

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

18 July 2012

SCHEDULE 1

Application Number:	09_0182
Proponent:	Boggabri Coal Pty. Limited
Approval Authority:	Minister for Planning and Infrastructure
Land:	See Appendix 1
Project:	Boggabri Coal Project

Red type represents the March 2014 modification

TABLE OF CONTENTS

DEFINITIONS	3
ADMINISTRATIVE CONDITIONS	5
Obligation to Minimise Harm to the Environment	5
Terms of Approval	5
Limits on Approval	5
Surrender of Existing Development Consent	6
Structural Adequacy	6
Demolition	6
Protection of Public Infrastructure	6
Operation of Plant and Equipment	6
Staged Submission of Strategies, Plans and Programs	6
Community Enhancement	7
ENVIRONMENTAL PERFORMANCE CONDITIONS	8
Construction	8
Acquisition Upon Request	8
Additional Noise and Air Quality Mitigation Upon Request	9
Noise and Vibration	9
Blasting	14
Air Quality and Greenhouse Gas	16
Meteorological Monitoring	19
Soil and Water	19
Biodiversity	22
Heritage	25
Transport	27
Visual	28
Bushfire Management	29
Waste	29
Rehabilitation	29
Social Impacts	30
ADDITIONAL PROCEDURES	32
Notification of Landowners/Tenants	32
Independent Review	32
Land Acquisition	33
ENVIRONMENTAL MANAGEMENT, REPORTING AND AUDITING	35
Environmental Management	35
Reporting	36
Auditing	37
Access to Information	37
APPENDIX 1: SCHEDULE OF LAND	39
APPENDIX 2: PROJECT LAYOUT PLAN	43
APPENDIX 3: GENERAL TERMS OF PLANNING AGREEMENT	46
APPENDIX 4: LAND OWNERSHIP PLAN	53
APPENDIX 5: STATEMENT OF COMMITMENTS	54
APPENDIX 6: PLANNING ASSESSMENT COMMISSION - GROUNDWATER	58
APPENDIX 7: BIODIVERSITY OFFSET STRATEGY	59
APPENDIX 8: ABORIGINAL HERITAGE SITES	61
APPENDIX 9: CONCEPTUAL FINAL LANDFORM	63

DEFINITIONS

Annual Review	The review required by Condition 4 of Schedule 5
ARTC	Australian Rail Track Corporation
BCA	Building Code of Australia
Biodiversity offset strategy	The conservation and enhancement strategy described in the EA required by condition 39 of schedule 3 of this consent and depicted conceptually in the figure in Appendix 7
Boggabri Rail Spur Line	The rail line comprising a shared Boggabri Rail Spur Line and a branch line to Boggabri Coal Mine and associated rail loop, as depicted in Appendix 2, Figure 3
Blast misfire	The failure of one or more holes in a blast pattern to initiate
CCC	Community Consultative Committee
CHPP	Coal Handling and Preparation Plant
Conditions of this approval	Conditions contained in Schedules 1 to 5 inclusive
Council	Narrabri Shire Council
CPI	Australian Bureau of Statistics Consumer Price Index (General)
Day	The period from 7am to 6pm on Monday to Saturday, and 8am to 6pm on Sundays and Public Holidays
DIDO	Drive in drive out
Director-General	Director-General of the Agency, or nominee
DoE	Commonwealth Department of the Environment
DPI	Department of Primary Industries
DRE	Division of Resources and Energy (within the Department of Trade and Investment, Regional Infrastructure and Services)
EA	<i>Environmental Assessment titled Environmental Assessment Boggabri Coal Mine dated December 2010; associated response to submissions titled Boggabri Coal Mine Response to Submissions dated March 2011; additional report titled Boggabri Coal Mine – Residual Matters dated July 2011; Environmental Assessment titled Boggabri Coal Mine Project Approval Modification – Environmental Assessment dated December 2013; and the associated response to submissions titled Project Approval Modification Response to Submissions dated January 2014</i>
EEC	Endangered ecological community, as defined under the <i>Threatened Species Conservation Act 1995</i>
EPA	Environment Protection Authority
EP&A Act	<i>Environmental Planning and Assessment Act 1979</i>
EP&A Regulation	<i>Environmental Planning and Assessment Regulation 2000</i>
EPL	Environment Protection Licence issued under the POEO Act
Evening	The period from 6pm to 10pm
Executive Director Mineral Resources	The Executive Director of Mineral Resources within DRE, or equivalent position
Feasible	Feasible relates to engineering considerations and what is practical to build or carry out
FIFO	Fly in fly out
Heritage item	An item as defined under the <i>Heritage Act 1977</i> , and assessed as being of local, State and/or National heritage significance
	An Aboriginal Object or Aboriginal Place as defined under the <i>National Parks and Wildlife Act 1974</i>
ICNG	Interim Construction Noise Guideline
Incident	A set of circumstances that: <ul style="list-style-type: none"> causes or threatens to cause material harm to the environment; and/or breaches or exceeds the limits or performance measures/criteria in this approval
Land	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
Leard Forest Mining Precinct	The area incorporating the existing and proposed coal mining operations centred around Leard Community Conservation Area (CCA) 4; including Boggabri Coal Mine, Tarrawonga Coal Mine and the proposed Maules Creek Coal Mine.
LHPA	Livestock Health and Pests Authorities
Material harm to the environment	Actual or potential harm to the health or safety of human beings or to ecosystems that is not trivial
MCCC	Maules Creek Community Council
Mine Water	Surface water or groundwater that accumulates in the active mine pit or void, water runoff from coal stockpiles and water contaminated with oils or grease,

Mining operations	but not including runoff from disturbed areas to sediment dams Includes the removal of overburden and extraction, processing, handling, storage and transportation of coal on site
Minister	Minister for Planning and Infrastructure, 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
NOW	NSW Office of Water within the Department of Primary Industries
OEH	Office of Environment and Heritage within the Department of Premier and Cabinet
PAC	Planning Assessment Commission
P&I	The executive agency of Planning and Infrastructure within the NSW Department of Premier and Cabinet
POEO Act	<i>Protection of the Environment Operations Act 1997</i>
Privately-owned land	Land that is not owned by a public agency or a mining company (or its subsidiary)
Project	The project as described in the EA
Proponent	Boggabri Coal Pty. Limited, or any person who seeks 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 for the purpose of establishing a safe, stable and non-polluting environment
RFS	Rural Fire Service
RMS	Roads and Maritime Services
ROM coal	Run-of-mine coal
Site	The land described in Appendix 1
Statement of Commitments	The Proponent's commitments in Appendix 5
VPA	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 Proponent shall 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 Proponent shall carry out the project generally in accordance with the:
 - (a) EA;
 - (b) Statement of Commitments; and
 - (c) 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 shall prevail to the extent of the inconsistency. However, the conditions of this approval shall prevail to the extent of any inconsistency.
4. The Proponent shall comply with any reasonable requirement/s of the Director-General arising from P&I's 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 Proponent may carry out mining operations on the site until the end of December 2033.

Note: Under this approval, the Proponent is required to rehabilitate the site and carry out additional undertakings to the satisfaction of both the Director-General and the Executive Director Mineral Resources. 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.

6. The Proponent may undertake mining operations 24 hours a day, 7 days a week.
7. The Proponent shall not clear native vegetation from any land within 250 metres of the adjoining Maules Creek Coal Mine mining lease boundary, except with the approval of the Director-General, following endorsement of OEH.

Notes: The purpose of this condition is to ensure that a 500 metre wide native vegetation corridor is maintained between the open cut pits of the project and the adjoining Maules Creek Project, if it is approved. However, alignment of this corridor directly along the lease boundaries may not be its most efficient location, from either an environmental or economic perspective. Consequently, with the endorsement of OEH, the Director-General may approve substitution of an alternative native vegetation corridor of at least 500 metres width and equivalent or better ecosystem value, within the general vicinity of the lease boundary. See also condition 51 of Schedule 3.

Coal Extraction and stockpiles

8. The Proponent shall not extract more than 3.5 million tonnes of ROM coal from the site in any calendar year (on a pro rata monthly basis) whenever coal is being transported along the private haul road to the coal loader, unless a road safety audit at the intersections of Leard Forest Road and Therribri Road has been completed in consultation with Council and RMS, and any recommended actions implemented to the satisfaction of the Director-General.
9. The Proponent shall not extract more than 4.5 million tonnes of ROM coal from the site in any calendar year (on a pro rata monthly basis) or undertake mining operations outside the disturbance area approved under DA36/88 MOD 2, unless the Biodiversity Management Plan required under condition 49 of Schedule 3 has been approved by the Director-General.
10. The Proponent shall not extract more than 8.6 million tonnes of ROM coal from the site in any calendar year.

11. The Proponent shall not stockpile more than 600,000 tonnes of product coal on the site.

Coal Transport

12. The Proponent shall not transport more than 7 million tonnes of product coal from the site in any calendar year.
13. The Proponent may only transport coal from the site by road for 22 months following the date of this approval, or for such additional period as may result from delays in construction of the Boggabri Rail Spur Line as agreed by the Director-General. Following expiry of this period, all coal is to be transported from the site via the Boggabri Rail Spur Line unless in exceptional circumstances as agreed with RMS, the Council and approved by the Director-General.

SURRENDER OF EXISTING DEVELOPMENT CONSENT

14. Within 12 months of the date of this approval, or as otherwise agreed by the Director-General, the Proponent shall surrender the existing development consent (DA36-88) for the Boggabri Coal Mine in accordance with Section 104A of the EP&A Act.

Prior to the surrender of this development consent, the conditions of this approval shall prevail to the extent of any inconsistency with the conditions of the development consent.

STRUCTURAL ADEQUACY

15. The Proponent shall 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 Proponent 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.

16. The Proponent shall ensure that the Boggabri Rail Spur Line and ancillary infrastructure (including rail bridges) are designed and constructed in accordance with the relevant requirements of the current ARTC infrastructure standards, or as otherwise approved by the Director-General.
17. The Proponent shall meet the requirements of the ARTC for any rail and associated infrastructure connections, such as signalling equipment, to the ARTC rail network.

DEMOLITION

18. The Proponent shall 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

19. Unless the Proponent and the applicable authority agree otherwise, the Proponent shall:
- (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

20. The Proponent shall 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.

STAGED SUBMISSION OF STRATEGIES, PLANS AND PROGRAMS

21. With the approval of the Director-General, the Proponent may submit any strategy, plan or program required by this consent on a progressive basis.

Notes:

- While any strategy, plan or program may be submitted on a progressive basis, the Proponent will need to ensure that the existing operations on site are covered by suitable strategies, plans or programs at all times; and

- *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.*

22. Until they are replaced by an equivalent strategy, plan or program approved under this approval, the Proponent shall implement the existing strategies, plans or programs for the site that have been approved under DA 36/88.

COMMUNITY ENHANCEMENT

23. By the end of December 2012, unless otherwise agreed by the Director-General, the Proponent shall 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 Proponent's offer provided in Appendix 3.
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SCHEDULE 3 ENVIRONMENTAL PERFORMANCE CONDITIONS

CONSTRUCTION

Construction Environment Management Plan – Boggabri Rail Spur Line

1. Prior to the commencement of construction of the Boggabri Rail Spur Line, or as otherwise agreed by the Director-General, the Proponent shall prepare and implement (following approval by the Director-General) a **Construction Environment Management Plan** for the Boggabri Rail Spur Line. The Plan shall outline the environmental management practices and procedures that are to be followed during construction, and shall be prepared in consultation with the relevant government agencies and in accordance with the *Guideline for the Preparation of Environmental Management Plans* (Department of Infrastructure, Planning and Natural Resources, 2004). The Plan shall include, but not necessarily be limited to:
 - (a) a description of activities to be undertaken during construction of the Boggabri Rail Spur Line (including staging and scheduling);
 - (b) statutory and other obligations that the Proponent is required to fulfil during construction, including approvals, consultations and agreements required from authorities and other stakeholders under key legislation and policies;
 - (c) identification of relevant guidelines, standards, codes of practice etc. to which the Proponent intends to comply;
 - (d) a description of the roles and responsibilities for relevant employees involved in the construction of Boggabri Rail Spur Line, including relevant training and induction provisions for ensuring that employees, including contractors and sub-contractors are aware of their environmental and compliance obligations under these conditions of approval;
 - (e) an environmental risk analysis to identify the key environmental performance issues associated with the construction phase; and
 - (f) details of how environmental performance would be managed and monitored to meet acceptable outcomes, including what actions will be taken to address identified potential adverse environmental impacts (including any impacts arising from the staging of the construction of the Boggabri Rail Spur Line). In particular, the following environmental performance issues shall be addressed in the Plan:
 - (i) noise and vibration;
 - (ii) traffic and access;
 - (iii) soil, water quality, flood and spoil management;
 - (iv) air quality and dust management;
 - (v) management of Aboriginal and non-Aboriginal heritage;
 - (vi) soil contamination, hazardous material and waste management;
 - (vii) management of ecological impacts; and
 - (viii) hazard and risk management

Notes:

- *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 compound, construction compound, materials storage compound, maintenance workshop, testing laboratory or material stockpile areas).*
- *Additional guidance on appropriate content for the Construction Environment Management Plan can be found in **P&I's** standard conditions for linear infrastructure.*
- *Other construction activities undertaken on the site, such as construction of the CHPP, drag line, water management structures and ancillary equipment, are to be addressed as part of the operational management plans required under this approval.*

NOISE AND VIBRATION

Construction Noise and Vibration Criteria

2. During the hours of:
 - (a) 7:00 am to 6:00 pm Monday to Fridays, inclusive;
 - (b) 8:00 am to 1:00 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 **Boggabri Rail Spur Line, Kamilaroi Highway Access Roads, and Daisymede Laydown Compound** shall meet the criteria in Table 1.

Table 1: Construction Noise impact assessment criteria – maximum any stage of project life

Location Property/ID	Construction Noise Impact Assessment Criteria
	Day dB(A) $L_{Aeq}(15\text{ min})$
27	50
23	45
All other privately-owned residences	40

Note: To interpret the locations referred to in Table 1, see the applicable figure in Appendix 4.

Vibration from activities associated with the construction and/or upgrade of **Boggabri Rail Spur Line, Kamilaroi Highway Access Roads, and Daisymede Laydown Compound** shall meet the limits set by:

- for structural damage, the vibration limits set out in the German Standard *DIN 4150-3: Structural Vibration - effects of vibration on structures*; and
- 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).

Should the Proponent propose to undertake any construction works associated with the **Boggabri Rail Spur Line, Kamilaroi Highway Access Roads, and Daisymede Laydown Compound** outside of hours specified above then the Proponent must develop an Out of Hours Work (OOHW) protocol consistent with the requirements of the *Interim Construction Noise Guideline* (Department of Environment and Climate Change, 2009). The OOHW protocol must be developed to the satisfaction of the Director-General in consultation with the EPA and residents likely to be affected and demonstrate how the proposed scheduling would minimise impacts and how local residents' preferences would be accommodated.

Note: For areas where construction noise from the **Boggabri Rail Spur Line, Kamilaroi Highway Access Roads, and Daisymede Laydown Compound** is predicted to be at or below 35dB(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.

Operational Noise – Noise Affected Land

- For privately-owned residences identified within the project's 35dB(A) noise impact contour (see Appendix 4A) the owner(s) can make a written request to the Proponent for one of the following:
 - 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 Proponent 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 Director-General for resolution; or
 - 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 Proponent must undertake whichever option has been requested by the owner(s).

However, this condition does not apply if the Proponent has an agreement with the owner(s) of the relevant residence to generate higher noise levels, and the Proponent has advised **P&I** 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.
 - 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 considered as part of the land to be acquired. Where the Proponent and the owner(s) cannot agree on whether non-contiguous parcels of land should be included, either party may refer the matter to the Director-General for resolution. The Director-General's decision as to the lands to be included for acquisition under the procedures in conditions 8 and 9 of Schedule 4 shall be final.
- Where the owner(s) of a residence included in condition 3 of this schedule have opted for either an agreement to generate higher noise levels or mitigation under condition 3(a), 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 2), the owner(s) can request an independent noise impact assessment

for the residence. The request shall be made in writing to the Director-General. If the Director-General considers that a noise impact assessment is warranted, then the Proponent shall 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(s) may require the Proponent to acquire the residence and land in accordance with the procedures in conditions 8-9 of Schedule 4.

