objectives of the SEE (EMM April 2016) and Appendix B of the SEE, and the Rehabilitation Strategy required by this consent;</p> <p>e) Integrate and build on, to the maximum extent practicable, the other management plans required under this consent;</p> <p>f) Address all aspects of mine closure and rehabilitation, including post mining land use domain, rehabilitation objectives, completion criteria and rehabilitation monitoring and management, and;</p> <p>g) Include the location of the proposed Muswellbrook Bypass on relevant plans by way of including the Bypass zoning boundary on the plans.</p>	<p>Deleted</p>	<p>Rehabilitation Framework</p> <p>Final Land Use</p> <p>Condition 17 is deleted so it is consistent with current rehabilitation regulation.</p> <p>'Rehabilitation Plans' have been replaced with the requirement that mining operators prepare Rehabilitation Management Plans. This is reflected in the revised Condition 15. The matters which Rehabilitation Management Plans must address are specified in the Form and Way guidelines approved by the Secretary. The particulars of Condition 17 are, accordingly, redundant.</p>
<p>18</p> <p>Rehabilitation Strategy</p> <p>The Applicant must prepare a Rehabilitation Strategy for the Muswellbrook Coal Mine site to the satisfaction of Council. This strategy must:</p> <p>(i) Provide for the establishment of habitat corridors as part of the final rehabilitated landform to replace areas of forest and woodland vegetation that are to be removed under the proposed mine plan. The strategy must outline the vegetation species selected for the corridor, the width and length of the corridor and how this corridor's specifications will facilitate the movement of the identified species planned for its use;</p> <p>(ii) ensure that any vegetated areas cleared for any future construction purposes and not utilised in the Mining Operations are restored at least to a condition as agreed to by consultation with relevant stakeholders;</p> <p>(iii) develop a plan for vegetation rehabilitation involving re-establishment of native species, especially groundcover species, in order to prevent erosion and future degeneration of the communities;</p> <p>(iv) ensure that all rehabilitated slopes are effectively and appropriately stabilised. Consider the use of native vegetation on the void slopes and pasture grasses on flatter areas to improve land use outcomes and minimise maintenance;</p> <p>(v) provide that a minimum of 23ha shall be re-forested utilising the following species that shall be sourced from local seed provinces; Grey-box, Bulloak, Narrowed-leaved Iron Bark and Grey Gum or an equivalent area of 23ha comprising of similar flora structural and floristic characteristics in green-offsets;</p> <p>(vi) outline and describe a stormwater drainage design for the mine site;</p> <p>(vii) explain the timeframe of rehabilitation, both in terms of topsoil remediation and for the lifespan of erosion and sediment control structures on the site;</p> <p>(viii) Where possible and if available, suitable timber cleared from the mine site is to be used to create stag trees for wildlife habitat in the rehabilitated areas, and;</p> <p>(ix) Include the location of the proposed Muswellbrook Bypass on relevant plans by way of including the Bypass zoning boundary on the plans.</p> <p>The Applicant must implement the approved Strategy as approved from time to time by Council.</p>	<p>Deleted</p>	<p>Rehabilitation Framework</p> <p>Environmentally and Socially Responsible Operator</p> <p>Condition 18 is deleted so that the consent is consistent with current rehabilitation regulation. Amendments to mining leases require rehabilitation to be carried out in accordance with certain plans and programs approved by or submitted to the NSW Resources Regulator. A Rehabilitation Strategy is not one of the prescribed documents and will conflict with current regulation.</p> <p>Revisions to the consent are also needed to ensure compliance.</p>
<p>19</p> <p>Closure Plan</p> <p>The Applicant must prepare a Mine Closure Plan for the development to the satisfaction of Council, and carry out the development in accordance with this plan. The plan must:</p>	<p>Closure Plan</p>	<p>Rehabilitation Framework</p> <p>Final Land Use</p>

Existing Condition	Proposed Condition (text marked in RED shows the proposed changes)	Reason
<ul style="list-style-type: none"> □ Be prepared in consultation with DRE and DPI Water; □ Provide a description of the known reasonable history of mining operations conducted within the consent boundary. □ Provide detailed plans showing final landform and drainage detail; □ Define the objectives and criteria for mine closure, with the exception of rehabilitation objectives and criteria, which are defined in the Rehabilitation Plan; □ Provide a chart outlining the indicative timing and sequence of the closure project; □ Outline the process to make changes to management plans during and following closure and where the closure plan will supersede management plan requirements; □ Describe measures that would be implemented to minimise or manage the ongoing environmental effects of the development; □ Describe how the performance of these measures would be monitored over time; □ Describe the changes to the monitoring regime of the development following the cessation of mining; and □ Include the location of the proposed Muswellbrook Bypass on relevant plans by way of including the Bypass zoning boundary on the plans. 	<p>The Applicant must prepare a Mine Closure Plan for the development to the satisfaction of Council and once approved by Council, implement the plan. carry out the development in accordance with this plan. The Mine Closure Plan should must:</p> <ul style="list-style-type: none"> □ Be prepared in consultation with DRE and DPI Water; □ Provide a description of the known reasonable history of mining operations conducted within the consent boundary. □ Provide detailed plans showing final landform and drainage detail; □ Define the objectives and criteria for mine closure, with the exception of rehabilitation objectives and criteria, which are defined in the Rehabilitation Plan; □ Provide a chart outlining the indicative timing and sequence of the closure project; □ Outline the process to make changes to management plans during and following closure and where the closure plan will supersede management plan requirements; □ Describe measures that would be implemented to minimise or manage the ongoing environmental effects of the development; □ Describe how the performance of these measures would be monitored over time; □ Describe the changes to the monitoring regime of the development following the cessation of mining; and □ Include the location of the proposed Muswellbrook Bypass on relevant plans by way of including the Bypass zoning boundary on the plans. <p>(a) Outline measures to:</p> <ul style="list-style-type: none"> (i) Actively manage site closure to minimise adverse impacts for workers, contracting companies and the community; and (ii) Assist workers where possible to maximise their future career options. <p>(b) Consider the report 'Identifying measures of success for a global best-practice thermal coal mine and thermal coal-fires power station closure' (UniSA, 2020), specifically the objectives, targets, indicators and measures outlined in Appendix A.</p> <p>(c) Include a tabulated description of objectives, targets, indicators and measures in a similar format to those presented in Appendix A of UniSA (2020) but tailored to the MCM.</p> <p>(d) Include a final land use strategy which investigates potential post-mining beneficial land uses for the site (including the final voids), that:</p> <ul style="list-style-type: none"> (i) reflect local and regional strategic planning instruments or policies; (ii) contribute to a sustainable future for the local community; and (iii) utilise existing mining infrastructure, where practicable. <p>(e) Include a Mine Closure Stakeholder Engagement Strategy.</p> <p>(f) Include an Approvals and Tenements Relinquishment Strategy.</p>	<p>Environmentally and Socially Responsible Operator</p> <p>Changes to this condition are required so that any Mine Closure Plan reflects updated final land uses for the site and does not overlap with the requirements of the Rehabilitation Management Plan.</p> <p>Revisions to the consent are also needed to ensure compliance.</p>
<p>20</p> <p>Restriction as to User – Vegetation Offset Area</p> <p>A restriction as to user must be registered on the title of affected land for the purpose of creating a Vegetation Offset Area as indicated on Figure 1 'Proposed Offset Area' prepared by Hansen Bailey dated 12/10/10 Cad file: 06836A.dwg. Muswellbrook Council must be nominated as the sole authority empowered to vary or modify the restriction.</p> <p>The terms of the restriction must include the following matters:</p> <ul style="list-style-type: none"> (a) Restriction against clearing. (b) Restriction against use of land in any way inconsistent with the maintenance of the EEC on the land. (c) Restrictions on livestock grazing on the land. (d) Obligation to fence the land. (e) Obligation to control noxious weeds and pests on the land. 	<p>Restriction as to User – Vegetation Offset Area</p> <p>A restriction as to user must be registered on the title of affected land for the purpose of creating a Vegetation Offset Area as indicated on Figure 1 'Proposed Offset Area' prepared by Hansen Bailey dated 12/10/10 Cad file: 06836A.dwg. Muswellbrook Council must be nominated as the sole authority empowered to vary or modify the restriction.</p> <p>The terms of the restriction must include the following matters:</p> <ul style="list-style-type: none"> (a) Restriction against clearing. (b) Restriction against use of land in any way inconsistent with the maintenance of the EEC on the land. (c) Restrictions on livestock grazing on the land. (d) Obligation to fence the land. (e) Obligation to control noxious weeds and pests on the land. 	<p>Administrative</p> <p>Corrected typographical error to refer to 'covenant'.</p>

Existing Condition	Proposed Condition (text marked in RED shows the proposed changes)	Reason
	A caveat acceptable to Muswellbrook Council, must be prepared and registered on the title of affected land, by Muswellbrook Coal Company at no cost to Council by 31 December 2018.	
21	<p>Archaeology and Cultural Heritage Management</p> <p>Should the Applicant uncover artefacts during the construction/ development process, a Section 90 Aboriginal Heritage Impact Permit under the National Parks and Wildlife Act 1974 must be obtained from the Office of Environment and Heritage for any destruction, damage or harm (including removal) of any Aboriginal artefact or heritage site.</p>	<p>Archaeology and Cultural Heritage Management</p> <p>Should the Applicant uncover artefacts during the construction/ development process, a Section 90 Aboriginal Heritage Impact Permit under the National Parks and Wildlife Act 1974 must be obtained from the Office of Environment and <u>NSW</u> Heritage for any destruction, damage or harm (including removal) of any Aboriginal artefact or heritage site.</p>
22	<p>Visual Amenity, Lighting and Landscaping</p> <p>The Applicant must address visual amenity and landscaping issues for the development area to address relevant visual and landscaping issues associated with the development.</p> <ul style="list-style-type: none"> implement all reasonable and feasible measures to mitigate visual and offsite lighting impacts of the project; and Install new external lighting associated with the development in accordance with relevant Australian Standards including Australian Standards AS4282 (INT) 1997 – Control of Obtrusive Effects of outdoor lighting. <p>The Applicant must prepare a Visual Amenity, Lighting and Landscaping Management Plan for the development to the satisfaction of Council, and carry out the development in accordance with this plan. The Plan must:</p> <ul style="list-style-type: none"> Identify the privately - owned residences that are likely to experience significant visual impact during the remainder of the project, and Describe (in general terms) any additional mitigation measures that are planned to be implemented to reduce the visibility of the mine from these properties. Describe (in general terms) the mitigation measures that are planned to minimise the visibility of fixed lighting and mobile lighting where possible from the mine on these properties. <p>Within 3 months of Council approving the Plan, the Applicant must advise all owners of privately-owned residences identified in the Plan as receiving significant visual impact, that they are entitled to additional appropriate mitigation measures to reduce the visibility of the mine from their properties.</p> <p>Upon receiving a written request from an owner of a privately- owned residence identified in the Plan, or upon receiving a reasonable direction from Council regarding any other privately – owned residence, the Applicant must implement additional visual impact mitigation measures (such as landscaping treatments or vegetation screens) in consultation with the landowner, and to the satisfaction of Council.</p> <p>These mitigation measures must be reasonable and feasible, and must be implemented in a reasonable time frame, to the satisfaction of Council.</p> <p>If within 3 months of receiving this request from the owner, the Applicant and the owner cannot agree on the measures to be implemented, or there is a dispute about the implementation of these measures, then either party may refer the matter to Council for resolution.</p> <p>Note: Except in exceptional circumstances, Council will not require additional visual impact mitigation to be undertaken for residences that are more than 3 kilometres from the mining pit and face and unrehabilitated overburden emplacements.</p>	<p>Visual Amenity, Lighting and Landscaping</p> <p>The Applicant must address visual amenity and landscaping issues for the development area to address relevant visual and landscaping issues associated with the development.</p> <ul style="list-style-type: none"> implement all reasonable and feasible measures to mitigate visual and offsite lighting impacts of the project; and Install new external lighting associated with the development in accordance with relevant Australian Standards including Australian Standards AS4282 (INT) 1997 – Control of Obtrusive Effects of outdoor lighting. <p>The Applicant must <u>implement the Visual Amenity Lighting and Landscape Management Plan, V5, dated October 2020 or any amended plan approved by Council. prepare a Visual Amenity, Lighting and Landscaping Management Plan for the development to the satisfaction of Council, and carry out the development in accordance with this plan. Any amended plan must be prepared to the satisfaction of Council.</u> The Plan must:</p> <ul style="list-style-type: none"> Identify the privately - owned residences that are likely to experience significant visual impact during the remainder of the project, and Describe (in general terms) any additional mitigation measures that are planned to be implemented to reduce the visibility of the mine from these properties. Describe (in general terms) the mitigation measures that are planned to minimise the visibility of fixed lighting and mobile lighting where possible from the mine on these properties. <p>Within 3 months of Council approving the Plan, the Applicant must advise all owners of privately-owned residences identified in the Plan as receiving significant visual impact, that they are entitled to additional appropriate mitigation measures to reduce the visibility of the mine from their properties.</p> <p>Upon receiving a written request from an owner of a privately- owned residence identified in the Plan, or upon receiving a reasonable direction from Council regarding any other privately – owned residence, the Applicant must implement additional visual impact mitigation measures (such as landscaping treatments or vegetation screens) in consultation with the landowner, and to the satisfaction of Council.</p> <p>These mitigation measures must be reasonable and feasible, and must be implemented in a reasonable time frame, to the satisfaction of Council.</p> <p>If within 3 months of receiving this request from the owner, the Applicant and the owner cannot agree on the measures to be implemented, or there is a dispute about the implementation of these measures, then either party may refer the matter to Council for resolution.</p> <p>Note: Except in exceptional circumstances, Council will not require additional visual impact mitigation to be undertaken for residences that are more than 3 kilometres from the mining pit and face and unrehabilitated overburden emplacements.</p>
23	<p>Bushfire Management Plan and other Fire Controls</p> <p>The Applicant must:</p> <p>(a) make available to the Rural Fire Service and emergency services when required, personnel, water carts and trucks in cases of bushfire on the mine site; and</p> <p>(b) prepare a Bushfire Management Plan for the development area to the satisfaction of Council and the Rural Fire Service.</p>	<p>Bushfire Management Plan and other Fire Controls</p> <p>The Applicant must:</p> <p>(a) make available to the Rural Fire Service and emergency services when required, personnel, water carts and trucks in cases of bushfire on the mine site. <u>Personnel, water carts and trucks do not need to be provided by the Applicant following the cessation of mining;</u> and</p>

