# **Project Approval**

## Section 75J of the Environmental Planning & Assessment Act 1979

As delegate of the Minister for Planning and Infrastructure, the Planning Assessment Commission of NSW approves the project application referred to in schedule 1, subject to the conditions in schedules 2 to 5.

These conditions are required to:

- prevent, minimise, and/or offset adverse environmental impacts;
- set standards and performance measures for acceptable environmental performance;
- require regular monitoring and reporting; and
- provide for the ongoing environmental management of the project.

Dr Neil Shepherd AM Member of the Commission	Mr David Johnson Member of the Commission	
Sydney	23 October 2012	
	SCHEDULE 1	
Application Number:	10_0138	
Applicant:	Aston Coal 2 Pty Limited	
Approval Authority:	Minister for Planning and Infrastructure	
Land:	See Appendix 1	
Project:	Maules Creek Coal Project	

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Red type represents July 2013 Modification (Mod 1) Blue type represents March 2014 Modification (Mod 2) Green type represents January 2017 Modification (Mod 3) Purple type represents December 2019 Modification (Mods 5) Light Purple type represents December 2019 Modification (Mod 6) Orange type represents August 2021 Modification (Mod 7) Pink type represents January 2022 Modification (Mod 8) Blue dashed-dotted underlined type represents March 2024 Modification (Mod 9)

The Department has prepared a consolidated version of the consent which is intended to include all modifications to the original determination instrument.

The consolidated version of the consent has been prepared by the Department with all due care. This consolidated version is intended to aid the consent holder by combining all consents relating to the original determination instrument but it does not relieve a consent holder of its obligation to be aware of and fully comply with all consent obligations as they are set out in the legal instruments, including the original determination instrument and all subsequent modification instruments.

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## DEFINITIONS

Annual review ARTC BC Act BCA BCS

Biodiversity offset strategy

Blast misfire Boggabri rail spur line

CCC CEEC

CHPP Commonwealth DCCEEW

Conditions of this approval Construction

Council CPI Day

DCCEEW Water Department DIDO Crown Lands DPI Fisheries EA The review required by condition 4 of schedule 5

Australian Rail Track Corporation

NSW Biodiversity Conservation Act 2016

Building Code of Australia

Biodiversity Conservation and Science Directorate within the NSW DCCEEW

The conservation and enhancement strategy described in the EA, required by condition <u>44 and 45</u> of schedule 3 of this consent and depicted conceptually in the figure in Appendix 7

The failure of one or more holes in a blast pattern to initiate

The railway line between the Narrabri-Werris Creek railway line and the Boggabri coal mine, as depicted in Figures 1 and 3 in Appendix 2

Community Consultative Committee

A critically endangered ecological community listed under the BC Act

Coal handling and preparation plant

Commonwealth Department of Climate Change, Energy, the Environment and Water

Conditions contained in schedules 1 to 5 inclusive

The construction works for the project as described in the EA. Construction work does not include surveys, acquisitions, fencing, investigative drilling or excavation, minor clearing, minor access roads, minor adjustments to services/utilities, works which allow isolation of the site so that access for construction can be provided (including service relocations) and establishing temporary facilities for construction (including for example an office and amenities compounds, temporary water and communications, construction compounds, materials storage compounds, maintenance workshops, testing laboratory or material stockpile areas).

Narrabri Shire Council

Australian Bureau of Statistics Consumer Price Index (General)

The period from 7am to 6pm on Monday to Saturday, and 8am to 6pm on Sundays and Public Holidays

Water Group within the NSW DCCEEW

Department of Planning, Housing and Infrastructure

Drive in drive out

Crown Lands Division within the Department

The Division of Fisheries within DPI

The *Maules Creek Coal Project Environmental Assessment* dated July 2011, including the Response to Submissions dated November 2011, as modified by:

- Maules Creek Coal Mine Project Approval Modification Environmental Assessment dated April 2013, including the Response to Submission dated 6 December 2013;
- Maules Creek Coal Mine Project Approval Modification 2 Environmental Assessment dated April 2014, including the Response to Submission dated 6 December 2013; and

- Maules Creek Coal Mine Project Approval Modification 3 Environmental Assessment dated May 2016, including the Response to Submission dated August 2016 and Supplementary Information Request Response dated 5 November 2016;
- Maules Creek Coal Mine Olivedene Water Pipeline Modification Report dated December 2019;
- Maules Creek Coal Mine Roma and Brighton Water Pipeline Modification Report dated December 2019;
- Modification Report titled *Maules Creek Coal Mine Landform Modification,* dated January 2021;
- Modification Report titled Maules Creek Coal Mine Mobile Coal Sizing and Waste Tyre Disposal, dated September 2021; and
- Modification Report titled Maules Creek Coal Mine Biodiversity Offset and Roma Bore Electricity Transmission Line dated November 2022, Submissions Report titled Maules Creek Coal Mine Biodiversity Offset and Roma Bore Electricity Transmission Line dated November 2023, and letter dated 20 February 2024

Endangered ecological community, as defined under the *Threatened Species Conservation Act 1995* 

Environment Protection Authority

Environmental Planning and Assessment Act 1979

Environmental Planning and Assessment Regulation 2000

Environment Protection Licence issued under the POEO Act

The period from 6pm to 10pm

Feasible relates to engineering considerations and what is practical to build or carry out

Fly in fly out

### Forestry Corporation of NSW

An item as defined under the *Heritage Act 1977,* and/or an Aboriginal Object or Aboriginal Place as defined under the *National Parks and Wildlife Act 1974* 

A set of circumstances that:

- causes or threatens to cause material harm to the environment; and/or
- breaches or exceeds the limits or performance measures/criteria in this approval

As defined in the EP&A Act, except for where the term is used in the noise and air quality conditions in schedules 3 and 4 of this approval where it is defined to mean the whole of a lot, or contiguous lots owned by the same landowner, in a current plan registered at the Land Titles Office at the date of this approval

The area incorporating the existing and proposed coal mining operations centred around Leard Community Conservation Area (CCA) 4, including the Maules Creek Coal Mine, Boggabri Coal Mine and Tarrawonga Coal Mine

#### Is harm to the environment that:

- involves actual or potential harm to the health or safety of human beings or to the environment that is not trivial, or
- results in actual or potential loss or property damage of an amount, or amounts in aggregate, exceeding \$10,000, (such loss includes the reasonable costs and expenses that

EEC

## EPA EP&A Act EP&A Regulation EPL Evening Feasible

## FIFO

Forestry NSW

Heritage item

Incident

Land

Leard Forest mining precinct

Material harm to the environment

	would be incurred in taking all reasonable and practicable measures to prevent, mitigate or make good harm to the		
	environment) This definition excludes "harm" that is authorised under either		
	this consent or any other statutory approval		
Maules Creek rail spur line	The railway line from the Boggabri rail spur line to the Maules Creek coal mine as depicted in Figures 1 and 3 in Appendix 2		
Mine Water	Water that accumulates within, or drains from, active mining and infrastructure areas and any other areas where runoff or groundwater inflow may have come into contact with carbonaceous material (other than vegetation)		
Mining operations	Includes the removal of overburden and extraction, processing, handling, storage and transportation of coal on site and on the rail spur line (including both the Boggabri and Maules Creek rail spur lines)		
Minister	Minister for Planning and Public Spaces, or delegate		
Minor	Not very large, important or serious		
Mitigation	Activities associated with reducing the impacts of the project		
Negligible	Small and unimportant, such as to be not worth considering		
Night	The period from 10pm to 7am on Monday to Saturday, and 10pm to 8am on Sundays and Public Holidays		
North West LLS	North West Local Land Services		
NSW DCCEEW	NSW Department of Climate Change, Energy, the Environment and Water		
Operational Noise	Operational noise includes noise from the mining operations and the use of private roads and rail spurs		
PAC	Planning Assessment Commission		
Planning Secretary	Planning Secretary under the EP&A Act, or nominee		
POEO Act	Protection of the Environment Operations Act 1997		
Privately-owned land	Land that is not owned by a public agency or a mining company (or its subsidiary)		
Project	The development as described in the EA		
Applicant	Aston Coal 2 Pty Limited, or any person who seeks to carry out the development approved under this approval		
Public infrastructure	Linear and related infrastructure that provides services to the general public, such as roads, railways, water supply, drainage, sewerage, gas supply, electricity, telephone, telecommunications, etc.		
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 project to a good condition and for the purpose of establishing a safe, stable and non-polluting environment		
Resources Regulator	Resources Regulator within the Department of Regional NSW		
Response to submissions	The <u>Applicant</u> 's responses to issues raised in submissions titled <i>Maules Creek Coal Project Response to Submissions</i> dated December 2011 (2 volumes), and <i>Maules Creek Coal Project Response to Subsidiary Submissions</i> dated March 2012		
RFS	Rural Fire Service		
RMS	Roads and Maritime Services		
	_		

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ROM coal Site Statement of commitments VPA Run-of-mine coal The land described in Appendix 1 The <u>Applicant</u>'s commitments in Appendix 5 Voluntary Planning Agreement

## **SCHEDULE 2**

### ADMINISTRATIVE CONDITIONS

### **OBLIGATION TO MINIMISE HARM TO THE ENVIRONMENT**

1. In addition to meeting the specific performance criteria established under this consent, the <u>Applicant must</u> implement all reasonable and feasible measures to prevent and/or minimise any material harm to the environment that may result from the construction, operation, or rehabilitation of the development.

### **TERMS OF APPROVAL**

- 2. The Applicant must carry out the project:
  - (a) generally in accordance with the EA;
  - (b) in accordance with the statement of commitments; and
  - (c) in accordance with the conditions of this approval

Notes:

- The general layout of the project is shown in Appendix 2; and
- The statement of commitments is reproduced in Appendix 5.
- 3. If there is any inconsistency between the above documents, the most recent document <u>must</u> prevail to the extent of the inconsistency. However, the conditions of this approval <u>must</u> prevail to the extent of any inconsistency.
- 4. The <u>Applicant must</u> comply with any reasonable requirement/s of the <u>Planning Secretary</u> arising from the <u>Department's</u> assessment of:
  - (a) any reports, strategies, plans, programs, reviews, audits or correspondence that are submitted in accordance with this approval; and
  - (b) the implementation of any actions or measures contained in these documents.

### LIMITS ON APPROVAL

### Mining Operations

5. The <u>Applicant</u> may carry out mining operations on the site until the end of December 2034.

Notes:

- Under this approval, the <u>Applicant</u> is required to <u>decommission</u> and rehabilitate the site and carry out additional undertakings in relation to mining operations. Consequently, this approval will continue to apply in all other respects - other than the right to conduct mining operations - until the rehabilitation of the site and these additional undertakings have been carried out satisfactorily.
- Mining operations and rehabilitation are also regulated under the Mining Act 1992.

### **Coal Extraction**

6. The <u>Applicant must</u> not extract more than 13 million tonnes of ROM coal from the site in any calendar year.

### Vegetated Buffer Corridor

- 7. The <u>Applicant must</u> not clear native vegetation from any land within 250 metres of the adjoining Boggabri Coal Mine mining lease boundary, unless:
  - (a) the <u>Applicant</u> has provided an alternative area of equal or better habitat value for the purpose of providing a fully effective east-west movement corridor for native fauna;
  - (b) the alternative area is capable of delivering this outcome before clearing commences within 250 m of the lease boundary;
  - (c) the alternative area is under tenure arrangements that ensure its maintenance for biodiversity purposes in perpetuity, or there is an enforceable commitment to deliver this outcome; and

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(d) the alternative area has been endorsed by the BCS and subsequently approved by the Planning Secretary.

#### Notes:

- The alternative area may be provided by way of offset or by way of suitable rehabilitated land within the Boggabri Coal Project site or the Maules Creek Coal Project site.
- The alternative area may be provided by the <u>Applicant</u> or the <u>Applicant</u> in conjunction with the <u>Applicant</u> of the Boggabri Coal Project.

### **Coal Transport**

8. The Applicant must only transport coal from the site by rail.

Note: All coal is to be transported from site via the Maules Creek rail spur line, and the shared portion of the Boggabri Coal rail spur line. The separate rail crossing over the Namoi River, as mentioned in at least one part of the EA, does not form part of the project and is not approved under this project approval.

- 9. The Applicant must not:
  - (a) transport more than 12.4 million tonnes of product coal from the site in any calendar year; and
  - (b) dispatch more than 7 laden trains from the site in a day when averaged over a calendar year; or
  - (c) dispatch more than 10 laden trains from the site in a day.

Note: For the purposes of this condition, a day refers to the 24 hours from midnight to midnight the next day.

#### SURRENDER OF EXISTING DEVELOPMENT CONSENT

10. By the end of 2013, or as otherwise agreed by the Planning Secretary, the Applicant must surrender the existing development consent (ie. DA85/1819) for mining on the site in accordance with Section 104A of the EP&A Act.

Prior to the surrender of this development consent, the conditions of this approval <u>must</u> prevail to the extent of any inconsistency with the conditions of the development consent.

#### STRUCTURAL ADEQUACY

11. The <u>Applicant must</u> 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.

Notes:

- Under Part 4A of the EP&A Act, the <u>Applicant</u> is required to obtain construction and occupation certificates for the proposed building works; and
- Part 8 of the EP&A Regulation sets out the requirements for the certification of the project.
- 12. The <u>Applicant must</u> ensure that the Maules Creek rail spur line and ancillary infrastructure are designed and constructed in accordance with the relevant requirements of the current ARTC infrastructure standards, or as otherwise approved by the <u>Planning Secretary</u>.

### DEMOLITION

13. The <u>Applicant must</u> ensure that all demolition work on site is carried out in accordance with Australian Standard AS 2601-2001: The Demolition of Structures, or its latest version.

#### PROTECTION OF PUBLIC INFRASTRUCTURE

- 14. Unless the Applicant and the applicable authority agree otherwise, the Applicant must:
  - (a) repair, or pay the full costs associated with repairing, any public infrastructure that is damaged by the project; and
  - (b) relocate, or pay the full costs associated with relocating, any public infrastructure that needs to be relocated as a result of the project.

### **OPERATION OF PLANT AND EQUIPMENT**

15. The <u>Applicant must</u> ensure that all the plant and equipment used on site, or to transport coal from the site, is:

- (a) maintained in a proper and efficient condition; and
- (b) operated in a proper and efficient manner.

### **UPDATING & STAGING STRATEGIES, PLANS OR PROGRAMS**

16. With the approval of the Planning Secretary, the <u>Applicant</u> may submit any strategies, plans or programs required by this consent on a progressive basis.

To ensure the strategies, plans or programs under the conditions of this approval are updated on a regular basis, the <u>Applicant</u> may at any time submit revised strategies, plans or programs to the Planning Secretary for approval.

With the agreement of the Planning Secretary, the <u>Applicant</u> may prepare any revised strategy, plan or program without undertaking consultation with all parties under the applicable condition of this approval.

Notes:

- While any strategy, plan or program may be submitted on a progressive basis, the <u>Applicant</u> must ensure that the existing operations on site are covered by suitable strategies, plans or programs at all times.
- If the submission of any strategy, plan or program is to be staged, then the relevant strategy, plan or program must clearly describe the specific stage to which the strategy, plan or program applies, the relationship of this stage to any future stages, and the trigger for updating the strategy, plan or program.

### COMMUNITY ENHANCEMENT

- 17. By the end of March 2013, unless the Planning Secretary agrees otherwise, the <u>Applicant must</u> enter into a planning agreement with Council in accordance with:
  - (a) Division 6 of Part 4 of the EP&A Act; and
  - (b) the terms of the Applicant's offer in Appendix 3.

## SCHEDULE 3

### ENVIRONMENTAL PERFORMANCE CONDITIONS

### ACQUISITION ON REQUEST

1. Upon receiving a written request for acquisition from the owner(s) of the land listed in Table 1, the <u>Applicant must</u> acquire the land in accordance with the procedures in conditions 8-9 of schedule 4.

Table 1: Land subject to acquisition upon request

Acquisition Basis	Land
Noise & Air	<del>110-114</del>
Noise	<mark>61-66, 108</mark> -109 <del>, 117-120, 123-124, 125-131, 132-140, 141-148, 149-155, 236, 256-263</del>
Air	<del>279-280</del>

However, this condition does not apply if the <u>Applicant</u> has an agreement with the owner(s) of the relevant properties to generate higher noise levels, and the <u>Applicant</u> has advised the <u>Department</u> in writing of the terms of this agreement.

Notes:

- 1. To interpret the locations referred to in Table 1, see the applicable figure(s) in Appendix 4.
- 2. The <u>Applicant</u> is only required to acquire property 279-280 if the owner of the land no longer has acquisition rights under any planning approval for the Boggabri mine and/or Tarrawonga mine.
- 3. For the purposes of acquisition under this condition, parcels of land that are in close proximity and operated as a single agricultural enterprise should be included as part of the land to be acquired. Where the <u>Applicant</u> and the owner(s) cannot agree on whether non-contiguous parcels of land should be included, either party may refer the matter to the <u>Planning Secretary</u> for resolution. The <u>Planning Secretary</u>'s decision as to the lands to be included for acquisition under the procedures in conditions 8 and 9 of Schedule 4 must be final.

### NOISE AND VIBRATION

#### Noise Affected Residences

- 2. For privately-owned residences within the project's 35dB(A) noise impact contour (see Table 2 and Appendix 4A) the owner(s) can make a written request to the <u>Applicant</u> for one of the following:
  - (a) mitigation (such as double glazing, insulation and air conditioning) at the residence in consultation with the owner(s). These measures must be reasonable and feasible and directed towards reducing the noise impacts of the project on the residence. If within 3 months of receiving this request from the owner(s), the <u>Applicant</u> and owner(s) 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 the <u>Planning Secretary</u> for resolution; or
  - (b) acquisition of the residence and land in accordance with the procedures in conditions 8-9 of Schedule 4.