Table 2: Maximum Predicted Noise Levels

Location Property/ID	Day (<i>L_{Aeq}</i> (15 min))	Evening (<i>L_{Aeq}</i> (15 min))	Night (<i>L_{Aeq}</i> (15 min))	Night (<i>L_{A1}</i> (1 min))
54	35	42	42	45
52	35	41	41	45
67, 68	35	40	40	45
23	35	38	38	51
27, 48	36	38	38	48
86	35	38	38	45
43, 44	35	37	37	45
32, 33, 79, 90	35	36	36	45

Notes:

1. To interpret the locations referred to in Table 2, 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 Director-General and include either:
 - o 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
 - o 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 Industrial Noise Policy.
 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 modeling techniques accepted by the EPA.
 5. The Proponent shall ensure that the requested noise impact assessment is submitted to the Director-General within 3 months of the Director-General's decision that the assessment was warranted. The Proponent shall also provide a copy of the assessment to the owner(s) of the residence at the same time it is submitted to the Director-General.
 6. Note 2 to condition 3 of this Schedule applies to acquisition under this condition.
5. At any stage of the project, except for the noise-affected land identified in condition 3 as being within the project's 35 dB(A) contour, the Proponent shall ensure that operational noise generated by the project does not exceed the criteria in Table 3 at any residence on privately-owned land.

Table 3: Noise impact assessment criteria dB(A) – maximum any stage of project life

Location Property/ID	Noise Impact Assessment Criteria			
	Day (<i>L_{Aeq}</i> (15 min))	Evening (<i>L_{Aeq}</i> (15 min))	Night (<i>L_{Aeq}</i> (15 min))	Night (<i>L_{A1}</i> (1 min))
All other privately-owned residences	35	35	35	45

Notes:

1. Noise generated by the project is to be measured in accordance with the relevant requirements, and exemptions (including certain meteorological conditions), of the NSW Industrial Noise Policy
2. Operational noise generated by the project includes noise generated from use of the private haul road and proposed rail spur.

However, these noise criteria do not apply if the Proponent has an agreement with the owner(s) of the relevant residence to generate higher noise levels, and the Proponent has advised P&I in writing of the terms of this agreement.

6. If the owner(s) of a privately-owned residence, which is not within the project's 35 dB(A) noise impact contour (see condition 3 and Appendix 4A), have reason to believe that operational noise from the project is causing the criteria in Table 3 to be exceeded at the residence, the owner(s) can request an independent noise impact assessment for the residence. The request shall be made in writing to the Director-General. If the Director-General considers that a noise impact assessment is warranted, then the Proponent shall 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 3, the owner(s) can make a written request to the Proponent 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 Proponent 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 Director-General 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 Proponent must undertake whichever option has been requested by the owner(s).

However, this condition does not apply if the Proponent has an agreement with the owner(s) of the relevant residence to generate higher noise levels, and the Proponent has advised P&I 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 considered as part of the land to be acquired. Where the Proponent and the owner(s) cannot agree on whether non-contiguous parcels of land should be included, either party may refer the matter to the Director-General for resolution. The Director-General's decision as to the lands to be included for acquisition under the procedures in conditions 8 and 9 of Schedule 4 shall be final.
3. Notes 2, 3, 4 and 5 of condition 4 apply to this condition.

Cumulative Noise Criteria

7. Except for the noise affected land identified in condition 3 as being within the project's 35 dB(A) contour, the Proponent shall ensure that the operational noise generated by the project combined with the noise generated by other mines does not exceed the criteria in Table 4 at any residence on privately-owned land.

Table 4: Cumulative noise criteria dB(A) L_{Aeq} (period)

Location	Day (L_{Aeq} (period))	Evening (L_{Aeq} (period))	Night (L_{Aeq} (period))
All privately-owned land	40	40	40

Notes:

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

Cumulative Noise Acquisition Criteria

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 3 and Appendix 4A), reasonably believes that the noise limits in Table 4 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 haul roads or rail spurs), the owner(s) can request an independent noise impact assessment for the residence. The request shall be made in writing to the Director-General. If the Director-General considers that a noise impact assessment is warranted, then the Proponent shall 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 4, then the owner(s) can make a written request to the Proponent 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 Proponent 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 Director-General 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 Proponent must undertake whichever option has been requested by the owner(s).

However, this condition does not apply if the Proponent has an agreement with the owner(s) of the relevant residence to generate higher noise levels, and the Proponent has advised **P&I** in writing of the terms of this agreement.

The Proponent 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 Proponent, or one of the contributing mines, may submit the matter to the Director-General for resolution. The Director-General's decision shall be final.

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 considered as part of the land to be acquired. Where the Proponent and the owner(s) cannot agree on whether non-contiguous parcels of land should be included, either party may refer the matter to the Director-General for resolution. The Director-General's decision as to the lands to be included for acquisition under the procedures in conditions 8 and 9 of Schedule 4 shall be final.*
3. *Notes 2, 3, 4 and 5 of condition 4 apply to this condition.*
4. *The noise impact assessment shall include assessment of the relative contribution of the mines to the impact at the residence.*

Attenuation of Plant

9. The Proponent shall:

- (a) ensure that:
- all new trucks, dozers, drills and excavators purchased for use on the site after the date of this approval 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 that correspond to best practice or the application of best available technology economically achievable;
 - where reasonable and feasible, improvements are made to existing noise suppression equipment as technologies become available; and
- (b) monitor and report on the implementation of these requirements annually on its website.

10. The Proponent shall:

- (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 within the Annual Review.

Boggabri Rail Spur Line and Bridge Design – Noise impacts

11. The Proponent shall:

- (a) ensure all relevant Boggabri Rail Spur Line and rail bridge designs are assessed by suitably qualified and experienced person/s in acoustic engineering for the purpose of providing reasonable and feasible recommendations to minimise noise, including low frequency noise. This acoustic review should consider the EA's relevant recommendations and additional noise attenuation such as acoustic barriers to minimise noise at sensitive receptors;
- (b) implement reasonable and feasible recommendations made in the acoustic review;
- (c) undertake commissioning trials of the operation of the Spur Line to optimise train speed to minimise noise impacts; and
- (d) following completion and 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 of the Director-General.

Operating Conditions

12. The Proponent shall:

- (a) implement best management practice to minimise the operational, low frequency and 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 Boggabri 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 rolling stock supplied by service providers on the Boggabri Rail Spur Line is designed and constructed to minimise noise;
- (h) ensure any new rail rolling stock manufactured specifically for the project is designed and constructed to minimise noise;
- (i) use its best endeavours to achieve the long term intrusive noise goals for the project in Table 5, where this is reasonable and feasible, and report on the progress towards achieving these goals in the annual review; and
- (j) 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 Director-General.

Notes:

- The comprehensive review can be undertaken as part of independent environmental audits required under condition 10 of Schedule 5.

Table 5: Long Term Intrusive Noise Goals – Existing Residences

Location	Day	Evening	Night	
	L_{Aeq} (15 min)	L_{Aeq} (15 min)	L_{Aeq} (15 min)	L_{A1} (1 min)
All residences on privately owned land	35	35	35	45

Notes:

- To interpret the locations referred to Table 5, see the applicable figures in Appendix 4; and
- Noise generated by the project is to be measured in accordance with condition 14 of this schedule.

Noise Management Plan

13. The Proponent shall prepare and implement a Noise Management Plan for the project to the satisfaction of the Director-General. This plan must:

- (a) be prepared in consultation with the EPA and the CCC, and submitted to the Director-General for approval within 6 months of the date of this approval;
- (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;
 - uses predictive meteorological forecasting to incorporate proactive mitigation measures to manage noise impacts;
 - 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;

- 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 other coal mines in the Precinct to minimise the cumulative noise impacts of all mines within the Precinct, that includes:
 - systems and processes to ensure that all mines are managed to achieve their noise criteria;
 - a shared environmental monitoring network and data sharing protocol; and
 - procedures for identifying and apportioning the source/s and contribution/s to cumulative noise impacts for 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

14. Where conditions in this approval refer to measurement of noise within the context of the NSW Industrial Noise Policy the inversion class to be applied to the project is Class G.

However, the Proponent may undertake an investigation to determine whether a proposal for change in this classification could be considered for approval by the Director-General. Any such investigation must be conducted in consultation with the EPA and be conducted by a suitably qualified person whose appointment has been endorsed by the EPA and approved by the Director-General. The report and recommendation must be submitted to the EPA for endorsement prior to submission to the Director-General. If the Director-General is satisfied that the recommendation is reasonable, then the Director-General may amend the inversion class applying to the project under this approval.

BLASTING

Blasting Criteria

15. The Proponent shall ensure that the blasting on the site does not cause exceedances of the criteria in Table 6.

Table 6: Blasting Criteria

Location	Airblast overpressure (dB(Lin Peak))	Ground vibration (mm/s)	Allowable exceedance
Residence on privately owned land	120	10	0%
	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 Director-General by the structural design methodology in AS 2187.2-2006, or its latest version	0%

However, these criteria do not apply if the Proponent has a written agreement with the relevant owner or infrastructure provider/owner, and the Proponent has advised P&I in writing of the terms of this agreement.

Blasting Hours

16. The Proponent shall 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 Director-General.

Blasting Frequency

17. The Proponent 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

18. If the Proponent 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 Proponent shall:
- (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 Proponent or landowner disagrees with the findings of the independent property investigation, either party may refer the matter to the Director-General for resolution.

The timeframe for completion of the inspection and provision of the report is subject to suitable access arrangements being granted by the landowner.

Property Investigations

19. 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 Proponent shall:
- (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 Proponent shall repair the damages to the satisfaction of the Director-General.

If there is a dispute over the selection of the suitably qualified, experienced and independent person, or the Proponent or landowner disagrees with the findings of the independent property investigation, either party may refer the matter to the Director-General for resolution.

The timeframe for completion of the inspection and provision of the report is subject to suitable access arrangements being granted by the landowner.

Operating Conditions

20. During mining operations on site, the Proponent shall:
- (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 the 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 Director-General.
21. The Proponent shall 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 not owned by the Proponent, unless:
 - the Proponent has a written agreement with the relevant landowner to allow blasting to be carried out closer to the land, and the Proponent has advised P&I in writing of the terms of this agreement, or
 - the Proponent has:

- demonstrated to the satisfaction of the Director-General 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

22. The Proponent shall prepare and implement a Blast Management Plan for the project to the satisfaction of the Director-General. This plan must:
- (a) be submitted to the Director-General for approval within 6 months from the date of project approval;
 - (b) be prepared in consultation with the EPA, the CCC and interested members of the local community potentially affected by blasting operations;
 - (c) propose 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 other mines within the Leard Forest Mining Precinct to minimise cumulative blasting impacts.

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

23. Unless otherwise authorised by an EPL, the Proponent shall ensure that no offensive odours are emitted from the site, as defined under the POEO Act.

Greenhouse Gas Emissions

24. The Proponent shall implement all reasonable and feasible measures to minimise the release of greenhouse gas emissions from the site to the satisfaction of the Director-General.

Acquisition on request due to Air Quality

25. Upon receiving a written request for acquisition from an owner of the land listed in Table 7, the Proponent shall acquire the land in accordance with the procedures in Conditions 8-9 of Schedule 4.

Table 7: Land subject to acquisition due to dust impacts upon request

Acquisition Basis	Land
Air impacts over land and at residence	Residence and landholdings (ID 54,55 and 83)

Notes:

- To interpret the locations referred to in Table 7 see the applicable figure(s) in Appendix 4.

Additional Air Quality Mitigation upon Request

26. Upon receiving a written request from the owner of any residence on the land listed in Table 7 or the land listed in Table 8, the Proponent shall 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 Proponent 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 Director-General for resolution.

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

Mitigation Basis	Land
Air impacts at private residences	52 and 86

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

Air Quality Assessment Criteria

27. Except for the air quality affected land in Table 7, the Proponent shall 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 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	^d Criterion
Total suspended particulate (TSP) matter	Annual	^a 90 µg/m ³
Particulate matter < 10 µm (PM ₁₀)	Annual	^a 30 µg/m ³

Table 10: Short-term criteria for particulate matter

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

Table 11: Long-term criteria for deposited dust

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

Notes to Table 9, Table 10 and Table 11:

- ^a Total impact (ie incremental increase in concentrations due to the project plus background concentrations due to all other sources);
- ^b Incremental impact (ie incremental increase in concentrations due to the project on its own);
- ^c 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.
- ^d Excludes extraordinary events such as bushfires, prescribed burning, dust storms, sea fog, fire incidents or any other activity agreed by the Director-General.

28. The Proponent shall 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:
- all reasonable and feasible avoidance and mitigation measures have been employed to prevent exceedance of the criteria;
 - the tenant, and landowner (where owned by a mine other than the Proponent), has been notified of health risks in accordance with the notification requirements under Schedule 4 of this approval;
 - the tenant on project owned land can terminate their tenancy agreement without penalty, subject to giving reasonable notice, and the Proponent uses its best endeavours to provide assistance with relocation and sourcing of alternative accommodation;
 - 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 a mine other than the Proponent); and
 - particulate matter air quality monitoring is undertaken to inform the tenant and landowner (where owned by a mine other than the Proponent) of potential health risks; and
 - the monitoring data are provided 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 Director-General.

Air Quality Acquisition Criteria

29. If particulate matter emissions generated by the project exceed, or contribute to an exceedance of the relevant cumulative criteria, in Table 12, Table 13 or Table 14 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 Proponent shall acquire the land in accordance with the procedures in conditions 8-9 of schedule 4.

Table 12: Long term land acquisition criteria for particulate matter

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

Table 13: Short term land acquisition criteria for particulate matter

Pollutant	Averaging period	^d Criterion
Particulate matter < 10 µm (PM ₁₀)	24 hour	^a 150 µg/m ³
Particulate matter < 10 µm (PM ₁₀)	24 hour	^b 50 µg/m ³

Table 14: Long term land acquisition criteria for deposited dust

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

Notes to Table 12, Table 13 and Table 14:

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

^b Incremental impact (ie incremental increase in concentrations due to the project on its own);

^c 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;

^d Excludes extraordinary events such as bushfires, prescribed burning, dust storms, sea fog, fire incidents, or any other activity agreed by the Director-General.

Operating Conditions

30. The Proponent shall:
- 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;
 - 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 to ensure compliance with the relevant conditions of this approval;
 - manage PM_{2.5} levels in accordance with any requirements of an EPL;
 - minimise the air quality impacts of the project during adverse meteorological conditions and extraordinary events (see note d under Table 14 above);
 - minimise any visible off-site air pollution;
 - minimise the surface disturbance of the site generated by the project; and
 - 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 Director-General.

Air Quality and Greenhouse Gas Management Plan

31. The Proponent shall prepare and implement an Air Quality and Greenhouse Gas Management Plan for the project to the satisfaction of the Director-General. This plan must:
- be prepared in consultation with the EPA and the CCC, and be submitted to the Director-General for approval within 6 months from the date of project approval;
 - integrate the recommendations of a Site Specific Best Management Determination and Reactive Dust Management Strategy prepared to the satisfaction of the EPA;

- (c) describe the measures that would be implemented to ensure:
 - best management practice is being employed, consistent with the development of the site specific best management determination and reactive dust management strategy;
 - 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.
- (d) describe the proposed air quality management system;
- (e) include a risk/response matrix to codify mine operational responses to varying levels of risk resulting from weather conditions and specific mining activities;
- (f) include commitments to provide summary reports and specific briefings at CCC meetings on issues arising from air quality monitoring;
- (g) 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_{2.5} monitoring;
 - includes monitoring of occupied project-related residences and residences on air-affected land listed in Table 7 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 a protocol for determining any exceedances of the relevant conditions in this approval; and
- (h) 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.

Notes:

- *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.*

METEOROLOGICAL MONITORING

32. For the life of the project, the Proponent shall 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 Industrial Noise Policy*, unless a suitable alternative is approved by the Director-General following consultation with the EPA.

