# **Project Approval**

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

Under the Minister for Planning and Infrastructure's delegation of 14 September 2011, I approve 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.

## Chris Wilson A/Deputy Director-General Development Assessment and Systems Performance

SIGNED 25 OCTOBER 2011 Sydney	2011
	SCHEDULE 1
Application Number:	10_0059
Proponent:	Werris Creek Coal Pty Limited
Approval Authority:	Minister for Planning and Infrastructure
Land:	See Appendix 1
Project:	Werris Creek Mine Extension Project

Red type represents the August 2012 modification Blue type represents the November 2015 modification Green type represents the March 2020 modification Orange type represents the May 2021 modification Purple type represents the December 2024 modification

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DEFINITIONS

The review required by condition 3 of schedule 5

ARTC Australian Rail Track Corporation BCA Building Code of Australia BCS Biodiversity Conservation and Science Group of NSW DCCEEW The conservation and enhancement strategy described in EA, and Biodiversity offset strategy shown conceptually in the figure in Appendix 4 CCC **Community Consultative Committee** CEEC Critically endangered ecological community Conditions contained in schedules 2 to 5 inclusive Conditions of this approval Council Liverpool Plains Shire Council Day The period from 7 am to 6 pm on Monday to Saturday, and 8 am to 6 pm on Sundays and Public Holidays Department NSW Department of Planning, Housing and Infrastructure Derived native grassland DNG Environmental Assessment titled: EA Werris Creek Coal Mine Life of Mine Project, dated December 2010, as modified by the response to submissions, dated March 2011, and the letter from Whitehaven Coal Limited to the Department, dated 25 July 2011; Werris Creek Coal Mine Minor Modification to Project Approval PA 10\_0059, dated 3 August 2012, and associated letter dated 27 August 2012; and Environmental Assessment for the Werris Creek Coal Mine Modification 2 (PA 10\_0059), dated April 2015, and associated response to submissions titled Response to Submissions for the Werris Creek Coal Mine Modification 2 (PA 10\_0059), dated June 2015: Werris Creek Coal Mine Modification 3 Letter to Project Approval PA 10 0059, from Whitehaven Coal, dated 6 March 2020; Werris Creek Coal Mine Waste Tyre Disposal Modification Report, dated February 2021, and associated response dated 16 April 2021: and Werris Creek Coal Mine – Final Landform Modification Report, dated May 2022, Werris Creek Modification 5 - Response to Submissions dated 10 May 2024 and additional information responses provided by the proponent dated 5 October 2022, 2 July 2024, 17 September 2024. FFC Endangered Ecological Community Includes all aspects of the surroundings of humans, whether affecting Environment any human as an individual or in his or her social groupings EP&A Act Environmental Planning and Assessment Act 1979 **EP&A Regulation** Environmental Planning and Assessment Regulation 2021 EPA **Environment Protection Authority** EPL Environment Protection Licence issued under the POEO Act Evening The period from 6 pm to 10 pm A measure used to assess slope stability as commonly applied in Factor of safety geotechnical engineering practise Feasible Feasible relates to engineering considerations and what is practical to build or carry out Heritage NSW within the NSW DCCEEW Heritage NSW An occurrence or set of circumstances that causes or threatens to Incident cause material harm to the environment, and which may or may not be or cause a non-compliance 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 Material harm Is harm that: • involves actual harm to the environment that may include (but not be limited to) a leak, spill, emission other escape or deposit of a substance, and as a consequence of that environmental harm (pollution), may cause harm to the health or safety of people; or • results in actual loss or property damage of an amount, or amounts in aggregate, exceeding \$10,000 (such loss includes the reasonable

> costs and expenses that would be incurred in taking all reasonable and practicable measures to prevent, mitigate or make good harm to

Annual Review

the environment)

# Notes:

• This definition excludes "harm" that is either authorised under this consent or any other statutory approval

• For the purposes of this definition, material harm excludes incidents captured by Work Health and Safety reporting requirements

Includes the removal of overburden and extraction, processing, handling, storage and transportation of coal