Existing Condition		Proposed Condition (text marked in RED shows the proposed changes)	Reason
		(b) implement the Bushfire Management Plan, V5 dated October 2020 or any approved amended plan. Any amended plan is to be prepared to the satisfaction of Council. <u>prepare a Bushfire Management Plan for the development area to the satisfaction of Council</u>	MCC cannot guarantee these provisions until the completion of rehabilitation.
Water Management and Monitoring			
24	<p>Discharge</p> <p>Unless an EPL or the EPA authorises otherwise, the Applicant must ensure that all surface water discharges from the site comply with the:</p> <p>(a) Discharge limits (both volume and quality) set for the development in the EPL and;</p> <p>(b) Relevant provisions of the POEO Act or Protection of the Environment Operations (Hunter River Salinity Trading Scheme) Regulation 2002.</p>	Deleted	<p>Administrative</p> <p>This condition has been deleted as MCC's environment protection licence (EPL) does not include discharge limits or a licensed discharge point.</p>
25	<p>Water Management Plan</p> <p>The Applicant must prepare a Water Management Plan for the development to the satisfaction of Council, and carry out the development in accordance with this plan. The plan must be prepared in consultation with DPI Water and submitted to Council for approval and include:</p> <p>(a) A Site Water Balance that:</p> <p>(i) Includes details of:</p> <p>A. Sources and security of water supply, including contingency planning for future reporting periods</p> <p>B. Water use and management on site;</p> <p>C. Any offsite water transfers and discharges;</p> <p>D. Reporting procedures, including the preparation of a site water balance for each AEMR reporting year; and</p> <p>(ii) Investigates and implements all reasonable and feasible measures to minimise water use on site;</p> <p>(b) Surface Water Management Plan, that includes:</p> <p>(i) Detailed baseline (2016) data on surface water quality in the watercourses that could potentially be affected by the development</p> <p>(ii) a description of the water management system on site, including the:</p> <p>A. Clean water diversion systems;</p> <p>B. Erosion and sediment controls (mine water system); and</p> <p>C. Mine water management systems including water infusion for Spontaneous Combustion.</p> <p>(iii) plans, including design objectives and performance criteria, for:</p> <p>A. design and management of final voids;</p> <p>B. design and management for the emplacement of coal reject materials;</p> <p>C. reinstatement of drainage lines on the rehabilitated areas of the site; and</p> <p>D. control of any potential water pollution from the rehabilitated areas of the site;</p> <p>(iv) performance criteria for the following, including trigger levels for investigating any potential adverse impacts associated with the development:</p> <p>A. surface water quality of Muscle Creek and Sandy Creek catchments; and</p> <p>(v) a program to monitor and report on:</p> <p>A. the effectiveness of the mine water management system; and</p> <p>B. surface water quality, in Muscle Creeks and Sandy Creeks, potentially affected by the development;</p>	<p>Water Management Plan</p> <p>The Applicant must prepare a Water Management Plan for the development to the satisfaction of Council, and carry out the development in accordance with this plan. The plan must be prepared in consultation with DPI Water and submitted to Council for approval and include:</p> <p><u>The Applicant is to implement the Water Management Plan, V6 dated October 2018 or any amended plan approved by Council. Any amended plan must be prepared in consultation with NRAR and to the satisfaction of Council. Any amended plan must include the following matters:</u></p> <p>(a) A Site Water Balance that:</p> <p>(i) Includes details of:</p> <p>A. Sources and security of water supply, including contingency planning for future reporting periods</p> <p>B. Water use and management on site;</p> <p>C. Any offsite water transfers and discharges;</p> <p>D. Reporting procedures, including the preparation of a site water balance for each AEMR reporting year; and</p> <p>(ii) Investigates and implements all reasonable and feasible measures to minimise water use on site;</p> <p>(b) Surface Water Management Plan, that includes:</p> <p>(i) Detailed baseline (2016) data on surface water quality in the watercourses that could potentially be affected by the development</p> <p>(ii) a description of the water management system on site, including the:</p> <p>A. Clean water diversion systems;</p> <p>B. Erosion and sediment controls (mine water system); and</p> <p>C. Mine water management systems including water infusion for Spontaneous Combustion.</p> <p>(iii) plans, including design objectives and performance criteria, for:</p> <p>A. design and management of final voids;</p> <p>B. design and management for the emplacement of coal reject materials;</p> <p>C. reinstatement of drainage lines on the rehabilitated areas of the site; and</p> <p>D. control of any potential water pollution from the rehabilitated areas of the site;</p> <p>(iv) performance criteria for the following, including trigger levels for investigating any potential adverse impacts associated with the development:</p> <p>A. surface water quality of Muscle Creek and Sandy Creek catchments; and</p> <p>(v) a program to monitor and report on:</p> <p>A. the effectiveness of the mine water management system; and</p>	<p>Administrative</p> <p>The revised condition refers to the currently approved Water Management Plan.</p>

Existing Condition	Proposed Condition (text marked in RED shows the proposed changes)	Reason
<p>(vi) a plan to respond to any exceedances of the performance criteria, and mitigate and/or offset any adverse surface water impacts of the development; and</p> <p>(c) Groundwater Management Plan, which includes:</p> <p>(i) baseline data on groundwater levels, and quality, of privately-owned registered groundwater bores within 2.5km of the development, that could be affected by the development;</p> <p>(ii) groundwater assessment criteria, including trigger levels for investigating any potentially adverse groundwater impacts;</p> <p>(iii) a program to monitor and report on:</p> <p>A. ground water inflows to the open cut pits;</p> <p>B. the impacts of the development on:</p> <p>1) regional and local (including alluvial) aquifers;</p> <p>2) groundwater supply of privately registered groundwater bores;</p> <p>C. a plan to respond to any exceedances of the groundwater assessment criteria; and</p> <p>D. a program to validate the groundwater model for the development, including an independent review of the model with every Independent Environmental Audit, and compare the monitoring results with modelled predictions.</p>	<p>B. surface water quality, in Muscle Creeks and Sandy Creeks, potentially affected by the development;</p> <p>(vi) a plan to respond to any exceedances of the performance criteria, and mitigate and/or offset any adverse surface water impacts of the development; and</p> <p>(c) Groundwater Management Plan, which includes:</p> <p>(i) baseline data on groundwater levels, and quality, of privately-owned registered groundwater bores within 2.5km of the development, that could be affected by the development;</p> <p>(ii) groundwater assessment criteria, including trigger levels for investigating any potentially adverse groundwater impacts;</p> <p>(iii) a program to monitor and report on:</p> <p>A. ground water inflows to the open cut pits;</p> <p>B. the impacts of the development on:</p> <p>1) regional and local (including alluvial) aquifers;</p> <p>2) groundwater supply of privately registered groundwater bores;</p> <p>C. a plan to respond to any exceedances of the groundwater assessment criteria; and</p> <p>D. a program to validate the groundwater model for the development, including an independent review of the model with every Independent Environmental Audit, and compare the monitoring results with modelled predictions.</p>	
Air Quality, Blast, Noise Management and Monitoring		
<p>29</p> <p>Air Quality – Management</p> <p>The must prepare a detailed Air Quality Management Plan for the development in consultation with the EPA, to the satisfaction of Council, and carry out the development in accordance with this plan.</p> <p>This plan must include, but not be limited to the following matters:</p> <p>(i) the identification of properties which may be affected by dust generated by the mine in excess of the criteria detailed above;</p> <p>(ii) specifications of the procedures for the dust monitoring program and atmospheric gas assessment for the management of the mine and for the purpose of undertaking independent investigations;</p> <p>(iii) outline the procedure to notify property owners and occupiers as identified by monitoring as likely to be affected by dust generated by the mine in excess of the criteria detailed above;</p> <p>(iv) mitigation measures to be employed to minimise dust and/or atmospheric gas emissions during the operation phase (this plan can refer to the Spontaneous Combustion Management Plan for atmospheric gas). This should include proactive/predictive and reactive mitigation measures to be employed to minimise dust and/or atmospheric gas emissions including visible dust emanating from the site;</p> <p>(v) the Applicant must ensure the prompt and effective rehabilitation of all disturbed areas of the application area following the completion of mining and associated activities in that area to minimise the generation of wind-blown dust;</p> <p>(vi) the use of the existing protocol for handling dust and atmospheric gas complaints that include recording, reporting and acting on complaints;</p> <p>(vii) details of locations and frequency of existing monitoring;</p> <p>(viii) as far as practicable details of the interrelationships of this plan with the Air Quality Management Plans with other mining operations in the vicinity; and</p> <p>(ix) unsealed roads are to be managed to minimise the generation of fugitive dust.</p>	<p>Air Quality – Management</p> <p>The Applicant is to implement the Air Quality Management Plan, V5 dated October 2020 or any amended plan approved by Council. Any amended plan must be prepared in consultation with the EPA and to the satisfaction of Council. must prepare a detailed Air Quality Management Plan for the development in consultation with the EPA, to the satisfaction of Council, and carry out the development in accordance with this plan.</p> <p>This plan must include, but not be limited to the following matters:</p> <p>(i) the identification of properties which may be affected by dust generated by the mine in excess of the criteria detailed above;</p> <p>(ii) specifications of the procedures for the dust monitoring program and atmospheric gas assessment for the management of the mine and for the purpose of undertaking independent investigations;</p> <p>(iii) outline the procedure to notify property owners and occupiers as identified by monitoring as likely to be affected by dust generated by the mine in excess of the criteria detailed above;</p> <p>(iv) mitigation measures to be employed to minimise dust and/or atmospheric gas emissions during the operation phase (this plan can refer to the Spontaneous Combustion Management Plan for atmospheric gas). This should include proactive/predictive and reactive mitigation measures to be employed to minimise dust and/or atmospheric gas emissions including visible dust emanating from the site;</p> <p>(v) the Applicant must ensure the prompt and effective rehabilitation of all disturbed areas of the application area following the completion of mining and associated activities in that area to minimise the generation of wind-blown dust;</p> <p>(vi) the use of the existing protocol for handling dust and atmospheric gas complaints that include recording, reporting and acting on complaints;</p> <p>(vii) details of locations and frequency of existing monitoring;</p> <p>(viii) as far as practicable details of the interrelationships of this plan with the Air Quality Management Plans with other mining operations in the vicinity; and</p> <p>(ix) unsealed roads are to be managed to minimise the generation of fugitive dust.</p>	<p>Administrative</p> <p>The revised condition refers to the currently approved Air Quality Management Plan.</p>