SOIL AND WATER

Water Licences

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

Water Supply

33. The Proponent shall 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 Director-General.

Compensatory Water Supply

34. The Proponent shall 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 NOW, and to the satisfaction of the Director-General.

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 Proponent 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 Director-General for resolution.

If the Proponent is unable to provide an alternative long-term supply of water, then the Proponent shall provide alternative compensation to the satisfaction of the Director-General.

Surface Water Discharges

35. The Proponent shall ensure that all surface water discharges from the site comply with the discharge limits (both volume and quality) set for the project in any EPL.

Operating conditions

36. The Proponent shall:
- (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
 - annual soil balances to manage soil handling including direct resspreading 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 must not be emplaced at elevations within the Boggabri pit shell where they may promote acid or sulphate species generation and migration beyond the pit shell
 - (d) ensure that any coal barrier between the final void and any future surrounding mining operations must remain intact in order to impede exchange of any contained groundwaters in the Boggabri pit shell.

Flood impacts Boggabri Rail Spur Line and Haul Road

37. The rail spur line, rail spur bridges and any upgrade to the haul road must be designed and constructed to minimise impacts on flooding. Prior to construction of the rail spur line or any upgrades to the haul road, the Proponent shall undertake a flood assessment of the detailed design to confirm there would be minimal impacts as predicted in the EA.

This shall include assessment of impacts of the rail spur line embankment and proposed design of stormwater culverts along the rail spur line to the Namoi River to assess changes to localised flood impacts within the Nagero creek catchment and adjoining Bollol Creek catchment. The assessment must be undertaken in consultation with NOW, Namoi CMA, Council and OEH, to the satisfaction of the Director-General.

Water Management Plan

38. The Proponent shall prepare and implement a Water Management Plan for the project to the satisfaction of the Director-General. This plan must be prepared in consultation with OEH, NOW, Namoi CMA and the CCC, by suitably qualified and experienced person/s whose appointment has been approved by the Director-General, and be submitted to the Director-General for approval within 6 months of the date of this approval.

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

- (a) a Site Water Balance, 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 Surface Water Management Plan, 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 soils within the irrigation management area;
 - 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:
 - clean water diversion systems;
 - erosion and sediment controls (dirty water system);
 - mine water management systems including irrigation areas;
 - discharge limits in accordance with EPL requirements;
 - water storages;
 - haul road and Boggabri Rail Spur Line and bridge flood and water diversions;
 - 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 Boggabri Rail Spur Line and bridge across the Namoi River floodplain and upstream adjoining Nagero/Bollol creek catchments;
 - 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;
 - soils within the irrigation area;
 - downstream surface water quality;
 - downstream flooding impacts, including flood impacts due to the construction and operation of the Boggabri Rail Spur Line and rail bridge; and
 - stream and riparian vegetation health, including the Namoi River;
 - a program to monitor:
 - the effectiveness of the water management system;
 - soils within the irrigation area; and
 - surface water flows and quality in the watercourses that could be affected by the project;
 - 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 Groundwater Management Plan, 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), 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;
 - groundwater assessment criteria including trigger levels for investigating any potentially adverse groundwater impacts;
 - a program to monitor and assess:
 - groundwater inflows to the open cut mining operations;
 - the seepage/leachate from water storages, backfilled voids and the final void;
 - interconnectivity between the alluvial and bedrock aquifers;
 - 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;
 - aquifers potentially affected by the mine irrigation area;
 - groundwater dependent ecosystems (including potential impacts on stygo-fauna) 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 Leard Forest Mining Precinct Water Management Strategy 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

39. The Proponent shall implement the Biodiversity Offset Strategy described in the EA, summarised in Table 15 and shown conceptually in Appendix 7, to the satisfaction of the Director-General.

Table 15: Summary of the Biodiversity Offset Strategy

Area	Offset Type	Minimum Size (hectares)
Merriendi Offset Area	Existing native vegetation to be protected and enhanced and additional native vegetation to be established with the restoration of at least 170.1 ha of derived native grassland Box Gum Woodland EEC as listed under the TSC Act.	541
Namoi Offset Area	Existing native vegetation to be protected and enhanced and additional native vegetation to be established with restoration of at least 491 ha of derived native grassland Box Gum Woodland EEC as listed under the TSC Act.	2,432
Eastern Offsets (Myall Plains/Wirrilah/Mallee)	Existing native vegetation to be protected and enhanced and additional native vegetation to be established with restoration of at least 430 ha of derived native grassland Box Gum Woodland EEC as listed under the TSC Act.	3,247
Additional offset area – <i>Note: Location subject to final approval as part of revised Biodiversity Strategy to be prepared by Proponent</i>	Proposal for 650ha of existing Box Gum Woodland EEC to be enhanced and restoration of an additional 350 ha of derived native grassland Box Gum Woodland EEC as listed under the TSC Act.	1,000
Additional modification offset area <i>Note: Location subject to final approval as part of revised Biodiversity Strategy to be prepared by Proponent</i>	Existing native vegetation to be protected and enhanced including at least 63 ha of Pilliga Box Woodland and 16 ha of Box Gum Woodland EEC as listed under the TSC Act.	103
Total offset area owned, under option or committed by Proponent		7,360
Crown Reserve Land within Namoi Offset Area	Additional funding /management agreement with DPI Catchments and Lands towards management of Special Lease/Crown Reserve land.	441

Area	Offset Type	Minimum Size (hectares)
Additional land within Namoi Offset Area, Eastern Offset Area and Crown Reserve Land managed for Corridor Enhancement.	Located on poor condition (for biodiversity conservation) land but managed to improve connectivity in offset corridors.	626
Rehabilitation Area.	<p>Except for the area of the minimised final void, pre-mining native vegetation communities are to be re-established for a biodiversity conservation land use objective, with the area subject to finalisation of the rehabilitation management plan as required under this approval.</p> <p>Note: the final mix and area of native vegetation communities is subject to the approved Biodiversity Management Plan and Rehabilitation Management Plan.</p>	1,508

Leard Forest Mining Precinct Regional Biodiversity Strategy

40. The Proponent shall 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 shall be co-ordinated through **P&I** (refer condition 42 below) and prepared by suitably qualified, experienced and independent person/s whose appointment has been endorsed by OEH and subsequently approved by the Director-General, in the following stages:

Stage 1 – Scoping Stage

A scoping report for development of the Strategy must be submitted, within 6 months of the date of this approval, for endorsement by OEH and subsequent approval by the Director-General. The Director-General may extend this period with the agreement of OEH. The scoping report must:

- include terms of reference, scope and objectives for the Strategy, including recommendations for the Strategy's geographic extent;
- identify the ongoing functions and members of the working group (see condition 41 of Schedule 3);
- include a project management plan of the Strategy, with a time schedule, indicative dates for working group meetings, review and milestones for completion;
- include a funding program for the development of the Strategy, including provision of adequate resources for the participation of working group members; and
- include a consultation/communications program for the Strategy.

Note: The broad terms of reference must be guided by the Planning Assessment Commission (PAC) merit review for the Boggabri Coal Mine (February 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 submitted for endorsement by OEH and subsequent approval by the Director-General within 18 months of the date of this approval. The Director-General may extend this period with agreement of OEH.

Stage 3 – Strategy Review

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 shall be conducted by suitably qualified, experienced and independent person/s whose appointment has been endorsed by OEH and approved by the Director-General. Any modifications to the Strategy arising from the review must be endorsed by OEH prior to approval by the Director-General.

- The Strategy shall be prepared in collaboration with a working group containing (subject to the outcomes of the Stage 1 – Scoping Stage) representatives of **P&I**, OEH, DRE, Namoi CMA, Council and **DoE** and the other Leard Forest Mining Precinct mines; which shall be chaired by a suitably qualified, experienced and independent person whose appointment has been approved by the Director-General.
- The cost of preparing the Strategy, including the independent chairperson and a co-ordinator to be employed by **P&I** shall 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 the Proponent, with appropriate adjustments 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.

Revised Biodiversity Offset Strategy

43. The Proponent shall prepare and implement a revised Biodiversity Offset Strategy for the identified offset areas in Table 15 to the satisfaction of the Director-General. The revised Strategy must:
 - (a) not reduce the size or quality of the proposed offset areas;
 - (b) be consistent (as far as is possible) with the recommendations and objectives of the Leard Forest Mining Precinct Regional Biodiversity Strategy;
 - (c) be prepared in consultation with OEH, Namoi CMA, CCC, DPI Catchments and Lands and DoE;
 - (d) identify the land to be acquired for the additional offset area of 1,000 ha in Table 15;
 - (e) identify the land to be acquired for the additional modification offset area of 103 ha in Table 15;
 - (f) identify the special lease/Crown reserve land subject to a funding/management agreement with DPI Catchments and Lands, and if this land area is less than the identified 441 ha, then the Proponent must identify substitute areas that would provide an equivalent increase in biodiversity values; and
 - (g) be submitted within 30 months of the date of this approval, or within 6 months of the approval of Stage 2 of the Leard Forest Mining Precinct Regional Biodiversity Strategy (whichever is sooner) for endorsement by OEH and subsequent approval by the Director-General.
44. For the White Box - Yellow Box - Blakeley's Red Gum Grassy Woodland Endangered Ecological Community the Proponent shall:
 - (a) ensure that the Biodiversity Offset Strategy and Rehabilitation Strategy are focused on protection, rehabilitation, re-establishment and long-term maintenance of viable stands of this community;
 - (b) investigate in consultation with OEH and the Namoi CMA, 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 Director-General; and
 - (d) incorporate the approved implementation plan into the revised Biodiversity Management Plan, required under condition 50.
45. For all threatened species on site, the proponent shall ensure that the Biodiversity Offset Strategy and Rehabilitation Strategy are focussed 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 Honey Eater, Speckled Warbler, Swift Parrot, Brown Treecreeper, Diamond Firetail, Grey-crowned Babbler, Hooded Robin, Little Lorikeet, Varied Sittella, Black Chinned Honeyeater, Painted Honeyeater, Pied Honeyeater, Little Eagle, Spotted Harrier, Black Necked Stork, Square Tailed Kite, Turquoise Parrot, Barking Owl, Masked Owl, Superb Parrot, Eastern False Pipistrelle, Greater Long-eared Bat, Yellow-bellied Sheath Tail Bat, Eastern Cave Bat, Eastern Bent-wing Bat, Large-eared Pied Bat, Little Pied Bat, Spotted-tailed Quoll, Squirrel Glider and Koala.

46. The Proponent shall:
 - (a) investigate, in consultation with OEH and the Namoi CMA, all factors likely to enhance or impede the effective long-term provision of suitable habitat(s) for the following species: Brown Treecreeper, Hooded Robin, Black-chinned Honeyeater, Painted Honeyeater, Pied Honeyeater, Grey-crowned Babbler, Speckled Warbler, Diamond Firetail, Varied Sittella, Regent Honeyeater, Eastern False Pipistrelle, Greater Long-eared Bat, Yellow-bellied Sheath Tail 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 Director-General; and
 - (c) incorporate the approved implementation plan into the revised Biodiversity Management Plan, required under condition 50.

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

by the project.

Long Term Security of Offset

47. The Proponent shall make suitable arrangements to provide appropriate long-term security for the offset areas:
- (a) For the areas included in Table 15 as owned, under option or committed by the Proponent, the long-term security shall be provided by way of the Proponent entering into a conservation agreement or agreements pursuant to section 69B of the *National Parks and Wildlife Act 1974*, recording the obligations assumed by the Proponent under the conditions of this approval in relation to these offset areas, and registering the agreement(s) pursuant to section 69F of the *National Parks and Wildlife Act 1974*. The conservation agreement(s) must be registered by December 2014 unless agreed otherwise by the Director-General after consultation with Chief Executive of OEH. The conservation agreements must remain in force in perpetuity.
 - (b) For the areas included in Table 15 as Crown Reserve Land and Additional Land managed for Corridor Enhancement, the long-term security shall be provided by a form of binding agreement acceptable to the Director-General that records the obligations assumed by the Proponent under the conditions of this approval in relation to these offset areas. These agreements must be in force within 12 months of the approval of Stage 2 of the Leard Forest Mining Precinct Regional Biodiversity Strategy, or other date agreed by the Director-General, to the satisfaction of the Director-General.

Agricultural Production in Offset Areas

48. 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 Proponent shall:
- (a) include in the Biodiversity Management Plan an agricultural suitability assessment of surplus land on the offset properties, in particular for the proposed corridor enhancement zones; and
 - (b) maintain the agricultural productivity of the surplus areas.

Biodiversity Management Plan

49. The Proponent shall prepare and implement a Biodiversity Management Plan for the project to the satisfaction of the Director-General. This plan must:
- (a) be prepared in consultation with OEH, DoE, CCC and the Namoi CMA, and be submitted to the Director-General for approval within 6 months of the date of this approval;
 - (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:
 - (i) manage the remnant vegetation and habitat on the site and in the offset area/s (if and when applicable); and
 - (ii) 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:
 - (i) enhancing the quality of existing vegetation and fauna habitat;
 - (ii) 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;
 - (iii) 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;
 - (iv) collecting and propagating seed;
 - (v) minimising the impacts on fauna on site, including undertaking pre-clearance surveys;
 - (vi) 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;
 - (vii) managing any potential conflicts between the proposed restoration works in the biodiversity areas and any Aboriginal heritage values (both cultural and archaeological);
 - (viii) managing salinity;
 - (ix) controlling weeds and feral pests;
 - (x) controlling erosion;
 - (xi) managing grazing and agriculture on site;
 - (xii) controlling access; and
 - (xiii) 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.

50. The Proponent shall revise the Biodiversity Management Plan within 30 months of the date of this approval, or within 6 months after the approval 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 OEH, DoE, DPI Catchments and Lands, the CCC and the Namoi CMA;
 - (b) demonstrate consistency with any findings of Leard Forest Mining Precinct Regional Biodiversity Strategy; and
 - (c) include any implementation plans arising from the studies required under conditions 44 and 46 of this approval;
- to the satisfaction of the Director-General.

Vegetated Corridor between Boggabri and Maules Creek Coal Projects

51. For the vegetated buffer corridor required to be retained and protected between the projects under Condition 7 of Schedule 2 of this approval the Proponent shall:
- (a) use its best endeavours to work cooperatively with the Proponent of the Maules Creek Coal Project to enhance the functioning of the area as a biodiversity corridor; and
 - (b) include in the Biodiversity Management Plan the details as to how impacts on the corridor are to be minimised,
- to the satisfaction of the Director-General.

Conservation Bond

52. Within 36 months of the date of this approval or within 6 months of the approval of the revised Biodiversity Management Plan required under condition 50 of Schedule 3 (whichever is sooner), the Proponent shall lodge a Conservation and Biodiversity Bond with P&I 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 shall 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 Director-General.

If the offset strategy is completed generally in accordance with the completion criteria in the Biodiversity Management Plan to the satisfaction of the Director-General, the Director-General will release the bond.

If the offset strategy is not completed generally in accordance with the completion criteria in the Biodiversity Management Plan, the Director-General 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 Director-General, this bond may be combined with rehabilitation security deposit administered by DRE.

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

53. By the end of December 2017 and then every 5 years, unless the Director-General agrees otherwise, the Proponent shall commission suitably qualified, experienced and independent person/s, whose appointment has been approved by the Director-General, 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 Director-General. This audit must:
- a) include consultation with OEH, Namoi CMA, DPI Catchments and Lands, DoE, CCC and DRE;
 - 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 Proponent shall revise the Biodiversity Offset Strategy, in consultation with P&I, OEH and DoE, and to the satisfaction of the Director-General.

Forestry Plantation Offset Strategy

- 54. The Proponent shall prepare a Eucalyptus Forestry Plantation Offset Strategy to the satisfaction of Forests NSW, within 12 months of the date of this approval. The Forestry Plantation Offset Strategy shall provide at least a minimum 168 ha plantation area (as committed in the EA), or alternative as agreed by Forests NSW. The Strategy shall identify proposed funding and management arrangements for the development and maintenance of the plantation offset. If there is a dispute over these requirements, either party may refer it to the Director-General for resolution, whose decision shall be final.