Table 2: Residences subject to acquisition or noise mitigation on request

### Residence

### 61, 108, 118, 120, 126, 134, 236, 256 and 259

Upon receiving a written request from the owner(s), the <u>Applicant</u> must undertake whichever option has been requested by the owner(s).

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However, this condition does not apply if the <u>Applicant</u> has an agreement with the owner(s) of the relevant residence to generate higher noise levels, and the <u>Applicant</u> has advised the <u>Department</u> in writing of the terms of this agreement.

Notes:

- 1. To interpret the locations referred to in Table 2 see the applicable figure(s) in Appendix 4.
- 2. For the purposes of this condition a privately-owned residence is defined as a residence not owned by a mining company that: is regularly occupied; or is an existing residence that is not regularly occupied but for which a valid development consent exists; or is a proposed residence for which a development application has been lodged with the relevant authority prior to the date of this approval.
- 3. For the purposes of acquisition under this condition, parcels of land that are in close proximity and operated as a single agricultural enterprise should be included as part of the land to be acquired. Where the <u>Applicant</u> and the owner(s) cannot agree on whether non-contiguous parcels of land should be included, either party may refer the matter to the Planning Secretary for resolution. The Planning Secretary's decision as to the lands to be included for acquisition under the procedures in conditions 8 and 9 of Schedule 4 <u>must</u> be final.

### 2A Deleted.

#### Maximum predicted noise levels

3. Where the owner(s) of a residence included in Table 2 of this schedule have opted for either an agreement to generate higher noise levels or noise mitigation under condition 2, and the owner(s) have reason to believe that the noise impacts at the residence are more than 3 dB(A) above the predicted noise levels for that residence (see Table 3), the owner can request an independent noise impact assessment for the residence. The request <u>must</u> be made in writing to the Planning Secretary. If the Planning Secretary considers that a noise impact assessment is warranted, then the <u>Applicant must</u> commission the assessment.

If the noise impact assessment determines that the noise generated by the project causes sustained exceedances, or is likely to cause sustained exceedances, of the predicted noise levels by more than 3 dB(A), the owner may require the <u>Applicant</u> to acquire the residence and land in accordance with the procedures in conditions 8-9 of Schedule 4.

Location Property/ID	Day (L <sub>Aeq (15 min)</sub> )	Evening (L <sub>Aeq (15 min)</sub> )	Night (L <sub>Aeq (15 min)</sub> )	Night (LA1 (1 min))
<del>61</del>	35	43	4 <del>3</del>	<del>53</del>
108 <del>, 120</del>	35	39	39	45
<del>118</del>	40	44	44	4 <del>5</del>
<del>126</del>	45	48	48	<del>53</del>
<del>134, 236</del>	<del>35</del>	<del>36</del>	<del>36</del>	<del>45</del>
<del>256</del>	35	40	40	<del>50</del>
<del>259</del>	35	<del>39</del>	<del>39</del>	4 <del>9</del>

Table 3: Maximum Predicted Noise Levels

Notes:

- 1. To interpret the locations referred to in Table 3, see the applicable figure in Appendix 4
- 2. The noise assessment must be undertaken by a suitably qualified, experienced and independent person, whose appointment has been approved by the *Planning Secretary* and include either:
  - sufficient monitoring at the affected residence to allow for assessment of the impacts under a range of meteorological conditions (including adverse conditions) likely to be experienced at the residence; or
  - sufficient monitoring to allow reliable prediction of the likely impacts under the range of meteorological conditions (including adverse conditions) likely to be experienced at the residence.
- 3. Monitoring should be conducted in accordance with the requirements of the NSW Noise Policy for Industry (EPA, 2017).
- 4. Where predictions of likely impacts is to be used, either in substitution for, or in conjunction with, direct measurement of noise impacts at the residence, it must be based on sufficient monitoring data to provide a

reliable estimate of the impacts (including under adverse meteorological conditions) and be derived using standard noise modelling techniques accepted by the EPA.

- 5. The <u>Applicant must</u> ensure that the requested noise impact assessment is submitted to the <u>Planning Secretary</u> within 3 months of the <u>Planning Secretary</u>'s decision that the assessment was warranted. The <u>Applicant must</u> also provide a copy of the assessment to the owner(s) of the residence at the same time it is submitted to the <u>Planning Secretary</u>.
- 6. Note 3 to condition 1 of this Schedule applies to acquisition under this condition.

### Construction Noise and Vibration Criteria - Maules Creek and Boggabri Shared Rail Spur Lines

- 4. During the hours of:
  - (a) 7 am to 6 pm Monday to Fridays, inclusive;
  - (b) 8 am to 1 pm on Saturdays; and
  - (c) at no time on Sundays or public holidays,

noise from activities associated with the construction and/or upgrade of the Maules Creek rail spur line and shared section of the Boggabri rail spur line <u>must</u> meet the criteria in Table 4.

Location	Construction Noise Criteria	
Property/ID	Day	
	dB(A) LAeq(15 min)	
<del>256</del>	<del>50</del>	
<del>259</del>	45	
All other privately-owned residences	40	

Table 4: Rail spur line construction noise criteria dB(A)

Note: To interpret the locations referred to in Table 4, see the applicable figure in Appendix 4.

- 5. Vibration from activities associated with the construction and/or upgrade of the Maules Creek rail spur line and shared section of the Boggabri rail spur line <u>must</u> comply with the following:
  - (a) for structural damage, the vibration limits set out in the German Standard *DIN 4150-3: Structural Vibration effects of vibration on structures*; and
  - (b) for human exposure, the acceptable vibration values set out in the *Environmental Noise Management Assessing Vibration: A Technical Guideline* (Department of Environment and Conservation, 2006).
- 6. If the <u>Applicant</u> proposes to undertake any construction works associated with the Maules Creek rail spur line (and shared section of the Boggabri rail spur line) outside the hours specified above, then the <u>Applicant</u> must prepare and implement an Out of Hours Work protocol for these works to the satisfaction of the Planning Secretary. This protocol must be prepared in consultation with the EPA and the residents who would be affected by the noise generated by these works, and be consistent with the requirements of the *Interim Construction Noise Guideline* (Department of Environment and Climate Change, 2009). The <u>Applicant must</u> not carry out any out of hours construction works before this protocol has been approved by the Planning Secretary.

Note: For areas where construction noise from the Maules Creek rail spur line and shared section of the Boggabri rail spur line is predicted to be at or below 35 dB(A) and/ or below operational noise criteria at sensitive receptors, this is likely to provide sufficient justification for the need to operate outside of recommended standard hours as specified in the ICNG.

#### **Noise Criteria**

7. Except for the noise affected land in Table 1, the <u>Applicant must</u> ensure that operational noise generated by the project does not exceed the criteria in Table 5.

Table 5: Noise criteria dB(A)

Land	Day/Evening/Night LAeq(15 min)	Night La1 (1 min)
All privately-owned residences	35	45

Note:

- Noise generated by the project is to be measured in accordance with the relevant procedures and exemptions (including certain meteorological conditions) of the NSW Noise Policy for Industry (EPA, 2017).
- Operational noise includes noise from the mining operations and the use of private roads and rail spurs.

However, these noise criteria do not apply if the <u>Applicant</u> has an agreement with the owner/s of the relevant residence or land to generate higher noise levels, and the <u>Applicant</u> has advised the <u>Department</u> in writing of the terms of this agreement.

### **Noise Acquisition Requirements - Residences**

8. If the owner(s) of a privately-owned residence, which is not within the project's 35 dB(A) noise impact contour (see condition 2, Table 2 and Appendix 4A), have reason to believe that operational noise from the project is causing the criteria in Table 5 to be exceeded at the residence, the owner(s) can request an independent noise impact assessment for the residence. The request must be made in writing to the Planning Secretary. If the Planning Secretary considers that a noise impact assessment is warranted, then the <u>Applicant must</u> commission the assessment.

If the noise impact assessment determines that the noise generated by the project causes sustained exceedances, or is likely to cause sustained exceedances, of the criteria in Table 5, the owner(s) can make a written request to the Applicant for one of the following:

- (a) mitigation (such as double glazing, insulation and air conditioning) at the residence in consultation with the owner(s). These measures must be reasonable and feasible and directed towards reducing the noise impacts of the project on the residence. If within 3 months of receiving this request from the owner(s), the <u>Applicant</u> and owner(s) 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 the <u>Planning Secretary</u> for resolution; or
- (b) acquisition of the residence and land in accordance with the procedures in conditions 8-9 of Schedule 4.

Upon receiving a written request from the owner(s), the <u>Applicant</u> must undertake whichever option has been requested by the owner(s).

However, this condition does not apply if the <u>Applicant</u> has an agreement with the owner(s) of the relevant residence to generate higher noise levels, and the <u>Applicant</u> has advised the <u>Department</u> in writing of the terms of this agreement.

Notes:

- 1. For the purposes of this condition a privately-owned residence is defined as a residence not owned by a mining company that: is regularly occupied; or is an existing residence that is not regularly occupied but for which a valid development consent exists; or is a proposed residence for which a development application has been lodged with the relevant authority prior to the date of this approval.
- 2. For the purposes of acquisition under this condition, parcels of land that are in close proximity and operated as a single agricultural enterprise should be included as part of the land to be acquired. Where the <u>Applicant</u> and the owner(s) cannot agree on whether non-contiguous parcels of land should be included, either party may refer the matter to the Planning Secretary for resolution. The Planning Secretary's decision as to the lands to be included for acquisition under the procedures in conditions 8 and 9 of Schedule 4 <u>must</u> be final.
- 3. Notes 2,3,4 and 5 of condition 3 apply to this condition.

#### **Noise Acquisition Requirements - Land**

9. If the owner(s) of land containing a privately owned residence, which is not listed in Table 1, have reason to believe that operational noise from the project is causing noise levels to exceed 40 dB(A) LAeq(15 min) over more than 25% of that land, the owner(s) can request an independent noise

impact assessment for the land. The request <u>must</u> be made in writing to the <u>Planning Secretary</u>. If the <u>Planning Secretary</u> considers that a noise impact assessment is warranted, then the <u>Applicant must</u> commission the assessment.

If the noise impact assessment determines that the noise generated by the project causes sustained exceedances, or is likely to cause sustained exceedances, of the 40 dBA criteria, the owner(s) can make a written request to the <u>Applicant</u> for acquisition of the residence and land in accordance with the procedures in conditions 8-9 of Schedule 4.

Upon receiving a written request from the owner(s), the <u>Applicant</u> must purchase the residence and land in accordance with the procedures in conditions 8-9 of Schedule 4.

However, this condition does not apply if the <u>Applicant</u> has an agreement with the owner(s) of the relevant residence to generate higher noise levels, and the <u>Applicant</u> has advised the <u>Department</u> in writing of the terms of this agreement.

Notes:

- For the purposes of this condition a privately-owned residence is defined as a residence not owned by a mining company that: is regularly occupied; or is an existing residence that is not regularly occupied but for which a valid development consent exists; or is a proposed residence for which a development application has been lodged with the relevant authority prior to the date of this approval.
- 2. For the purposes of acquisition under this condition, parcels of land that are in close proximity and operated as a single agricultural enterprise should be included as part of the land to be acquired. Where the <u>Applicant</u> and the owner(s) cannot agree on whether non-contiguous parcels of land should be included, either party may refer the matter to the Planning Secretary for resolution. The Planning Secretary's decision as to the lands to be included for acquisition under the procedures in conditions 8 and 9 of Schedule 4 must be final.
- 3. Notes 2,3,4 and 5 of condition 3 apply to this condition.

### **Cumulative Noise Criteria**

10. Except for the land listed in Table 1, the <u>Applicant must</u> ensure that the operational noise generated by the project combined with the noise generated by other mines does not exceed the criteria in Table 6 at any residence on privately-owned land.

Land	Day/Evening/Night L <sub>Aeq (period)</sub>	
All privately-owned land	40	

Table 6: Cumulative noise criteria dB(A) LAeq (period)

Notes:

- Cumulative noise is to be measured in accordance with the relevant requirements, and exemptions (including certain meteorological conditions), of the NSW Noise Policy for Industry (EPA, 2017).
- Operational noise includes noise from the mining operations and the use of private roads and rail spurs.

### **Cumulative Noise Acquisition Requirements**

11. If the owner(s) of a privately-owned residence, which is not listed in Table 1, reasonably believes that the noise limits in Table 6 are being exceeded at the residence and that the exceedance is caused by operational noise from the project and one or more other mines (including use of private roads or rail spurs), the owner(s) can request an independent noise impact assessment for the residence. The request <u>must</u> be made in writing to the <u>Planning Secretary</u>. If the <u>Planning Secretary</u> considers that a noise impact assessment is warranted, then the <u>Applicant must</u> commission the assessment.

Where the noise impact assessment determines that the cumulative noise generated by the project combined with the noise from the other mine(s) causes, or is likely to cause, sustained exceedances of the criteria in Table 6, then the owner(s) can make a written request to the <u>Applicant</u> for one of the following:

(a) mitigation (such as double glazing, insulation and air conditioning) at the residence in consultation with the owner(s). These measures must be reasonable and feasible and directed towards reducing the noise impacts of the project on the residence. If within 3 months of receiving this request from the owner(s), the <u>Applicant</u> and owner(s) 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 the Planning Secretary for resolution; or

(b) acquisition of the residence and land in accordance with the procedures in conditions 8-9 of Schedule 4.

Upon receiving a written request from the owner(s), the <u>Applicant</u> must undertake whichever option has been requested by the owner(s).

However, this condition does not apply if the <u>Applicant</u> has an agreement with the owner(s) of the relevant residence to generate higher noise levels, and the <u>Applicant</u> has advised the <u>Department</u> in writing of the terms of this agreement.

The <u>Applicant</u> may seek to recover an equitable share of the costs incurred from the other mines contributing to the cumulative impact. Unless otherwise agreed between the mines, the proportional contributions should be based on expert analysis of the monitoring results to assess relative contribution to the impact. In the event of a dispute between the mines the <u>Applicant</u>, or one of the contributing mines, may submit the matter to the <u>Planning Secretary</u> for resolution. The <u>Planning Secretary</u>'s decision <u>must</u> be final.

Notes:

- For the purposes of this condition a privately-owned residence is defined as a residence not owned by a mining company that: is regularly occupied; or is an existing residence that is not regularly occupied but for which a valid development consent exists; or is a proposed residence for which a development application has been lodged with the relevant authority prior to the date of this approval.
- 2. For the purposes of acquisition under this condition, parcels of land that are in close proximity and operated as a single agricultural enterprise should be included as part of the land to be acquired. Where the <u>Applicant</u> and the owner(s) cannot agree on whether non-contiguous parcels of land should be included, either party may refer the matter to the <u>Planning Secretary</u> for resolution. The <u>Planning Secretary's</u> decision as to the lands to be included for acquisition under the procedures in conditions 8 and 9 of Schedule 4 must be final.
- 3. Notes 2,3,4 and 5 of condition 3 apply to this condition.
- 4. The noise impact assessment <u>must</u> include assessment of the relative contribution of the mines to the impact at the residence.

#### Attenuation of Plant

#### 12. The Applicant must:

- (a) ensure that:
  - all mining trucks and water carts used on the site are commissioned as noise suppressed (or attenuated) units;
  - ensure that all equipment and noise control measures deliver sound power levels that are equal to or better than the sound power levels identified in the EA, and correspond to best practice or the application of the best available technology economically achievable;
  - where reasonable and feasible, improvements are made to existing noise suppression equipment as better technologies become available; and
- (b) monitor and report on the implementation of these requirements annually on its website.
- 13. The Applicant must:
  - (a) conduct an annual testing program of the attenuated plant on site to ensure that the attenuation remains effective;
  - (b) restore the effectiveness of any attenuation if it is found to be defective; and
  - (c) report on the results of any testing and/or attenuation work annually on its website.

#### Maules Creek Rail Spur Line – Noise impacts

- 14. The Applicant must:
  - (a) commission suitably qualified and experienced person/s to review the design of the Maules Creek rail spur line, and determine whether it incorporates all reasonable and feasible noise mitigation measures, including suitable measures to minimise low frequency noise;
  - (b) implement the recommendations of this acoustic review;

- (c) undertake commissioning trials of the spur line to determine the optimal train speed to minimise noise impacts; and
- (d) following commissioning of the spur line, undertake targeted noise monitoring to determine the accuracy of predicted acoustic impacts and effectiveness of any noise reduction measures, including monitoring during adverse inversion conditions,

to the satisfaction the Planning Secretary.

### **Operating Conditions**

- 15. The Applicant must:
  - (a) implement best management practice to minimise the construction, operational, low frequency, road and rail traffic noise of the project;
  - (b) operate a comprehensive noise management system on site that uses a combination of predictive meteorological forecasting and real-time noise monitoring data to guide the day to day planning of mining operations and the implementation of both proactive and reactive noise mitigation measures to ensure compliance with the relevant conditions of this approval;
  - (c) maintain the effectiveness of noise suppression equipment on plant at all times and ensure defective plant is not used operationally until fully repaired;
  - (d) ensure that noise attenuated plant is deployed preferentially in locations relevant to sensitive receivers;
  - (e) minimise the noise impacts of the project during meteorological conditions when the noise limits in this approval do not apply;
  - (f) ensure that the Maules Creek rail spur line is only accessed by locomotives that are approved to operate on the NSW rail network in accordance with the noise limits in ARTC's EPL (No. 3142);
  - (g) use its best endeavours to ensure that the rolling stock supplied by service providers on the rail spur line is designed, constructed and maintained to minimise noise;
  - (h) ensure any new rail rolling stock manufactured specifically for the project is designed, constructed and maintained to minimise noise; and
  - co-ordinate the noise management on site with the noise management at other mines within the Leard Forest Mining Precinct to minimise the cumulative noise impacts of these mines,

to the satisfaction of the Planning Secretary.