Existing Condition	Proposed Condition (text marked in RED shows the proposed changes)	Reason	
<p>30</p>	<p>Air Quality – Monitoring – Dust</p> <p>(a) The Applicant must:</p> <p>(i) Operate in real time air quality monitors representative of residence on privately owned land to the north and south of the development. The locations of all the monitors must be identified in the Air Quality Management Plan as approved by Council.</p> <p>(ii) monitor and report against criteria in Tables 1 and 2 for the monitors located to be representative of nearby residences on privately owned land in accordance with the Air Quality Management Plan. The results of this monitoring and reporting are to be incorporated into the AEMR;</p> <p>(iii) include in the AEMR a summary of the performance of the control measures and of the monitoring system against the criteria outlined in Tables 1 and 2. The assessment locations and the methodology of assessment is to be identified in the Air Quality Management Plan, and;</p> <p>(b) In the event that a landowner or occupier of a residence on privately owned land considers that dust from the development at his/her dwelling is in excess of the criteria detailed in Tables 1 or 2 of the consent, and Council is satisfied after adequate examination of the relevant facts, that an investigation is required, the Applicant must upon the receipt of a written request from Council:</p> <p>(i) consult with the landowner or occupant affected to determine his/her concerns;</p> <p>(ii) commission an independent dust impact assessment at the privately owned residence, and provide a report to Council. Where elevated levels of dust in excess of the criteria in Tables 1 and 2 are identified, and the independent expert is of the opinion that the Applicant's activities have materially contributed to the exceedance, the independent dust assessment is to include suggested remedial actions;</p> <p>(iii) modify the mining activity or take other steps in accordance with the Air Quality Management Plan, or independent dust assessment, if exceedances are demonstrated by the independent investigations, engaged by the Applicant, to materially result in part from the development related activity. This may include:</p> <p>A. introduction of additional controls, either of dust generation from individual sources on the site or on site operations, or modify operations to attempt to ensure that the dust criteria are achieved; and/or;</p> <p>B. negotiate, as far as reasonably practicable, an agreement with the landowner or provide such forms of benefit or amelioration of the impact of dust as may be agreed between the parties as providing acceptable compensation for the dust levels experienced.</p> <p>(iv) conduct follow up investigation(s) to the satisfaction of the Council, where necessary.</p> <p>Note: Appendix E of the determination outlines the process for mitigation measures</p> <p>(c) If the independent dust investigations in sub-clause (b) above confirm that dust levels from the Project alone are in excess of the relevant criteria detailed in Tables 1 and 2 of the consent, and if the measures in sub-clause (b)(iii) (1) above do not reduce the dust levels, from the Project alone, below the criteria detailed in the consent, or if agreement in accordance with sub-clause (b)(iii) (2) above cannot be reached, the Applicant must at the written request of the owner acquire the relevant property. Acquisition shall be generally in accordance with the procedures set out in Condition 49 of this consent.</p> <p>(d) Further independent investigation(s) shall cease if Council is satisfied that the relevant criteria detailed in the consent are not being exceeded and are unlikely to be exceeded in the future.</p> <p>(e) This condition applies until the completion of bulk shaping in the rehabilitation phase of the development.</p>	<p>Air Quality – Monitoring – Dust</p> <p>(a) The Applicant must:</p> <p>(i) Operate in real time air quality monitors representative of residence on privately owned land to the north and south of the development. The locations of all the monitors must be identified in the Air Quality Management Plan as approved by Council.</p> <p>(ii) monitor and report against criteria in Tables 1 and 2 for the monitors located to be representative of nearby residences on privately owned land in accordance with the Air Quality Management Plan. The results of this monitoring and reporting are to be incorporated into the AEMR;</p> <p>(iii) include in the AEMR a summary of the performance of the control measures and of the monitoring system against the criteria outlined in Tables 1 and 2. The assessment locations and the methodology of assessment is to be identified in the Air Quality Management Plan, and;</p> <p>(b) In the event that a landowner or occupier of a residence on privately owned land considers that dust from the development at his/her dwelling is in excess of the criteria detailed in Tables 1 or 2 of the consent, and Council is satisfied after adequate examination of the relevant facts, that an investigation is required, the Applicant must upon the receipt of a written request from Council:</p> <p>(i) consult with the landowner or occupant affected to determine his/her concerns;</p> <p>(ii) commission an independent dust impact assessment at the privately owned residence, and provide a report to Council. Where elevated levels of dust in excess of the criteria in Tables 1 and 2 are identified, and the independent expert is of the opinion that the Applicant's activities have materially contributed to the exceedance, the independent dust assessment is to include suggested remedial actions;</p> <p>(iii) modify the mining activity or take other steps in accordance with the Air Quality Management Plan, or independent dust assessment, if exceedances are demonstrated by the independent investigations, engaged by the Applicant, to materially result in part from the development related activity. This may include:</p> <p>A. introduction of additional controls, either of dust generation from individual sources on the site or on site operations, or modify operations to attempt to ensure that the dust criteria are achieved; and/or;</p> <p>B. negotiate, as far as reasonably practicable, an agreement with the landowner or provide such forms of benefit or amelioration of the impact of dust as may be agreed between the parties as providing acceptable compensation for the dust levels experienced.</p> <p>(iv) conduct follow up investigation(s) to the satisfaction of the Council, where necessary.</p> <p>Note: Appendix E of the determination outlines the process for mitigation measures</p> <p>(c) If the independent dust investigations in sub-clause (b) above confirm that dust levels from the Project alone are in excess of the relevant criteria detailed in Tables 1 and 2 of the consent, and if the measures in sub-clause (b)(iii) (1) above do not reduce the dust levels, from the Project alone, below the criteria detailed in the consent, or if agreement in accordance with sub-clause (b)(iii) (2) above cannot be reached, the Applicant must at the written request of the owner acquire the relevant property. Acquisition shall be generally in accordance with the procedures set out in Condition 49 of this consent.</p> <p>(d) Further independent investigation(s) shall cease if Council is satisfied that the relevant criteria detailed in the consent are not being exceeded and are unlikely to be exceeded in the future.</p>	<p>Change in Operations</p> <p>Changes to this condition reflects the mine's transition from the operational mining phase to the rehabilitation phase. The condition makes clear that monitoring and/or other obligations with respect to dust are only required up until a specific point in the rehabilitation phase, and are not necessary afterwards.</p>
<p>30A</p>	<p>Air Quality – Monitoring – Gas</p> <p>(a) The Applicant must:</p> <p>(i) Operate gas assessment equipment representative of non-mine owned residents to the north and south of the development. The locations of the atmospheric gas assessment equipment must be identified in the Air Quality Management Plan.</p> <p>(ii) Include in the AEMR a summary of the performance of the control measures and of the monitoring system, Assess the Atmospheric Gas Content against the requirements outlined in Table</p>	<p>Air Quality – Monitoring – Gas</p> <p>(a) The Applicant must:</p> <p>(i) Operate gas assessment equipment representative of non-mine owned residents to the north and south of the development. The locations of the atmospheric gas assessment equipment must be identified in the Air Quality Management Plan.</p>	<p>Change in Operations</p> <p>Changes to this condition reflects the mine's transition from the operational mining phase to the rehabilitation phase. The condition makes clear that monitoring and/or other obligations with respect to gas management are only required up until a specific point in the</p>

Existing Condition	Proposed Condition (text marked in RED shows the proposed changes)	Reason	
	<p>3. The assessment locations and the methodology of assessment is to be identified in the Air Quality Management Plan, and;</p> <p>(iii) Should the results of the Atmospheric Gas Content criterion outlined in Table 3 be exceeded, the Applicant is to immediately advise Council.</p> <p>(b) In the event that a landowner or occupier of a residence on privately owned land considers that atmospheric gas from the development at his/her dwelling is in excess of the criteria detailed in Table 3 of the consent, and Council is satisfied that an investigation is warranted, the Applicant must upon the receipt of a written request from Council:</p> <p>(i) consult with the landowner or occupant affected to determine his/her concerns;</p> <p>(ii) commission a relevant expert, approved by Council, to conduct an independent atmospheric gas impact assessment at the residence, and provide a report to Council. Where levels of atmospheric gas in excess of the criteria in Table 3 are identified, and the independent expert is of the opinion that the Applicant's activities have caused the exceedances, the Applicant must:</p> <p>A. modify the mining activity or take such other steps as are reasonably necessary to ensure that the Applicant operates so as not to cause or partly cause the criteria identified in Table 3 to be exceeded at the residence.</p> <p>B. conduct follow up investigation(s) to the satisfaction of the Council, where necessary.</p>	<p>rehabilitation phase, and are not necessary afterwards.</p>	
31	<p>Air Quality – Spontaneous Combustion</p> <p>The Applicant must incorporate current best practice approaches to minimizing the occurrence of spontaneous combustion and managing any spontaneous combustion that occurs within the development area.</p> <p>The Applicant must prepare a detailed Spontaneous Combustion Management Plan to the satisfaction of Council, and carry out the development in accordance with this plan. The plan must:</p> <p>(a) Be endorsed by a suitably qualified expert/s whose appointment/s have been approved by Council;</p> <p>(b) Describe what measures are to be undertaken to minimize the occurrence of spontaneous combustion. Should spontaneous combustion occur, describe what methods would be employed to extinguish, or reduce the size and duration of the outbreak. This is to include details of the times, areas, locations etc. that will trigger actions, and criteria provided to indicate success or further works being required.</p> <p>The plan must break these activities up to be specific to the following areas:</p> <p>(i) The highwall and existing known U/G mine workings in the No.1 pit,</p> <p>(ii) The overburden/interburden removal and coal removal in the No.1 pit,</p> <p>(iii) Active and recent emplacement areas within the No.1 pit,</p> <p>(iv) The No.2 pit,</p> <p>(v) Coal emplacement and storage areas,</p> <p>(vi) Elsewhere within the mine disturbance area.</p> <p>(c) Define what constitutes a spontaneous combustion incident, and includes a protocol for notifying Council and any other relevant stakeholders of spontaneous combustion incidents;</p> <p>(d) Define what will trigger a review of the Spontaneous Combustion Management Plan. This is to include a Trigger Action Response Plan resulting from a spontaneous combustion incident that has as one of its outcomes a review of this Management Plan.</p>	<p>Air Quality – Spontaneous Combustion</p> <p>The Applicant must incorporate current best practice approaches to minimizing the occurrence of spontaneous combustion and managing any spontaneous combustion that occurs within the development area.</p> <p>The Applicant must <u>implement the Spontaneous Combustion Management Plan, V5 dated October 2020 or any amended plan approved by Council during prepare a detailed Spontaneous Combustion Management Plan to the satisfaction of Council, and carry out the mining and rehabilitation. Any amended plan is to be prepared to the satisfaction of Council and must: development in accordance with this plan. The plan must:</u></p> <p>(a) Be endorsed by a suitably qualified expert/s whose appointment/s have been approved by Council;</p> <p>(b)(a) Describe what measures are to be undertaken to minimize the occurrence of spontaneous combustion. Should spontaneous combustion occur, describe what methods would be employed to extinguish, or reduce the size and duration of the outbreak. This is to include details of the times, areas, locations etc. that will trigger actions, and criteria provided to indicate success or further works being required.</p> <p>The plan must break these activities up to be specific to the following areas:</p> <p>(i) The highwall and existing known U/G mine workings in the No.1 pit,</p> <p>(ii)(i) Pit 1 <u>Pit 1</u> The overburden/interburden removal and coal removal in the No.1 pit,</p> <p>(iii) Active and recent emplacement areas within the No.1 pit,</p> <p>(iv)(ii) The No.2 pit <u>Pit 2,</u></p> <p>(v)(iii) Coal emplacement and storage areas,</p> <p>(vi)(iv) Elsewhere within the mine disturbance area.</p> <p>(e)(b) Define what constitutes a spontaneous combustion incident, and includes a protocol for notifying Council and any other relevant stakeholders of spontaneous combustion incidents;</p>	<p>Changes in Operations</p> <p>The revised condition refers to the currently approved Spontaneous Combustion Management Plan and confirms its application throughout the mining and rehabilitation phase of the mine. Further changes are suggested regarding the content and approval of the plan.</p>