HERITAGE

Aboriginal Heritage Conservation Strategy

- 55. The Proponent shall prepare and implement an Aboriginal Heritage Conservation Strategy for the project and the Biodiversity Offset Strategy areas to the satisfaction of the Director-General. 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:
 - (a) be prepared by suitably qualified and experienced person/s whose appointment has been endorsed by the Director-General;
 - (b) be prepared in consultation with OEH, the local Aboriginal community and other mines within the Leard Forest Mining Precinct, and submitted to the Director-General for approval within 18 months from the date of project approval;
 - (c) identify the Aboriginal cultural heritage values of the Biodiversity Offset Strategy areas;
 - (d) identify areas of high Aboriginal cultural heritage significance within both the site and the Leard Forest Mining Precinct;
 - (e) identify a range of options for enhancing and conserving Aboriginal cultural heritage values, 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
 - (f) consider cumulative impacts and potential for developing joint initiatives with other mines 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

- 56. The Proponent shall prepare and implement a Heritage Management Plan for the project to the satisfaction of the Director-General. This plan must:
 - (a) be prepared by suitably qualified and experienced person/s whose appointment has been endorsed by the Director-General;
 - (b) be prepared in consultation with the OEH and the local Aboriginal stakeholders (in relation to the management of Aboriginal heritage values);
 - (c) be submitted to the Director-General for approval prior to any development that may impact heritage items, unless the Director-General 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 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 for the implementation of mitigation and management measures for historic heritage items identified to be impacted by the project, in particular proposed consultation, archival recording, research and archaeological investigations to be undertaken for the locally significant *Heathcliffe* residence prior to and during any disturbance;
 - a detailed plan for 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.

Notes:

- *P&I 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 Proponent will be required to update the plan as soon as practicable following the Director-General's approval of the Aboriginal Heritage Conservation Strategy.*

Archaeological Salvage Program

57. The Proponent shall prepare and implement an Archaeological Salvage Program for the project to the satisfaction of the Director-General. This Program must:
- (a) be prepared by suitably qualified and experienced person/s whose appointment has been endorsed by the Director-General;
 - (b) be prepared in consultation with the OEH and the local Aboriginal stakeholders;
 - (c) incorporate methodology including:
 - sub-surface testing;
 - staged salvage, based on anticipated mine planning;
 - pre-disturbance monitoring;
 - site assessment and reporting protocols;
 - research objectives to inform knowledge of Aboriginal occupation;
 - protection, storage and management of salvaged Aboriginal objects;
 - addressing relevant statutory requirements under the National Parks and Wildlife Act 1974; and
 - proposed long term plan for protection of salvaged Aboriginal objects.

TRANSPORT

Road Upgrade and Maintenance

Notes:

- *Under the Roads Act 1993, the Proponent will 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.*
58. The Proponent shall construct, operate and maintain the bridges over the Kamilaroi Highway for the Boggabri Rail Spur Line and the haul road bridge to the satisfaction of RMS, and shall bear all costs associated with the construction and maintenance of these bridges.
- 58A. *The Proponent shall design and construct the intersections with the Kamilaroi Highway for access to the haul road to the satisfaction of RMS.*
59. The Proponent shall meet the requirements of the RMS in respect of road access from the Kamilaroi highway for temporary construction traffic, road intersection upgrades and maintenance of RMS roads used in respect of the project.

Traffic Management Plan

60. The Proponent shall prepare and implement a Traffic Management Plan for the project to the satisfaction of the Director-General. This plan must:
- (a) be prepared in consultation with the RMS, Council and Gunnedah Council;
 - (b) be submitted to the Director-General for approval within 6 months of the date of this approval;
 - (c) propose an appropriate program and schedule of works for any intersection upgrades to be undertaken or contributed to by the Proponent arising from conditions 58 and 59 of Schedule 3;

- (d) include:
 - (i) a code of conduct for drivers of heavy vehicles;
 - (ii) nominated heavy vehicle access routes for construction and operational stages, including details on volumes and nature of heavy/over size and over/mass vehicles;
 - (iii) measures to minimise traffic impacts at school bus pick up and drop off times;
 - (iv) consideration of measures to minimise dust from unsealed roads that may be used for access to the mine site; and
 - (v) a monitoring program to audit vehicle movements against predictions in the EA.

Leard Forest Road Closure

61. The Proponent shall prepare and submit a Leard Forest Road Closure Strategy for approval by the Director-General in consultation with Council, Forests NSW, MCCC, CCC and the local community affected by the road closure. The strategy must:
 - (a) provide a similar level of road access from Maules Creek to Manilla Road during flood events compared to the existing Leard Forest Road, following the closure of Leard Forest Road;
 - (b) investigate options for a road realignment to join onto Goonbri Road to the east of Leard State Forest;
 - (c) be funded by the Proponent for the capital cost of any upgrades or road realignment and identify allocation of ongoing maintenance costs;
 - (d) include ongoing review of the effectiveness of the road closure strategy and provision of additional mitigation measures as necessary to maintain a similar level of access during flood events; and
 - (e) be implemented prior to the closure of Leard Forest Road.

Monitoring of Coal Transport

62. The Proponent shall:
 - (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

63. The Proponent shall liaise with Gunnedah Shire Council regarding the recommendations made in the Gunnedah Traffic Study for mitigating impacts of coal rail transportation on road safety and congestion in the Gunnedah LGA due to closures of rail level crossings.
64. Within 12 months of the completion of the Gunnedah Traffic Study, the Proponent shall provide a report of the outcomes of this liaison and identify any proposals recommended by either the Proponent or the Gunnedah Shire Council towards implementing reasonable and feasible recommendations, to the satisfaction of the Director-General.

Note:

Any contribution by the Proponent should be on an equitable basis with other coal project rail users.

VISUAL

Operating Conditions

65. The Proponent shall:
 - (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 private haul road;
 - along the Boggabri 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 (including the rail spur bridge over the Namoi river floodplain and Kamilaroi highway), 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 Director-General.

Additional Visual Impact Mitigation

66. 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 Proponent shall 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 Proponent 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 Director-General 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); and
- Except in exceptional circumstances, the Director-General 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

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

WASTE

68. The Proponent shall:
- (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;
 - (c) monitor and report on the effectiveness of the waste minimisation and management measures in the Annual Review.

REHABILITATION

Rehabilitation Objectives

69. The Proponent shall rehabilitate the site to the satisfaction of the Executive Director Mineral Resources. This rehabilitation must be generally consistent with the proposed Rehabilitation Strategy described in the EA (and depicted conceptually in Appendix 9) and comply with the objectives in Table 16.

Table 16: Rehabilitation Objectives

Feature	Objective
Mine site (as a whole), including the final void.	Safe, stable and non-polluting Minimise the size and depth of the final void as far as is reasonable and feasible and ensure that the void contains no retained surface water (ie no pit lake). Constructed landforms drain to the natural environment.
Surface infrastructure	To be decommissioned and removed, unless the Executive Director, Mineral Resources in DRE agrees otherwise.
Other land	Restore ecosystem function, including maintaining or establishing self-sustaining ecosystems comprised of: <ul style="list-style-type: none">• local native plant species (unless the Executive Director Mineral Resources in DRE agrees otherwise); and a landform consistent with the surrounding environment.
Community	Ensure public safety

<i>Feature</i>	<i>Objective</i>
	Minimise the adverse socio-economic effects associated with mine closure

Progressive Rehabilitation

70. The Proponent shall 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 shall 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

71. The Proponent shall prepare and implement a Rehabilitation Management Plan to the satisfaction of the Executive Director, Mineral Resources in DRE. This plan must:
- (a) be prepared in consultation with P&I, Forests NSW, NOW, OEH, Namoi CMA, Council and the CCC;
 - (b) be submitted to the Executive Director, Mineral Resources in DRE within 6 months from the date of this approval;
 - (c) be prepared in accordance with any relevant DRE guideline;
 - (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
 - (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

72. The Proponent shall prepare and implement an updated Final Void and Mine Closure Plan (as a component of the overall Rehabilitation Management Plan required under condition 71 of Schedule 3) to the satisfaction of the Executive Director, Mineral Resources in DRE. This plan must:
- (a) be submitted to the Executive Director, Mineral Resources in DRE by the end of December 2025;
 - (b) address future stability of the proposed landforms, long term groundwater recovery and void groundwater quality characteristics;
 - (c) include a detailed assessment of the hydrochemistry, hydrogeology and hydrology components of the final void and landform design that has been subject to independent review and verification by suitably qualified, experienced and independent person/s whose appointment has been approved by the Director-General.
 - (d) demonstrate that:
 - (i) the long term landform will not generate a pit lake;
 - (ii) emplaced spoil has the capacity to drain to the natural environment; and
 - (iii) drained waters do not adversely affect the downstream environment
 - (e) identify opportunities for integrated mine planning with adjoining mines to minimise environmental impacts of the final landform.

SOCIAL IMPACTS

Agricultural Production on Project-Owned Land

73. The Proponent shall use its best endeavours to ensure that the agricultural productivity of land that is project related (including remaining agricultural land on properties forming the biodiversity offset area) is maintained or enhanced.

Note: This does not include land where disturbance is permitted under the conditions of this approval, or land that forms part of the biodiversity offset area. However, the corridor enhancement zone that forms part of the Biodiversity Offset

Area will need to be further assessed for agricultural suitability and management may include both agricultural and conservation outcomes identified as part of an approved biodiversity management plan.

Agricultural Production on land acquired due to impacts on residential receivers

74. The Proponent shall ensure that any properties primarily used for agricultural production that are acquired by the Proponent 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 Proponent disposes of the property.

Housing Strategy

75. The Proponent shall implement the Boggabri Coal Housing Commitment identified in the EA, in consultation with Council, to provide for:
- (a) construction of a minimum of 10 dwellings in Boggabri, within a timeframe agreed by Council;
 - (b) construction of a minimum of 20 dwellings in Narrabri, within a timeframe agreed by Council; and
 - (c) implementation of remaining commitments within the terms of the approved Social Impact Management Plan (see condition 77 of Schedule 3).

If there is any dispute between Council and the Proponent regarding the timing of construction, then either party may refer the matter to the Director-General for resolution, whose decision shall be final.

Construction Workforce Accommodation

76. Prior to construction activities commencing, the Proponent shall prepare and implement a Construction Workforce Accommodation Plan, in consultation with Council, and to the satisfaction of the Director-General. The plan must:
- (a) provide details of the construction workforce numbers throughout all stages of construction including local vs. non-local hiring; and
 - (b) for off-site accommodation options, demonstrate that the construction workforce can be suitably housed in approved accommodation facilities.

Social Impact Management Plan

77. The Proponent shall prepare and implement a Social Impact Management Plan for the project to the satisfaction of the Director-General 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 Director-General;
 - (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 Director-General 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; and
 - workforce demand/supply factors, such as training needs; and
 - labour availability impacts on other sectors, such as agricultural enterprises;
 - (e) incorporate the housing availability and affordability initiatives identified in the EA, including the Boggabri Coal Housing Commitment;
 - (f) identify proposed initiatives for promoting workforce opportunities for residing in the area/region as opposed to FIFO/DIDO;
 - (g) include a management and mitigation program to minimise and/or mitigate social impacts; and
 - (h) include a monitoring program, incorporating key performance indicators and a review and reporting protocol, including reporting in the annual review.

SCHEDULE 4 ADDITIONAL PROCEDURES

NOTIFICATION OF LANDOWNERS/TENANTS

1. Within 3 months of the date of this approval, the Proponent shall:
 - (a) notify in writing the owner(s) of:
 - the land identified in conditions 3 and 25 of schedule 3 that they have the right to require the Proponent to acquire their land at any stage during the project;
 - any residence on the land listed in conditions 3 and 26 of schedule 3 that they have the right to request the Proponent 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 Proponent that is predicted to experience exceedances of the recommended dust criteria, the Proponent shall:
 - (a) advise the prospective tenants of the potential health and amenity impacts associated with living on the land;
 - (b) advise the prospective tenants of the rights they would have under this approval; and
 - (c) provide the prospective tenants with a copy of the NSW Health fact sheet entitled "Mine Dust and You" (as may be updated from time to time); and
 - (d) request the prospective tenants consult their medical practitioner to discuss the air quality monitoring data and predictions and potential health impacts arising from this information, to the satisfaction of the Director-General.
3. As soon as practicable after obtaining monitoring results showing:
 - (a) an exceedance of the relevant criteria in schedule 3, the Proponent shall 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 in schedule 3, the Proponent shall send a copy of:
 - the NSW Health fact sheet entitled "Mine Dust and You" (as may be updated from time to time); and
 - the air quality 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,to the landowner/s and/or existing tenants of the land.

INDEPENDENT REVIEW

Landowners

4. If an owner of privately-owned land considers the project to be exceeding the criteria in schedule 3 (other than the noise criteria), then he/she may ask the Director-General in writing for an independent review of the impacts of the project on his/her land.

If the Director-General is satisfied that an independent review is warranted, then within 2 months of the Director-General's decision, the Proponent shall:

- (a) commission a suitably qualified, experienced and independent expert, whose appointment has been approved by the Director-General, 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 Director-General 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 Proponent may discontinue the independent review with the approval of the Director-General.

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 Proponent shall:

- (a) acquire the land in accordance with the procedures in conditions 8-9 below; or if preferred by the landowner,
- (b) 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
- (c) secure a written agreement with the landowner to allow exceedances of the relevant criteria, to the satisfaction of the Director-General.

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 Proponent shall 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 Proponent shall:
- (a) acquire the land in accordance with the procedures in conditions 8-9 below; or if preferred by the landowner,
 - (b) 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
 - (c) 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 Director-General.

Biodiversity & Heritage

7. If a person has good reason to believe the Proponent is not implementing the biodiversity and/or heritage conditions in schedule 3 satisfactorily, then he/she may ask the Director-General in writing for an independent review of the matter.

If the Director-General is satisfied that an independent review is warranted, then within 2 months of the Director-General's decision, the Proponent shall:

- (a) commission a suitably qualified, experienced and independent person, whose appointment has been approved by the Director-General, to:
 - consult with the person and/or any relevant agencies;
 - investigate the person's complaints/claims;
 - review the environmental performance of the Proponent;
 - determine whether the Proponent's performance is satisfactory or not; and if necessary
 - recommend measures to improve the Proponent's performance; and
- (b) give the Director-General 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 Proponent shall 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 conditions 3 and 26 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 Director-General; 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 Proponent 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 Director-General for resolution.

Upon receiving such a request, the Director-General shall 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 Proponent shall 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 Director-General 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 Director-General will determine a fair and reasonable acquisition price for the land, having regard to the matters referred to in paragraphs (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 Proponent shall make a binding written offer to the landowner to purchase the land at a price not less than the Director-General's determination.

If the landowner refuses to accept the Proponent's binding written offer under this condition within 6 months of the offer being made, then the Proponent's obligations to acquire the land shall cease, unless the Director-General determines otherwise.

9. The Proponent shall pay all reasonable costs associated with the land acquisition process described in condition 6 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 Proponent shall prepare and implement an Environmental Management Strategy for the project to the satisfaction of the Director-General. The strategy must:
 - (a) be submitted to the Director-General for approval within 6 months of the date of this approval;
 - (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 Proponent 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 Proponent 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 **P&I** describing those options and any preferred remediation measures or other courses of action; and
- (c) implement remediation measures as directed by the Director-General, to the satisfaction of the Director-General.

Management Plan Requirements

3. The Proponent shall 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 Proponent shall review the environmental performance of the project for the previous calendar year to the satisfaction of the Director-General. 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; and
 - (d) any modification to the conditions of this approval,the Proponent shall review, and if necessary revise, the strategies, plans, and programs required under this approval to the satisfaction of the Director-General.

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 Proponent shall use its best endeavours to minimise the cumulative impacts of the project on the surrounding area to the satisfaction of the Director-General.

Community Consultative Committee

7. The Proponent shall operate a Community Consultative Committee (CCC) for the project to the satisfaction of the Director-General. 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 one member representing the MCCC (if the MCCC is still operating and agreed to by the MCCC), 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 Director-General.