### **Noise Management Plan**

- 16. The <u>Applicant must</u> prepare and implement a Noise Management Plan for the project to the satisfaction of the Planning Secretary. This plan must:
  - (a) be prepared in consultation with the EPA, and submitted to the Planning Secretary for approval prior to the commencement of construction;
  - (b) describe the measures that would be implemented to ensure:
    - best management practice is being employed;
    - the noise impacts of the project are minimised during meteorological conditions when the noise limits in this approval do not apply; and
    - compliance with the relevant conditions of this approval;
  - (c) describe the proposed noise management system in detail;
  - (d) include a risk/response matrix to codify mine operational responses to varying levels of risk resulting from weather conditions and specific mining activities;
  - (e) include commitments to provide summary reports and specific briefings at CCC meetings on issues arising from noise monitoring;
  - (f) include a monitoring program that:
    - uses a combination of real time and supplementary attended monitoring to evaluate the performance of the project;
    - adequately supports the proactive and reactive noise management system on site;

- includes a protocol for determining exceedances of the relevant conditions of this approval;
- includes monitoring of inversion strength at an appropriate sampling rate to determine compliance with noise limits;
- evaluates and reports on the effectiveness of the noise management system on site; and
- provides for the annual validation of the noise model for the project; and
- (g) includes a Leard Forest Mining Precinct Noise Management Strategy that has been prepared in consultation with the other coal mines in the Precinct to minimise the cumulative noise impacts of all the mines within the precinct, and includes:
  - a description of the measures that would be implemented to ensure that the noise management of the mines is properly co-ordinated to ensure compliance with the relevant noise criteria;
  - a suitable monitoring network for the precinct;
  - protocols for data sharing; and
  - procedures for identifying and apportioning the source/s and contribution/s to cumulative noise impacts for the operating mines and other sources, using the noise and meteorological monitoring network and appropriate investigative tools.

Note: The Leard Forest Mining Precinct Noise Management Strategy can be developed in stages and will need to be subject to ongoing review dependent upon the determination and commencement of other mining projects in the area.

#### **Noise Measurement**

### 17. Deleted.

### BLASTING

### **Blasting Criteria**

18. The <u>Applicant must</u> ensure that the blasting on the site does not cause exceedances of the criteria in Table 7.

Table 7: Blasting criteria

	Location	Airblast overpressure (dB(Lin Peak))	Ground vibration (mm/s)	Allowable exceedance
-		120	10	0%
	Residence on privately owned land	115	5	5% of the total number of blasts over a period of 12 months
	All public infrastructure	-	50 (or alternatively a specific limit determined to the satisfaction of the <b>Planning Secretary</b> by the structural design methodology in AS 2187.2-2006, or its latest version)	0%

However, these criteria do not apply if the <u>Applicant</u> has a written agreement with the relevant owner or infrastructure provider/owner, and the <u>Applicant</u> has advised the <u>Department</u> in writing of the terms of this agreement.

### Blasting Hours

19. The <u>Applicant must</u> only carry out blasting on the site between 9 am and 5 pm Monday to Saturday inclusive. No blasting is allowed on Sundays, public holidays, or at any other time without the written approval of the Planning Secretary.

### **Blasting Frequency**

- 20. The Applicant may carry out a maximum of:
  - (a) 1 blast a day; unless an additional blast is required following a blast misfire; and
  - (b) 4 blasts a week, averaged over a calendar year;

for the project.

This condition does not apply to blasts that generate ground vibration of 0.5 mm/s or less at any residence on privately-owned land, or to blasts required to ensure the safety of the mine or its workers.

Note: For the purposes of this condition, a blast refers to a single blast event, which may involve a number of individual blasts fired in quick succession in a discrete area of the mine.

### **Property Inspections**

- 21. If the <u>Applicant</u> receives a written request from the owner of any privately-owned land within 2 kilometres of the approved open cut mining pit on site, for a property inspection to establish the baseline condition of any buildings and/or structures on his/her land, or to have a previous property inspection report updated, then within 2 months of receiving this request the <u>Applicant</u> must:
  - (a) commission a suitably qualified, experienced and independent person, whose appointment is acceptable to both parties, to:
    - establish the baseline condition of any buildings and/or structures on the land, or update the previous property inspection report; and
    - identify any measures that should be implemented to minimise the potential blasting impacts of the project on these buildings and/or structures; and
  - (b) give the landowner a copy of the new or updated property inspection report.

If there is a dispute over the selection of the suitably qualified, experienced and independent person, or the <u>Applicant</u> or landowner disagrees with the findings of the independent property investigation, then either party may refer the matter to the <u>Planning Secretary</u> for resolution.

### **Property Investigations**

- 22. If the owner of any privately-owned land claims that the buildings and/or structures on his/her land have been damaged as a result of blasting on site then within 2 months of receiving this claim in writing from the landowner the <u>Applicant must</u>:
  - (a) commission a suitably qualified, experienced and independent person, whose appointment is acceptable to both parties, to investigate the claim; and
  - (b) give the landowner a copy of the property investigation report.

If this independent property investigation confirms the landowner's claim, and both parties agree with these findings, then the <u>Applicant must</u> repair the damages to the satisfaction of the <u>Planning</u> Secretary.

If there is a dispute over the selection of the suitably qualified, experienced and independent person, or the <u>Applicant</u> or landowner disagrees with the findings of the independent property investigation, then either party may refer the matter to the <u>Planning Secretary</u> for resolution.

### **Operating Conditions**

- 23. During mining operations on site, the <u>Applicant must</u>:
  - (a) implement best management practice to:
    - protect the safety of people and livestock in the surrounding area;
    - protect public or private infrastructure/property in the surrounding area from any damage; and
    - minimise the dust and fume emissions of any blasting; and
    - minimise blasting impacts on heritage items in the vicinity of the site;
  - (b) co-ordinate the timing of blasting on site with the timing of blasting at other mines within the Leard Forest Mining Precinct to minimise the cumulative blasting impacts of these mines; and

(c) operate a suitable system to enable the public to get up-to-date information on the proposed blasting schedule on site,

to the satisfaction of the Planning Secretary.

- 24. The Applicant must not undertake blasting on-site within 500 metres of:
  - (a) any public road without the approval of Council; or
  - (b) any land outside the site that is not owned by the Applicant, unless:
    - the <u>Applicant</u> has a written agreement with the relevant landowner to allow blasting to be carried out closer to the land, and the <u>Applicant</u> has advised the <u>Department</u> in writing of the terms of this agreement, or
    - the <u>Applicant</u> has:
      - demonstrated to the satisfaction of the Planning Secretary that the blasting can be carried out closer to the land without compromising the safety of the people or livestock on the land, or damaging the buildings and/or structures on the land; and
      - updated the Blast Management Plan to include the specific measures that would be implemented while blasting is being carried out within 500 metres of the land.

### **Blast Management Plan**

- 25. The <u>Applicant must</u> prepare and implement a Blast Management Plan for the project to the satisfaction of the <u>Planning Secretary</u>. This plan must:
  - (a) be submitted to the Planning Secretary for approval prior to undertaking any blasting activities on the site;
  - (b) be prepared in consultation with the EPA and interested members of the local community potentially affected by blasting operations;
  - (c) propose and justify any alternative ground vibration limits for public infrastructure in the vicinity of the site;
  - (d) describe the measures that would be implemented to ensure:
    - best management practice is being employed; and
    - compliance with the relevant conditions of this approval;
  - (e) include a road closure management plan for blasting within 500 metres of a public road, that has been prepared in consultation with Council;
  - (f) include a specific blast fume management protocol to demonstrate how emissions will be minimised including risk management strategies if blast fumes are generated;
  - (g) include a monitoring program for evaluating the performance of the project including:
    - compliance with the applicable criteria; and
    - minimising fume emissions from the site; and
  - (h) include a Leard Forest Mining Precinct Blast Management Strategy that has been prepared in consultation with the other mines within the Leard Forest Mining Precinct to minimise the cumulative blasting impacts of all the mines within the precinct.

Note: The Leard Forest Mining Precinct Blast Management Strategy can be developed in stages and will need to be subject to ongoing review dependent upon the determination of and commencement of other mining projects in the area.

## **AIR QUALITY & GREENHOUSE GAS**

### Odour

26. Unless otherwise authorised by an EPL, the <u>Applicant must</u> ensure that no offensive odours are emitted from the site, as defined under the POEO Act.

#### **Greenhouse Gas Emissions**

27. The <u>Applicant must</u> implement all reasonable and feasible measures to minimise the release of greenhouse gas emissions from the site to the satisfaction of the <u>Planning Secretary</u>.

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### Additional Air Quality Mitigation Upon Request

28. Upon receiving a written request from the owner(s) of any residence on the land listed in Table 1 (on the basis of air quality) or the land listed in Table 8, the <u>Applicant must</u> implement additional air quality mitigation measures (such as air filters, a first flush roof water drainage system and/or air conditioning) at the residence in consultation with the owner. These measures must be reasonable and feasible and directed towards reducing the air quality impacts of the project on the residence.

If within 3 months of receiving this request from the owner, the <u>Applicant</u> 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 the <u>Planning Secretary</u> for resolution.

Table 8: Land subject to additional air quality mitigation measures upon request

Mitigation Basis	Land	
Air	<b>108</b> -109 <del>, <u>115-116, 121-122</u></del>	

Note: To interpret the locations referred to in Table 8, see the applicable figure(s) in Appendix 4.

#### Air Quality Criteria

29. Except for the air quality affected land in Table 1, the <u>Applicant must</u> ensure that all reasonable and feasible avoidance and mitigation measures are employed so that particulate matter emissions generated by the project do not cause exceedances of the criteria listed in Table 9, Table 10 and Table 11 at any residence-on privately-owned land or on more than 25 percent of any privately-owned land.

Table 9: Long-term criteria for particulate matter

Pollutant	Averaging Period	<sup>d</sup> Criterion
Total suspended particulate (TSP) matter	Annual	<sup>a</sup> 90 μg/m <sup>3</sup>
Particulate matter < 10 μm (PM <sub>10</sub> )	Annual	<sup>a</sup> 30 µg/m <sup>3</sup>

Pollutant	Averaging Period	<sup>d</sup> Criterion
Particulate matter < 10 μm (PM <sub>10</sub> )	24 hour	<sup>a</sup> 50 µg/m <sup>3</sup>

Table 11: Long-term criteria for deposited dust

Pollutant	Averaging	Maximum increase in	Maximum total
	Period	deposited dust level	deposited dust level
<sup>c</sup> Deposited dust	Annual	<sup>b</sup> 2 g/m <sup>2</sup> /month	<sup>a</sup> 4 g/m <sup>2</sup> /month

Notes to Table 9, Table 10 and Table 11:

<sup>a</sup> Total impact (ie incremental increase in concentrations due to the project plus background concentrations due to all other sources);

<sup>b</sup> Incremental impact (ie incremental increase in concentrations due to the project on its own);

<sup>c</sup>Deposited dust is to be assessed as insoluble solids as defined by Standards Australia, AS/NZS 3580.10.1:2003: Methods for Sampling and Analysis of Ambient Air - Determination of Particulate Matter - Deposited Matter - Gravimetric Method.

<sup>d</sup> Excludes extraordinary events such as bushfires, prescribed burning, dust storms, sea fog, fire incidents or any other activity agreed by the Planning Secretary.

reasonable and feasible avoidance and mitigation measures' includes, but is not limited to, the operational requirements in condition 33 and the requirements in conditions 33 and 34 to develop and implement a real-time air quality management system that ensures effective operational responses to the risks of exceedance of the criteria.

#### **Mine-Specific Air Quality Criteria**

30. The <u>Applicant must</u> ensure that except for the air quality affected land in Table 1 (and subject to note 1 below for properties listed in Table 8), particulate matter emissions generated by the project do not exceed the criteria listed in Table 12 at any residence on privately-owned land or on more than 25 percent of any privately-owned land.

Table 12: Short-term criteria for particulate matter

Pollutant	Averaging Period	Criterion
Particulate matter < 10 µm (PM <sub>10</sub> )	24 hour	50 µg/m³

#### Notes:

- 1. The properties listed in Table 8 are each predicted to be impacted by an exceedance of the criteria in Table 12 on one occasion in one modelled year. For each of these properties a maximum of 5 exceedances of the criteria in Table 12 is allowed over the period covered by this approval. These allowed exceedances are limited to the project-specific emission predictions for each property and to a single exceedance for each property in any one year.
- 2. As provided by the EP&A Act, the criterion in Table 12 (and the exceptions in note 1) may be amended to a more stringent criterion in an EPL, after the first review of the EPL under section 78 of the POEO Act.

#### Mine-owned Land

- 31. The <u>Applicant must</u> ensure that particulate matter emissions generated by the project do not exceed the criteria listed in Table 9, Table 10 and Table 11 at any occupied residence on any mine-owned land (including land owned by adjacent mines) unless:
  - (a) the tenant and landowner has been notified of health risks in accordance with the notification requirements under schedule 4 of this approval;
  - (b) the tenant on project owned land can terminate their tenancy agreement without penalty, subject to giving reasonable notice, and the <u>Applicant</u> uses its best endeavours to provide assistance with relocation and sourcing of alternative accommodation;
  - (c) air mitigation measures such as air filters, a first flush roof water drainage system and/or air conditioning) are installed at the residence, if requested by the tenant and landowner (where owned by another mine other than the <u>Applicant</u>);
  - (d) particulate matter air quality monitoring is undertaken to inform the tenant and landowner of potential health risks; and
  - (e) monitoring data is presented to the tenant in an appropriate format, for a medical practitioner to assist the tenant in making an informed decision on the health risks associated with occupying the property,

to the satisfaction of the Planning Secretary.

#### Air Quality Acquisition Criteria

32. If particulate matter emissions generated by the project exceed the criteria, or contribute to an exceedance of the relevant cumulative criteria, in Table 13, Table 14 or Table 15, at any residence on privately-owned land or on more than 25 percent of any privately-owned land, then upon receiving a written request for acquisition from the landowner the <u>Applicant must</u> acquire the land in accordance with the procedures in conditions 8-9 of schedule 4.

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Table 13: Long-term land acquisition criteria for particulate matter

Pollutant	Averaging period	<sup>d</sup> Criterion
Total suspended particulate (TSP) matter	Annual	<sup>a</sup> 90 μg/m <sup>3</sup>
Particulate matter < 10 μm (PM <sub>10</sub> )	Annual	<sup>a</sup> 30 μg/m <sup>3</sup>

Table 14: Short-term land acquisition criteria for particulate matter

Pollutant	Averaging period	<sup>d</sup> Criterion
Particulate matter < 10 µm (PM <sub>10</sub> )	24 hour	<sup>a</sup> 150 μg/m <sup>3</sup>
Particulate matter < 10 µm (PM <sub>10</sub> )	24 hour	<sup>⊳</sup> 50 µg/m³

Table 15: Long-term land acquisition criteria for deposited dust

Pollutant	Averaging period	Maximum increase in deposited dust level	Maximum total deposited dust level
<sup>c</sup> Deposited dust	Annual	<sup>b</sup> 2 g/m <sup>2</sup> /month	<sup>a</sup> 4 g/m <sup>2</sup> /month

Notes to Table 13, Table 14 and Table 15:

<sup>a</sup> Total impact (ie incremental increase in concentrations due to the project plus background concentrations due to all other sources);

<sup>b</sup> Incremental impact (ie incremental increase in concentrations due to the project on its own);

<sup>c</sup> Deposited dust is to be assessed as insoluble solids as defined by Standards Australia, AS/NZS 3580.10.1:2003: Methods for Sampling and Analysis of Ambient Air - Determination of Particulate Matter - Deposited Matter - Gravimetric Method;

<sup>d</sup> Excludes extraordinary events such as bushfires, prescribed burning, dust storms, sea fog, fire incidents, or any other activity agreed by the Planning Secretary.

#### **Operating Conditions**

### 33. The Applicant must:

- (a) implement best management practice to minimise the off-site odour, fume and dust emissions of the project, including best practice coal loading and profiling and other measures to minimise dust emissions from coal transportation by rail;
- (b) operate a comprehensive air quality management system on site that uses a combination of predictive meteorological forecasting, predictive and real time air dispersion modelling and real-time air quality monitoring data to guide the day to day planning of mining operations and implementation of both proactive and reactive air quality mitigation measures (such as relocate, modify and/or suspend operations) to ensure compliance with the relevant conditions of this approval;
- (c) manage PM<sub>2.5</sub> levels in accordance with any requirements of an EPL;
- (d) minimise the air quality impacts of the project during adverse meteorological conditions and extraordinary events (see note d in condition 29);
- (e) minimise any visible off-site air pollution;
- (f) minimise the surface disturbance of the site generated by the project; and
- (g) co-ordinate the air quality management on site with the air quality management at other mines within the Leard Forest Mining Precinct to minimise the cumulative air quality impacts of the mines,

to the satisfaction of the Planning Secretary.