Existing Condition	Proposed Condition (text marked in RED shows the proposed changes)	Reason
	<p>(d)(c) Define what will trigger a review of the Spontaneous Combustion Management Plan. This is to include a Trigger Action Response Plan resulting from a spontaneous combustion incident that has as one of its outcomes a review of this Management Plan.</p>	
Blast Management and Monitoring		
<p>33 Blasting/ Vibration Management</p> <p>(a) The Applicant must prepare and implement an updated Blast Management Plan, in consultation with EPA and DRE, to the satisfaction of Council. This plan must include, but not be limited to, the following matters:</p> <p>(i) demonstration of consistency in compliance with blasting criteria at the existing mining operation</p> <p>(ii) compliance blasting criteria;</p> <p>(iii) mitigation measures, such as, adverse weather conditions;</p> <p>(iv) monitoring methods and program in accordance with blast monitoring and inspection conditions;</p> <p>(v) measures to be undertaken to demonstrate that the development is achieving best practice applicable to the development in minimising air blast overpressure, ground vibration levels, fumes and odours from blasting activities;</p> <p>(vi) measures to protect underground utilities (eg: rising mains, subsurface telecommunication and electric cables, irrigation lines) and livestock on non-mine owned land;</p> <p>(vii) measures to protect surface infrastructure where relevant, such as dams, rail infrastructure and power poles;</p> <p>(viii) measures to consider the blasting activities from other neighbouring mines. This shall include details of the proposed measures to ensure that cumulative blast related impacts are managed, such as through consultation with the other mines to co-ordinate blasting activities;</p> <p>(ix) procedures for the investigation of blast related complaints from the development, in consultation with other mines in the event of cumulative related impacts;</p> <p>(x) procedures for the notification of occupiers of buildings and residences prior to detonation of each blast;</p> <p>(xi) measures to ensure no damage by flyrock to people, property, livestock and powerlines;</p> <p>(xii) location of blast monitors to assess blasting within the development; and</p> <p>(xiii) when blasting is no longer required for this development, the management plan will need to be revised to suspend requirements of Blast Monitoring (Cond. 34) and Blast Management Plan requirements listed in this consent.</p> <p>The Applicant must implement the approved Blast Management Plan.</p> <p>(b) The Applicant must, as a minimum, advise occupiers of buildings and residences, unless otherwise requested by the occupier, in the North Muswellbrook, Sandy Creek Road and other areas to the satisfaction of Council of future blasting events through a community information telephone hotline and the advertisement and promotion of the hotline. The hotline shall be at no cost to the caller.</p> <p>(c) The Applicant must respond to complaints regarding blasting in accordance with its Environmental Management Strategy.</p>	<p>Blasting/ Vibration Management</p> <p><u>(a) The Applicant must implement the Blast Management Plan, V5 dated May 2020 or any amended plan approved by Council. Any amended plan must be prepared in consultation with the EPA and RR, to the satisfaction of Council. The plan must include</u></p> <p>The Applicant must prepare and implement an updated Blast Management Plan, in consultation with EPA and DRE, to the satisfaction of Council. This plan must include, but not be limited to, the following matters:</p> <p>(i) demonstration of consistency in compliance with blasting criteria at the existing mining operation</p> <p>(ii) compliance blasting criteria;</p> <p>(iii) mitigation measures, such as, adverse weather conditions;</p> <p>(iv) monitoring methods and program in accordance with blast monitoring and inspection conditions;</p> <p>(v) measures to be undertaken to demonstrate that the development is achieving best practice applicable to the development in minimising air blast overpressure, ground vibration levels, fumes and odours from blasting activities;</p> <p>(vi) measures to protect underground utilities (eg: rising mains, subsurface telecommunication and electric cables, irrigation lines) and livestock on non-mine owned land;</p> <p>(vii) measures to protect surface infrastructure where relevant, such as dams, rail infrastructure and power poles;</p> <p>(viii) measures to consider the blasting activities from other neighbouring mines. This shall include details of the proposed measures to ensure that cumulative blast related impacts are managed, such as through consultation with the other mines to co-ordinate blasting activities;</p> <p>(ix) procedures for the investigation of blast related complaints from the development, in consultation with other mines in the event of cumulative related impacts;</p> <p>(x) procedures for the notification of occupiers of buildings and residences prior to detonation of each blast;</p> <p>(xi) measures to ensure no damage by flyrock to people, property, livestock and powerlines; <u>and</u></p> <p>(xii) location of blast monitors to assess blasting within the development ; <u>and</u></p> <p>(xiii) when blasting is no longer required for this development, the management plan will need to be revised to suspend requirements of Blast Monitoring (Cond. 34) and Blast Management Plan requirements listed in this consent.</p> <p>The Applicant must implement the approved Blast Management Plan.</p> <p>(b) The Applicant must, as a minimum, advise occupiers of buildings and residences, unless otherwise requested by the occupier, in the North Muswellbrook, Sandy Creek Road and other areas to the satisfaction of Council of future blasting events through a community information telephone hotline and the advertisement and promotion of the hotline. The hotline shall be at no cost to the caller.</p> <p>(c) The Applicant must respond to complaints regarding blasting in accordance with its Environmental Management Strategy.</p> <p><u>(d) The obligations in this condition continue whilst blasting activities are carried out as part of this development and will no longer apply once blasting activities cease for the mine.</u></p>	<p>Administrative</p> <p>Change in Operations</p> <p>The revised condition refers to the currently approved Blast Management Plan and confirms its application until blasting activities cease.</p> <p>Changes to this condition reflects the mine's transition from the operational mining phase to the rehabilitation phase. The condition makes clear that monitoring and/or other obligations with respect to blast/vibration management are only required up until a specific point in the rehabilitation phase, and are not necessary afterwards.</p>

Existing Condition	Proposed Condition (text marked in RED shows the proposed changes)	Reason
--------------------	---	--------