Notes:

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

REPORTING

Incident Reporting

8. The Proponent shall notify, at the earliest opportunity, the Director-General and any other relevant agencies of any incident that has caused, or threatens to cause, material harm to the environment. For any other incident associated with the project, the Proponent shall notify the Director-General and any other relevant agencies as soon as practicable after the Proponent becomes aware of the incident. Within 7 days of the date of the incident, the Proponent shall provide the Director-General and any relevant agencies with a detailed report on the incident, and such further reports as may be requested.

Regular Reporting

9. The Proponent shall 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.

AUDITING

Independent Environmental Audit

10. By the end of June 2014 and every 3 years thereafter, unless the Director-General directs otherwise, the Proponent shall commission and pay the full cost of an Independent Environmental Audit of the project. This audit must:
 - (a) be conducted by a suitably qualified, experienced and independent team of experts whose appointment has been endorsed by the Director-General;
 - (b) include consultation with the relevant agencies;
 - (c) assess the environmental performance of the project and assess whether it is complying with the requirements in this approval, and any other relevant approvals, relevant EPL/s and/or Mining Lease (including any assessment, plan or program required under these approvals);
 - (d) assess whether the Proponent is implementing best noise, blasting and air quality management practice;
 - (e) investigate and report on the measures taken to minimise the noise impacts of the project during meteorological conditions when the noise limits in this approval do not apply, including:
 - the effectiveness of these measures in maintaining noise impacts within the relevant noise criteria in this approval and/or the limits in the relevant EPL; and
 - any additional measures available to mitigate noise impacts under such meteorological conditions
 - (f) investigate and report on the measures taken to minimise the air quality impacts of the project during adverse meteorological conditions and extraordinary events (see condition 30(d) of Schedule 3), including:
 - the effectiveness of these measures in maintaining air quality impacts within the criteria in Table 9, Table 10 and Table 11 of Schedule 3; and
 - any additional measures available to mitigate air quality impacts under such conditions;
 - (g) review the adequacy of any approved strategy, plan or program required under the abovementioned approvals; and
 - (h) recommend measures or actions to improve the environmental performance of the project and/or any strategy, plan or program required under these approvals.

Note: This audit team must be led by a suitably qualified auditor, and include experts in noise, air quality, ecology, Aboriginal heritage and any other fields specified by the Director-General.

11. Within 3 months of commissioning this audit, or as otherwise agreed by the Director-General, the Proponent shall submit a copy of the audit report to the Director-General, together with its response to any recommendations contained in the audit report.

ACCESS TO INFORMATION

12. The Proponent shall:
 - (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 Proponent's response to the recommendations in any audit;
 - any other matter required by the Director-General; and
 - (b) keep this information up to date, to the satisfaction of the Director-General.

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

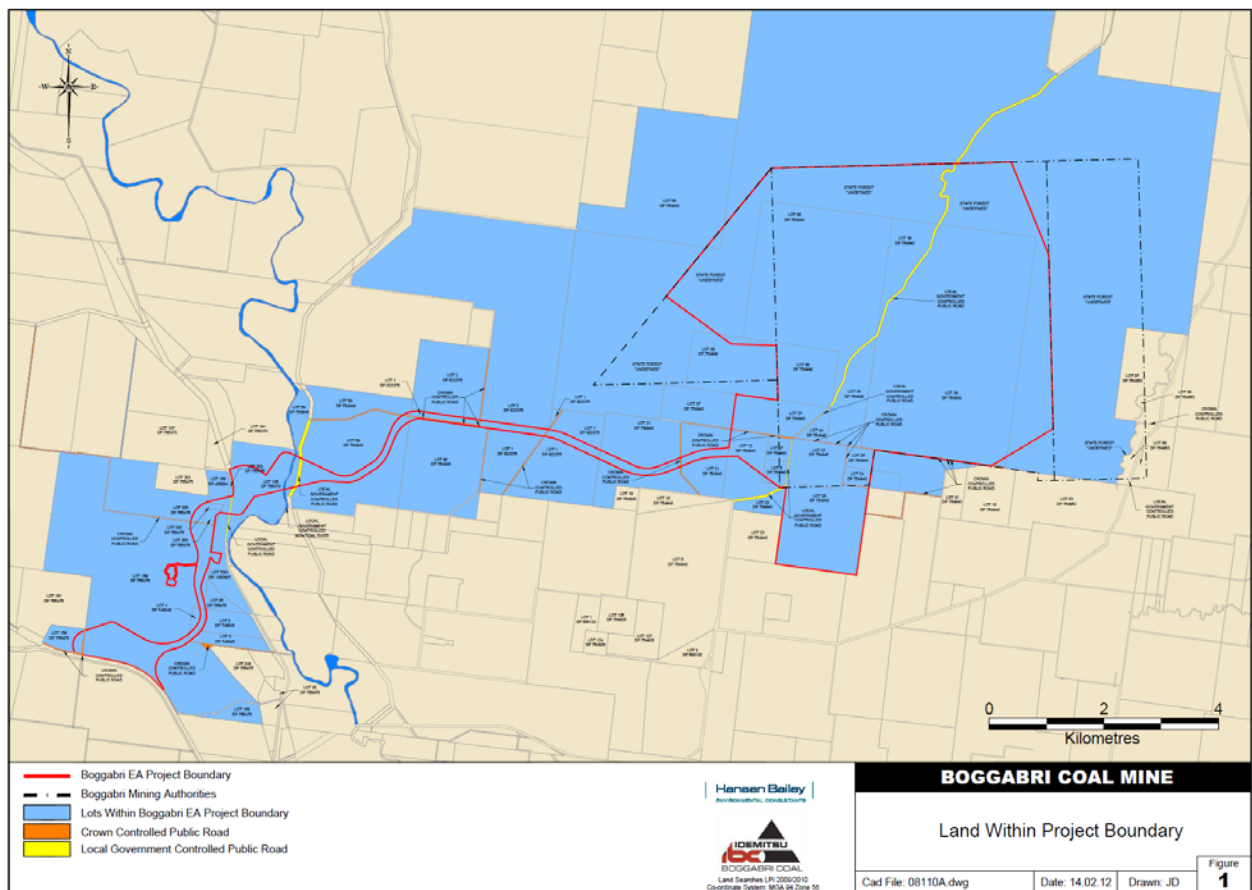
13. The Proponent shall ensure that the noise and air quality risk/response matrices required to be developed in the Noise and Air Quality Management Plans and validated real time monitoring data are available on line and includes:
- (a) timely publication of validated monitoring data in a clearly understandable form;
 - (b) identification of mine operational responses to monitoring data and weather forecasts; and
 - (c) provision for on-line input /response by members of the community and real time engagement with regionally-based regulatory compliance staff,
- to the satisfaction of the Director-General.

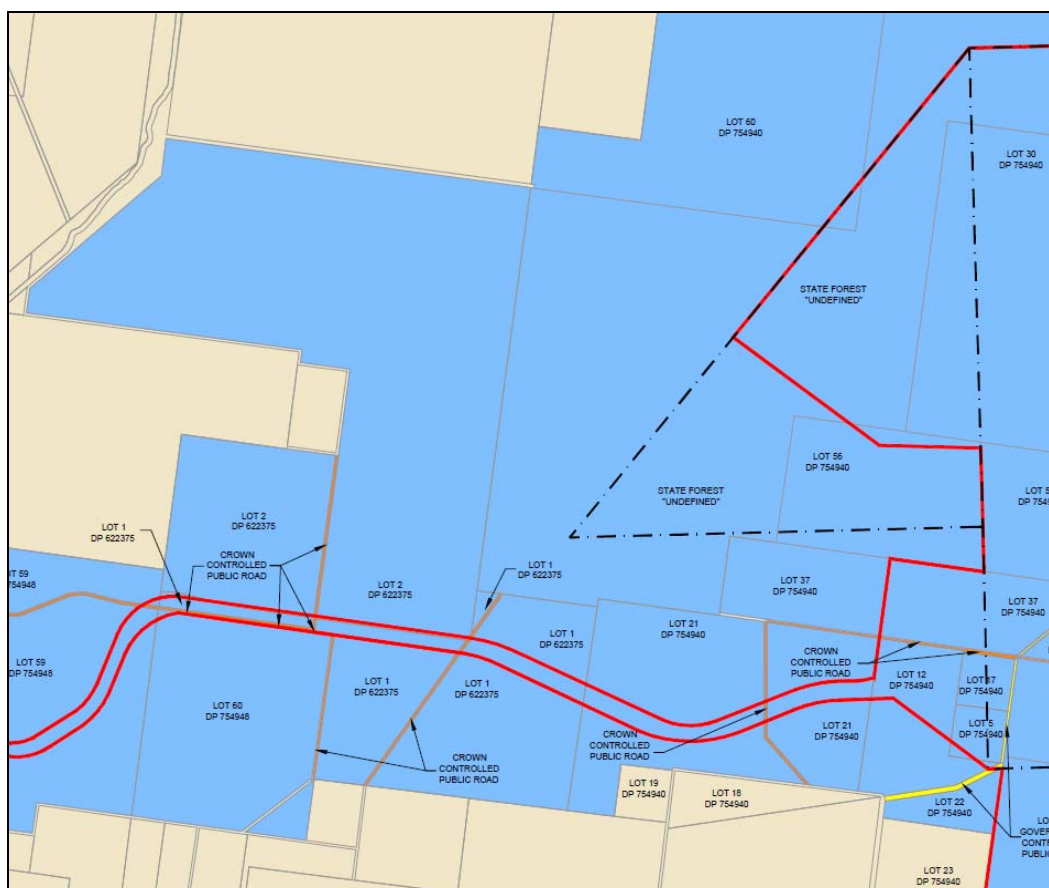
**APPENDIX 1
SCHEDULE OF LAND**

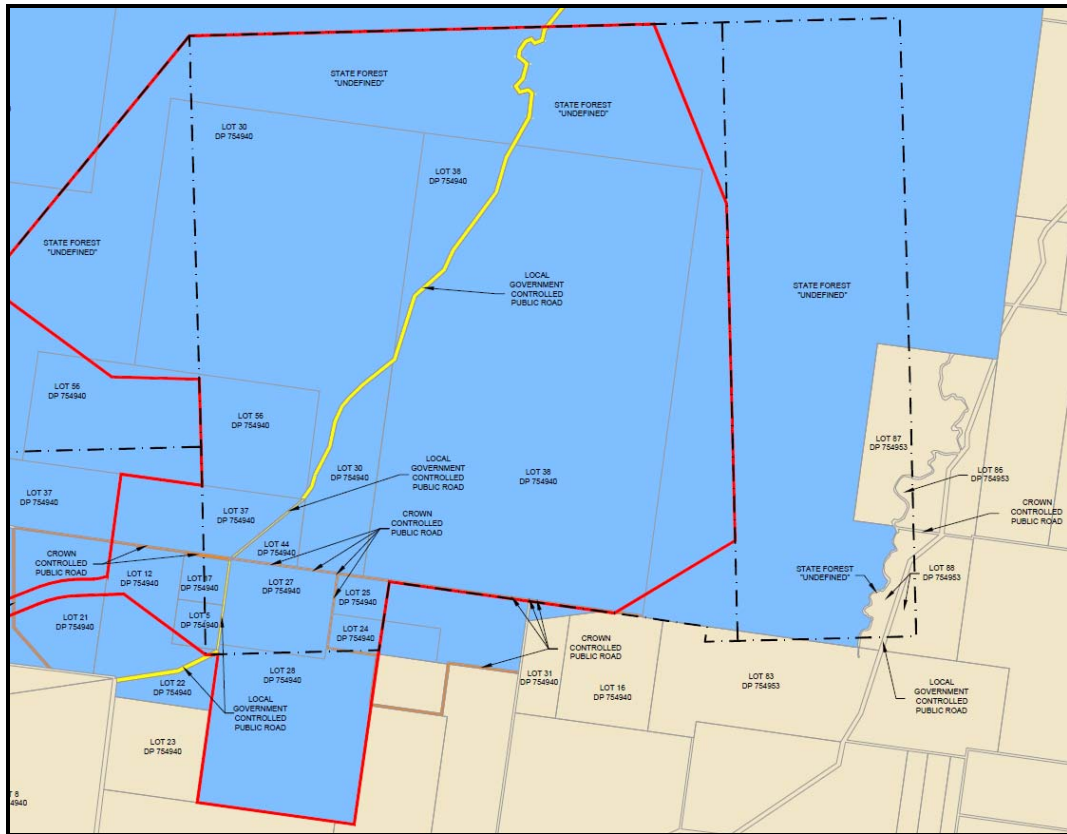
PROPERTY DESCRIPTION	
Lot	DP
31	754940
83	754953
88	754953
24	754940
25	754940
27	754940
28	754940
44	754940
30	754940
37	754940
38	754940
22	754940
19	754940
21	754940
23	754940
17	754940
5	754940
12	754940
8	754940
16	754940
18	754940
56	754940
124	754926
125	754926
127	754926
1	566122
3	566122
1	622375
59	754948
105	755470
156	455004
107	755470
191	755470
202	755475
203	755475
262	755475
263	755475
264	755475
1	748046
2	748046
3	748046
93	755475
159	755475
248	755475
158	755475

PROPERTY DESCRIPTION	
Lot	DP
161	755475
7001	1052587
STATE FOREST - UNDEFINED	
PARTS OF TRUNK ROAD NO.72, T.S & C-R 28354	
THERRIBRI ROAD (R9542) WITHIN THE LAND DISTRICT OF NARRIBRI	
LEARD FOREST ROAD (R19387) WITHIN THE LAND DISTRICT OF NARRIBRI	
UN-NAMED PUBLIC ROADS WITHIN THE PROJECT BOUNDARY	