### Air Quality and Greenhouse Gas Management Plan

- 34. The <u>Applicant must</u> prepare and implement an Air Quality and Greenhouse Gas Management Plan for the project to the satisfaction of the <u>Planning Secretary</u>. This plan must:
  - (a) be prepared in consultation with the EPA, and be submitted to the Planning Secretary for approval prior to the commencement of construction;
  - (b) describe the measures that would be implemented to ensure:
    - best management practice is being employed;
    - the air quality impacts of the project are minimised during adverse meteorological conditions and extraordinary events; and
    - compliance with the relevant conditions of this consent.
  - (c) describe the proposed air quality management system;
  - (d) include a risk/response matrix to codify mine operational responses to varying levels of risk resulting from weather conditions and specific mining activities;
  - (e) include commitments to provide summary reports and specific briefings at CCC meetings on issues arising from air quality monitoring;
  - (f) include an air quality monitoring program that:
    - uses a combination of real-time monitors and supplementary monitors to evaluate the performance of the project;
    - adequately supports the proactive and reactive air quality management system;
    - includes PM<sub>2.5</sub> monitoring;
    - includes a trigger response/reactive management protocol to be used in combination with the real time PM<sub>10</sub> monitoring sites and the site meteorological weather station;
    - includes monitoring of occupied project-related residences and residences on air quality-affected land listed in Table 1 and Table 8, subject to the agreement of the tenant and/or landowner;
    - evaluates and reports on the effectiveness of the air quality management system;
    - includes sufficient random audit of operational responses to the real time air quality management system to determine the ongoing effectiveness of these responses in maintaining the project within the relevant criteria in this Schedule and the requirements of conditions 29 and 30 above; and
    - includes a protocol for determining any exceedances of the relevant conditions in this approval; and
  - (g) includes a Leard Forest Mining Precinct Air Quality Management Strategy that has been prepared in consultation with other coal mines in the Precinct to minimise the cumulative air quality impacts of all mines within the Precinct, that includes:
    - systems and processes to ensure that all mines are managed to achieve their air quality criteria;
      - a shared environmental monitoring network and data sharing protocol;
      - control monitoring site(s) to provide real time data on background air quality levels (ie not influenced by mining from the Leard Forest Mining Precinct and representative of regional air quality);
    - a shared predictive and real time air dispersion model covering the Leard Forest Mining Precinct to be used for assessment of cumulative impacts, optimising location of the shared real time monitoring network, validation of air predictions and optimising mitigation measures; and
    - procedures for identifying and apportioning the source/s and contribution/s to cumulative air impacts for both mines and other sources, using the air quality and meteorological monitoring network and appropriate investigative tools such as modelling of post incident plume dispersion, dual synchronised monitors and chemical methods of source apportionment (where possible).

Notes:

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The requirement for regionally based control sites can be further reviewed if a regional air monitoring network is
implemented and operated by the EPA as recommended in the draft Strategic Regional Land Use Plan for New
England North West.

- The Leard Forest Mining Precinct Air Quality Management Strategy can be developed in stages and will need to be subject to ongoing review dependent upon the determination of and commencement of other mining projects in the area.
- The management plan should be consistent with the EPA's guidance on Best Management Practice reporting and Reactive Particulate Management Strategies.

### **METEOROLOGICAL MONITORING**

- 35. For the life of the project, the <u>Applicant must</u> ensure that there is a meteorological station in the vicinity of the site that:
  - (a) complies with the requirements in the *Approved Methods for Sampling of Air Pollutants in New South Wales* guideline; and
  - (b) is capable of continuous real-time measurement of temperature lapse rate in accordance with the *NSW Noise Policy for Industry* (EPA, 2017), unless a suitable alternative is approved by the Planning Secretary following consultation with the EPA.
- 35A. The <u>Applicant must</u> develop and implement a quality assurance and control procedure for the data collected from the meteorological monitoring station and make it available to the EPA upon request.

### SOIL AND WATER

Note: Under the Water Act 1912 and/or the Water Management Act 2000, the <u>Applicant</u> is required to obtain the necessary water licences for the project.

#### Water Supply

36. The <u>Applicant must</u> ensure that it has sufficient water for all stages of the project, and if necessary, adjust the scale of mining operations on site, to match its available water supply to the satisfaction of the Planning Secretary.

### **Compensatory Water Supply**

37. The <u>Applicant must</u> provide a compensatory water supply to any landowner of privately-owned land whose water supply is adversely and directly impacted (other than an impact that is negligible) as a result of the project, in consultation with <u>DCCEEW Water</u>, and to the satisfaction of the Planning Secretary.

The compensatory water supply measures must provide an alternative long-term supply of water that is equivalent to the loss attributed to the project. Equivalent water supply should be provided (at least on an interim basis) within 24 hours of the loss being identified.

If the <u>Applicant</u> and the landowner 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 the <u>Planning Secretary</u> for resolution.

If the <u>Applicant</u> is unable to provide an alternative long-term supply of water, then the <u>Applicant</u> <u>must</u> provide alternative compensation to the satisfaction of the <u>Planning Secretary</u>.

### **Surface Water Discharges**

- 38. The Applicant must ensure that any surface water discharges of mine water from the site:
  - (a) are of equal or better quality than the receiving waters; and
  - (b) comply with the discharge limits (both volume and quality) set for the project in any EPL.

Note: The project is based on a zero discharge basis for mine water in all modelled meteorological events, however the Department acknowledges that discharge of treated water may be required to be undertaken following very extraordinary events outside modelled data, if approved under an EPL.

#### **Operating Conditions**

- 39. The Applicant must:
  - (a) develop a detailed soil management protocol that identifies procedures for:
    - comprehensive soil surveys prior to soil stripping;
    - assessment of top-soil and sub-soil suitability for mine rehabilitation; and

NSW Government

- annual soil balances to manage soil handling including direct respreading and stockpiling;
- (b) maximise the salvage of suitable top-soils and sub-soils and biodiversity habitat components such as bush rocks, tree hollows and fallen timber for rehabilitation of disturbed areas within the site and for enhancement of biodiversity offset areas;
- (c) ensure that coal reject or any potentially acid forming interburden materials are not emplaced at elevations within the pit shell or out of pit emplacement areas where they may promote acid or sulphate species generation and migration beyond the pit shell or out of pit emplacement areas;
- (d) ensure that no water can drain from an out of pit emplacement area to any watercourse or to any land beyond the lease boundary;
- (e) ensure that the coal barrier between the final void and any future surrounding mining operations minimises exchange of any contained groundwaters in the pit shell;
- (f) design, install and maintain any new infrastructure within 40 metres of watercourses in accordance with the guidance series for *Controlled Activities on Waterfront Land* (DPI Water, 2012 or latest version;

### Water Management Plan

40. The <u>Applicant must</u> prepare and implement a Water Management Plan for the project to the satisfaction of the Planning Secretary. This plan must be prepared in consultation with <u>BCS</u>, <u>DCCEEW Water</u> and North West LLS, by suitably qualified and experienced person/s whose appointment has been approved by the Planning Secretary, and be submitted to the Planning Secretary for approval prior to the commencement of construction.

In addition to the standard requirements for management plans (see condition 3 of schedule 5), this plan must include:

- (a) a <u>Site Water Balance</u>, that:
  - includes details of:
    - sources and security of water supply, including contingency for future reporting periods;
    - water use on site;
    - water management on site;
    - any off-site water discharges;
    - reporting procedures, including the preparation of a site water balance for each calendar year;
    - a program to validate the surface water model, including monitoring discharge volumes from the site and comparison of monitoring results with modelled predictions; and
  - describes the measures that would be implemented to minimise clean water use on site;
- (b) a <u>Surface Water Management Plan</u>, which includes:
  - detailed baseline data on surface water flows and quality in the water-bodies that could potentially be affected by the project;
  - detailed baseline data on hydrology across the downstream drainage system of the Namoi River floodplain from the mine site to the Namoi River;
  - a detailed description of the water management system on site, including the:
    - o clean water diversion systems;
    - erosion and sediment controls (dirty water system);
    - mine water management systems;
    - o discharge limits in accordance with EPL requirements;
    - water storages;
    - o mine access road and Maules Creek rail spur line;
  - detailed plans, including design objectives and performance criteria for:
    - design and management of final voids;
    - design and management for the emplacement of reject materials, sodic and dispersible soils and acid or sulphate generating materials;

- design and management for construction and operation of the rail spur line and mine access road;
- o reinstatement of drainage lines on the rehabilitated areas of the site; and
- control of any potential water pollution from the rehabilitated areas of the site; performance criteria for the following, including trigger levels for investigating any potentially adverse impacts associated with the project:
  - the water management system;
  - downstream surface water quality:
  - downstream flooding impacts, including flood impacts due to the construction and operation of the rail spur line and mine access road, and flooding along Back Creek; and
  - o stream and riparian vegetation health, including the Namoi River;
  - a program to monitor:
    - o the effectiveness of the water management system; and
    - surface water flows and quality in the watercourses that could be affected by the project;
    - o downstream flooding impacts; and
- reporting procedures for the results of the monitoring program;
- a plan to respond to any exceedances of the performance criteria, and mitigate and/or offset any adverse surface water impacts of the project; and
- (c) a <u>Groundwater Management Plan</u>, which includes:
  - detailed baseline data of groundwater levels, yield and quality in the region, and privately-owned groundwater bores including a detailed survey/schedule of groundwater dependent ecosystems (including stygo-fauna and Melaleuca riparian forest communities), that could be affected by the project;
  - the monitoring and testing requirements specified in the PAC recommendations for groundwater management as set out in Appendix 6;
  - detailed plans, including design objectives and performance criteria, for the design and management of:
    - the proposed final void; and
    - o coal reject and potential acid forming material emplacement;
  - groundwater assessment criteria including trigger levels for investigating any potentially adverse groundwater impacts;
  - a program to monitor and assess:
    - o groundwater inflows to the open cut mining operations;
    - the seepage/leachate from water storages, emplacements, backfilled voids and the final void;
    - interconnectivity between the alluvial and bedrock aquifers;
    - o background changes in groundwater yield/quality against mine-induced changes;
    - the impacts of the project on:
      - regional and local (including alluvial) aquifers;
      - groundwater supply of potentially affected landowners;
      - groundwater dependent ecosystems (including potential impacts on stygo-
      - fauna and Melaleuca riparian forest communities) and riparian vegetation;
  - a program to validate the groundwater model for the project, including an independent review of the model every 3 years, and comparison of monitoring results with modelled predictions; and
  - a plan to respond to any exceedances of the performance criteria; and
- (d) a <u>Leard Forest Mining Precinct Water Management Strategy</u> that has been prepared in consultation with other mines within the Precinct to:
  - minimise the cumulative water quality impacts of the mines;
  - review opportunities for water sharing/water transfers between mines;
  - co-ordinate water quality monitoring programs as far as practicable;
  - undertake joint investigations/studies in relation to complaints/exceedances of trigger levels where cumulative impacts are considered likely; and
  - co-ordinate modelling programs for validation, re-calibration and re-running of the groundwater and surface water models using approved mine operation plans.

Note: The Leard Forest Mining Precinct Water Management Strategy can be developed in stages and will need to be subject to ongoing review dependent upon the determination of and commencement of other mining projects in the area.

### BIODIVERSITY

### Leard Forest Mining Precinct Regional Biodiversity Strategy

41. The <u>Applicant must</u> commission and fund the preparation of a Leard Forest Mining Precinct Regional Biodiversity Strategy, jointly with all other coal mines within the Precinct. The Strategy <u>must</u> be co-ordinated through the <u>Department</u> (refer condition 42 below) and be prepared by suitably qualified, experienced and independent person/s whose appointment has been endorsed by <u>BCS</u> and subsequently approved by the <u>Planning Secretary</u>, in the following stages:

### Stage 1 – Scoping Stage

A scoping report for development of the Strategy must be submitted, by the end of January 2013, for endorsement by BCS and subsequent approval by the Planning Secretary. The Planning Secretary may extend this period with the agreement of BCS. The scoping report must:

- (a) include terms of reference, scope and objectives for the Strategy, including recommendations for the Strategy's geographic extent;
- (b) identify the ongoing functions and members of the working group (see condition 42 below);
- (c) include a project management plan of the Strategy, with a time schedule, indicative dates for working group meetings, review and milestones for completion;
- (d) include a funding program for the development of the Strategy, including provision of adequate resources for the participation of working group members; and
- (e) include a consultation/communications program for the Strategy.

Note: The broad terms of reference must be guided by the Planning Assessment Commission (PAC) merit reviews for the Boggabri Coal Mine (February 2012) and Maules Creek Coal Mine (March 2012) – Recommendation 1 for the development of a regional biodiversity strategy.

### Stage 2 - Strategy Development

The Strategy must be developed in accordance with the approved Scoping Stage report and be submitted, by the end of January 2014, for endorsement by BCS and subsequent approval by the Planning Secretary. The Planning Secretary may extend this period with agreement of BCS.

### <u>Stage 3 – Strategy Review</u>

The Strategy must be reviewed by the end of December 2018, following completion of audits of the rehabilitation and Biodiversity Offset Areas required to be undertaken under approvals for coal mines within the Precinct. The review <u>must</u> be conducted by suitably qualified, experienced and independent person/s whose appointment has been endorsed by BCS and subsequently approved by the Planning Secretary. Any modifications to the Strategy arising from the review must be endorsed by BCS prior to approval by the Planning Secretary.

- 42. The Strategy <u>must</u> be prepared in collaboration with a working group containing (subject to the outcomes of the Stage 1 Scoping Stage) representatives of the Department, BCS, the Resources Regulator, North West LLS, Council and <u>Commonwealth DCCEEW</u> and the other Leard Forest Mining Precinct mines; which <u>must</u> be chaired by a suitably qualified, experienced and independent person whose appointment has been approved by the Planning Secretary.
- 43. The cost of preparing the Strategy, including the independent chairperson and a co-ordinator to be employed by the Department <u>must</u> be shared equitably between the coal mines in the Leard Forest Mining Precinct on the basis of the approved clearing of remnant vegetation (including native grassland) by the mines, based on the following arrangements:
  - (a) Stage 1 is to be initially funded by Boggabri Coal, with appropriate compensation from the <u>Applicant</u> made following the determination of the Maules Creek Coal and Tarrawonga Coal Projects and as per approved funding arrangements finalised under the Stage 1 Scoping Report;
  - (b) Stage 2 is to be funded by all Leard Forest Mining Precinct mines based on the arrangements approved under the Stage 1 Scoping Report; and
  - (c) Stage 3 is to be funded by all Leard Forest Mining Precinct mines based on recommendations in the approved Stage 2 Leard Forest Mining Precinct Regional Biodiversity Strategy.

Note: Based on predicted clearing of native vegetation provided in the EA documents for the three projects within the Leard Forest Mining Precinct, the proposed funding split would equate to total contributions of 36% from Boggabri (clearing of 1,385 ha), 54% from Maules Creek (clearing of 2,078ha) and 10% from Tarrawonga (clearing of 397 ha). This funding arrangement may change depending upon the determination outcomes of individual projects and can be further refined in the Stage 1 Scoping Stage.

### Biodiversity Offset Strategy

44. The <u>Applicant must</u> implement the biodiversity offset strategy summarised in Table 16 to the satisfaction of the <u>Planning Secretary</u>.

Table 16: Summary of the Biodiversity Offset Strategy

Offset Area	Offset Type	Nominal Size of the Offset Area (ha)
Kelso         Velyama         Louenville         Teston South         Wollandilly         Thornfield         Onavale         Roseglass         Bimbooria         Wirradale and Wongala         South         Mount Lindesay         Triangle         Neranghi North         Cooncor         Long Gully         Teston North	Existing native woodland/forest of approximately 10.547.8 ha to be protected and enhanced (including approximately 4.114.4 ha of Box-Gum Woodland [woodland form] and approximately 17.6 ha of Belah Woodland). Restoration of woodland/forest within approximately 4.327 ha of derived native grassland and/or cleared land (including approximately 1.518 ha of Box-Gum Woodland CEEC [grassland form] and approximately 5 ha of Belah Woodland).	489           7.03           213           336           804           1.71           558           1.465           623           4.447           2.337           742           567           574           353           205
Tralee		<u>294</u>
	Subtotal	<u>14,881</u>
Rehabilitation Area	Except for the area of the minimised final void, pre-mining native vegetation communities to be re-established (including 544 ha of Box-Gum Woodland CEEC) for a biodiversity conservation land use objective, with the area subject to finalisation of the <i>Rehabilitation Management</i> <i>Plan</i> as required under this approval. Note: the final mix and area of native vegetation communities is subject to the Rehabilitation Management <i>Plan</i> .	2.078 (less the area of the minimised void approved under the closure plan required under this approval)
	Total	<u>16,959</u>

#### Security of Offsets

45. By 30 March 2025, unless otherwise agreed by the Planning Secretary, the Applicant must make suitable arrangements to secure in perpetuity the Long Gully, Triangle, Neranghi North and Coonoor offset areas identified in Table 16, to the satisfaction of the Planning Secretary.

Note: All other biodiversity areas in Table 16 have been secured under conservation agreements

45A. By the end of December 2034 unless otherwise agreed by the Planning Secretary, the Applicant must make suitable arrangements to secure in perpetuity the Rehabilitation Area identified in Table 16, to the satisfaction of the planning Secretary.

#### **Agricultural Production in Offset Areas**

- 46. Offset areas are to be managed primarily for the purposes of compensating for biodiversity impacts of the project, and improving regional biodiversity outcomes. However, to the extent that limited agricultural production on the lots purchased for offsets is compatible with these objectives, the Biodiversity Management Plan and other conditions of this approval, the <u>Applicant must</u>:
  - (a) include in the Biodiversity Management Plan (see condition 52 below) an agricultural suitability assessment of surplus land on the offset properties, in particular for proposed

corridor enhancement zones; and

(b) maintain the agricultural productivity of the surplus areas.

### Vegetated Corridor between Boggabri and Maules Creek Coal Projects

- 47. For the vegetated buffer corridor required to be retained and protected under condition 7 of schedule 2 of this approval, the <u>Applicant must</u>:
  - (a) use its best endeavours to work cooperatively with the <u>Applicant</u> of the Boggabri Coal Project to enhance the functioning of the area as a biodiversity corridor; and
  - (b) include in the Biodiversity Management Plan (see condition 52 below) the details as to how impacts on the corridor are to be minimised,

to the satisfaction of the Planning Secretary.