Noise Management and Monitoring		
---------------------------------	--	--

36	<p>Table 4 Noise Limits (dB(A))</p> <table border="1" style="width:100%; border-collapse: collapse; font-size: 8px;"> <thead> <tr style="background-color: #d3d3d3;"> <th style="text-align: left;">Location</th> <th style="text-align: center;">Day</th> <th style="text-align: center;">Evening</th> <th style="text-align: center;">Night</th> <th style="text-align: center;">LA1(1 minute)</th> </tr> <tr style="background-color: #d3d3d3;"> <th></th> <th style="text-align: center;">L_{Aeq}(15 minute)</th> <th style="text-align: center;">L_{Aeq}(15 minute)</th> <th style="text-align: center;">L_{Aeq}(15 minute)</th> <th style="text-align: center;">L_{A1}(1 minute)</th> </tr> </thead> <tbody> <tr><td>R1, R2, R3, R4, R17, R26, R27, R28, R29, R30, R31, R32, R33, R34, R35, R37, R38, R39</td><td style="text-align: center;">35</td><td style="text-align: center;">35</td><td style="text-align: center;">35</td><td style="text-align: center;">45</td></tr> <tr><td>R5</td><td style="text-align: center;">36</td><td style="text-align: center;">36</td><td style="text-align: center;">36</td><td style="text-align: center;">45</td></tr> <tr><td>R7</td><td style="text-align: center;">38</td><td style="text-align: center;">38</td><td style="text-align: center;">38</td><td style="text-align: center;">45</td></tr> <tr><td>R11</td><td style="text-align: center;">39</td><td style="text-align: center;">39</td><td style="text-align: center;">39</td><td style="text-align: center;">45</td></tr> <tr><td>R12</td><td style="text-align: center;">39</td><td style="text-align: center;">39</td><td style="text-align: center;">39</td><td style="text-align: center;">45</td></tr> <tr><td>R13</td><td style="text-align: center;">41</td><td style="text-align: center;">41</td><td style="text-align: center;">41</td><td style="text-align: center;">45</td></tr> <tr><td>R14</td><td style="text-align: center;">38</td><td style="text-align: center;">38</td><td style="text-align: center;">38</td><td style="text-align: center;">45</td></tr> <tr><td>R15</td><td style="text-align: center;">37</td><td style="text-align: center;">37</td><td style="text-align: center;">37</td><td style="text-align: center;">45</td></tr> <tr><td>R16</td><td style="text-align: center;">36</td><td style="text-align: center;">36</td><td style="text-align: center;">36</td><td style="text-align: center;">45</td></tr> <tr><td>R18</td><td style="text-align: center;">45</td><td style="text-align: center;">38</td><td style="text-align: center;">37</td><td style="text-align: center;">47</td></tr> <tr><td>R20</td><td style="text-align: center;">45</td><td style="text-align: center;">38</td><td style="text-align: center;">37</td><td style="text-align: center;">47</td></tr> <tr><td>R21</td><td style="text-align: center;">37</td><td style="text-align: center;">37</td><td style="text-align: center;">37</td><td style="text-align: center;">45</td></tr> <tr><td>R22</td><td style="text-align: center;">39</td><td style="text-align: center;">39</td><td style="text-align: center;">39</td><td style="text-align: center;">45</td></tr> <tr><td>R23</td><td style="text-align: center;">39</td><td style="text-align: center;">39</td><td style="text-align: center;">39</td><td style="text-align: center;">45</td></tr> <tr><td>R24</td><td style="text-align: center;">40</td><td style="text-align: center;">40</td><td style="text-align: center;">40</td><td style="text-align: center;">45</td></tr> <tr><td>R25</td><td style="text-align: center;">42</td><td style="text-align: center;">42</td><td style="text-align: center;">42</td><td style="text-align: center;">45</td></tr> <tr><td>R36</td><td style="text-align: center;">38</td><td style="text-align: center;">38</td><td style="text-align: center;">38</td><td style="text-align: center;">45</td></tr> <tr><td>R40</td><td style="text-align: center;">42</td><td style="text-align: center;">42</td><td style="text-align: center;">42</td><td style="text-align: center;">45</td></tr> <tr><td>R41</td><td style="text-align: center;">42</td><td style="text-align: center;">42</td><td style="text-align: center;">42</td><td style="text-align: center;">45</td></tr> <tr><td>R42</td><td style="text-align: center;">40</td><td style="text-align: center;">40</td><td style="text-align: center;">40</td><td style="text-align: center;">45</td></tr> </tbody> </table> <p>The limits in the noise table above do not apply if the Applicant has a written agreement with the relevant owner(s) of these residences to generate higher noise levels, and Council has been advised in writing of the terms of this agreement. The limits in the noise table above do not apply to residences owned by the Applicant.</p>	Location	Day	Evening	Night	LA1(1 minute)		L _{Aeq} (15 minute)	L _{Aeq} (15 minute)	L _{Aeq} (15 minute)	L _{A1} (1 minute)	R1, R2, R3, R4, R17, R26, R27, R28, R29, R30, R31, R32, R33, R34, R35, R37, R38, R39	35	35	35	45	R5	36	36	36	45	R7	38	38	38	45	R11	39	39	39	45	R12	39	39	39	45	R13	41	41	41	45	R14	38	38	38	45	R15	37	37	37	45	R16	36	36	36	45	R18	45	38	37	47	R20	45	38	37	47	R21	37	37	37	45	R22	39	39	39	45	R23	39	39	39	45	R24	40	40	40	45	R25	42	42	42	45	R36	38	38	38	45	R40	42	42	42	45	R41	42	42	42	45	R42	40	40	40	45	<p>Table 4-Noise Limits (dB(A))</p> <table border="1" style="width:100%; border-collapse: collapse; font-size: 8px;"> <thead> <tr style="background-color: #d3d3d3;"> <th style="text-align: left;">Location</th> <th style="text-align: center;">Day</th> <th style="text-align: center;">Evening</th> <th colspan="2" style="text-align: center;">Night</th> </tr> <tr style="background-color: #d3d3d3;"> <th></th> <th style="text-align: center;">L_{Aeq}(15 minute)</th> <th style="text-align: center;">L_{Aeq}(15 minute)</th> <th style="text-align: center;">L_{Aeq}(15 minute)</th> <th style="text-align: center;">L_{A1}(1 minute)</th> </tr> </thead> <tbody> <tr><td>R1, R2, R3, R4, R17, R26, R27, R28, R29, R30, R31, R32, R33, R34, R35, R37, R38, R39</td><td style="text-align: center;">35^a</td><td style="text-align: center;">35^a</td><td style="text-align: center;">35^a</td><td style="text-align: center;">45^a</td></tr> <tr><td>R5^a</td><td style="text-align: center;">36^a</td><td style="text-align: center;">36^a</td><td style="text-align: center;">36^a</td><td style="text-align: center;">45^a</td></tr> <tr><td>R7^a</td><td style="text-align: center;">38^a</td><td style="text-align: center;">38^a</td><td style="text-align: center;">38^a</td><td style="text-align: center;">45^a</td></tr> <tr><td>R11^a</td><td style="text-align: center;">39^a</td><td style="text-align: center;">39^a</td><td style="text-align: center;">39^a</td><td style="text-align: center;">45^a</td></tr> <tr><td>R12^a</td><td style="text-align: center;">39^a</td><td style="text-align: center;">39^a</td><td style="text-align: center;">39^a</td><td style="text-align: center;">45^a</td></tr> <tr><td>R13^a</td><td style="text-align: center;">41^a</td><td style="text-align: center;">41^a</td><td style="text-align: center;">41^a</td><td style="text-align: center;">45^a</td></tr> <tr><td>R14^a</td><td style="text-align: center;">38^a</td><td style="text-align: center;">38^a</td><td style="text-align: center;">38^a</td><td style="text-align: center;">45^a</td></tr> <tr><td>R15^a</td><td style="text-align: center;">37^a</td><td style="text-align: center;">37^a</td><td style="text-align: center;">37^a</td><td style="text-align: center;">45^a</td></tr> <tr><td>R16^a</td><td style="text-align: center;">36^a</td><td style="text-align: center;">36^a</td><td style="text-align: center;">36^a</td><td style="text-align: center;">45^a</td></tr> <tr><td>R18^a</td><td style="text-align: center;">45^a</td><td style="text-align: center;">38^a</td><td style="text-align: center;">37^a</td><td style="text-align: center;">47^a</td></tr> <tr><td>R20^a</td><td style="text-align: center;">45^a</td><td style="text-align: center;">38^a</td><td style="text-align: center;">37^a</td><td style="text-align: center;">47^a</td></tr> <tr><td>R21^a</td><td style="text-align: center;">37^a</td><td style="text-align: center;">37^a</td><td style="text-align: center;">37^a</td><td style="text-align: center;">45^a</td></tr> <tr><td>R22^a</td><td style="text-align: center;">39^a</td><td style="text-align: center;">39^a</td><td style="text-align: center;">39^a</td><td style="text-align: center;">45^a</td></tr> <tr><td>R23^a</td><td style="text-align: center;">39^a</td><td style="text-align: center;">39^a</td><td style="text-align: center;">39^a</td><td style="text-align: center;">45^a</td></tr> <tr><td>R24^a</td><td style="text-align: center;">40^a</td><td style="text-align: center;">40^a</td><td style="text-align: center;">40^a</td><td style="text-align: center;">45^a</td></tr> <tr><td>R25^a</td><td style="text-align: center;">42^a</td><td style="text-align: center;">42^a</td><td style="text-align: center;">42^a</td><td style="text-align: center;">45^a</td></tr> <tr><td>R36^a</td><td style="text-align: center;">38^a</td><td style="text-align: center;">38^a</td><td style="text-align: center;">38^a</td><td style="text-align: center;">45^a</td></tr> <tr><td>R40^a</td><td style="text-align: center;">42^a</td><td style="text-align: center;">42^a</td><td style="text-align: center;">42^a</td><td style="text-align: center;">45^a</td></tr> <tr><td>R41^a</td><td style="text-align: center;">42^a</td><td style="text-align: center;">42^a</td><td style="text-align: center;">42^a</td><td style="text-align: center;">45^a</td></tr> <tr><td>R42^a</td><td style="text-align: center;">40^a</td><td style="text-align: center;">40^a</td><td style="text-align: center;">40^a</td><td style="text-align: center;">45^a</td></tr> </tbody> </table> <table border="1" style="width:100%; border-collapse: collapse; font-size: 8px;"> <thead> <tr style="background-color: #d3d3d3;"> <th style="text-align: left;">Location</th> <th style="text-align: center;">Day LAeq(15 minute)</th> <th style="text-align: center;">Evening LAeq(15 minute)</th> <th style="text-align: center;">Night LAeq(15 minute)</th> <th style="text-align: center;">Night LA1(1 minute)</th> </tr> </thead> <tbody> <tr><td>R1, R2, R3, R4, R17, R26, R27, R28, R29, R30, R31, R32, R33, R34, R35, R37, R38, R39</td><td style="text-align: center;">35</td><td style="text-align: center;">35</td><td style="text-align: center;">35</td><td style="text-align: center;">45</td></tr> <tr><td>R5, R16</td><td style="text-align: center;">36</td><td style="text-align: center;">36</td><td style="text-align: center;">36</td><td style="text-align: center;">45</td></tr> <tr><td>R7, R14, R36</td><td style="text-align: center;">38</td><td style="text-align: center;">38</td><td style="text-align: center;">38</td><td style="text-align: center;">45</td></tr> <tr><td>R12, R22, R23</td><td style="text-align: center;">39</td><td style="text-align: center;">39</td><td style="text-align: center;">39</td><td style="text-align: center;">45</td></tr> <tr><td>R15, R21</td><td style="text-align: center;">37</td><td style="text-align: center;">37</td><td style="text-align: center;">37</td><td style="text-align: center;">45</td></tr> <tr><td>R13</td><td style="text-align: center;">41</td><td style="text-align: center;">41</td><td style="text-align: center;">41</td><td style="text-align: center;">45</td></tr> <tr><td>R18, R20</td><td style="text-align: center;">45</td><td style="text-align: center;">38</td><td style="text-align: center;">37</td><td style="text-align: center;">47</td></tr> <tr><td>R24, R42</td><td style="text-align: center;">40</td><td style="text-align: center;">40</td><td style="text-align: center;">40</td><td style="text-align: center;">45</td></tr> <tr><td>R25</td><td style="text-align: center;">42</td><td style="text-align: center;">42</td><td style="text-align: center;">42</td><td style="text-align: center;">45</td></tr> </tbody> </table> <p>Note: Receptor locations referred to in the table above are identified in Appendix C of Muswellbrook Shire Councils development consent S96(2) Modification to Muswellbrook Coal Mining Operations in No.1 & 2 205/2002/8, dated 26 October 2016, EPA Reference DOC16/551495.</p> <p>The limits in the noise table above do not apply if the Applicant has a written agreement with the relevant owner(s) of these residences to generate higher noise levels, and Council has been advised in writing of the terms of this agreement. The limits in the noise table above do not apply to residences owned by the Applicant.</p>	Location	Day	Evening	Night			L _{Aeq} (15 minute)	L _{Aeq} (15 minute)	L _{Aeq} (15 minute)	L _{A1} (1 minute)	R1, R2, R3, R4, R17, R26, R27, R28, R29, R30, R31, R32, R33, R34, R35, R37, R38, R39	35 ^a	35 ^a	35 ^a	45 ^a	R5 ^a	36 ^a	36 ^a	36 ^a	45 ^a	R7 ^a	38 ^a	38 ^a	38 ^a	45 ^a	R11 ^a	39 ^a	39 ^a	39 ^a	45 ^a	R12 ^a	39 ^a	39 ^a	39 ^a	45 ^a	R13 ^a	41 ^a	41 ^a	41 ^a	45 ^a	R14 ^a	38 ^a	38 ^a	38 ^a	45 ^a	R15 ^a	37 ^a	37 ^a	37 ^a	45 ^a	R16 ^a	36 ^a	36 ^a	36 ^a	45 ^a	R18 ^a	45 ^a	38 ^a	37 ^a	47 ^a	R20 ^a	45 ^a	38 ^a	37 ^a	47 ^a	R21 ^a	37 ^a	37 ^a	37 ^a	45 ^a	R22 ^a	39 ^a	39 ^a	39 ^a	45 ^a	R23 ^a	39 ^a	39 ^a	39 ^a	45 ^a	R24 ^a	40 ^a	40 ^a	40 ^a	45 ^a	R25 ^a	42 ^a	42 ^a	42 ^a	45 ^a	R36 ^a	38 ^a	38 ^a	38 ^a	45 ^a	R40 ^a	42 ^a	42 ^a	42 ^a	45 ^a	R41 ^a	42 ^a	42 ^a	42 ^a	45 ^a	R42 ^a	40 ^a	40 ^a	40 ^a	45 ^a	Location	Day LAeq(15 minute)	Evening LAeq(15 minute)	Night LAeq(15 minute)	Night LA1(1 minute)	R1, R2, R3, R4, R17, R26, R27, R28, R29, R30, R31, R32, R33, R34, R35, R37, R38, R39	35	35	35	45	R5, R16	36	36	36	45	R7, R14, R36	38	38	38	45	R12, R22, R23	39	39	39	45	R15, R21	37	37	37	45	R13	41	41	41	45	R18, R20	45	38	37	47	R24, R42	40	40	40	45	R25	42	42	42	45	<p style="color: green;">Environmentally and Socially Responsible Operator</p> <p>Noise criteria outlined in the original condition 36 are not consistent with the requirements in MCC's EPL applying to the mine site. The noise criteria/limits proposed to be inserted are consistent with the EPL and will align the development consent with the EPL requirements.</p>
Location	Day	Evening	Night	LA1(1 minute)																																																																																																																																																																																																																																																																													
	L _{Aeq} (15 minute)	L _{Aeq} (15 minute)	L _{Aeq} (15 minute)	L _{A1} (1 minute)																																																																																																																																																																																																																																																																													
R1, R2, R3, R4, R17, R26, R27, R28, R29, R30, R31, R32, R33, R34, R35, R37, R38, R39	35	35	35	45																																																																																																																																																																																																																																																																													
R5	36	36	36	45																																																																																																																																																																																																																																																																													
R7	38	38	38	45																																																																																																																																																																																																																																																																													
R11	39	39	39	45																																																																																																																																																																																																																																																																													
R12	39	39	39	45																																																																																																																																																																																																																																																																													
R13	41	41	41	45																																																																																																																																																																																																																																																																													
R14	38	38	38	45																																																																																																																																																																																																																																																																													
R15	37	37	37	45																																																																																																																																																																																																																																																																													
R16	36	36	36	45																																																																																																																																																																																																																																																																													
R18	45	38	37	47																																																																																																																																																																																																																																																																													
R20	45	38	37	47																																																																																																																																																																																																																																																																													
R21	37	37	37	45																																																																																																																																																																																																																																																																													
R22	39	39	39	45																																																																																																																																																																																																																																																																													
R23	39	39	39	45																																																																																																																																																																																																																																																																													
R24	40	40	40	45																																																																																																																																																																																																																																																																													
R25	42	42	42	45																																																																																																																																																																																																																																																																													
R36	38	38	38	45																																																																																																																																																																																																																																																																													
R40	42	42	42	45																																																																																																																																																																																																																																																																													
R41	42	42	42	45																																																																																																																																																																																																																																																																													
R42	40	40	40	45																																																																																																																																																																																																																																																																													
Location	Day	Evening	Night																																																																																																																																																																																																																																																																														
	L _{Aeq} (15 minute)	L _{Aeq} (15 minute)	L _{Aeq} (15 minute)	L _{A1} (1 minute)																																																																																																																																																																																																																																																																													
R1, R2, R3, R4, R17, R26, R27, R28, R29, R30, R31, R32, R33, R34, R35, R37, R38, R39	35 ^a	35 ^a	35 ^a	45 ^a																																																																																																																																																																																																																																																																													
R5 ^a	36 ^a	36 ^a	36 ^a	45 ^a																																																																																																																																																																																																																																																																													
R7 ^a	38 ^a	38 ^a	38 ^a	45 ^a																																																																																																																																																																																																																																																																													
R11 ^a	39 ^a	39 ^a	39 ^a	45 ^a																																																																																																																																																																																																																																																																													
R12 ^a	39 ^a	39 ^a	39 ^a	45 ^a																																																																																																																																																																																																																																																																													
R13 ^a	41 ^a	41 ^a	41 ^a	45 ^a																																																																																																																																																																																																																																																																													
R14 ^a	38 ^a	38 ^a	38 ^a	45 ^a																																																																																																																																																																																																																																																																													
R15 ^a	37 ^a	37 ^a	37 ^a	45 ^a																																																																																																																																																																																																																																																																													
R16 ^a	36 ^a	36 ^a	36 ^a	45 ^a																																																																																																																																																																																																																																																																													
R18 ^a	45 ^a	38 ^a	37 ^a	47 ^a																																																																																																																																																																																																																																																																													
R20 ^a	45 ^a	38 ^a	37 ^a	47 ^a																																																																																																																																																																																																																																																																													
R21 ^a	37 ^a	37 ^a	37 ^a	45 ^a																																																																																																																																																																																																																																																																													
R22 ^a	39 ^a	39 ^a	39 ^a	45 ^a																																																																																																																																																																																																																																																																													
R23 ^a	39 ^a	39 ^a	39 ^a	45 ^a																																																																																																																																																																																																																																																																													
R24 ^a	40 ^a	40 ^a	40 ^a	45 ^a																																																																																																																																																																																																																																																																													
R25 ^a	42 ^a	42 ^a	42 ^a	45 ^a																																																																																																																																																																																																																																																																													
R36 ^a	38 ^a	38 ^a	38 ^a	45 ^a																																																																																																																																																																																																																																																																													
R40 ^a	42 ^a	42 ^a	42 ^a	45 ^a																																																																																																																																																																																																																																																																													
R41 ^a	42 ^a	42 ^a	42 ^a	45 ^a																																																																																																																																																																																																																																																																													
R42 ^a	40 ^a	40 ^a	40 ^a	45 ^a																																																																																																																																																																																																																																																																													
Location	Day LAeq(15 minute)	Evening LAeq(15 minute)	Night LAeq(15 minute)	Night LA1(1 minute)																																																																																																																																																																																																																																																																													
R1, R2, R3, R4, R17, R26, R27, R28, R29, R30, R31, R32, R33, R34, R35, R37, R38, R39	35	35	35	45																																																																																																																																																																																																																																																																													
R5, R16	36	36	36	45																																																																																																																																																																																																																																																																													
R7, R14, R36	38	38	38	45																																																																																																																																																																																																																																																																													
R12, R22, R23	39	39	39	45																																																																																																																																																																																																																																																																													
R15, R21	37	37	37	45																																																																																																																																																																																																																																																																													
R13	41	41	41	45																																																																																																																																																																																																																																																																													
R18, R20	45	38	37	47																																																																																																																																																																																																																																																																													
R24, R42	40	40	40	45																																																																																																																																																																																																																																																																													
R25	42	42	42	45																																																																																																																																																																																																																																																																													