FIGURES DEPICTING PROJECT BOUNDARY AND LAND







APPENDIX 2 PROJECT LAYOUT PLAN

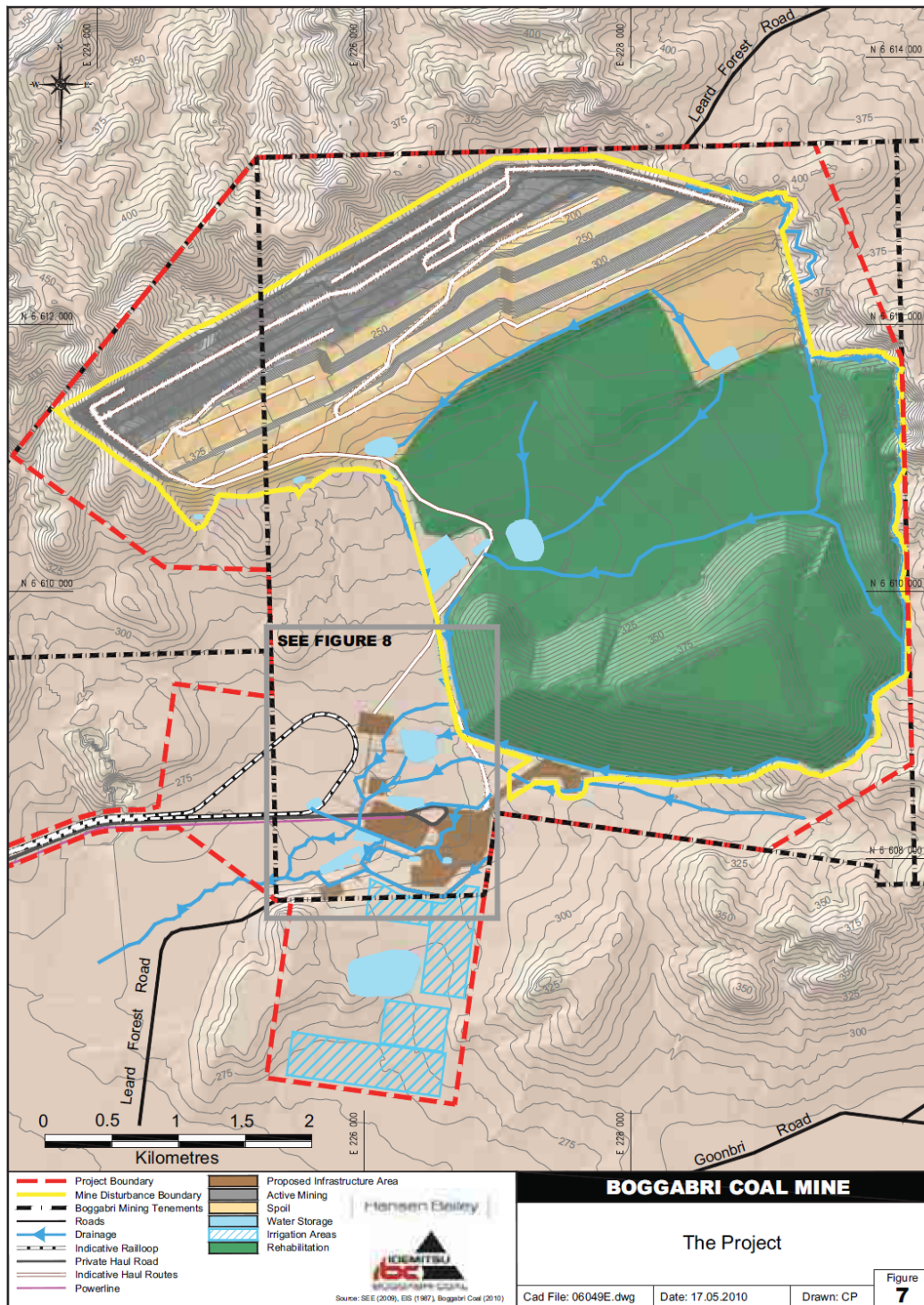


Figure 1: Mine Site Location

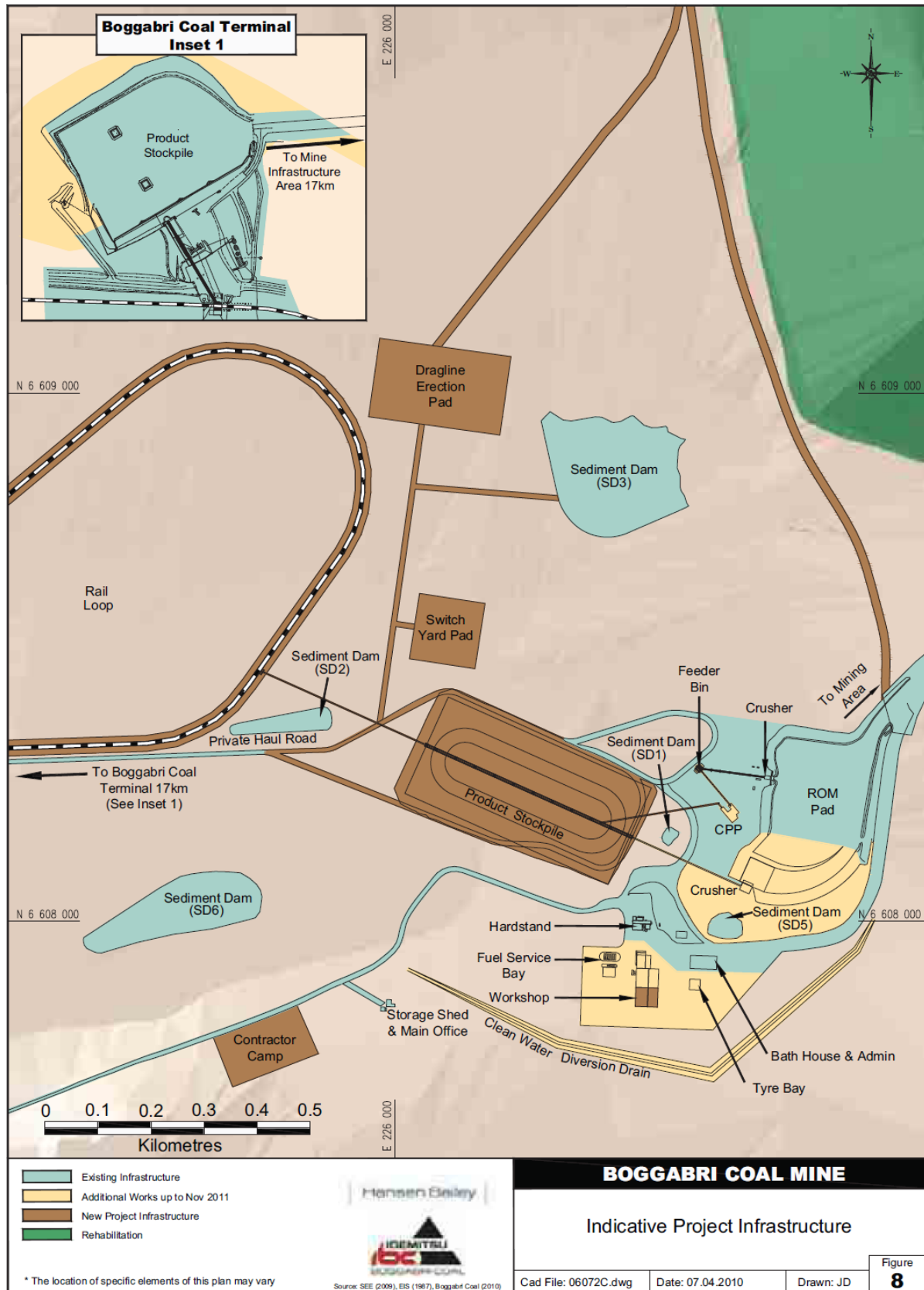


Figure 2: Infrastructure Area – including existing coal loading facility

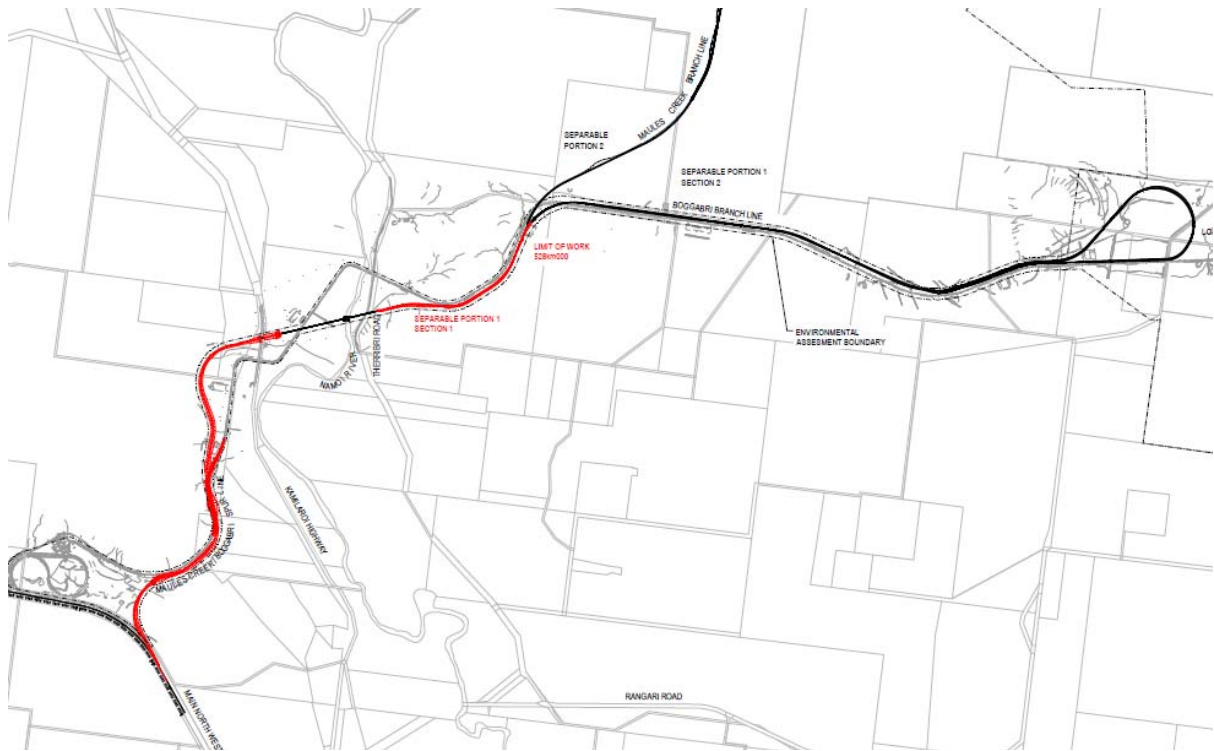


Figure 3: Boggabri Rail Spur Line – incorporating Boggabri Branch Line and Shared Spur Line (Red) and Rail Bridge over Namoi River

APPENDIX 3 GENERAL TERMS OF PLANNING AGREEMENT

VPA letter request from Narrabri Shire Council

Our Reference: PM:EL
Your Reference: N/A
Contact Name: Mr Paul Wearne
Telephone: (02) 67996833

5th April 2012

Mr T Shibahara
Deputy Managing Director
Idemitsu Boggabri Coal
GPO Box 1127
BRISBANE QLD 4001

Dear Mr Shibahara

Re: Voluntary Planning Agreement (VPA)

Further to your recent discussions with Council's Phil Marshall, I would like to put forward the following as an indicative proposal to enter into a VPA under section 93F of the Environmental Planning and Assessment Act 1979.

This letter is similar to that previously provided by Mr Marshall with the exception of minor amendments to broaden where such funds will be utilised and amendment to enable the centre per tonne payments to be utilised at Council's discretion.

The proposal requires the final approval of the Council. The Council is prepared to provide a letter of support to the VPA and ensure that the process through the Planning Assessment Commission is not jeopardised by not having a VPA in negotiation and near finalisation.

The following contributions are proposed:

AMOUNT	TIMELINE FOR PAYMENT	DESCRIPTION
\$1,600,000	1 July 2013	Funds to be utilised on the upgrade of Boggabri Caravan Park and Swimming Pool Complex
\$200,000	1 July 2012	Community contribution to the Boggabri Home and Community Care to assist in the purchase of its current premises and any upgrades as required.
\$4,300,000	1 July 2014	Funds to be utilised on the replacement of the bridge across the Namoi River and other works on Harparary Road.
\$2,500,000	1 July 2013	Funds to be utilised on the upgrade of the Narrabri Aquatic Centre which is centred around a 365 day facility.
\$100,000	1 July 2013	Funds to be held in trust for "Environment" projects and to be administered by the Community Consultative Committee(CCC)

		<p>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.</p> <p>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.</p> <p>The Council and Idemitsu Boggabri will work through the CCC to administer the funds with the criteria to support a grant application to be completed by the 30th June 2013. The first round of applications will be called in the financial year 2013/14.</p>
<p>\$0.075 per tonne + CPI</p> <p>The roadworks to be undertaken in close confines to the mine sites in the first instance and then radiating out at Council's discretion.</p>		<p>The cents per tonne to mirror the calculation per tonne paid to the NSW State Government and payable monthly.</p> <p>The cents per tonne to commence from the 1st July 2013 and is to be utilised on infrastructure projects (including environmental) at Council's discretion.</p> <p>The Consumer Price Index is to be calculated as follows:</p> <p>Price indexes published by the Australian Bureau of Statistics (ABS)</p> <p>CPI to be based upon the weighted average of eight capital cities for the previous 12 months and to commence from 1st July 2012.</p> <p>The first review to be undertaken and applied in the first instance as at the 1st July 2013 based on the prior 12 months CPI.</p> <p>The CPI to be adjusted annually with a maximum CPI increase of 3.5% with a minimum of 2.0% to be applied each year.</p>
<p>Gravel 25,000 tonnes per annum at no cost to the Council.</p>		<p>Idemitsu Boggabri to provide to Council on an annual basis 25,000 tonnes base material suitable for Council road building (should Boggabri Coal need crushed gravel, then the Council would provide this at nil cost)</p>

The contents of this letter form the basis of the VPA. The Council will work with Idemitsu Boggabri to finalise the details for the Environment Projects.

The Council is grateful for the generous contributions of Idemitsu Boggabri Coal and your contributions will be acknowledged in a prominent place of your support of the Narrabri Shire Council.

Your professionalism and understanding with the negotiation of this VPA is truly appreciated.

Yours sincerely

Mr Paul Wearne
ACTING GENERAL MANAGER

Response from Boggabri Coal



Boggabri Coal Pty Limited
ABN 77 122 087 398
Level 28, 10 Eagle Street
Brisbane, QLD 4000 Australia
(PO Box 1127 Brisbane QLD 4001 Australia)
TEL +61-7-3222-5600 FAX +61-7-222-5665

5th April 2012

Mr Paul Wearne
Acting General Manager
Narrabri Shire Council
PO Box 261
NARRABRI NSW 2390

Copy: Mr Howard Reed, Mr Stephen O'Donoghue
NSW Department of Planning & Infrastructure

Dear Mr Wearne,

Re: Voluntary Planning Agreement (VPA)

This is to acknowledge the receipt of your proposal of this date with regard to the VPA and to notify you that Boggabri Coal Pty Ltd accepts the proposal as stated.

Boggabri Coal hereby express its sincere application to Narrabri Shire Council to develop the VPA proposal and we look forward to work with the Council as always.

Sincerely yours,

A handwritten signature in blue ink, appearing to read 'T. Shibahara', written over a horizontal line.

Toshio Shibahara
Director
Boggabri Coal Pty Limited



Boggabri Coal Pty Limited
 ABN 77 122 087 398
 Level 28, 10 Eagle Street
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 (PO Box 1127 Brisbane QLD 4001 Australia)
 TEL +61-7-3222-5600 FAX +61-7-222-5665

5th April 2012

Mr Paul Wearne
 Acting General Manager
 Narrabri Shire Council
 PO Box 261
 NARRABRI NSW 2390

Dear Mr Wearne,

Re: Planning Agreement (VPA)

Further to recent discussions and correspondence regarding a VPA in respect of any project approval granted for the Boggabri Coal Continuation of Mining Project (application number 02_0182), (the **Project**) Boggabri Coal Pty Limited (**BC**) offers subject to the grant of a valid project approval for the Project to enter into a VPA in accordance with section 93F of the *Environmental Planning and Assessment Act 1979 NSW* that confers upon Narrabri Shire Council the benefits detailed in the following schedule to be used for the purposes particularised in the schedule.