NSW Minister for Planning and Public Spaces, or delegate

Activities associated with reducing the impacts of the project

Small and unimportant, such as to be not worth considering The period from 10 pm to 7 am on Monday to Saturday, and 10 pm to 8

am on Sundays and Public Holidays NSW Department of Climate Change, Energy, the Environment and Water

Protection of the Environment Operations Act 1997

Land that is not owned by a public agency or a mining company (or its subsidiary)

The development described in the EA

Werris Creek Coal Pty Limited, or its successors

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

As defined in the *Mining Act 1992* NSW Resources Regulator within the Department of Primary Industries and Regional Development **Run-of-mine** 

## Roads and Maritime Services

Secretary of the Department, or nominee The land listed in Appendix 1 The Proponent's commitments in Appendix 6 Water that accumulates in the open cut pit NSW DCCEEW – Water Group Whitehaven Coal Handling and Preparation Plant near Gunnedah

Mining operations

Minister Mitigation Negligible Night

## **NSW DCCEEW**

POEO Act Privately-owned land

Project Proponent Reasonable

Rehabilitation Resources Regulator

ROM

RMS Secretary Site Statement of commitments Void Water Water Group Whitehaven CHPP

## SCHEDULE 2 ADMINISTRATIVE CONDITIONS

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

1. 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 project.

## TERMS OF APPROVAL

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

#### Notes:

- The general layout of the project is shown in Appendix 2; and
- The statement of commitments is reproduced in Appendix 6.
- 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 Secretary arising from the Department'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 site until the end of December 2032.

Note: Under this approval, the Proponent is required to rehabilitate the site and carry out additional undertakings to the satisfaction of both the Secretary and the Executive Director, Mineral Resources in Resources Regulator. 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 those additional undertakings have been carried out satisfactorily.

## **Coal Extraction**

6. The Proponent shall not extract more than 2.5 million tonnes of ROM coal from the site in a calendar year.

## **Coal Stockpiling**

7. The Proponent shall not stockpile more than 250,000 tonnes of product coal on the site.

#### **Coal Transport**

- 8. The Proponent shall not transport:
  - (a) more than 50,000 tonnes of product coal from the site by public road in any calendar year;
  - (b) any product coal from the site by public road to the Muswellbrook, Singleton, Mid-Western Regional, Cessnock or Newcastle local government areas without the written approval of the Secretary; and
  - (c) any coal to the Whitehaven CHPP.

## SURRENDER OF EXISTING DEVELOPMENT CONSENT

 By the end of October 2012, or as otherwise agreed by the Secretary, the Proponent shall surrender the existing development consent (DA 172-7-2004) for the Werris Creek 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

10. 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 (where necessary) for the proposed building works; and
- Part 8 of the EP&A Regulation sets out the requirements for the certification of the project.

## DEMOLITION

11. 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.

## **OPERATION OF PLANT AND EQUIPMENT**

- 12. 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 ANY STRATEGY, PLAN OR PROGRAM

13. With the approval of the Secretary, the Proponent may submit any strategy, plan or program required by this approval 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.
- 14. 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 that apply under DA 172-7-2004.

## **COMMUNITY ENHANCEMENT**

- 15. The Proponent shall establish and operate a Community Enhancement Fund for the project to the satisfaction of the Secretary. This fund must:
  - (a) be established and operated in consultation with Council and the CCC;
  - (b) be directed towards providing benefits to the local communities affected by the project;
  - (c) provide for the expenditure of at least \$300,000 (indexed to CPI) over 6 calendar years (2012 to 2017), and include at least \$200,000 of expenditure within the town of Werris Creek; and
  - (d) be operating from the end of April 2012, unless the Secretary agrees otherwise.

## SCHEDULE 3 ENVIRONMENTAL PERFORMANCE CONDITIONS

## NOISE

## Noise Criteria

1. The Proponent shall ensure that the noise generated by the project (including noise generated on the Werris Creek Rail Spur) does not exceed the criteria in Table 1 at any residence on privately-owned land.