### **Threatened Species**

- 48. For the White Box Yellow Box Blakely's Red Gum Grassy Woodland Endangered Ecological Community the <u>Applicant must</u>:
  - ensure that the Biodiversity Offset Strategy and site Rehabilitation Strategy is focused on protection rehabilitation, re-establishment and long-term maintenance of viable stands of this community;
  - (b) investigate in consultation with BCS and the North West LLS, all factors likely to enhance or impede the effective long term restoration of degraded remnants of this EEC in offset areas or regeneration of this EEC on disturbed areas (both offset areas and the site);
  - (c) within 24 months of the date of this approval (and if possible in conjunction with Stage 2 of the Leard Forest Mining Precinct Regional Biodiversity Strategy), submit a report of this investigation and provide an implementation plan to maximise the prospects for rehabilitation and regeneration of this EEC on the offset areas and the site, for approval by the Planning Secretary; and
  - (d) incorporate the approved implementation plan into the revised Biodiversity Management Plan, required under condition 52.
- 49. For all threatened species on site, the <u>Applicant must</u> ensure that the Biodiversity Offset Strategy and Rehabilitation Strategy are focused on protection, rehabilitation and long-term maintenance of viable stands of suitable habitat for these species.

Note: the threatened fauna species on site include: Regent Honeyeater, Fork Tailed Swift, White Throated Needletail, Rainbow Bee-eater, Satin Flycatcher, Speckled Warbler, Swift Parrot, Brown Treecreeper, Diamond Firetail, Greycrowned Babbler, Hooded Robin, Little Lorikeet, Varied Sittella, White-browed Woodswallow, Black Chinned Honeyeater, Painted Honeyeater, Little Eagle, Spotted Harrier, Black Necked Stork, Square Tailed Kite, Turquoise Parrot, Barking Owl, Masked Owl, Eastern False Pipistrelle, Greater Long-eared Bat, Yellow-bellied Sheath Tail Bat, Eastern Cave Bat, Eastern Bent-wing Bat, Little Pied Bat and Koala.

- 50. The <u>Applicant must</u>:
  - (a) investigate, in consultation with BCS and the North West LLS, all factors likely to enhance or impede the effective long term provision of suitable habitat(s) for the following species: Regent Honeyeater, Speckled Warbler, Brown Treecreeper, Diamond Firetail, Greycrowned Babbler, Hooded Robin, Little Lorikeet, Varied Sittella, Black Chinned Honeyeater, Painted Honeyeater, Little Eagle, Spotted Harrier, Turquoise Parrot, Barking Owl, Masked Owl, Eastern False Pipistrelle, Greater Long-eared Bat, Yellow-bellied Sheath Tail Bat and Little Pied Bat;
  - (b) within 24 months of the date of this approval (and if possible, in conjunction with Stage 2 of the Leard Forest Mining Precinct Regional Biodiversity Strategy), submit a report of this investigation and provide an implementation plan to ensure delivery of suitable areas of viable habitat for the species included in (a) above, for approval by the Planning Secretary; and
  - (c) incorporate the approved implementation plan into the revised Biodiversity Management Plan, required under condition 52.

Note: the species listed in (a) are those identified in the Director-General's Assessment Report as likely to be significantly impacted by the project.

### Aquatic habitat

51. Prior to the design and construction of the permanent Namoi water pipeline and pump station, the <u>Applicant</u> must consult with DPI Fisheries regarding the general operation and design of the pump station and screens to minimise entrainment of fish. The <u>Applicant</u> must implement all reasonable and feasible recommendations from DPI Fisheries to the satisfaction of the Planning Secretary.

### **Biodiversity Management Plan**

- 52. The <u>Applicant must</u> prepare and implement a Biodiversity Management Plan for the project to the satisfaction of the <u>Planning Secretary</u>. This plan must:
  - be prepared in consultation with BCS, <u>Commonwealth DCCEEW</u>, CCC, and the North West LLS, and be submitted to the Planning Secretary for approval prior to commencement of construction;
  - (b) describe how the implementation of the biodiversity offset strategy would be integrated with the overall rehabilitation of the site;
  - (c) describe the short, medium, and long term measures that would be implemented to:
    - manage the remnant vegetation and habitat on the site and in the offset area/s (if and when applicable); and
    - implement the biodiversity offset strategy (if and when applicable), including detailed performance and completion criteria;
  - (d) include detailed performance and completion criteria for evaluating the performance of the biodiversity offset strategy, and triggering remedial action (if necessary);
  - (e) include a detailed description of the measures that would be implemented including the procedures to be implemented for:
    - enhancing the quality of existing vegetation and fauna habitat;
    - restoring native vegetation and fauna habitat on the biodiversity areas and rehabilitation area through focusing on assisted natural regeneration, targeted vegetation establishment and the introduction of naturally scarce fauna habitat features;
    - maximising the salvage of resources within the approved disturbance area including vegetative, top and sub-soils and cultural heritage resources – for beneficial reuse in the enhancement of the biodiversity areas or rehabilitation area;
    - collecting and propagating seed;
    - minimising the impacts on fauna on site, including undertaking pre-clearance surveys;
    - improving the connectivity and corridor function of the offset areas to provide an east/west corridor to the Namoi River and demonstrating that this corridor is enhanced and maintained;
    - managing any potential conflicts between the proposed restoration works in the biodiversity areas and any Aboriginal heritage values (both cultural and archaeological);
    - managing salinity;
    - controlling weeds and feral pests;
    - controlling erosion;
    - managing grazing and agriculture on site, including detailed assessment of the suitability of grazing for conservation management outcomes;
    - controlling access; and
    - bushfire management;
  - (f) include a seasonally-based program to monitor and report on the effectiveness of these measures, and progress against the detailed performance and completion criteria;
  - (g) identify the potential risks to the successful implementation of the biodiversity offset strategy, and include a description of the contingency measures that would be implemented to mitigate against these risks; and
  - (h) include details of who would be responsible for monitoring, reviewing, and implementing the plan.

Note: The Biodiversity Management Plan and Rehabilitation Management Plan need to be substantially integrated for achieving biodiversity objectives for the rehabilitated mine-site.

- 53. The <u>Applicant must</u> revise the Biodiversity Management Plan within 30 months of the date of this approval or within 6 months after the completion of Stage 2 of the Leard Forest Mining Precinct Regional Biodiversity Strategy, whichever is sooner. The revised plan must:
  - (a) be prepared in consultation with BCS, <u>Commonwealth DCCEEW</u>, <u>Forestry NSW</u>, <u>DPHI</u> <u>Crown Lands</u>, the CCC and the North West LLS;
  - (b) demonstrate consistency with the findings of Leard Forest Mining Precinct Regional Biodiversity Strategy; and
  - (c) include any implementation plans arising from the studies required under conditions 48 and 50 of this approval,

to the satisfaction of the Planning Secretary.

### Long Term Security of Offset

54. Replaced by Condition 45A

### **Conservation Bond**

- 55. Within 6 months of approval of any revision to the Biodiversity Management Plan required under condition 52 above, the Applicant must review and update as necessary the Conservation and Biodiversity Bond lodged with the Department to ensure that the biodiversity offset strategy is implemented in accordance with the performance and completion criteria of the Biodiversity Management Plan. The sum of the bond must be determined by:
  - (a) calculating the full cost of implementing the biodiversity offset strategy (other than land acquisition costs); and
  - (b) employing a suitably qualified quantity surveyor to verify the calculated costs

to the satisfaction of the Planning Secretary.

If <u>the biodiversity offset strategy</u> is completed generally in accordance with the completion criteria in the Biodiversity Management Plan to the satisfaction of the Planning Secretary, the Planning Secretary will release the bond.

If <u>the biodiversity offset strategy</u> is not completed generally in accordance with the completion criteria in the Biodiversity Management Plan, the Planning Secretary will call in all or part of the conservation bond, and arrange for the satisfactory completion of the relevant works.

With the agreement of the Planning Secretary, this bond may be combined with rehabilitation security deposit administered by the Resources Regulator.

Note: Alternative funding arrangements for long term management of the Biodiversity Offset Strategy, such as provision of capital and management funding as agreed by BCS as part of a Biobanking <u>or Biodiversity Stewardship Agreement</u> or transfer to conservation reserve estate can be used to reduce the liability of the conservation and biodiversity bond.

### **Biodiversity Audit**

- 56. By the end of December 2017 and then every 5 years, unless the Planning Secretary agrees otherwise, the <u>Applicant must</u> commission suitably qualified, experienced and independent person/s, whose appointment has been approved by the Planning Secretary, to undertake an audit of the revegetation of the rehabilitation area, management and restoration within the Biodiversity Offset Strategy areas to the satisfaction of the Planning Secretary. This audit must:
  - (a) include consultation with BCS, North West LLS, <u>DPHI Crown Lands</u>, <u>Commonwealth</u> <u>DCCEEW</u>, CCC and the Resources Regulator;
  - (b) assess the performance of the revegetation in the rehabilitation area completed to date against the completion criteria in the Rehabilitation Management Plan;
  - (c) assess the performance of management and restoration in the off-site Biodiversity Offset Strategy areas completed to date against the completion criteria in the Biodiversity Management Plan;
  - (d) identify any measures that should be implemented to improve the performance of rehabilitation, management and restoration within the rehabilitation and biodiversity offset areas; and
  - (e) if the completion criteria have not been met, or are not adequately trending towards being met, determine the likely ecological value of the rehabilitation and restoration once

completed, and recommend additional measures to augment the Biodiversity Offset Strategy to ensure that it adequately offsets the project's impacts on biodiversity.

If the audit recommends the implementation of additional measures to augment the Biodiversity Offset Strategy in accordance with (e) above, then within 6 months of the completion of the audit the Applicant must revise the Biodiversity Offset Strategy, in consultation with the Department, BCS and Commonwealth DCCEEW, and to the satisfaction of the Planning Secretary.

### **HERITAGE**

### Aboriginal Heritage Conservation Strategy

- The Applicant must prepare and implement an Aboriginal Heritage Conservation Strategy for the 57. project and the Biodiversity Offset Strategy areas to the satisfaction of the Planning Secretary. This Strategy must enhance and conserve the Aboriginal cultural heritage values (both cultural and archaeological) and provide for their long-term protection and management. The Strategy must:
  - be prepared by suitably qualified and experienced person/s whose appointment has been (a) endorsed by the Planning Secretary:
  - be prepared in consultation with BCS, the local Aboriginal community and other mines (b) within the Leard Forest Mining Precinct, and submitted to the Planning Secretary for approval within 18 months from the date of project approval;
  - identify the Aboriginal cultural heritage values of the Biodiversity Offset Strategy areas; (c)
  - identify areas of high Aboriginal cultural heritage significance within both the site and the (d) Leard Forest Mining Precinct;
  - identify a range of options for enhancing and conserving Aboriginal cultural heritage values, (e) with specific consideration of the potential for the long-term protection and management of significant sites within either the site, the Biodiversity Offset Strategy areas or other lands within the Leard Forest Mining Precinct identified as having high cultural heritage significance to the Aboriginal community; and
  - consider cumulative impacts and potential for developing joint initiatives with other mines (f) within the Leard Forest Mining Precinct for enhancing and conserving Aboriginal cultural heritage values.

Notes: Known Aboriginal sites are shown on the plans in Appendix 8.

### Heritage Management Plan

- The Applicant must prepare and implement a Heritage Management Plan for the project to the 58 satisfaction of the Planning Secretary. This plan must:
  - be prepared by suitably qualified and experienced person/s whose appointment has been (a) endorsed by the Planning Secretary;
  - be prepared in consultation with the BCS, North West LLS and the local Aboriginal (b) stakeholders (in relation to the management of Aboriginal heritage values);
  - (c) be submitted to the Planning Secretary for approval prior to any development that may impact heritage items, unless the Planning Secretary agrees otherwise;
  - (d) include the following for the management of Aboriginal heritage:
    - a detailed plan for the implementation of the approved Aboriginal Heritage Conservation Strategy;
    - a detailed archaeological salvage program for Aboriginal sites/objects within the approved disturbance area, including methodology and procedures/protocols for: sub-surface testing;
      - 0
      - staged salvage, based on anticipated mine planning; 0
      - if relevant, historic heritage salvage at the Lawler's Waterhole site; 0
      - pre-disturbance monitoring; 0
      - site assessment and reporting; 0
      - research objectives to inform knowledge of Aboriginal occupation; 0
      - protection, storage and management of salvaged Aboriginal objects; 0
        - addressing relevant statutory requirements under the National Parks and 0 Wildlife Act 1974; and
        - long term protection of salvaged Aboriginal objects; 0

- a description of the measures that would be implemented for:
  - protecting, monitoring and managing Aboriginal sites on the site which are outside of the approved disturbance area;
  - maintaining and managing reasonable access for Aboriginal stakeholders to heritage items on the site and within the Biodiversity Offset Strategy areas;
  - managing the discovery of any human remains or previously unidentified Aboriginal objects on site, including (in the case of human remains) stop work provisions and notification protocols;
  - ongoing consultation of the local Aboriginal stakeholders in the conservation and management of Aboriginal cultural heritage both on-site and within any Aboriginal heritage conservation areas;
  - ensuring any workers on site receive suitable heritage inductions prior to carrying out any activities which may disturb Aboriginal sites, and that suitable records are kept of these inductions;
- a strategy for the storage and management of any heritage items salvaged on site, both during the project and long term;
- (e) include the following for the management of historic heritage:
  - a detailed plan of management measures for maintaining or enhancing the heritage values of heritage items on project-related land which are outside of the approved disturbance area;
  - a description of the measures that would be implemented for:
    - managing the discovery of human remains or previously unidentified heritage items on site; and
    - ensuring workers on site receive suitable heritage inductions prior to carrying out any development on site, and that suitable records are kept of these inductions.

Note: The Department acknowledges that the initial Heritage Management Plan may not include a detailed plan for the implementation of the Aboriginal Heritage Conservation Strategy. If this occurs, the <u>Applicant</u> will be required to update the plan as soon as practicable following the <u>Planning</u> Secretary's approval of the Aboriginal Heritage Conservation Strategy.

### TRANSPORT

#### **Road Upgrade and Maintenance**

Note: Under the Roads Act 1993, the <u>Applicant</u> may require separate approvals from RMS, NSW Forests and/or Council as the appropriate roads authorities prior to construction of, closure of or conducting mining operations within public roads.

59. The <u>Applicant must</u> construct, operate and maintain the rail bridge over the Kamilaroi Highway for the shared section of the Boggabri rail spur line to the satisfaction of RMS, and <u>must</u> make all necessary contributions to the costs associated with construction, maintenance and decommissioning of this bridge to the satisfaction of the Planning Secretary.

Note: all costs should be shared on an equitable basis with the Applicant of the Boggabri Coal Project.

60. The <u>Applicant must</u> meet RMS's requirements for road intersection upgrades for all State roads used by the project, including upgrading the intersection of Manilla Road and the Kamilaroi Highway to provide a channelised right turn in accordance with Austroads guidelines.

Note: Any upgrades should be undertaken on an equitable basis with the <u>Applicant</u> of the Boggabri Coal Project.

- 61. The <u>Applicant must</u> upgrade and seal the unsealed section of Manilla Road between its intersections with the Tarrawonga Coal mine access road and Barbers Lagoon Road, to the satisfaction of RMS.
- 62. The <u>Applicant must</u> ensure that there is no substantial access of heavy vehicles for construction activity to the site prior to the upgrade referred to in condition 61 above, to the satisfaction of the Planning Secretary. However, the Planning Secretary may approve heavy vehicle access to the site prior to or during this upgrade, subject to the <u>Applicant</u> demonstrating that dust impacts can be minimised in accordance with an approved Traffic Management Plan.
- 63. Deleted

#### Traffic Management Plan

- 64. The <u>Applicant must</u> prepare and implement a Traffic Management Plan for the project to the satisfaction of the Planning Secretary. This plan must:
  - (a) be prepared in consultation with the RMS, Council and Gunnedah Council;
  - (b) propose an appropriate program and schedule for works required under conditions 59 61 above; and
  - (c) include:
    - a description of measures for managing workforce fatigue, road safety and school bus interaction;
    - a description of measures to minimise dust from unsealed roads that may be used for access to the site;
    - a code of conduct for drivers of heavy and light vehicles;
    - nominated heavy vehicle access routes for construction and operational stages, including details on volumes and nature of heavy, over size and/or over mass vehicles;
    - a proposed program for implementing the findings of the road safety audit identified in the EA;
    - performance criteria, measures and indicators for shuttle bus utilisation and carpooling in accordance with the commitments in the EA; and
    - a monitoring program to audit vehicle movements against predictions in the EA.

## Monitoring of Coal Transport

### 65. The Applicant must:

- (a) keep records of the:
  - amount of coal transported from the site (on a monthly basis); and
  - date and time of each train movement generated by the project; and
- (b) make these records available on its website at the end of each calendar year.

### **Rail Transport**

- 66. Within 12 months of the completion of the Gunnedah Traffic Study, the Applicant must:
  - (a) liaise with Gunnedah Shire Council regarding the study recommendations, including mitigating impacts of coal transportation by rail on road safety and congestion in the Gunnedah LGA due to closures of rail level crossings; and
  - (b) provide a report of the outcomes of this liaison and identify reasonable and feasible proposals recommended by the <u>Applicant</u> and/or the Gunnedah Shire Council towards implementing the Study's recommendations,

to the satisfaction of the Planning Secretary.

Note: Any contribution by the <u>Applicant</u> should be on an equitable basis with other coal project rail users.