39	<p>Noise Management</p> <p>The Applicant must prepare and implement a Noise Management Plan for the development, in consultation with EPA and to the satisfaction of Council. The plan must:</p> <p>(i) Demonstrate consistency in complying with noise criteria limits at the existing Applicants operation;</p>	<p>Noise Management</p> <p>The Applicant <u>must implement the Noise Management Plan, V6 dated October 2020 or any amended plan approved by Council. Any amended plan must be prepared</u> must prepare and implement a Noise Management Plan for the development, in consultation with EPA and to the satisfaction of Council. The plan must:</p>	<p style="color: blue;">Administrative</p> <p>The revised condition refers to the currently approved Noise Management Plan.</p>
----	--	--	---

Existing Condition	Proposed Condition (text marked in RED shows the proposed changes)	Reason	
	<p>(ii) Provide a diagram indicating the location of all noise monitoring locations;</p> <p>(iii) include details of the noise investigations conducted at monthly intervals (unless otherwise agreed by Council) by an independent noise consultant to evaluate, assess and report the La eq (15 minute) and La1(1 minute) noise emission levels due to the normal operations of the development;</p> <p>(iv) provide details regarding operating configuration, determining survey intervals, weather conditions and seasonal variations, selecting variations, locations, periods and times of measurements;</p> <p>(v) detail management measures where the target noise level criteria of this consent are predicted to be exceeded, or are exceeded during Mining Operations. These measures must include but not be limited to:</p> <ul style="list-style-type: none"> • The selection of representative monitoring locations within the community must be carried out in consultation with Council; • prompt response to any community issues of concern; • refinement of onsite noise mitigation measures and mine operating procedures where practical; • discussions with relevant property holders to assess concerns; • consideration of acoustical mitigation at receivers; and • consideration of negotiated agreements with property owners. <p>(vi) outline measures to reduce the impact of intermittent, low frequency and tonal noise (including truck reversing alarms);</p> <p>(vii) survey and investigate noise reduction measures from plant and equipment annually, subject to noise monitoring results and/or complaints received, and report in the AEMR;</p> <p>(viii) specify the procedures for a noise monitoring program for the purpose of undertaking independent noise investigations;</p> <p>(ix) outline the procedure to notify property owners and occupiers likely to be affected by noise from the operations;</p> <p>(x) maintain a protocol for handling noise complaints that include recording, reporting and acting on complaints, particularly where complaints are received and it is demonstrated noise levels are in excess of the criteria contained in this consent;</p> <p>(xi) as far as practicable, details of the interrelationship of this plan with the noise management plan for other mines in the vicinity; and</p> <p>(xii) accommodate for revised noise monitoring and management requirements once mining ceases and the closure and final rehabilitation process commences.</p>		
40	<p>Request for independent monitoring and acquisition</p> <p>(a) Monitoring and Management</p> <p>In the event that a landowner of a non-mine owned property considers that noise from the development, at their residence, is in excess of the noise level criteria listed in Table 4 (being an owner who has not earlier entered into an agreement with the applicant to exceed their noise levels) and Council is satisfied that an investigation is required, the Applicant must upon the receipt of a written request from Council:</p> <p>(i) consult with the owner affected to determine their concerns;</p> <p>(ii) make arrangements for, and bear the costs of, following consultation as far as reasonably practicable with other mine operations in the vicinity where necessary, appropriate independent noise investigations in accordance with the Noise Management Plan to the satisfaction of Council, to quantify the impact and determine the source of the effect and the contribution of the Project to the effect. The location, duration and timing of these noise assessments is to be in accordance with the Industrial Noise Policy or its replacement;</p>	<p>Request for independent monitoring and acquisition</p> <p>(a) Monitoring and Management</p> <p>In the event that a landowner of a non-mine owned property considers that noise from the development, at their residence, is in excess of the noise level criteria listed in Table 4 (being an owner who has not earlier entered into an agreement with the applicant to exceed their noise levels) and Council is satisfied that an investigation is required, the Applicant must upon the receipt of a written request from Council:</p> <p>(i) consult with the owner affected to determine their concerns;</p> <p>(ii) make arrangements for, and bear the costs of, following consultation as far as reasonably practicable with other mine operations in the vicinity where necessary, appropriate independent noise investigations in accordance with the Noise Management Plan to the satisfaction of Council, to quantify the impact and determine the source of the effect and the contribution of the Project to the effect. The location, duration and timing of these noise assessments is to be in accordance with the Industrial Noise Policy or its replacement;</p>	<p>Change in Operations</p> <p>Changes to this condition reflect the mine's transition from the operational mining phase to the rehabilitation phase. The condition makes clear that the obligations regarding acquisition do not apply once mining ceases as acquisition, being the long term and last resort means of mitigating against impacts, is not required during the rehabilitation phase.</p>

Existing Condition	Proposed Condition (text marked in RED shows the proposed changes)	Reason
<p>(iii) modify the mining activity in accordance with a noise reduction plan prepared as part of the Noise Management Plan, if repeated exceedances are demonstrated by the investigation to result in part from the mine related activity. This must include:</p> <ul style="list-style-type: none"> introduction of additional controls, either on noise emission from individual sources on the site or on site operations or modification to operations, to ensure that the noise criteria detailed in Table 4 is achieved by reasonable and feasible measures, or; seek agreement of the landowner, and in the case of cumulative impacts with the other relevant mines/ industrial operations in the area and the landowner, to provide such other forms of benefit or amelioration of the impacts of noise as may be agreed between the parties as providing acceptable compensation for the noise levels experienced. <p>(iv) conduct follow up investigations to the satisfaction of Council, where necessary. If necessary, the follow up investigation should be conducted 3 months after the initial investigation to give the Applicant time to implement the recommended noise control.</p> <p>Note: Appendix E of the determination outlines the process for mitigation measures</p> <p>(b) Acquisition</p> <p>(i) If the independent noise investigation(s) in (a) above confirms that the noise acquisition criteria detailed in Table 5 is being repeatedly exceeded by the development alone, and the measures detailed in the consent do not reduce the levels below this criteria, the Applicant must at the written request of the landowner acquire the relevant property. Acquisition shall be in accordance with the procedures set out in the consent.</p> <p>(ii) If the independent noise investigations confirm that the noise acquisition criteria is being repeatedly exceeded as a result of cumulative impacts, including a contribution from the development, the Applicant must enter into consultation with neighbouring mines for the purchase of the affected property in accordance with the Acquisition procedure set out in the consent.</p> <p>(c) If continued complaints and noise investigation confirm that the noise criteria is being exceeded as a result of the contribution from the development, but are less than the noise acquisition criteria, the Applicant must negotiate with the landowner until a resolution to the satisfaction of Council is reached.</p> <p>(d) If a landowner disputes any noise mitigation or other measures proposed by the Applicant in accordance with sub-clause (a) above, the matter shall be referred by either the Applicant or landowner to Council. Where possible the principles of the DP&E's Voluntary Land Acquisition and Mitigation Policy will apply. If the matter cannot be resolved within 21 days, the matter shall be referred to the Independent Dispute Resolution Process.</p> <p>(e) Further independent investigations shall cease if Council is satisfied that the relevant criterion in Condition 6.4.2 (a) is not being exceeded and are unlikely to be exceeded in the future.</p> <p>(f) The Applicant is to pay the full costs incurred in the monitoring, assessment, mitigation or acquisition costs to be implemented, if they apply.</p>	<p>(iii) modify the mining activity in accordance with a noise reduction plan prepared as part of the Noise Management Plan, if repeated exceedances are demonstrated by the investigation to result in part from the mine related activity. This must include:</p> <ul style="list-style-type: none"> introduction of additional controls, either on noise emission from individual sources on the site or on site operations or modification to operations, to ensure that the noise criteria detailed in Table 4 is achieved by reasonable and feasible measures, or; seek agreement of the landowner, and in the case of cumulative impacts with the other relevant mines/ industrial operations in the area and the landowner, to provide such other forms of benefit or amelioration of the impacts of noise as may be agreed between the parties as providing acceptable compensation for the noise levels experienced. <p>(iv) conduct follow up investigations to the satisfaction of Council, where necessary. If necessary, the follow up investigation should be conducted 3 months after the initial investigation to give the Applicant time to implement the recommended noise control.</p> <p>Note: Appendix E of the determination outlines the process for mitigation measures</p> <p>(b) Acquisition</p> <p>(i) If the independent noise investigation(s) in (a) above confirms that the noise acquisition criteria detailed in Table 5 is being repeatedly exceeded by the development alone, and the measures detailed in the consent do not reduce the levels below this criteria, the Applicant must at the written request of the landowner acquire the relevant property. Acquisition shall be in accordance with the procedures set out in the consent.</p> <p>(ii) If the independent noise investigations confirm that the noise acquisition criteria is being repeatedly exceeded as a result of cumulative impacts, including a contribution from the development, the Applicant must enter into consultation with neighbouring mines for the purchase of the affected property in accordance with the Acquisition procedure set out in the consent.</p> <p>(c) If continued complaints and noise investigation confirm that the noise criteria is being exceeded as a result of the contribution from the development, but are less than the noise acquisition criteria, the Applicant must negotiate with the landowner until a resolution to the satisfaction of Council is reached.</p> <p>(d) If a landowner disputes any noise mitigation or other measures proposed by the Applicant in accordance with sub-clause (a) above, the matter shall be referred by either the Applicant or landowner to Council. Where possible the principles of the DP&E's Voluntary Land Acquisition and Mitigation Policy will apply. If the matter cannot be resolved within 21 days, the matter shall be referred to the Independent Dispute Resolution Process.</p> <p>(e) Further independent investigations shall cease if Council is satisfied that the relevant criterion in Condition 6.4.2 (a) is not being exceeded and are unlikely to be exceeded in the future.</p> <p>(f) The Applicant is to pay the full costs incurred in the monitoring, assessment, mitigation or acquisition costs to be implemented, if they apply.</p> <p><u>(g) The obligations in this condition regarding acquisition of land do not apply following the cessation of coal mining.</u></p>	
Monitoring/Auditing		
<p>41 Third Party Monitoring/Auditing</p> <p>Independent Environmental Auditing</p> <p>(a) Every three years from the date of this consent until completion of activity in the application area, or as otherwise agreed by Council, the Applicant must conduct an environmental audit of the mining and infrastructure areas of the development.</p> <p>Copies of the report shall be submitted by the Applicant to Council, EPA, DRE, OEH, DPI Water and the CCC within two weeks of the report's completion for comment.</p> <p>(b) The audit must:</p> <ol style="list-style-type: none"> assess compliance with the requirements of this consent, the EPL, mining leases and water licences; include consultation with Council, EPA, DRE and DPI – Water. 	<p>Third Party Monitoring/Auditing</p> <p>Independent Environmental Auditing</p> <p>(a) Every three years from the date of this consent until completion of activity completion of activity five years after the completion of mining in the application area, or as otherwise agreed by Council, the Applicant must conduct an environmental audit of the mining and infrastructure areas of the development.</p> <p>Copies of the report shall be submitted by the Applicant to Council, EPA, DRE DRE RR, OEH OEH DPIE, DPI Water NRAR and the CCC within two weeks of the report's completion for comment.</p> <p>(b) The audit must:</p> <ol style="list-style-type: none"> assess compliance with the requirements of this consent, the EPL, mining leases and water licences; include consultation with Council, EPA, DRE DRE RR and DPI-Water NRAR. 	<p>Changes in Operations</p> <p>Administrative</p> <p>Changes to this condition reflect the mine's transition from the operational mining phase to the rehabilitation phase.</p> <p>Update to reflect government department changes.</p>