Amount	Timeline for Payment	Description of Required Use of Funds for Community Benefit
\$1,600,000	1 July 2013	Funds to be utilised on the upgrade of Boggabri Caravan Park and Swimming Pool Complex
\$200,000	1 July 2012	Community contribution to the Boggabri Home and Community Care Centre to assist in the purchase of its current premises and any upgrades as required.
\$4,300,000	1 July 2014	Funds to be utilised on the replacement of the bridge across the Namoi River and other works on Harparary Road.
\$2,500,000	1 July 2013	Funds to be utilised on the upgrade of the Narrabri Aquatic Centre to assist in it becoming a 365 day facility.
\$100,000	1 July 2013	Funds to be held in trust for "Environment" projects within

Page 1

		<p>proximity of the Boggabri Mining Precinct to be administered by the Boggabri Coal Community Consultative Committee (CCC).</p> <p>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.</p> <p>The Council and Boggabri Coal will work through the CCC to administer the funds through a grant application process to be in place by the 30th June 2013. The first round of applications will be called for in the 2013/14 financial year.</p>
<p>\$0.075 per tonne of coal produced from the Project and is liable for royalty payment under the Mining Act (Tonnage Payment).</p> <p>The Tonnage Payment will be adjusted annually (1 July) by changes in the Consumer Price Index over the then immediately preceding twelve months to be calculated as follows:</p> <p>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 1 July 2012.</p> <p>The first review to be undertaken and applied in the first instance as at the 1 July 2013 based on the prior 12 months CPI.</p> <p>The CPI to be adjusted annually with a maximum CPI increase of 3.5% with a minimum of 2.0% to be applied each year.</p>	<p>1 July 2013 payable monthly at the same time royalty is paid</p>	<p>Funds to be expended on:</p> <ol style="list-style-type: none"> 1. Road works to be undertaken in close confines to the mine precinct in the first instance and then radiating out at Council's discretion. 2. Allocation to infrastructure projects including environmental projects at Council's discretion
<p>Gravel 25,000 tonnes per annum at nil cost to Council</p>		<p>Boggabri Coal to provide to Council on an annual basis 25,000 tonnes of base material suitable for Council road</p>

		building subject to appropriate approvals being obtained. Should Boggabri Coal need crushed gravel, then the Council would provide this at nil cost.
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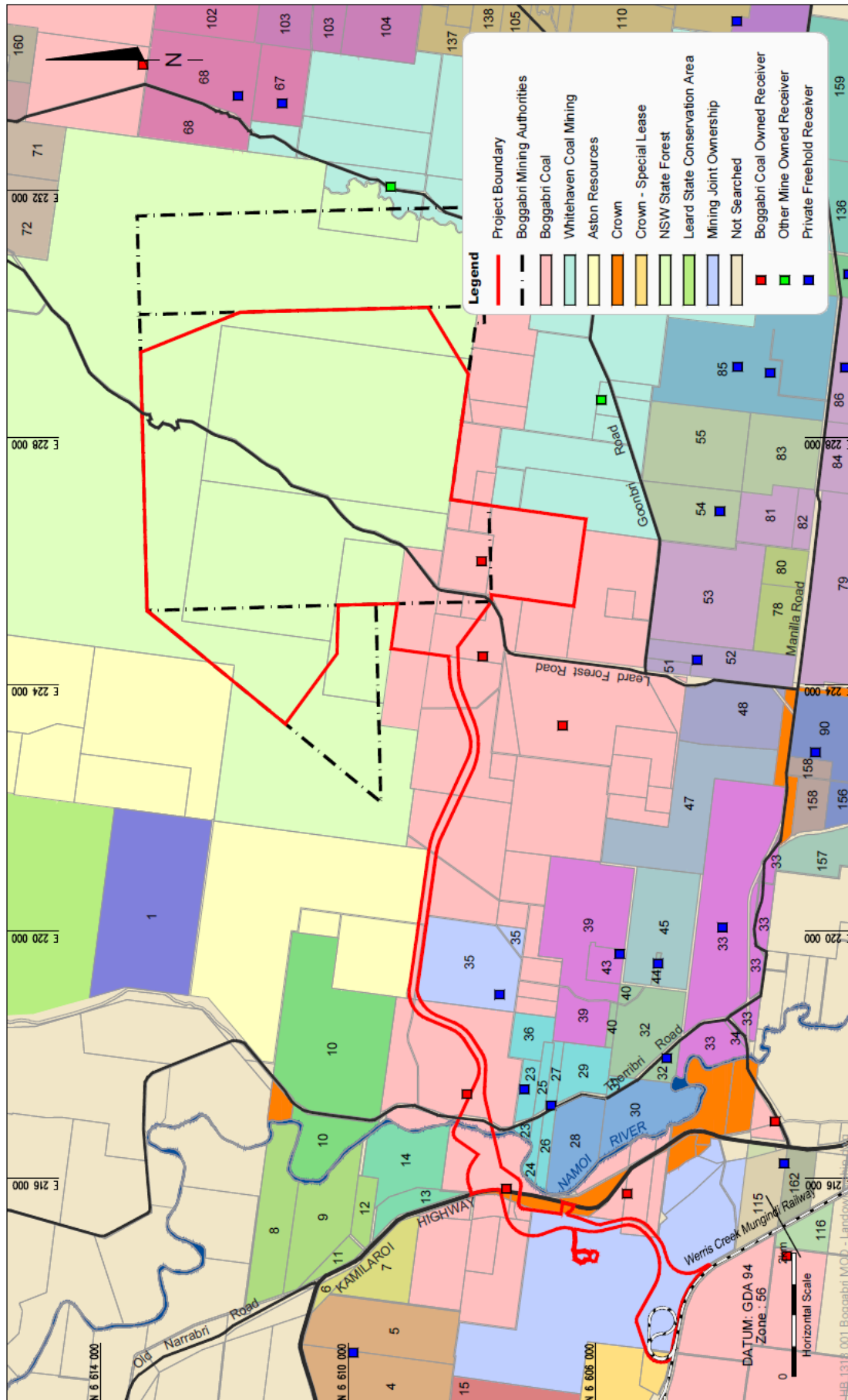
Would you please confirm Council's acceptance of this offer following which BC will arrange for a proposed form of a VPA to be prepared and forwarded to Council for settling between Council and BC and then for execution.

Sincerely yours,



Toshiro Shibahara
Director
Boggabri Coal Pty Limited

APPENDIX 4: LAND OWNERSHIP



APPENDIX 4A: MAXIMUM NOISE LEVEL CONTOURS (DB(A))

Figure 1: Mining Noise Area of Affection.

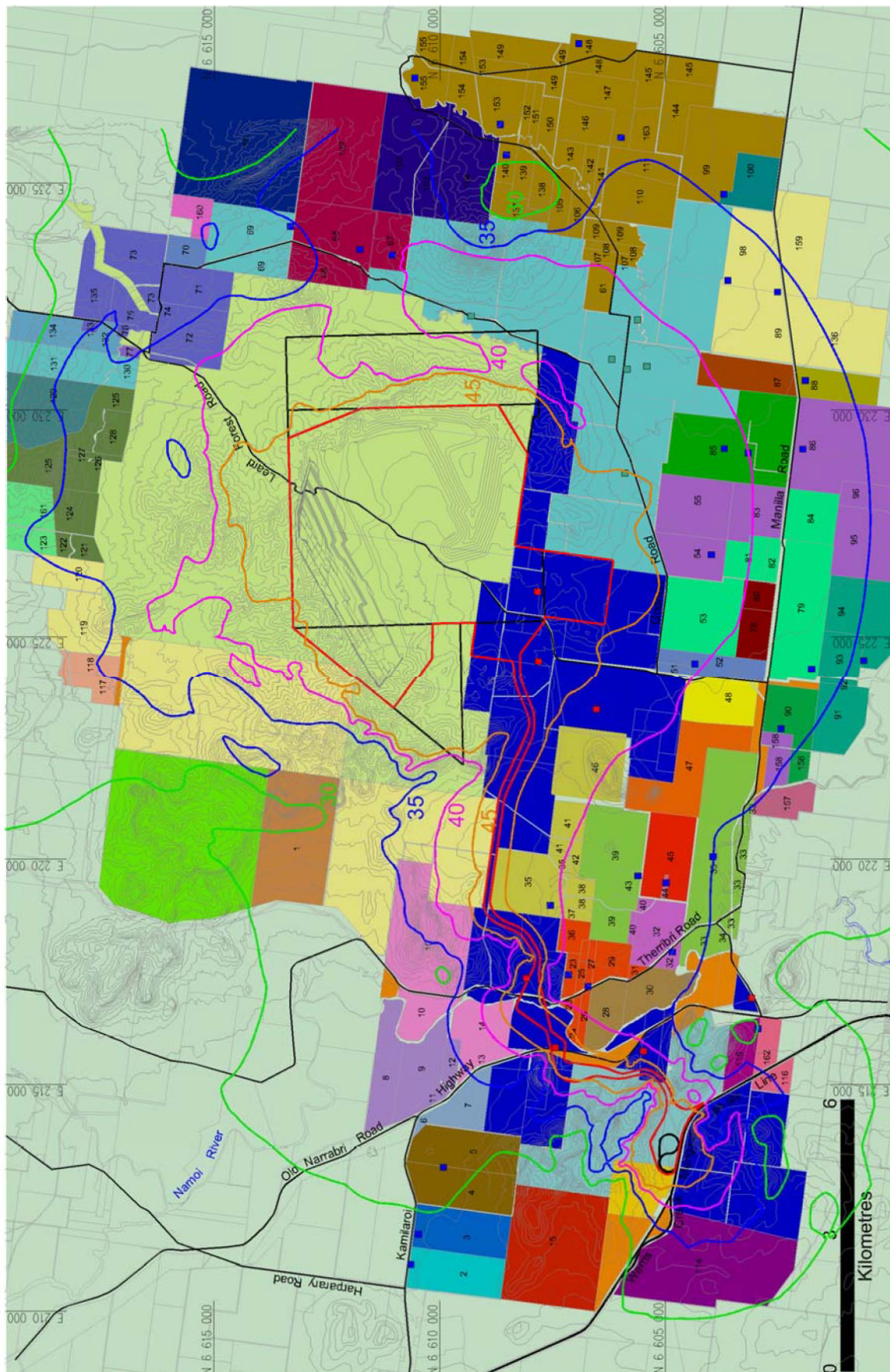
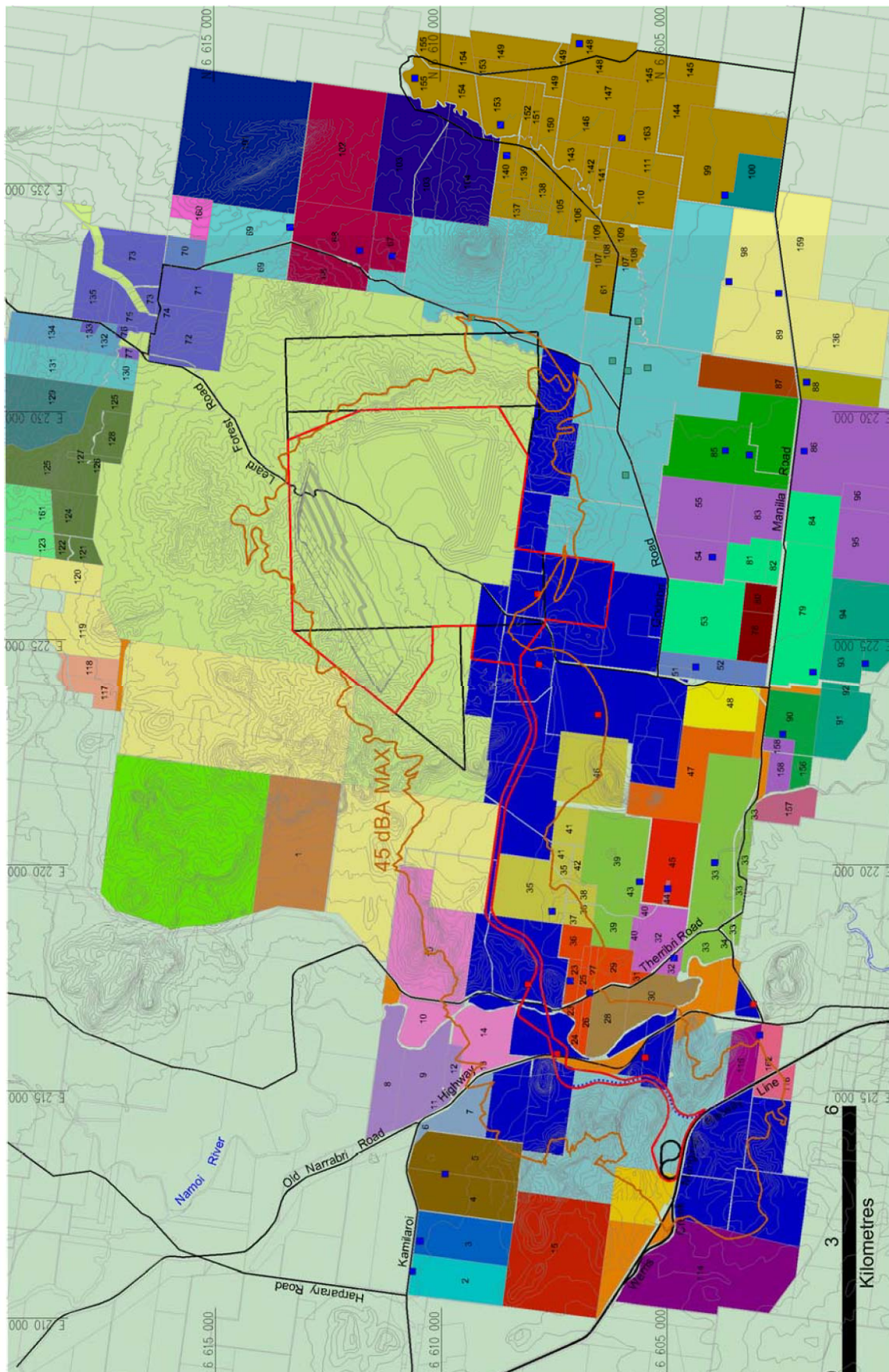


Figure 4: Maximum Noise Levels For All Years, 45 dBA Max.



**APPENDIX 5
STATEMENT OF COMMITMENTS**

**BOGGABRI COAL PROJECT
CONSOLIDATED STATEMENT OF COMMITMENTS
for
*Boggabri Coal Pty Ltd***

In addition to conditions of Project Approval, Boggabri Coal commits to the operational controls outlined in **Section 4.1** and **Section 8** of 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 December 2010, the Response to Submissions Report dated March 2011 and the Residual Matters Report dated July 2011 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.

**Table 1
Consolidated Statement of Commitments**

Ref	Commitment	Section
Mining Operations		
1.	Upon the Receipt of Project Approval, Boggabri Coal will relinquish DA 36/88 at the appropriate time as agreed between Boggabri Coal and DP&I.	Section 4.0 of the Boggabri EA & Section 5 of the Response to Submissions
2.	Boggabri Coal commits to using reasonable endeavours to reach in good faith an appropriate barrier coal extraction agreement with Aston by the end of Year 5 of operations.	Section 2.1.1 of the Residual Matters Report
Environmental Management and Monitoring		
3.	Boggabri Coal 's Environmental Monitoring Programs for air quality, water quality, noise and blasting will be reviewed and updated as required, in consultation with the relevant regulators for approval by DP&I as specified in conditions of Project Approval.	Section 8.0 of the Boggabri EA
4.	Boggabri Coal's EMPs will be revised and updated as required, in consultation with the relevant regulators for approval by DP&I as specified in any conditions of Project Approval for Surface and Groundwater Management, Flora and Fauna, Rehabilitation and Landscape Management (including Void Management) and Aboriginal Archaeology and Cultural Heritage Management.	
Air Quality		
5.	Boggabri Coal will utilise technologies and initiatives as required to ensure that the air quality outcomes described in the EA are achieved.	Section 8.1.3 of the Boggabri EA
6.	Boggabri Coal will undertake regular monitoring of greenhouse gas emissions and energy efficiency initiatives to ensure that greenhouse gas emissions per tonne of product coal are kept to the minimum practicable level.	

Ref	Commitment	Section
7.	Boggabri Coal will install a TEOM air quality monitoring unit(s).	
Noise and Blasting		
8.	Boggabri Coal will implement the necessary noise control and management measures to ensure that the EA predicted noise levels at private receivers as listed in Table 25 of the EA are not exceeded.	Section 8.2.4 of the Boggabri EA
9.	Boggabri Coal will manage its blasting practices such that the recommended DECCW guidelines, existing at the time of approval; will be met at all privately owned receivers.	
10.	Boggabri Coal will install a real time noise monitoring system and a real time meteorological monitoring system with predictive software capabilities.	Section 8.2.4 of the Boggabri EA
11.	Boggabri Coal will use its reasonable endeavours to establish negotiated agreements with near neighbours as described in Section 2.4.3 of the Residual Matters report.	Section 2.4.3 of the Residual Matters Report
12.	Boggabri Coal will install a system for monitoring inversion strengths.	Section 2.4.2 of the Residual Matters Report
Water Resources		
13.	Boggabri Coal will continue to monitor groundwater ingress and impacts on surrounding privately owned bores. In the event that monitoring confirms a deleterious impact on any privately owned water bore Boggabri Coal will meet the cost of modifying the bore or replace any water loss.	Section 8.10.4 of the Boggabri EA
14.	Boggabri Coal will use best endeavours to acquire additional water entitlements to ensure maximum operational capabilities in extreme dry years.	
Traffic		
15.	To offset the closure of a section of Leard Forest Road Boggabri Coal will upgrade Harparary Road including three culverts and a new bridge over the Namoi River as described in its VPA with NSC.	Section 8.19 of the Boggabri EA
16.	Boggabri Coal will continue to investigate alternative road access options to the Maules Creek Community to mitigate the closure of a section of Leard Forest Road in consultation with the NSC and MCCC.	Section 4.12.2 of the Response to Submissions
17.	Boggabri Coal will construct an overpass on Therribri Road across the Private Coal Haul Road should road coal haulage reach 5.5 Mtpa.	Section 8.19 of the Boggabri EA
18.	Boggabri Coal will commit to a financial contribution to the upgrade of the intersections identified in the road safety audit commensurate with the impacts of the Project.	
19.	Prior to the construction of the rail spur overpass within the easement of the Kamilaroi Highway Boggabri Coal will consult with all relevant regulatory authorities and will develop a rail construction and traffic management plan in consultation with the RMS.	
Ecology		
20.	To offset impacts on fauna and flora from the Project, Boggabri Coal will establish a Regional East-West Wildlife Corridor which will be proactively managed to enhance its ecological values as detailed in Section 8.5 of the EA.	Section 8.5 of the Boggabri EA
21.	The mine rehabilitation program will focus on the re-establishment of Box-Gum Woodland.	
22.	Boggabri Coal will establish a 186 ha hardwood commercial forest in consultation with Forest NSW.	