## VISUAL

### **Operating Conditions**

- 67. The Applicant must:
  - (a) implement all reasonable and feasible measures to minimise the visual and off-site lighting impacts of the project;
  - (b) ensure no outdoor lights shine above the horizontal;
  - (c) wherever possible, ensure that mobile equipment is appropriately designed and/or retrofitted to prevent light being directed above the horizontal;
  - (d) ensure that all external lighting associated with the project complies with Australian Standard AS4282 (INT) 1997 – Control of Obtrusive Effects of Outdoor Lighting or its latest version;
  - (e) provide for the establishment of trees and shrubs and/or the construction of mounding or bunding:
    - along the access road to the mine site;
- along the Maules Creek rail spur line;
- around the water storage dams; and
- at other areas identified as necessary for the maintenance of satisfactory visual amenity;
- (f) ensure that the visual appearance of all buildings, structures, facilities or works (including paint colours and specifications) is aimed at blending as far as possible with the surrounding landscape,

to the satisfaction of the Planning Secretary.

#### Additional Visual Impact Mitigation

68. Upon receiving a written request from the owner of any residence on privately-owned land which has, or would have, significant direct views of the mining operations and infrastructure on site during the project, the <u>Applicant must</u> implement additional visual impact mitigation measures (such as landscaping treatments or vegetation screens) to reduce the visibility of these mining operations and infrastructure from the residences on their properties.

These mitigation measures must be reasonable and feasible, and must be implemented within a reasonable timeframe.

If the <u>Applicant</u> 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 the <u>Planning Secretary</u> for resolution.

Notes:

- The additional visual impact mitigation measures must be aimed at reducing the visibility of the mining operations on site from significantly affected residences, and do not require measures to reduce the visibility of the mining operations from other locations on the affected properties.
- The additional visual impact mitigation measures do not necessarily have to include the implementation of measures on the affected property itself (i.e. the additional measures could involve the implementation of measures outside the affected property boundary that provide an effective reduction in visual impacts).
- Except in exceptional circumstances, the Planning Secretary will not require additional visual impact mitigation to be undertaken for residences that are more than 7.5 kilometres from the mining operations.

### **BUSHFIRE MANAGEMENT**

- 69. The Applicant must:
  - (a) ensure that the project is suitably equipped to respond to any fires on site; and
  - (b) assist the Rural Fire Service, Forestry NSW, emergency services and National Parks and Wildlife Services as much as possible if there is a fire in the surrounding area.

#### WASTE

- 70. The Applicant must:
  - (a) implement all reasonable and feasible measures to minimise the waste (including coal reject) generated by the project;
  - (b) ensure that the waste generated by the project is appropriately stored, handled and disposed of; and
  - (c) monitor and report on the effectiveness of the waste minimisation and management measures in the Annual Review.
- 70A. The Applicant must ensure that waste tyres generated by the project are appropriately stored, handled and disposed of, and beneficial reuse/ recycling options implemented in accordance with any requirements of an EPL.

### REHABILITATION

#### Rehabilitation Objectives

71. The <u>Applicant must</u> rehabilitate the site in accordance with the conditions imposed on the mining lease(s) associated with the project under the *Mining Act 1992*. This rehabilitation must be generally consistent with the proposed Rehabilitation Strategy described in the EA and comply with the objectives in Table 17.

Table 17: Rehabilitation Objectives

Feature	Objective		
Mine site	Safe, stable and non-polluting		
	Constructed landforms drain to the natural environment.		
Final void	Minimise the size and depth of the final void as far as is reasonable and feasible Minimise the drainage catchment of the final void as far as is reasonable and feasible		
Surface infrastructure	To be decommissioned and removed, unless the Resources Regulator agrees otherwise.		
All land, other than the final void	<ul> <li>Restore ecosystem function, including maintaining or establishing self-sustaining ecosystems comprised of:</li> <li>local native plant species; and</li> <li>a landform consistent with the surrounding environment</li> </ul>		
Community	Ensure public safety Minimise the adverse socio-economic effects		
	associated with mine closure		

Note: Appropriate non-native sterile plants may be used for stabilisation and dust suppression purposes on a temporary basis, if required.

#### **Progressive Rehabilitation**

72. The <u>Applicant must</u> rehabilitate the site progressively, that is, as soon as reasonably practicable following disturbance. All reasonable and feasible measures must be taken to minimise the total area exposed for dust generation at any time. Interim rehabilitation strategies <u>must</u> be employed when areas prone to dust generation cannot yet be permanently rehabilitated.

Note: It is accepted that some parts of the site that are progressively rehabilitated may be subject to further disturbance at some later stage of the development.

#### **Rehabilitation Management Plan**

- 73. The Applicant must prepare and implement a Rehabilitation Management Plan in accordance with the conditions imposed on the mining lease(s) associated with the project under the *Mining Act* 1992. This plan must:
  - (a) be prepared in consultation with the Department, MEG, <u>Forestry NSW</u>, <u>DCCEEW Water</u>, <u>BCS</u>, North West LLS and Council;
  - (b) be prepared in accordance with the relevant requirements specified under the *Mining Act* 1992 within 6 months from the date of this approval;
  - (c) be prepared in accordance with any relevant NSW Government mining rehabilitation guidelines;
  - (d) describe how the rehabilitation of the site would be integrated with the implementation of the biodiversity management plan;
  - (e) include detailed performance and completion criteria for evaluating the performance of the rehabilitation of the site, and triggering remedial action (if necessary);
  - (f) describe the measures that would be implemented to ensure compliance with the relevant conditions of this approval, and address all aspects of rehabilitation including mine closure, final landform, and final land use;
  - (g) include interim rehabilitation where necessary to minimise the area exposed for dust generation;
  - (h) include a program to monitor, independently audit and report on the effectiveness of the measures, and progress against the detailed performance and completion criteria; and

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(i) build to the maximum extent practicable on the other management plans required under this approval.

Note: In particular the Biodiversity Management Plan and Rehabilitation Management Plan need to be substantially integrated for achieving biodiversity objectives for the rehabilitated mine-site.

#### Final Void Design and Closure

- 74. The <u>Applicant must</u> prepare and implement an updated Final Void and Mine Closure Plan (as a component of the overall Rehabilitation Management Plan required under condition 73 of schedule 3) to the satisfaction of the Resources Regulator, following consultation with the Planning Secretary. A draft plan must be prepared and submitted to the Resources Regulator by the end of December 2020, and a final plan must be prepared and submitted to the Resources Regulator by the end of December 2026. Each version of the plan must:
  - (a) be subject to independent review and verification by suitably qualified, experienced and independent person/s (including a groundwater expert) whose appointment has been approved by the Planning Secretary;
  - (b) identify and consider:
    - options for continued mining beyond current project life;
    - interactions with the final landform of adjoining mines (including any direct or indirect interaction between final voids);
    - opportunities for integrated mine planning with adjoining mines to minimise environmental impacts of the mines' final landforms;
    - all reasonable and feasible landform options for the final void (including filling);
    - predicted stability of the proposed landforms; and
    - predicted hydrochemistry and hydrogeology (including long-term groundwater recovery and void groundwater quality);
  - (c) include a detailed proposed landform design; and
  - (d) demonstrate that the proposed final landform:
    - satisfies the relevant objectives in Table 17;
    - minimises the extent of any resulting pit lake;
    - avoids salt scalding;
    - maximises the capacity of emplaced spoil to drain to the natural environment; and
    - ensures that drained waters do not adversely affect the downstream environment.

### SOCIAL

#### Agricultural Property on Project Owned Land

75. The <u>Applicant must</u> use its best endeavours to ensure that the agricultural productivity of land that is project related <u>and owned by the Applicant</u> (including remaining agricultural land on properties forming the biodiversity offset <u>strategy</u>) is maintained or enhanced.

Note: This does not include land where disturbance is permitted under the conditions of this approval <u>or land that is</u> conserved under a conservation agreement, a biodiversity stewardship site, or land dedicated to other biodiversity conservation measures.

#### Agricultural Production on land acquired due to impacts on residential receivers

76. The <u>Applicant must</u> ensure that any properties primarily used for agricultural production that are acquired by the <u>Applicant</u> due to impacts on residential receivers continue to be operated and maintained for sustainable agricultural production, unless they have been incorporated into an approved biodiversity offset area. This condition ceases to have effect if the <u>Applicant</u> disposes of the property.

#### **Construction Workforce Accommodation**

- 77. Prior to construction activities commencing, the <u>Applicant must</u> prepare and implement a Construction Workforce Accommodation Plan, in consultation with Council, and to the satisfaction of the Planning Secretary. The plan must:
  - (a) provide details of the construction workforce numbers throughout all stages of construction including local vs. non-local hiring; and
  - (b) demonstrate that the construction workforce can be suitably housed in approved accommodation facilities.

#### **Social Impact Management Plan**

- 78. The <u>Applicant must</u> prepare and implement a Social Impact Management Plan for the project to the satisfaction of the Planning Secretary to manage the potential impacts of the project. This plan must:
  - (a) be prepared by suitably qualified and experienced person/s whose appointment has been endorsed by the Planning Secretary;
  - (b) be prepared in consultation with Council, Gunnedah Shire Council, the CCC, Aboriginal stakeholders and other relevant Government agencies and service providers, other mine operators in the Leard Forest Mining Precinct and submitted to the Planning Secretary for approval within 12 months of project approval;
  - (c) take into consideration relevant actions related to social impacts identified in the Strategic Regional Land Use Plan for New England North West;
  - (d) identify the social impacts resulting from the various stages of the project (including construction, operational and decommissioning stages) in both the local and regional context, including but not limited to:
    - soft infrastructure such as housing, medical, education, childcare and emergency services;
    - hard infrastructure such as local and regional roads and rail;
    - economic/business development;
    - workforce demand/supply factors, such as training needs; and
    - labour availability impacts on other sectors, such as agricultural enterprises;
  - (e) identify proposed initiatives for promoting workforce opportunities for residing in the area/region as opposed to FIFO/DIDO;
  - (f) include a management and mitigation program to minimise and/or mitigate social impacts which at a minimum incorporates the socio-economic mitigation initiatives identified in the EA, and
  - (g) include a monitoring program, incorporating key performance indicators and a review and reporting protocol, including reporting in the annual review.

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### **SCHEDULE 4**

### ADDITIONAL PROCEDURES

### NOTIFICATION OF LANDOWNERS/TENANTS

- 1. Within 3 months of the date of this approval, the Applicant must:
  - (a) notify in writing the owners of:
    - the land listed in Table 1 of schedule 3 that they have the right to require the <u>Applicant</u> to acquire their land at any stage during the project;
    - any residence on the land listed in Table 1 and 2 of schedule 3 that they have the right to request the <u>Applicant</u> to ask for additional noise and/or air quality mitigation measures to be installed at their residence at any stage during the project; and
    - any privately-owned land within 2 kilometres of the approved open cut mining pit/s that they are entitled to ask for an inspection to establish the baseline condition of any buildings or structures on their land, or to have a previous property inspection report updated;
  - (b) notify the tenants of any mine-owned land of their rights under this approval; and
  - (c) 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 (including mine-owned land) where the predictions in the EA identify that dust emissions generated by the project are likely to be greater than the relevant air quality criteria in schedule 3 at any time during the life of the project.
- 2. Prior to entering into any tenancy agreement for any land owned by the <u>Applicant</u> that is predicted to experience exceedances of the recommended dust and/or noise criteria, or for any of the land listed in Table 1 that is subsequently purchased by the <u>Applicant</u>, the <u>Applicant must</u>:
  - (a) advise the prospective tenants of the potential health and amenity impacts associated with living on the land, and give them a copy of the NSW Health fact sheet entitled "Mine Dust and You" (as may be updated from time to time);
  - (b) advise the prospective tenants of the rights they would have under this approval; and
  - (c) request the prospective tenants consult their medical practitioner to discuss the air quality monitoring data and predictions and health impacts arising from this information,

to the satisfaction of the Planning Secretary.

- 3. As soon as practicable after obtaining monitoring results showing:
  - (a) an exceedance of the relevant criteria in schedule 3, the <u>Applicant must</u> notify the affected landowner in writing of the exceedance, and provide regular monitoring results to each of these parties until the project is complying with the relevant criteria again; and
  - (b) an exceedance of the relevant air quality criteria schedule 3, the <u>Applicant must</u> send to the affected landowners and/or existing tenants of the land (including the tenants of any mine-owned land) a copy of:
    - the NSW Health fact sheet entitled "Mine Dust and You" (as may be updated from time to time); and
    - the monitoring data, in an appropriate format so that a medical practitioner can assist the resident in making an informed decision on the health risks associated with occupation of the property.

### INDEPENDENT REVIEW

#### Landowners

4. If an owner of privately-owned land considers the project to be exceeding the criteria in schedule 3, then he/she may ask the Planning Secretary in writing for an independent review of the impacts of the project on his/her land.

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If the Planning Secretary is satisfied that an independent review is warranted, then within 2 months of the Planning Secretary's decision, the <u>Applicant must</u>:

- (a) commission a suitably qualified, experienced and independent expert, whose appointment has been approved by the Planning Secretary, to:
  - consult with the landowner to determine his/her concerns;
  - conduct monitoring to determine whether the project is complying with the relevant impact assessment criteria in schedule 3; and
  - if the project is not complying with these criteria then:
    - i. determine if the more than one mine is responsible for the exceedance, and if so the relative share of each mine towards the impact on the land;
    - ii. identify the measures that could be implemented to ensure compliance with the relevant criteria; and
- (b) give the Planning Secretary and landowner a copy of the independent review.
- 5. If the independent review determines that the project is complying with the relevant criteria in schedule 3, then the <u>Applicant</u> may discontinue the independent review with the approval of the <u>Planning Secretary</u>.

If the independent review determines that the project is not complying with the relevant criteria, and that the project is primarily responsible for this non-compliance, then the <u>Applicant must</u>:

- (a) implement all reasonable and feasible mitigation measures, in consultation with the landowner and appointed independent expert, and conduct further monitoring until the project complies with the relevant criteria; or
- (b) secure a written agreement with the landowner to allow exceedances of the relevant criteria,

to the satisfaction of the Planning Secretary.

If the independent review determines that the project is not complying with the relevant acquisition criteria, and that the project is primarily responsible for this non-compliance, then upon receiving a written request from the landowner, the <u>Applicant must</u> acquire all or part of the landowner's land in accordance with the procedures in condition 8-9 below.

- 6. If the independent review determines that the relevant criteria are being exceeded, but that more than one mine is responsible for this exceedance, then together with the relevant mine/s the <u>Applicant must</u>:
  - (a) implement all reasonable and feasible mitigation measures, in consultation with the landowner and appointed independent expert, and conduct further monitoring until there is compliance with the relevant criteria; or
  - (b) secure a written agreement with the landowner and other relevant mine/s to allow exceedances of the relevant impact assessment criteria,

to the satisfaction of the Planning Secretary.

If the independent review determines that the project is not complying with the relevant acquisition criteria in schedule 3, but that more than one mine is responsible for this non-compliance, then upon receiving a written request from the landowner, the <u>Applicant must</u> acquire all or part of the landowner's land on as equitable a basis as possible with the relevant mine/s, in accordance with the procedures in conditions 8-9 below.

#### **Biodiversity & Heritage**

7. If a person has good reason to believe the <u>Applicant</u> is not implementing the biodiversity and/or heritage conditions in schedule 3 satisfactorily, then he/she may ask the <u>Planning Secretary</u> in writing for an independent review of the matter.

If the Planning Secretary is satisfied that an independent review is warranted, then within 2 months of the Planning Secretary's decision, the <u>Applicant must</u>:

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- (a) commission a suitably qualified, experienced and independent person, whose appointment has been approved by the Planning Secretary, to:
  - consult with the person and/or any relevant agencies;
  - investigate the person's complaints/claims;
  - review the environmental performance of the <u>Applicant</u>;
  - determine whether the <u>Applicant</u> s performance is satisfactory or not; and if necessary
  - recommend measures to improve the Applicant s performance; and
- (b) give the Planning Secretary and complainant a copy of the independent review.

#### LAND ACQUISITION

- 8. Within 3 months of receiving a written request from a landowner with acquisition rights, the <u>Applicant must</u> make a binding written offer to the landowner based on:
  - (a) the current market value of the landowner's interest in the land at the date of this written request, as if the land was unaffected by the project, having regard to the:
    - existing and permissible use of the land, in accordance with the applicable planning instruments at the date of the written request; and
    - presence of improvements on the land and/or any approved building or structure which has been physically commenced at the date of the landowner's written request, and is due to be completed subsequent to that date, but excluding any improvements that have resulted from the implementation of the additional mitigation measures required under condition 2 of schedule 3;
  - (b) the reasonable costs associated with:
    - relocating within the Tamworth, Narrabri, Gunnedah or Moree local government area, or to any other local government area determined by the Planning Secretary; and
    - obtaining legal advice and expert advice for determining the acquisition price of the land, and the terms upon which it is to be acquired; and
  - (c) reasonable compensation for any disturbance caused by the land acquisition process.

However, if at the end of this period, the <u>Applicant</u> 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 the matter to the <u>Planning Secretary</u> for resolution.

Upon receiving such a request, the Planning Secretary <u>must</u> request the President of the NSW Division of the Australian Property Institute to appoint a qualified independent valuer to:

- consider submissions from both parties;
  - determine a fair and reasonable acquisition price for the land and/or the terms upon which the land is to be acquired, having regard to the matters referred to in paragraphs (a)-(c) above;
- prepare a detailed report setting out the reasons for any determination; and
- provide a copy of the report to both parties.

Within 14 days of receiving the independent valuer's report, the <u>Applicant must</u> make a binding written offer to the landowner to purchase the land at a price not less than the independent valuer's determination.