Existing Condition	Proposed Condition (text marked in RED shows the proposed changes)	Reason
<p>iii. assess environmental performance of the development and whether it is complying with the management plans and the EMS;</p> <p>iv. review the effectiveness of the environmental management of the mine, including any mitigation works;</p> <p>v. be carried out at the Applicant's expense; and</p> <p>vi. be conducted by a duly qualified independent person or team whose appointment has been endorsed by Council.</p> <p>(c) Council may, after reviewing the report and considering any submission made by the relevant government agencies, CCC and Applicant on the report, notify the Applicant of any requirements with regard to any recommendations in the report. The Applicant shall comply with any reasonable requirements within such time as Council may require.</p> <p>Note: Council may agree to a request from the Applicant that the Independent Environmental Audit requirement under this condition be integrated with similar audits required in accordance with other licenses and approvals applicable to MCC</p>	<p>iii. assess environmental performance of the development and whether it is complying with the management plans and the EMS;</p> <p>iv. review the effectiveness of the environmental management of the mine, including any mitigation works;</p> <p>v. be carried out at the Applicant's expense; and</p> <p>vi. be conducted by a duly qualified independent person or team whose appointment has been endorsed by Council.</p> <p>(c) Council may, after reviewing the report and considering any submission made by the relevant government agencies, CCC and Applicant on the report, notify the Applicant of any requirements with regard to any recommendations in the report. The Applicant shall comply with any reasonable requirements within such time as Council may require.</p> <p>Note: Council may agree to a request from the Applicant that the Independent Environmental Audit requirement under this condition be integrated with similar audits required in accordance with other licenses and approvals applicable to MCC</p>	
Reporting		
<p>42</p> <p>Annual Environmental Management Report (AEMR)</p> <p>(a) The Applicant must, throughout the mining operations and for five years after the completion of mining in the application area (or as otherwise agreed by Council), prepare and submit an Annual Environmental Management Report (AEMR) to the satisfaction of Council and DRE.</p> <p>The AEMR must review the performance of the mine against the Environmental Management Strategy and the relevant, management plans, the conditions of this consent, and other licences and approvals relating to the mine. To enable ready comparison with the predictions made in the EIS, diagrams and tables, the report must include, the following matters:</p> <p>(i) a detailed compliance review of the performance of the project against conditions of this consent and statutory approvals. From this review a table will be provided in the AEMR report that identifies any non-compliances over the last year, and describes what actions were (or are being) taken to ensure compliance.</p> <p>(ii) assess the project against predictions made in the EIS and the terms and commitments in the documents listed in the consent.</p> <p>(iii) a review of the effectiveness of the environmental management of the mine in terms of EPA, DRE, DPI Water and Council requirements;</p> <p>(iv) review the results of environmental monitoring required under this consent or other approvals, including interpretations and discussion;</p> <p>(v) identification of trends in monitoring results;</p> <p>(vi) a listing of any variations obtained to approvals applicable to the DA area during the reporting year;</p> <p>(vii) the water budget for the year;</p> <p>(viii) a summary report on the yearly review of activities to manage spontaneous combustion throughout the reporting year;</p> <p>(ix) production and employment levels and any changes from the previous reporting year; status of rehabilitation and revegetation works; and</p> <p>(x) environmental management targets and strategies for the next year, taking into account identified trends in monitoring results.</p> <p>(b) In preparing the AEMR, the Applicant must:</p> <p>(i) consult with Council;</p> <p>(ii) comply with any reasonable requirements of Council or other relevant government agency; and</p>	<p>Annual Environmental Management Report (AEMR)</p> <p>(a) The Applicant must, throughout the mining operations and for five years after the completion of mining in the application area (or as otherwise agreed by Council), prepare and submit an Annual Environmental Management Report (AEMR) to the satisfaction of Council and DRE.</p> <p>The AEMR must review the performance of the mine against the Environmental Management Strategy and the relevant, management plans, the conditions of this consent, and other licences and approvals relating to the mine. To enable ready comparison with the predictions made in the EIS, diagrams and tables, the report must include, the following matters:</p> <p>(i) a detailed compliance review of the performance of the project against conditions of this consent and statutory approvals. From this review a table will be provided in the AEMR report that identifies any non-compliances over the last year, and describes what actions were (or are being) taken to ensure compliance.</p> <p>(ii) assess the project against predictions made in the EIS and the terms and commitments in the documents listed in the consent.</p> <p>(iii) a review of the effectiveness of the environmental management of the mine in terms of EPA, DRE, NRARDPI Water and Council requirements;</p> <p>(iv) review the results of environmental monitoring required under this consent or other approvals, including interpretations and discussion ;</p> <p>(v) identification of trends in monitoring results;</p> <p>(vi) a listing of any variations obtained to approvals applicable to the DA area during the reporting year;</p> <p>(vii) the water budget for the year;</p> <p>(viii) a summary report on the yearly review of activities to manage spontaneous combustion throughout the reporting year;</p> <p>(ix) production and employment levels and any changes from the previous reporting year; status of rehabilitation and revegetation works; and</p> <p>(x) environmental management targets and strategies for the next year, taking into account identified trends in monitoring results.</p> <p>(b) In preparing the AEMR, the Applicant must:</p> <p>(i) consult with Council;</p> <p>(ii) comply with any reasonable requirements of Council or other relevant government agency; and</p>	<p>Rehabilitation Framework</p> <p>Various changes are proposed to Condition 42 regarding the Annual Environmental Management Report (AEMR). Most notably the changes require the AEMR be prepared to the satisfaction of Council, not Council and DRE and the report to no longer address rehabilitation and revegetation works. The NSW Resources Regulator has advised that it will require mine operators to specifically report to it on rehabilitation activities and progress. Accordingly the AEMR will go to Council and will address a variety of matters concerning the mine, other than rehabilitation. The Resources Regulator has advised that it does not want to receive a copy of the AEMR and suggested that if necessary a copy of the rehabilitation documentation that is required to be submitted to the Resources Regulator be appended to the AEMR.</p>

Existing Condition		Proposed Condition (text marked in RED shows the proposed changes)	Reason																		
	<p>(iii) ensure that the first report is completed and submitted within 3 months of the end of the reporting year, or at a date determined by Council. in consultation with the DRE.</p> <p>(c) The Applicant must ensure that copies of each AEMR are submitted to Council, DRE, DPI Water, EPA, OEH, and CCC, and made available for public information at Council within fourteen days of submission to these authorities.</p>	<p>(iii) ensure that the first report is completed and submitted within 3 months of the end of the reporting year, or at a date determined by Council.</p> <p>(c) The Applicant must ensure that copies of each AEMR are submitted to Council, DRE, DPI Water, NRAR, EPA, OEH, DPIE, and CCC, and made available for public information at Council within fourteen days of submission to these authorities.</p>																			
Community Consultation																					
46	<p>Complaint Handling Procedures</p> <p>(a) The Environmental Officer employed by the mine shall be responsible for:</p> <p>(i) establishing and maintaining a system for recording complaints with respect to mine operations on a dedicated and publicly advertised telephone line, 24 hours per day 7 days per week, entering complaints or comments in an up to date log book, or other suitable data base, and ensuring that an initial response is provided to the complainant within 24 hours;</p> <p>(ii) providing a report of complaints received with respect to the operation of the mine, every 12 months throughout the life of the project to Council, EPA, DRE, and CCC, or as otherwise agreed by Council. A summary of this report shall be included in the AEMR.</p> <p>(iii) consulting with the environmental officer(s) employed by other mines in the vicinity to seek to co-ordinate a response to any complaints received regarding the operations of MCC and other mines.</p>	<p>Complaint Handling Procedures</p> <p>(a) The Environmental Officer employed by the mine shall be responsible for:</p> <p>(i) establishing and maintaining a system for recording complaints with respect to mine mining and rehabilitation operations on a dedicated and publicly advertised telephone line, 24 hours per day 7 days per week, during the hours of operation, 24 hours per day 7 days per week, entering complaints or comments in an up to date log book, or other suitable data base, and ensuring that an initial response is provided to the complainant within 24 hours;</p> <p>(ii) providing a report of complaints received with respect to the operation of the mine, every 12 months throughout the life of the project to Council, EPA, DRE, and CCC, or as otherwise agreed by Council. A summary of this report shall be included in the AEMR.</p> <p>(iii) consulting with the environmental officer(s) employed by other mines in the vicinity to seek to co-ordinate a response to any complaints received regarding the operations of MCC and other mines.</p>	<p>Changes in Operations</p> <p>Changes proposed will ensure the Environmental Officer for Muswellbrook Coal Mine will maintain a complaints system during applicable operating hours.</p>																		
Applicants Obligations																					
47	<p>Area of Mitigation – Properties requiring Mitigation</p> <p>Within one month of the date of the approval of the Continuation Project Modification the Applicant must:</p> <p>(i) notify in writing the owners of any residences being listed in Table 6 below that they have the right to request the Applicant to ask for additional noise and/or air quality mitigation measures (as applicable) to be installed at their residence at any stage of the development until mining operations are completed on site.</p> <p>(ii) send a copy of the NSW Health fact sheet entitled “Mine Dust and You” (as may be updated from time to time) to the owners and or existing tenants of any land where the predictions in the SEE (2016) identify that dust emissions generated by the development are likely to be greater than the relevant air quality criteria in this consent at any time during the life of the development.</p> <p>Table 6--Land subject to additional mitigation upon request¶</p> <table border="1"> <thead> <tr> <th>Mitigation Basis^a</th> <th>Characterisation of Impact^a</th> <th>Land^a</th> </tr> </thead> <tbody> <tr> <td>Noise^a</td> <td>Moderate^a</td> <td>11, 12, 13, 24, 25, 40, 41, 42^a</td> </tr> <tr> <td>Air Quality^a</td> <td>N/A^a</td> <td>25, 40^a</td> </tr> </tbody> </table> <p>¶</p> <p>Notes</p> <p>To interpret the land referenced to in Table 6 see Appendix C of this consent.</p> <p>Definitions of Moderate mitigation are given in the DPE's Voluntary Land Acquisition and Mitigation Policy.</p> <p>Where the “Secretary” is referred to in the DP&E's Voluntary Land Acquisition and Mitigation Policy, it should be replaced with Council for the purposes outlined in the document and this consent.</p> <p>Upon receiving a written request from the owner of any residence on the land in the table above, the Applicant must implement additional noise and/or air quality mitigation measures as required at or in the vicinity of the residence in consultation with the landowner. These measures must be consistent with measures outlined in the DPE's Voluntary Land Acquisition and Mitigation Policy. They must also be reasonable and feasible and proportionate with the level of predicted impact.</p> <p>If within 3 months of receiving this request from the owner, the Applicant and the owner cannot agree on the measures to be implemented, or there is a dispute about the implementation of these measures, then either party may refer the matter to Council for resolution, which must then determine the dispute based on the principles outlined above.</p>	Mitigation Basis ^a	Characterisation of Impact ^a	Land ^a	Noise ^a	Moderate ^a	11, 12, 13, 24, 25, 40, 41, 42 ^a	Air Quality ^a	N/A ^a	25, 40 ^a	<p>Area of Mitigation – Properties requiring Mitigation</p> <p>Within one month of the date of the approval of the Continuation Project Modification the Applicant must:</p> <p>(i) notify in writing the owners of any residences being listed in Table 6 below that they have the right to request the Applicant to ask for additional noise and/or air quality mitigation measures (as applicable) to be installed at their residence at any stage of the development until mining operations are completed on site.</p> <p>(ii) send a copy of the NSW Health fact sheet entitled “Mine Dust and You” (as may be updated from time to time) to the owners and or existing tenants of any land where the predictions in the SEE (2016) identify that dust emissions generated by the development are likely to be greater than the relevant air quality criteria in this consent at any time during the life of the development.</p> <p>Table 6--Land subject to additional mitigation upon request¶</p> <table border="1"> <thead> <tr> <th>Mitigation Basis^a</th> <th>Characterisation of Impact^a</th> <th>Land^a</th> </tr> </thead> <tbody> <tr> <td>Noise^a</td> <td>Moderate^a</td> <td>11, 12, 13, 24, 25, 40, 41, 42^a</td> </tr> <tr> <td>Air Quality^a</td> <td>N/A^a</td> <td>25, 40^a</td> </tr> </tbody> </table> <p>¶</p> <p>Notes</p> <p>To interpret the land referenced to in Table 6 see Appendix C of this consent.</p> <p>Definitions of Moderate mitigation are given in the DPE's Voluntary Land Acquisition and Mitigation Policy.</p> <p>Where the “Secretary” is referred to in the DPDP&E's Voluntary Land Acquisition and Mitigation Policy, it should be replaced with Council for the purposes outlined in the document and this consent.</p> <p>Up until the cessation of mining operations, UUpon receiving a written request from the owner of any residence on the land in the table above, the Applicant must implement additional noise and/or air quality mitigation measures as required at or in the vicinity of the residence in consultation with the landowner. These measures must be consistent with measures outlined in the DPE's Voluntary Land Acquisition and Mitigation Policy. They must also be reasonable and feasible and proportionate with the level of predicted impact.</p> <p>If within 3 months of receiving this request from the owner, the Applicant and the owner cannot agree on the measures to be implemented, or there is a dispute about the implementation of these</p>	Mitigation Basis ^a	Characterisation of Impact ^a	Land ^a	Noise ^a	Moderate ^a	11, 12, 13, 24, 25, 40, 41, 42 ^a	Air Quality ^a	N/A ^a	25, 40 ^a	<p>Change in Operations</p> <p>Changes to this condition reflect the mine's transition from the operational mining phase to the rehabilitation phase. Additional noise and air quality mitigation measures are only required up until the cessation of mining operations .</p>
Mitigation Basis ^a	Characterisation of Impact ^a	Land ^a																			
Noise ^a	Moderate ^a	11, 12, 13, 24, 25, 40, 41, 42 ^a																			
Air Quality ^a	N/A ^a	25, 40 ^a																			
Mitigation Basis ^a	Characterisation of Impact ^a	Land ^a																			
Noise ^a	Moderate ^a	11, 12, 13, 24, 25, 40, 41, 42 ^a																			
Air Quality ^a	N/A ^a	25, 40 ^a																			