Ref	Commitment	Section
23.	Boggabri Coal will maintain a natural vegetation corridor link between its operations and the Maules Creek Coal Project until further assessments are undertaken, relevant approvals are received and appropriate offset measures are put in place.	Section 2.1.1 of the Residual Matters Report
24.	Boggabri Coal will acquire an additional offset property(s) consisting of 1,000 ha of remnant vegetation including 650 ha of Box Gum Woodland ('like for like') and 350 ha of Derived Native Grassland to add to its biodiversity offset strategy within 3 years of the grant of Project Approval in one of the following local areas: 1. Nandewar Corridor – north-south Mt Kaputar National Park to Kelvin State Forest; 2. Pilliga Corridor – east-west Mt Kaputar National Park to Pilliga East State Forest; and 3. Leard Corridor – west-east Leard State Forest to Nandewar Range.	Section 2.2.3 of the Residual Matters Report
Visual		
25.	Boggabri Coal will progressively rehabilitate the mining and OEAs to minimise visual impact.	Section 8.3 of the Boggabri EA
Aboriginal Archaeology and Cultural Heritage		
26.	The salvage and the protection of all known Aboriginal objects within the Project Boundary will continue to be managed in accordance with a revised Aboriginal Archaeology and Cultural Heritage Management Plan in consultation with the local Aboriginal community and EPA.	Section 8.6.3 of the Boggabri EA
27.	Boggabri Coal will establish a keeping place for the purpose of housing salvaged Aboriginal artefacts from the mine site.	
Non Aboriginal Heritage		
28.	Boggabri Coal will undertake archival recordings of the Daisymede shearing shed and yards, Daisymede piggery and the Heathcliff property residence prior to any disturbance or relocation of these sites.	Section 8.7 of the Boggabri EA
Community		
29.	Boggabri Coal will enter into a Voluntary Planning Agreement with NSC with regard to the Project including a commitment of up to \$9.67 Million to be contributed to NSC for the purpose of funding the following upgrades or works to NSC infrastructure: <ul style="list-style-type: none">• Upgrades to the Boggabri Caravan Park;• Erection of a monument in recognition of the achievements of Ben Lexcen;• Improve public seating throughout Boggabri;• Support for the Boggabri Home and Community Care organisation;• Upgrades to Harparary Road and Bridge over the Namoi River; and• In full satisfaction of any requirements under Section 94 of the EP&A Act.	Section 8.13.8 of the Boggabri EA
Housing		
30.	Boggabri Coal will implement the strategies outlined in Section 2.6.2 of the Residual Matters Report to ensure the Project does not have a material impact on housing availability and affordability in the Narrabri and Gunnedah LGA's.	Section 2.6.2 of the Residual Matters Report

Ref	Commitment	Section
Reporting		
31.	Boggabri Coal will prepare an Annual Review (which summarises monitoring results and reviews performance) and distribute it to the relevant regulatory authorities and the Boggabri CCC.	Section 8.0 of the Boggabri EA
Rail		
32.	Boggabri Coal will actively coordinate with ARTC to ensure environmental impacts on the ARTC rail network are minimised as far as practical.	Section 2.4.5 of the Residual Matters Report
33.	Boggabri Coal will continue to work with the GSC in the development of a solution to potential cumulative rail impacts on traffic in Gunnedah.	Section 2.4.6 of the Residual Matters Report
Rehabilitation		
34.	Boggabri Coal will revise its existing RMP and undertake rehabilitation trials in the development of its topsoil utilisation strategy and rehabilitation success criteria to the satisfaction of EPA & DTIRIS–DRE and for approval by DP&I.	Section 2.3.1 of the Residual Matters Report

APPENDIX 6

PLANNING ASSESSMENT COMMISSION RECOMMENDATIONS FOR GROUNDWATER AND HYDRO-CHEMICAL MONITORING.

1. The proposed additional monitoring bores (MB1 to MB11) to be equipped with pore pressure monitoring transducers installed at vertical separations such that the future impacts of mining induced strata depressurisation can be adequately monitored.
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.
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.

BOGGABRI COAL MINE
BOGGABRI COAL PTY LTD

**PARSONS
BRINCKERHOFF**

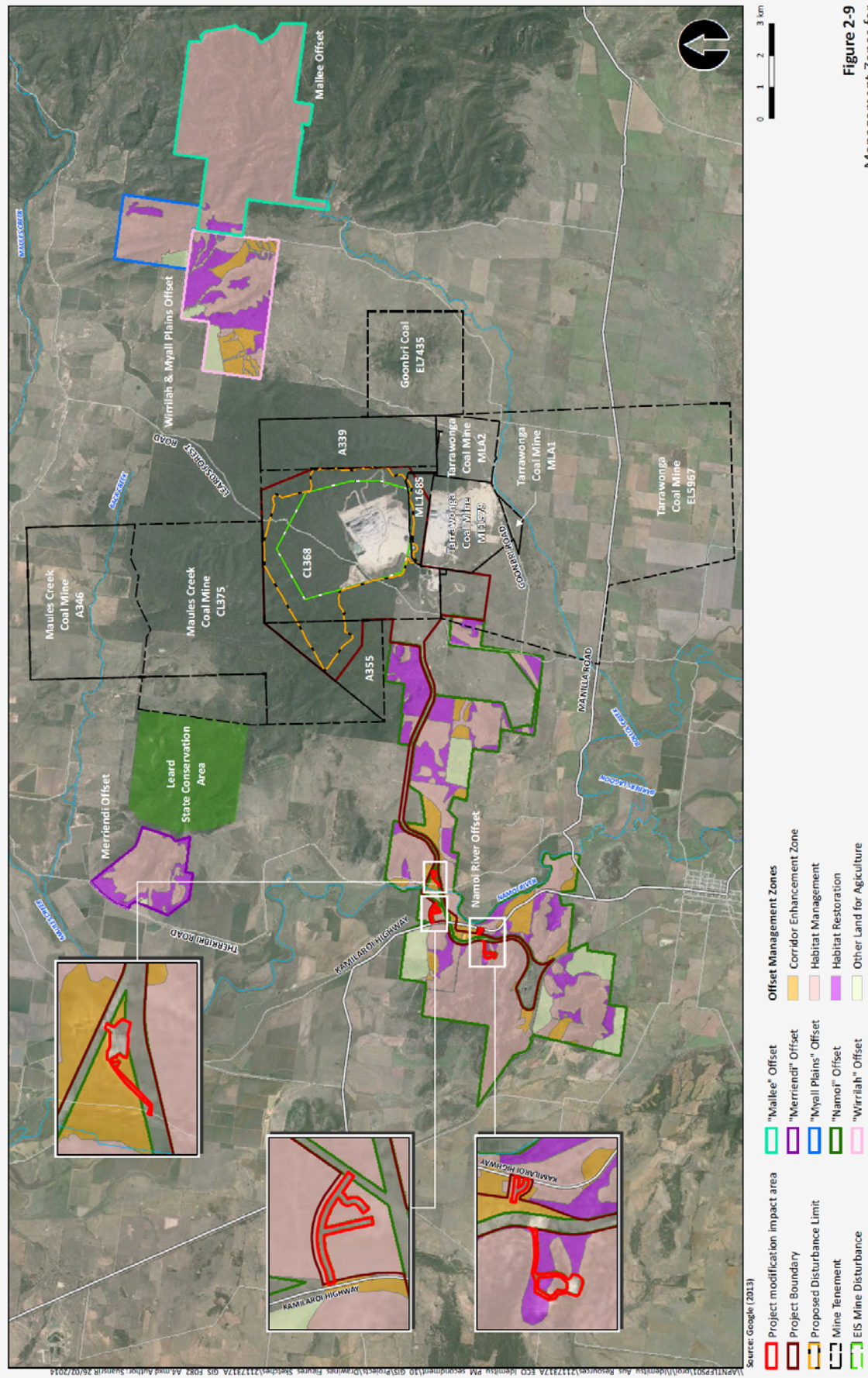


Figure 2-9
Management Zones for
Biodiversity Offsets

Table 2-4 Extent of biodiversity management zone within each offset property

Property	Management zone			
	Habitat Management	Habitat restoration	Corridor enhancement	Other land for agricultural
Boggabri Coal/Aston Crown Perpetual Lease	329.0	39.5	20.1	57.1
Bellevue	230.6	61.0	89.0	176.8
Daisy Mede	233.7	110.6	75.9	37.6
Eastview	167.4	47.3	31.9	303.0
Heathcliffe	220.6	66.8	22.0	152.8
Mallee	2029.9	36.3	0.0	0.0
Jeralong North	0.0	2.8	0.0	256.8
Merriendi	371.1	170.0	0.0	795.8
Merriown	112.2	200.5	0.0	306.1
Mt Deh	0.0	0.0	0.0	15.5
Myall Plains	418.2	19.7	0.0	42.6
Nagero	0.0	0.1	0.0	399.6
Special Lease/Crown land	382.4	58.7	98.7	12.3
Springfield	150.8	65.9	0.0	127.5
The Rock	12.2	47.4	80.4	6.5
Velyama	147.0	109.6	0.0	37.3
Victoria Park	42.4	71.3	0.0	458.4
Wirrilah	368.6	374.2	208.0	90.4
Total	5216.1	1481.7	626.0	3276.1

APPENDIX 8 LIST AND MAP OF ABORIGINAL HERITAGE SITES

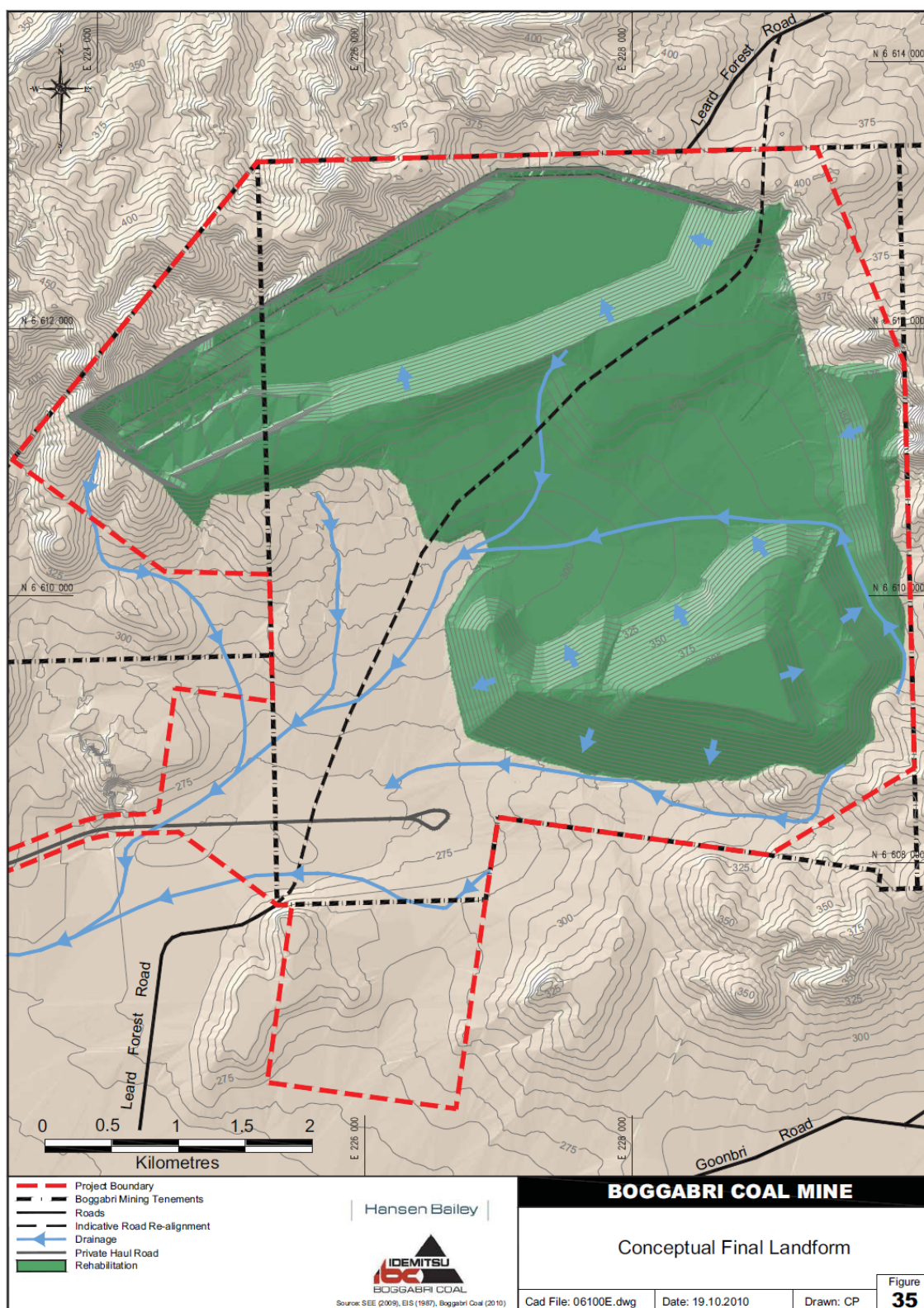
The Project Impacts on the Aboriginal Archaeological Resource

Site Type	To be Impacted by the Project	Sites Not Impacted by the Project
Artefact Scatter	BC34, BC42, BC43, BC46, BC47, BC54, NV10, NV15, NV20, NV21, NV22, NV23, NV39, NV40, NV43, NV47, NV48, NV65, NV66, NV67, NV68, NV73, NV78	BC31, BC33, BCD2, NV2, NV3, NV4, NV5, NV13, NV24, NV49, NV50, NV54, NV55, NV57, NV58, NV59, NV60, NV62, NV63
Isolated Find	BC18, BC19, BC22, BC26, BC49, NV6, NV7, NV8, NV9, NV16, NV18, NV19, NV38, NV41, NV42, NV44, NV45, NV46, NV52, NV53, NV64, NV69, NV70, NV71, NV72, NV74, NV75, NV77	BC17, BC24, BC25, BC32, BC36, BCD3, NV1, NV11, NV12, NV14, NV51, NV61
Scarred Tree	BC16, BC50, BC51, BC52, NV28, NV29, NV30, NV31, NV32, NV33, NV34, NV76	BC30, NV25, NV26, NV27, NV35, NV36, NV37
Historic Scarred Tree	n/a	BC37
Quarry	n/a	BCD1, NV56

BC (ARAS 2005, 2007), BCD (Insite Heritage 2008). NV (Insite Heritage 2009).

Sourced from Environmental Assessment titled *Environmental Assessment Boggabri Coal Mine* dated December 2010, Table 37.

APPENDIX 9 CONCEPTUAL FINAL LANDFORM



Extract page 164 of EA

"The design of the vegetation types has taken into consideration the pre-mining landscape and potential future forestry resource requirements. Approximately 437 ha of shrubby woodland community is proposed to be rehabilitated on the steeper slopes of the final landform. Approximately 1,019 ha of grassy woodland on the lower slopes and the flat top areas will be rehabilitated and 52 ha of riverine woodland are proposed to be rehabilitated within the existing and proposed drainage lines"