However, if either party disputes the independent valuer's determination, then within 14 days of receiving the independent valuer's report, they may refer the matter to the Planning Secretary for review. Any request for a review must be accompanied by a detailed report setting out the reasons why the party disputes the independent valuer's determination. Following consultation with the independent valuer and both parties, the Planning Secretary will determine a fair and reasonable acquisition price for the land, having regard to the matters referred to in paragraphs

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(a)-(c) above, the independent valuer's report, the detailed report of the party that disputes the independent valuer's determination and any other relevant submissions.

Within 14 days of this determination, the <u>Applicant must</u> make a binding written offer to the landowner to purchase the land at a price not less than the <u>Planning Secretary</u>'s determination.

If the landowner refuses to accept the <u>Applicant</u>'s binding written offer under this condition within 6 months of the offer being made, then the <u>Applicant</u>'s obligations to acquire the land <u>must</u> cease, unless the <u>Planning Secretary</u> determines otherwise.

9. The <u>Applicant must</u> pay all reasonable costs associated with the land acquisition process described in condition 8 above, including the costs associated with obtaining Council approval for any plan of subdivision (where permissible), and registration of this plan at the Office of the Registrar-General.

### **SCHEDULE 5**

#### ENVIRONMENTAL MANAGEMENT, REPORTING AND AUDITING

#### **ENVIRONMENTAL MANAGEMENT**

#### **Environmental Management Strategy**

- 1. The <u>Applicant must</u> prepare and implement an Environmental Management Strategy for the project to the satisfaction of the <u>Planning Secretary</u>. The strategy must:
  - (a) be submitted to the Planning Secretary for approval prior to the commencement of construction;
  - (b) provide the strategic framework for environmental management of the project;
  - (c) identify the statutory approvals that apply to the project;
  - (d) describe the role, responsibility, authority and accountability of all key personnel involved in the environmental management of the project;
  - (e) describe the procedures that would be implemented to:
    - keep the local community and relevant agencies informed about the operation and environmental performance of the project;
    - receive, handle, respond to, and record complaints;
    - resolve any disputes that may arise during the course of the project;
    - respond to any non-compliance;
    - respond to emergencies; and
  - (f) include:
    - copies of any strategies, plans and programs approved under the conditions of this consent; and
    - a clear plan depicting all the monitoring to be carried out in relation to the project.

#### **Adaptive Management**

2. The <u>Applicant</u> must assess and manage project-related risks to ensure that there are no exceedances of the criteria and/or performance measures in schedule 3. Any exceedance of these criteria and/or performance measures constitutes a breach of this approval and may be subject to penalty or offence provisions under the EP&A Act or EP&A Regulation.

Where any exceedance of these criteria and/or performance measures has occurred, the <u>Applicant</u> must at the earliest opportunity:

- (a) take all reasonable and feasible steps to ensure that the exceedance ceases and does not recur;
- (b) consider all reasonable and feasible options for remediation (where relevant) and submit a report to the Department describing those options and any preferred remediation measures or other courses of action; and
- (c) implement remediation measures as directed by the Planning Secretary,

to the satisfaction of the Planning Secretary.

#### **Management Plan Requirements**

- 3. The <u>Applicant must</u> ensure that the management plans required under this consent are prepared in accordance with any relevant guidelines, and include:
  - (a) detailed baseline data;
  - (b) a description of:

- the relevant statutory requirements (including any relevant consent, licence or lease conditions);
- any relevant limits or performance measures/criteria;
- the specific performance indicators that are proposed to be used to judge the performance of, or guide the implementation of, the development or any management measures;
- (c) a description of the measures that would be implemented to comply with the relevant statutory requirements, limits, or performance measures/criteria
- (d) a program to monitor and report on the:
  - impacts and environmental performance of the project;
  - effectiveness of any management measures (see c above);
- (e) a contingency plan to manage any unpredicted impacts and their consequences;
- (f) a program to investigate and implement ways to improve the environmental performance of the project over time;
- (g) a protocol for managing and reporting any:
  - incidents;
  - complaints;
  - non-compliances with statutory requirements; and
  - exceedances of the impact assessment criteria and/or performance criteria; and
- (h) a protocol for periodic review of the plan.

#### Annual Review

- 4. By the end of March each year, the <u>Applicant must</u> review the environmental performance of the project for the previous calendar year to the satisfaction of the <u>Planning Secretary</u>. This review must:
  - (a) describe the development (including any rehabilitation) that was carried out in the past calendar year, and the development that is proposed to be carried out over the current calendar year;
  - (b) include a comprehensive review of the monitoring results and complaints records of the project over the past year, which includes a comparison of these results against the:
    - relevant statutory requirements, limits or performance measures/criteria;
    - monitoring results of previous years; and
    - relevant predictions in the EA;
  - (c) identify any non-compliance over the last year, and describe what actions were (or are being) taken to ensure compliance;
  - (d) identify any trends in the monitoring data over the life of the project;
  - (e) identify any discrepancies between the predicted and actual impacts of the project, and analyse the potential cause of any significant discrepancies; and
  - (f) describe what measures will be implemented over the next year to improve the environmental performance of the project.

#### Revision of Strategies, Plans and Programs

- 5. Within 3 months of the submission of an:
  - (a) annual review under condition 4 above;
  - (b) incident report under condition 8 below;

- (c) audit under condition 10 below; or
- (d) any modification to the conditions of this approval,

the <u>Applicant must</u> review, and if necessary revise, the strategies, plans, and programs required under this approval to the satisfaction of the <u>Planning Secretary</u>.

Note: This is to ensure the strategies, plans and programs are updated on a regular basis, and incorporate any recommended measures to improve the environmental performance of the project.

#### **Management of Cumulative Impacts**

6. In conjunction with the owners of the nearby mines in the Leard Forest Mining Precinct, the <u>Applicant must</u> use its best endeavours to minimise the cumulative impacts of the project on the surrounding area to the satisfaction of the <u>Planning Secretary</u>.

#### **Community Consultative Committee**

7. The <u>Applicant must</u> establish and operate a Community Consultative Committee (CCC) for the project to the satisfaction of the Planning Secretary. This CCC must be operated in general accordance with the *Guidelines for Establishing and Operating Community Consultative Committees for Mining Projects* (Department of Planning, 2007, or its latest version), and be operating within 6 months of the date of this approval.

The CCC must include at least one member representing the Maules Creek community, one member from Aboriginal stakeholder groups, and seek to include some joint membership with CCCs for other operating coal mines within the Leard Forest Mining Precinct, unless otherwise agreed by the Planning Secretary.

Notes:

- The CCC is an advisory committee. The Department and other relevant agencies are responsible for ensuring that the <u>Applicant</u> complies with this approval; and
- In accordance with the Department's guideline, the CCC should be comprised on an independent chair and appropriate representation from the <u>Applicant</u>, Council, recognised environmental groups and the local community.

#### REPORTING

#### **Incident Reporting**

8. The Planning Secretary must be notified in writing via the Major Projects website immediately after the <u>Applicant</u> becomes aware of an incident. The notification must identify the development (including the development application number and the name of the development if it has one) and set out the location and nature of the incident. Subsequent notification requirements must be given, and reports submitted in accordance with the requirements set out in Appendix 9.

#### **Non-Compliance Notification**

- 8A The Planning Secretary must be notified in writing via the Major Projects website within seven days after the Applicant becomes aware of any non-compliance.
- 8B A non-compliance notification must identify the development and the application number for it, set out the condition of consent that the development is non-compliant with, the way in which it does not comply and the reasons for the non-compliance (if known) and what actions have been, or will be, undertaken to address the non-compliance.
- 8C A non-compliance which has been notified as an incident does not need to also be notified as a non-compliance.

#### **Regular Reporting**

9. The <u>Applicant must</u> provide regular reporting on the environmental performance of the project on its website, in accordance with the reporting arrangements in any plans or programs approved under the conditions of this approval.

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### AUDITING

#### Independent Environmental Audit

- 10. By the end of June 2015 and every 3 years thereafter, unless the Planning Secretary directs otherwise, the <u>Applicant must</u> commission and pay the full cost of an Independent Environmental Audit of the project. This audit must:
  - (a) Be conducted and carried out in accordance with the *Independent Audit Post Approval Requirements (2020 or as updated)*.
  - (b) Proposed independent auditors must be agreed to in writing by the Planning Secretary prior to the commencement of an Independent Audit.
  - (c) The Planning Secretary may require the initial and subsequent Independent Audits to be undertaken at different times to those specified in the *Independent Audit Post Approval Requirements (2020 or as updated),* upon giving at least 4 weeks' notice (or timing) to the <u>Applicant</u> of the date upon which the audit must be commenced.
  - (d) In accordance with the specific requirements in the *Independent Audit Post Approval Requirements (2020 or as upated)*, the <u>Applicant must</u>:
    - review and respond to each Independent Audit Report;
    - submit the response to the Planning Secretary; and
    - make each Independent Audit Report, and response to it, publicly available within 60 days of submission to the Planning Secretary. unless otherwise agreed by the Secretary.
- 11. Independent Audit Reports and the <u>Applicant</u>'s response to audit findings must be submitted to the Planning Secretary within 2 months of undertaking the independent audit site inspection as outlined in the *Independent Audit Post Approvals Requirements (2020 or as updated)* unless otherwise agreed by the Planning Secretary.

### ACCESS TO INFORMATION

12. The Applicant must:

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- (a) within 3 months of the date of this approval, make the following information publicly available on its website:
  - the EA;
  - all current statutory approvals for the project;
  - approved strategies, plans and programs required under the conditions of this consent;
  - a comprehensive summary of the monitoring results of the project, which have been reported in accordance with the various plans and programs approved under the conditions of this consent;
  - a complaints register, which is to be updated on a monthly basis;
  - minutes of CCC meetings;
  - the last five annual reviews;
  - any independent environmental audit, and the <u>Applicant</u>'s response to the recommendations in any audit;
  - any other matter required by the Planning Secretary; and
- (b) keep this information up to date,

#### to the satisfaction of the Planning Secretary.

#### Online Communication of Onsite Activities and Monitoring of Noise and Air Quality

13. The Applicant must, within 3 months of the date of this approval:

- (a) make the following information for the project publicly available on its website, on a daily basis and in a clearly understandable form:
  - daily weather forecasts for the coming week;
  - proposed operational responses to these weather forecasts;
  - real-time noise and air quality monitoring data (subject to any necessary caveats); and
  - any operational responses that were taken in response to the noise and air quality monitoring data, and
  - (b) make provision on its website for the provision of on-line and/or email comments by members of the community regarding this information,

to the satisfaction of the Planning Secretary.

NSW Government Department of Planning, Housing and Infrastructure

### APPENDIX 1: SCHEDULE OF LAND

Lot	DP	Lot	DP	
7001	94069	264	755475	
156	455004	7002	1051146	
1	622375	7001	1052587	
2	<del>622375</del>	7300	1143939	
1	748046	1	114793	
2	748046	822	1074515	
3	748046	35	754924	
3	754924	101	1204994	
65	754924	102	1204994	
57	754940	1	1201952	
58	754940	1	1226200	
59	754940	1	1157540	
60	754940	3	1200040	
61	754940	4	1202450	
39	754940	7	1202450	
40	754940	38	1211027	
41	754940	263	1193634	
42	754940	2	509312	
35	754940	2	1197060	
54	754948	B	<u>190503</u>	
59	754948	1	<u>1099042</u>	
60	754948	Undef	ined Road 1	
73	754948	Undef	ined Road 2	
76	754948	Undef	ined Road 3	
105	755470	Undef	ined Road 4	
85	755475	Undef	ined Road 5	
159	755475	Werris Creek Mungindi Railway		
262	755475	Kamilaroi Highway		
<del>263</del>	755475	Namoi River		
			rribri Road	
		Warners Road Reserve		

### Notes:

1. The cadastral information for the lands to which the Project Application applies was sourced from the NSW LPI records database in June 2010.











### APPENDIX 2: PROJECT LAYOUT PLANS

Figure 1: Mine Site Location



Figure 2: Infrastructure Area



Figure 3: Maules Creek Coal Mine Rail Spur Line connecting into the shared spur line (in red) and Boggabri Coal Mine Rail Spur Line.

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Figure 4: Transmission Lines and Switching Station



Figure 5: Final Landform

### APPENDIX 3: GENERAL TERMS OF PLANNING AGREEMENT

AMOUNT	TIMELINE FOR PAYMENT	DESCRIPTION
\$6,000,000	\$3,000,00 3 months after receipt of all necessary approvals to commence construction of the mine. \$1,500,000 12 months after the first payment \$1,500,000 24 months after the first payment *Note: Maules Creek Coal will commit funds out of the first \$3,000,000 to the upgrade of Therribri Road.	Funds to be utilised on the upgrade of infrastructure and road including Therribri Road and Tarrioro Bridge.
\$5,000,000	\$1,000,000 3 months after receipt of all necessary approvals to commence construction of the mine. Each 12 months thereafter \$1,000,000	Funds to be utilised on the upgrade of the Narrabri Airport.
\$800,000	To be distributed in consultation with Narrabri Shire Council (NSC) and the Boggabri Community. The funds will be where possible equally distributed over a 3 year period commencing 3 months after receipt of all necessary approvals to commence construction of the mine.	Funds to be utilised on various projects within the township of Boggabri and its surrounds.
\$275,000	To be distributed in consultation with Narrabri Shire Council (NSC) and the Maules Creek Community. The funds will be where possible equally distributed over a 3 year period commencing 3 months after receipt of all necessary approvals to commence construction of the mine	Funds to be contributed to the Maules Creek Community.
\$1,250,000	\$250,000 3 months after receipt of all necessary approvals to commence construction of the mine. \$500,000 12 Months after the first payment \$500,000 24 Months after the first payment	Funds to be utilised on CBD upgrades in the Narrabri Shire
\$100,000	At Aston's discretion.	Funds to be held in trust for "Environment" projects and to be administered by the Community Consultative Committee (CCC)
		The aim is to set up a "pool of funds" with all current and future mines being compelled to contribute \$100,000 as a once only upfront fee to commence the fund.
		The Council through gaining a Consumer Price Index (CPI) increase on the tonnes produced will allocate 1.5% of the increase each and every year to supplement the fund.
		The Council and MCC will work through the CCC to administer the funds with the criteria to support a grant application to be completed by the 30 <sup>th</sup> June 2013. The first round of applications will be called in the financial year 2013/14.
\$0.075 per saleable tonne + CPI		The cents per saleable tonne to mirror the calculation per saleable tonne paid to the NSW State Government and payable monthly.

The cents per saleable tonne to commence from the start of production and to be utilised on infrastructure projects (including environmental) at Council's discretion.
The Consumer Price Index is to be calculated as follows:
Price Indexes published by the Australian Bureau of Statistics (ABS)
CPI to be based upon the weighted average of eight capital cities for the previous 12 months and to commence from the start of production.
The first review to be undertaken and applied in the first instance and based on the prior 12 months CPI.

### **APPENDIX 4: LAND OWNERSHIP**



APPENDIX 4A: 35 dB(A) NOISE CONTOUR MARKED IN BLUE



### APPENDIX 5: STATEMENT OF COMMITMENTS MAULES CREEK COAL PROJECT

### CONSOLIDATED STATEMENT OF COMMITMENTS

In addition to conditions of Project Approval, Maules Creek Coal commits to the operational controls outlined in the Environmental Assessment (EA) for all activities associated with the Project. The below consolidated Statement of Commitments (SoC) summarises the major aspects of the Project as described throughout the EA dated July 2011, the Response to Submissions Report dated December 2011 and the Response to Subsidiary Submissions Report dated March 2012 and summarises the key proposed management and mitigation measures.

The aim of this SoC is to ensure that any potential environmental impacts resulting from the Project are minimised and managed by implementing relevant environmental management, mitigation and monitoring strategies.