Existing Condition	Proposed Condition (text marked in RED shows the proposed changes)	Reason	
	measures, then either party may refer the matter to Council for resolution, which must then determine the dispute based on the principles outlined above.		
49	<p>Area of Affection – Land Acquisition</p> <p>(a) Within three (3) months of receiving a written request from a landowner with acquisition rights under Condition 30(c) or 40(b)(i) of this consent, the Applicant must make a binding written offer to the landowner based on:</p> <p>(i) the current market value of the owner’s interest in the land at the date of the written request as if the land was unaffected by the Project the subject of this DA, having regard to:</p> <ul style="list-style-type: none"> the existing and permissible use of the land in accordance with the planning instruments in force at the date of the written request; and the presence of improvements on the land and/or any Council approved building or structure which is substantially commenced at the date of the request and is due to be completed subsequent to that date, but excluding any improvements that have resulted from the implementation of noise and/or dust mitigation measures that have been paid for by the Applicant pursuant to this consent; <p>(ii) the owner’s reasonable compensation for disturbance allowance and relocation costs within the Muswellbrook Local Government Area, or within such other nearby location as may be determined by Council in exceptional circumstances; and</p> <p>(iii) the owner’s reasonable costs for obtaining legal advice and expert witnesses for the purposes of determining the acquisition price of the land and the terms upon which it is to be acquired.</p> <p>(b) However, if the Applicant and landowner cannot agree on the acquisition price of the land and/or the terms upon which the land is to be acquired, then either party may refer to matter to Council for resolution.</p> <p>(i) Upon receiving such a request, the Council shall request the President of the Australian Property Institute to appoint a qualified independent valuer or Fellow of the Institute, who shall determine, after consideration of any submissions from the owners and the Applicant, a fair and reasonable acquisition price for the land as described in sub-clause (b) and/or terms upon which it is to be acquired.</p> <p>(c) The Applicant shall bear the costs of any survey assessment requested by the independent valuer, and the costs of determination referred to in sub clause (b).</p> <p>(d) Upon receipt of a determination pursuant to sub-clause (b), the Applicant shall, within 14 days, offer in writing to acquire the relevant land at a price not less than the determination. Should the Applicant’s offer to acquire not be accepted in writing by the owner within six (6) months of the date of such offer, the Applicant’s obligations to purchase the property shall cease, unless the Council, acting reasonably, determines otherwise.</p> <p>(e) In the event that the Applicant and the land owner agree that only part of the land is to be transferred to the Applicant, the Applicant shall pay all reasonable costs associated with applying for Council approval to any plan of subdivision and registration of the plan at the Office of the Registrar-General.</p> <p>(f) The provisions of this condition do not apply to a land owner who is the holder of an authority under the Mining Act, 1992.</p> <p>(g) Notwithstanding any other condition of this consent, the Applicant may, upon request of the landowner, acquire any property affected by the project during the course of this consent on terms agreed to between the Applicant and the landowner.</p> <p>Note: Appendix F of the determination sets out the process for land acquisition.</p>	<p>Area of Affection – Land Acquisition</p> <p>(a) Within three (3) months of receiving a written request from a landowner with acquisition rights under Condition 30(c) or 40(b)(i) of this consent, the Applicant must make a binding written offer to the landowner based on:</p> <p>(i) the current market value of the owner’s interest in the land at the date of the written request as if the land was unaffected by the Project the subject of this DA, having regard to:</p> <ul style="list-style-type: none"> the existing and permissible use of the land in accordance with the planning instruments in force at the date of the written request; and the presence of improvements on the land and/or any Council approved building or structure which is substantially commenced at the date of the request and is due to be completed subsequent to that date, but excluding any improvements that have resulted from the implementation of noise and/or dust mitigation measures that have been paid for by the Applicant pursuant to this consent; <p>(ii) the owner’s reasonable compensation for disturbance allowance and relocation costs within the Muswellbrook Local Government Area, or within such other nearby location as may be determined by Council in exceptional circumstances; and</p> <p>(iii) the owner’s reasonable costs for obtaining legal advice and expert witnesses for the purposes of determining the acquisition price of the land and the terms upon which it is to be acquired.</p> <p>(b) However, if the Applicant and landowner cannot agree on the acquisition price of the land and/or the terms upon which the land is to be acquired, then either party may refer to matter to Council for resolution.</p> <p>(i) Upon receiving such a request, the Council shall request the President of the Australian Property Institute to appoint a qualified independent valuer or Fellow of the Institute, who shall determine, after consideration of any submissions from the owners and the Applicant, a fair and reasonable acquisition price for the land as described in sub-clause (b) and/or terms upon which it is to be acquired.</p> <p>(c) The Applicant shall bear the costs of any survey assessment requested by the independent valuer, and the costs of determination referred to in sub clause (b).</p> <p>(d) Upon receipt of a determination pursuant to sub-clause (b), the Applicant shall, within 14 days, offer in writing to acquire the relevant land at a price not less than the determination. Should the Applicant’s offer to acquire not be accepted in writing by the owner within six (6) months of the date of such offer, the Applicant’s obligations to purchase the property shall cease, unless the Council, acting reasonably, determines otherwise.</p> <p>(e) In the event that the Applicant and the land owner agree that only part of the land is to be transferred to the Applicant, the Applicant shall pay all reasonable costs associated with applying for Council approval to any plan of subdivision and registration of the plan at the Office of the Registrar-General.</p> <p>(f) The provisions of this condition do not apply to a land owner who is the holder of an authority under the Mining Act, 1992.</p> <p>(g) Notwithstanding any other condition of this consent, the Applicant may, upon request of the landowner, acquire any property affected by the project during the course of this consent on terms agreed to between the Applicant and the landowner.</p> <p>(h) The obligations regarding acquisition under Conditions 30 and 40 are limited to specific phases of the development as specified in those individual Conditions.</p> <p>Note: Appendix F of the determination sets out the process for land acquisition.</p>	<p>Change in Operation</p> <p>Changes to this condition reflects the mine’s transition from the operational mining phase to the rehabilitation phase. The condition makes clear that the obligations regarding acquisition apply up until specific points as specified in Conditions 30 and 40.</p>
50	<p>Cumulative Impact Management</p> <p>(a) In the event that the cumulative impact of noise or dust contributed by the operation of the Project and any future mining activities/ industrial operations, at any residence on privately owned land in the vicinity of the operation, is in excess of the noise or dust acquisition criteria contained in these conditions of consent, the Applicant must endeavour, as far as reasonably practicable, to</p>	<p>Cumulative Impact Management</p> <p>(a) In the event that the cumulative impact of noise or dust contributed by the operation of the Project and any future mining activities/ industrial operations, at any residence on privately owned land in the vicinity of the operation, is in excess of the noise or dust acquisition criteria contained in these conditions of consent, the Applicant must endeavour, as far as reasonably practicable, to</p>	<p>Administrative</p> <p>Update to reflect government change</p>

Existing Condition	Proposed Condition (text marked in RED shows the proposed changes)	Reason
<p>negotiate with the other companies and landowner to determine appropriate arrangements to reasonably contribute to the management of the identified cumulative impacts to the satisfaction of Council in proportion to their contributions to the impact.</p> <p>(b) If agreement cannot be reached from negotiations undertaken in accordance with subclause (a), then, with the agreement of the other contributing mines and future mining or industrial operations, the matter is to be referred to Council by either the Applicant or landowner. If the matter is not resolved within 21 days of the referral, the matter will be referred to an Independent Dispute Resolution Process as determined by Council, and resolved as determined by Council. The Independent Dispute Resolution Process shall determine the responsibilities of each of the mining and/or present or future companies in accordance with subclause (a) above and actions to be undertaken. The recommendation of the Independent Dispute Resolution Process shall be determined by Council.</p> <p>(c) Prior to referral to the Independent Dispute Resolution process, the Applicant shall provide the Director-General a report detailing the Applicant's reasons for being unable to reach agreement with the other parties, and the reasons for the criteria exceedances with demonstration that the Project activities are not the sole cause of the exceedance.</p>	<p>negotiate with the other companies and landowner to determine appropriate arrangements to reasonably contribute to the management of the identified cumulative impacts to the satisfaction of Council in proportion to their contributions to the impact.</p> <p>(b) If agreement cannot be reached from negotiations undertaken in accordance with subclause (a), then, with the agreement of the other contributing mines and future mining or industrial operations, the matter is to be referred to Council by either the Applicant or landowner. If the matter is not resolved within 21 days of the referral, the matter will be referred to an Independent Dispute Resolution Process as determined by Council, and resolved as determined by Council. The Independent Dispute Resolution Process shall determine the responsibilities of each of the mining and/or present or future companies in accordance with subclause (a) above and actions to be undertaken. The recommendation of the Independent Dispute Resolution Process shall be determined by Council.</p> <p>(c) Prior to referral to the Independent Dispute Resolution process, the Applicant shall provide the Director-General<u>Secretary</u> a report detailing the Applicant's reasons for being unable to reach agreement with the other parties, and the reasons for the criteria exceedances with demonstration that the Project activities are not the sole cause of the exceedance.</p>	
Further Approvals and Agreement		
<p>52</p> <p>Building Code of Australia</p> <p>The Applicant must ensure that all new buildings and structures, and any alterations or additions to existing buildings and structures, are constructed in accordance with the relevant requirements of the BCA and MSB.</p> <p>Notes</p> <p>Under Part 4A of the EP&A Act, the Applicant is required to obtain construction and occupation certificates (where applicable) for the proposed building works;</p> <p>Part 8 of the EP&A regulation sets out requirements for the certification of the development; and The development is located in the Muswellbrook Mine Subsidence District, and under Section 15 of the Mine Subsidence Act 1961, the Applicant is required to obtain the MSB's approval before constructing any improvements on the site.</p>	<p>Building Code of Australia</p> <p>The Applicant must ensure that all new buildings and structures, and any alterations or additions to existing buildings and structures, are constructed in accordance with the relevant requirements of the BCA and <u>SAMSB</u>.</p> <p>Notes</p> <p>Under Part 4A of the EP&A Act, the Applicant is required to obtain construction and occupation certificates (where applicable) for the proposed building works;</p> <p>Part 8 of the EP&A regulation sets out requirements for the certification of the development; and The development is located in the Muswellbrook Mine Subsidence District, and under Section 15 of the Mine Subsidence Act 1961, the Applicant is required to obtain the <u>SAMSB</u>'s approval before constructing any improvements on the site.</p>	<p>Administrative</p> <p>Update to reflect government change</p>



INTEGRATED
ENVIRONMENTAL
MANAGEMENT
AUSTRALIA

A large, stylized circular graphic composed of two concentric rings. The outer ring is a dark green color, and the inner ring is a lighter green color. The rings are slightly offset from each other, creating a 3D effect. The graphic is centered on the page and partially overlaps the text below it.

APPENDIX B

Schedule of Lands

Schedule of Land

Lot	Deposited Plan (DP)	Owner
681	611756	Muswellbrook Coal Company (MCC)
682	611756	MCC
1	571355	MCC
1	723294	MCC
2	723294	MCC
97	752484	MCC
1	45525	MCC
82	231202	MCC
811	534516	MCC
58*	752484	MCC
59*	752484	MCC
60*	752484	MCC
62*	752484	MCC
61*	1113302	MCC
1*	1004305	MCC
70*	752484	MCC
71*	752484	MCC
1*	184481	MCC
98*	752484	MCC
3*	571355	MCC
1*	614842	MCC
2*	614842	MCC
39*	793463	MCC
1*	45194	MCC

Lot	Deposited Plan (DP)	Owner
5*	26760	MCC
6*	26760	MCC
20*	16352	MCC
402*	578075	MCC
<u>3*</u>	<u>1220491</u>	<u>MCC</u>
<u>4*</u>	<u>1220491</u>	<u>MCC</u>
71*	629631	MCC
101*	1148216	MCC
1*	46760	MCC

Notes:

1. *Part of block within DA Boundary
2. Schedule of Land applies to those areas of land within the DA Boundary