Ref	Commitment	Section
	Mining Operations	
1.	Maules Creek Coal will extract coal at a rate of up to 13 Mtpa for 21 years, generally in accordance with this EA.	Section 3 of the Maules Creek Coal Project EA
2.	Maules Creek Coal will seek the appropriate licences and approvals as relevant to the Project and listed in <b>Table 9</b> .	Section 4.8 of the Maules Creek Coal Project EA
3.	Maules Creek Coal <u>must</u> surrender its existing development consent DA 85/1819 following the grant of the Project Approval.	Section 4 of the Maules Creek Coal Project EA
	Environmental Management	
4.	<ul> <li>The Applicant will develop a staged EMS in consultation with relevant regulators (and the Aboriginal community where relevant) to the approval of DP&amp;I which must comprise:</li> <li>Environmental Management Strategy;</li> <li>Environmental Monitoring Program (incorporating air quality, noise, blasting, ecology, Aboriginal heritage, surface water and groundwater);</li> <li>Construction Management Plan;</li> <li>Air Quality Management Plan;</li> <li>Noise Management Plan;</li> <li>Flora and Fauna Management Plan (including Land Disturbance Protocol);</li> <li>Biodiversity Offsets Management Plan;</li> <li>Aboriginal Archaeology and Cultural Heritage Management Plan;</li> <li>Water Management Plan (including groundwater and surface water);</li> <li>Traffic and Transport Management Plan;</li> <li>Bushfire Management Plan; and</li> <li>Hazardous Materials Management Plan.</li> </ul>	Section 7 of the Maules Creek Coal Project EA
5.	Maules Creek Coal will continue to consult with the Namoi CMA in relation to the preparation and implementation of the environmental management plans for the Project.	Section 4.4.2 of the Response to Submissions Report
	Air Quality	

Ref	Commitment	Section
6.	Maules Creek Coal will utilise leading practice technologies and initiatives as required to seek to achieve the air quality outcomes described in this EA.	Section 7.1.4 of the Maules Creek Coal Project EA
7.	Maules Creek Coal will undertake regular monitoring of greenhouse gas emissions and energy efficiency initiatives to ensure that Scope 1 greenhouse gas emissions per tonne of product coal are kept to the minimum practicable level.	Section 7.2.4 of the Maules Creek Coal Project EA
8.	Maules Creek Coal will install a real time air quality monitoring network in consultation with OEH. Consultation will also occur with Boggabri and Tarrawonga Coal Mines in an attempt to develop an holistic network for the region.	
9.	Maules Creek Coal will install a real time meteorological monitoring system with predictive air quality modelling software capabilities at locations selected in consultation with OEH. Consultation will also occur with Boggabri and Tarrawonga Coal Mines in an attempt to develop an holistic network for the region. The monitoring component of this system will include a PM <sub>2.5</sub> monitor at a location representative of the receivers located within the Maules Creek Community.	Section 7.1.4 of the Maules Creek Coal Project EA
	Noise and Blasting	
10.	Maules Creek Coal will implement the necessary noise control and management measures as required to seek to ensure that the EA predicted noise levels at private receivers as listed in <b>Table 23</b> are not exceeded.	Section 7.3.4 of the Maules Creek Coal Project EA
11.	Maules Creek Coal will install a real time noise monitoring system at locations selected in consultation with OEH. Consultation will also occur with Boggabri and Tarrawonga Coal Mines in an attempt to develop an holistic network for the region.	Section 7.3.4 of the Maules Creek Coal Project EA

	Visual				
12.	Should a landholder within 7.5 km of the active mining area consider they are experiencing high visual impact as a result of the Project, Maules Creek Coal will carry out a specific visual assessment from the residence and develop any management and mitigation measures required in consultation with the landholder and DP&I.	Section 7.5.4 of the			
13.	Night time operations will be undertaken behind barriers, particularly in exposed areas to reduce direct night lighting impacts to neighbouring receivers.	Maules Creek Coal Project EA			
14.	Infrastructure lighting will consist of horizontal lights with hoods and louvers in elevated and exposed areas utilising low brightness lights to the level necessary for operational and safety requirements to minimise adverse night lighting impacts.				
	Ecology				
15.	Maules Creek Coal will design and construct the CHPP, MIA and water storages within the Project Disturbance Boundary to minimise impacts upon CEEC within the constraints of cost effective engineering practicality.	Section 7.6.4 of the Maules Creek Coal			
16.	Maules Creek Coal will progressively rehabilitate mined areas with a focus on the reestablishment of existing forest and woodland communities.	Project EA			
17.	Maules Creek Coal will establish the Biodiversity Offset Strategy as described in this EA to initially maintain and ultimately improve the ecological values of the Bioregion.	Section 7.7 of the Maules Creek Coal Project EA			
	Aboriginal Archaeology and Cultural Heritage				
18.	The salvage and the protection of all known Aboriginal objects within the Project Boundary will be managed in accordance with an Aboriginal Archaeology and Cultural Heritage Management Plan to be developed in consultation with the local Aboriginal community and OEH.	Section 7.8.3 of the Maules Creek Coal Project EA			

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Ref	Commitment	Section
19.	Maules Creek Coal will consult with Boggabri Coal Mine and contribute to the establishment and ongoing funding of a keeping place for the purpose of housing salvaged Aboriginal artefacts from the local area.	
20.	Maules Creek Coal will provide the opportunity for one representative of the Aboriginal community to be a member of the Maules Creek CCC.	
21.	Maules Creek Coal will offer training packages to members of the Red Chief Local Aboriginal Lands Council in relation to site recording, artefact recording and basic analysis.	
	Non Indigenous Heritage	
22.	Maules Creek Coal will compile an Oral History report for any landowners which are identified to be adversely impacted by the Project and who are acquired in accordance with conditions of Project Approval.	Section 7.9.3 of the
23.	Maules Creek Coal will ensure that the Heritage items located on its landholdings will be adequately managed and preserved in accordance with the requirements under the Heritage Act.	Maules Creek Coal Project EA
	Water Resources	
24.	Maules Creek Coal will continue to monitor groundwater ingress and impacts on surrounding privately owned bores. In the unlikely event that it is demonstrated that water levels in existing landholder bores decline as a consequence of the Project, leading to an adverse impact on water supply, the supply will be substituted by Maules Creek Coal in consultation with the landholder either by deepening the bore, construction of a new bore or providing comparable water from an external source.	Section 7.11.4 of the Maules Creek Coal Project EA
25.	Maules Creek Coal will use reasonable endeavours to, in consultation with Boggabri Coal Mine and Tarrawonga Mine, develop a groundwater monitoring network to monitor the predicted groundwater impacts from mining.	
26.	Maules Creek Coal will conduct water quality monitoring of the seepage / runoff from the OEAs.	Section 7.10.4 of the Maules Creek Coal Project EA
27.	Maules Creek Coal will use reasonable endeavours to obtain water access licence allocation to account for the capture and use of water from the various Water Sharing Plans that apply to the Project in accordance with the provisions of the WM Act and its Regulations.	Section 4.7.1 of the Response to Submissions Report
	Geochemical	
28.	PAF coal rejects materials and the roof and floor of these PAF coal seams will be co-disposed with overburden in pit or within encapsulated cells within the Northern OEA.	Section 7.12.4 of the Maules Creek Coal Project EA
	Traffic	
29.	Reasonable endeavours will be made to ensure that Project related traffic does not utilise the following public roads unless they are travelling to a specific destination along that route (such as residence, monitoring location, near neighbour etc.): Harparary Road from Leard Forest Road to the Kamilaroi Highway; Leard Forest Road between Northern Loop Road and Harparary Road; Therribri Road between the Mine Access Road and Harparary Road and the entire length of Browns Lane.	Section 7.14.4 of the Maules Creek Coal Project EA
30.	Maules Creek Coal will use reasonable endeavours to work with other Gunnedah Basin coal projects and the relevant roads authorities in managing safety issues on the road network related to mining within the Narrabri and Gunnedah LGAs.	Section 7.14.4 of the Maules Creek Coal Project EA & Section 4.13.1 of the Response to Submissions Report

Ref	Commitment	Section

31.	Maules Creek Coal will use reasonable endeavours to work with other Gunnedah Basin coal miners and the ARTC to encourage management strategies to ensure that the rail network can continue to handle the forecast additional rail movements. Prior to the construction of the rail spur overpass within the easement of the Kamilaroi Highway,	Section 7.14.4 of the Maules Creek Coal Project EA			
	Maules Creek Coal will consult with all relevant regulatory authorities and will develop a Construction Management Plan for the works (including traffic control and management) in consultation with the RTA.	Section 7.14.4 of the Maules Creek Coal Project EA			
	Community				
33.	Maules Creek Coal will implement the management strategies as described within <b>Section 7.20.9</b> of this EA, in order to monitor and address the possible impacts of the Project upon the socioeconomic environment.	Section 7.20.9 of the Maules Creek Coal Project EA			
34.	Maules Creek Coal offers to enter into an appropriate VPA on terms it will seek to agree with NSC and GSC.	Section 7.20.9 of the Maules Creek Coal Project			
35.	Maules Creek Coal will maintain the agricultural productivity of its landholdings that are not utilised for mining or biodiversity offsets.	Section 7.15.4 of the Maules Creek Coal Project EA			
	Reporting				
36.	Maules Creek Coal will prepare an Annual Review (which summarises monitoring results and reviews performance) and distribute it to the relevant regulatory authorities and the Maules Creek CCC.	Section 5.5 of the Maules Creek Coal Project EA			

### APPENDIX 6: PLANNING ASSESSMENT COMMISSION – GROUNDWATER RECOMMENDATIONS FOR GROUNDWATER AND HYDRO-CHEMICAL MONITORING

- 1. The proposed 17 additional monitoring bores be equipped with water level or pore pressure monitoring transducers installed at vertical separations such that the future impacts of strata depressurisation can be adequately measured and mapped.
- 2. Core tests to be conducted to assess the distribution and variability of hydraulic conductivities of (unfractured) interburden at sufficient number of bore locations to quantify porous groundwater flow and storage contributions associated with interburden.
- 3. XRD-XRF analyses to be undertaken on core samples obtained at a sufficient number of bore locations to establish mineralogy of interburden likely to be exposed to pit re-saturation.
- 4. Hydrochemical modelling to be undertaken in order to determine the long term void water quality. This study should include batch reaction (full saturation) trials on waste interburden (spoils) to confirm hydrochemical modelling outcomes.



### **APPENDIX 7: BIODIVERSITY OFFSET STRATEGY**

Figure 1: biodiversity offset strategy properties



### **APPENDIX 8: ABORIGINAL HERITAGE SITES**

SITE TYPE	SITE NAME	SCIENTIFIC SIGNIFICANCE	PROJECT IMPACT	MANAGEMENT
	Leard SF AS1	High	Open Pit	Salvage Excavation
	MC13	High	Rail Spur	Salvage Excavation
	MC14	High	Rail Spur	Salvage Excavation
	Manila MC21	Moderate	Open Pit	Surface Collection of Artefacts
	MC5	Moderate	Overburden Area	Surface Collection of Artefacts
	Leard SF AS2	Low	Open Pit	Surface Collection of Artefacts
	Teston AS3	Low	Overburden Area	Surface Collection of Artefacts
	Teston AS6	Low	Overburden Area	Surface Collection of Artefacts
	Teston AS I	Low	Project Disturbance Boundary	Surface Collection of Artefacts
	NV23	Low	Rail Spur	Surface Collection of Artefacts
	MCH	Low	Rail Spur	Surface Collection of Artefacts
	MC8	Moderate	Rail Spur	Surface Collection of Artefacts
	MC7	Moderate	Rail Spur Option	Surface Collection of Artefacts
	Manila MC15	Moderate	Open Pit	Surface Collection of Artefacts
	Teston AS2	Low	Project Disturbance Boundary	Site to be fenced
	MC10	Low	Rail Spur	Site to be fenced
	HRNV21	Low	Rail Spur Option	Site to be fenced
	Back Creek ASI	Moderate	Not Impacted	Site to be fenced
	Back Creek AS2	Moderate	Not Impacted	Site to be fenced
	Back Creek AS3	High	Not Impacted	Site to be fenced
	Back Creek AS4	Low	Not Impacted	Site to be fenced
	Back Creek AS5	Low	Not Impacted	Site to be fenced
	Back Creek AS6	High	Not Impacted	Site to be fenced
Artefact	MC23	Low	Rail Spur	Inspection during salvage to determine extent
Scatter	MC24	Low	Rail Spur	Inspection during salvage to determine extent
	MC4	Moderate	Project Disturbance Boundary	Surface Collection of Artefacts
	MC6	Low	Project Disturbance Boundary	Surface Collection of Artefacts
	MC2	Low	Project Disturbance Boundary	Surface Collection of Artefacts
	MC3	Low	Project Disturbance Boundary	Surface Collection of Artefacts
	Teston AS7	Low	Project Disturbance Boundary	Surface Collection of Artefacts
	MC22	Moderate	Not Impacted	No Impact – No Further Requirements
	MC25	High	Not Impacted	No Impact – No Further Requirements
	NV20	Low	Not Impacted	No Impact – No Further Requirements
	NV22	Low	Not Impacted	No Impact – No Further Requirements
	NV43	Low	Not Impacted	No Impact – No Further Requirements
	NV 44	Low	Not Impacted	No Impact – No Further Requirements
	NV45	Low	Not Impacted	No Impact – No Further Requirements
	NV46	Low	Not Impacted	No Impact – No Further Requirements
	NV47	Low	Not Impacted	No Impact – No Further Requirements
	NV48	Low	Not Impacted	No Impact – No Further Requirements
	NV75	Low	Not Impacted	No Impact – No Further Requirements
	Teston AS4	Moderate	Not Impacted	No Impact – No Further Requirements
	Teston AS5	Low	Not Impacted	No Impact – No Further Requirements
	Velyama ASI	Low	Not Impacted	No Impact – No Further Requirements
	Velyama AS2	Low	Not Impacted	No Impact – No Further Requirements
	Velyama AS3	Low	Not Impacted	No Impact – No Further Requirements
	Velyama AS4	Low	Not Impacted	No Impact – No Further Requirements
	Velyama AS5	Low	Not Impacted	No Impact – No Further Requirements

SITE TYPE	SITE NAME	SCIENTIFIC SIGNIFICANCE	PROJECT IMPACT	MANAGEMENT
	Velyama AS6	Low	Not Impacted	No Impact – No Further Requirements
	Velyama AS7	Low	Not Impacted	No Impact – No Further Requirements
	MC12	Moderate	Not Impacted	No Impact – No Further Requirements
	MC9	Low	Not Impacted	No Impact – No Further Requirements
	Leard SF IA1	Low	Open Pit	Surface Collection of Artefacts
	Leard SF 4	Low	Overburden Area	Surface Collection of Artefacts
	Leard SF IA2	Low	Overburden Area	Surface Collection of Artefacts
	Teston IA2	Low	Overburden Area	Surface Collection of Artefacts
	Teston IA3	Low	Overburden Area	Surface Collection of Artefacts
	Teston IA4	Low	Overburden Area	Surface Collection of Artefacts
	Teston IA5 (1)	Low	Overburden Area	Surface Collection of Artefacts
	Leard SF 3	Low	Project Disturbance Boundary	Surface Collection of Artefacts
	Teston IA I	Low	Project Disturbance Boundary	Surface Collection of Artefacts
	Teston IA6	Low	Project Disturbance Boundary	Surface Collection of Artefacts
Isolated Artefact	Teston IA7	Low	Project Disturbance Boundary	Surface Collection of Artefacts
Artelact	Back Creek IA1	Low	Not Impacted	Site to be fenced
	Back Creek IA2	Low	Not Impacted	Site to be fenced
	Teston IA5 (2)	Low	Not Impacted	No Impact – No Further Requirements
	Teston IA8	Low	Not Impacted	No Impact – No Further Requirements
	Teston IA9	Low	Not Impacted	No Impact – No Further Requirements
	Velyama IA I	Low	Not Impacted	No Impact – No Further Requirements
	Velyama IA2	Low	Not Impacted	No Impact – No Further Requirements
	Velyama IA3	Low	Not Impacted	No Impact – No Further Requirements
	Velyama IA4	Low	Not Impacted	No Impact – No Further Requirements
	Velyama IA5	Low	Not Impacted	No Impact – No Further Requirements
	Teston ST2	Moderate	Overburden Area	Removal of Scarred Tree
	Leard SF ST I	High	Open Pit	Removal of Scarred Tree
	Leard SF ST2	Moderate	Open Pit	Removal of Scarred Tree
	Teston ST I	Moderate	Rail Spur	Removal of Scarred Tree
	Younger ST I	Moderate	Overburden Area	Removal of Scarred Tree
	Watsons ST1	Moderate	Project Disturbance Boundary	Removal of Scarred Tree
	NV37	TBD	Rail Spur	Inspection during salvage to determine extent
	NV34	High	Rail Spur Option	Site to be fenced
	Namoi River TSR ST3	High	Water Pipeline	Site to be fenced
	Namoi River TSR ST4	High	Water Pipeline	Site to be fenced
Scarred Tree	Namoi River TSR ST5	High	Water Pipeline	Site to be fenced
Tree	Namoi River TSR ST6	High	Water Pipeline	Site to be fenced
	Namoi River TSR ST7	High	Water Pipeline	Site to be fenced
	Namoi River TSR ST8	High	Water Pipeline	Site to be fenced
	NV36	Moderate	Not Impacted	No Impact – No Further Requirements
	Namoi River ST1	High	Not Impacted	No Impact – No Further Requirements
	Namoi River TSR ST1	High	Not Impacted	No Impact – No Further Requirements
	Namoi River TSR ST2	High	Not Impacted	No Impact – No Further Requirements
	Namoi River TSR ST9	High	Not Impacted	No Impact – No Further Requirements
	Velyama ST I	High	Not Impacted	No Impact – No Further Requirements
	NV76	Moderate	Not Impacted	No Impact – No Further Requirements
	Teston Grindstone I	High	Rail Spur	Surface Collection of Artefacts
Grinding Groove	Teston GG2	High	Rail spur Option	Surface Collection of Artefacts
aroove	Teston GG1	Moderate	Rail spur Option	Community Consultation if Impacted

#### **APPENDIX 9: INCIDENT NOTIFICATION AND REPORTING REQUIREMENTS**

#### WRITTEN INCIDENT NOTIFICATION REQUIREMENTS

- 1. A written incident notification addressing the requirements set out below must be submitted to the Planning Secretary via the Major Projects website within seven days after the <u>Applicant</u> becomes aware of an incident. Notification is required to be given under this condition even if the <u>Applicant</u> fails to give the notification required under condition 8 of Schedule 5 or, having given such notification, subsequently forms the view that an incident has not occurred.
- 2. Written notification of an incident must:
  - a. identify the development and application number;
  - b. provide details of the incident (date, time, location, a brief description of what occurred and why it is classified as an incident);
  - c. identify how the incident was detected;
  - d. identify when the Applicant became aware of the incident;
  - e. identify any actual or potential non-compliance with conditions of consent;
  - f. describe what immediate steps were taken in relation to the incident;
  - g. identify further action(s) that will be taken in relation to the incident; and
  - h. identify a project contact for further communication regarding the incident.
- 3. Within 30 days of the date on which the incident occurred or as otherwise agreed to by the Planning Secretary, the <u>Applicant</u> must provide the Planning Secretary and any relevant public authorities (as determined by the Planning Secretary) with a detailed report on the incident addressing all requirements below, and such further reports as may be requested.
- 4. The Incident Report must include:
  - a. a summary of the incident;
  - b. outcomes of an incident investigation, including identification of the cause of the incident;
  - c. details of the corrective and preventative actions that have been, or will be, implemented to address the incident and prevent recurrence; and
  - d. details of any communication with other stakeholders regarding the incident.