Table 1: Noise criteria	-		
Location	Day dB(A) L <sub>Aeq(15 min)</sub>	Evening & Night dB(A) L <sub>Aeq(15 min)</sub>	Night dB(A) L <sub>A1 (1 min)</sub>
R10, R11	39	39	45
R21	39	37	45
R12	38	38	45
R96	38	38	45
R7, R8, R9, R24	37	37	45
R22	36	37	45
R98	36	38	45
All other privately-owned residences	35	35	45

Notes:

To interpret the locations referred to in Table 1, see the applicable figure in Appendix 3; and

• 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.

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

## Noise Acquisition Criteria

2. If the noise generated by the project causes sustained exceedances of the criteria in Table 2 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 5 - 6 of schedule 4.

Table 2: Noise acquisition criteria

Location	Day/Evening/Night dB(A) L <sub>Aeq (15min)</sub>
All privately-owned land	40

Note: 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.

## **Additional Noise Mitigation Measures**

3. Upon receiving a written request from the owner of the land listed in Table 3, the Proponent shall implement additional noise mitigation measures (such as double glazing, insulation, and/or air conditioning) at any residence on the land in consultation with the owner. These measures must be reasonable and feasible.

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 Secretary for resolution.

Table 3: Land subject to additional noise mitigation measures

#### Location

#### R10, R11, R12, R21, R96

Note: To interpret the locations referred to in Table 3, see the applicable figure in Appendix 3.

## **Operating Conditions**

- 4. The Proponent shall:
  - (a) implement best practice noise management to minimise the operational, low frequency, rail and road traffic noise of the project;
  - regularly assess the real-time noise monitoring and meteorological forecasting data and relocate, modify, and/or stop operations on site to ensure compliance with the relevant conditions of this approval;
  - (c) minimise the noise impacts of the project during temperature inversions; and
  - (d) use its best endeavours to achieve the long-term noise goals in Table 4, where this is reasonable and feasible, and report on the progress towards achieving these goals in the annual review;
  - (e) carry out a comprehensive noise audit of the project in conjunction with each independent environmental audit,

to the satisfaction of the Secretary.

Table 4: Long-term noise goal

Location	Day/Evening/Night dB(A) L <sub>Aeg (15min)</sub>
All privately-owned land	35

Note: 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.

#### Noise Management Plan

- 5. The Proponent shall prepare and implement a Noise Management Plan for the project to the satisfaction of the Secretary. This plan must:
  - (a) be prepared in consultation with EPA by a suitably qualified expert whose appointment has been approved by the Secretary;
  - (b) be submitted to the Secretary for approval by the end of April 2012;
  - (c) describe the measures that would be implemented to ensure compliance with the relevant conditions of this approval, including:
    - a real-time noise management system that employs both reactive and proactive mitigation measures; and
    - rail spur management plan, that has been prepared in consultation with ARTC and the rail freight company; and
  - (d) include a Noise Monitoring Program that:
    - uses a combination of real-time and supplementary attended noise monitoring measures to evaluate the performance of the project;
    - is capable of monitoring temperature inversion strengths at an appropriate sampling rate;
    - evaluates and reports on the effectiveness of the real-time noise management system;
    - includes a protocol for determining exceedances of the relevant conditions of this approval.

## BLASTING

#### **Blasting Criteria**

6. The Proponent shall ensure that blasting on site does not cause exceedances of the criteria in Table 5.

Table	5·	Blasting	Criteria
rubic	υ.	Diabling	ontonia

Location	Airblast Overpressure (dB(Lin Peak))	Ground Vibration (ppv(mm/s))	Allowable Exceedance
Any residence on privately-owned land	115	5	5% of the total number of blasts over a period of 12 months
	120	10	0%
All public infrastructure	-	50	0%

However, these criteria do not apply if the Proponent has a written agreement with the relevant owner, and has advised the Department in writing of the terms of this agreement.

## **Blasting Hours**

7. The Proponent shall only carry out blasting on 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 Secretary.

## **Blasting Frequency**

- 8. The Proponent shall not carry out more than:
  - (a) 1 blast a day on site, unless an additional blast is required following a blast misfire; and
  - (b) 15 blasts a month on site.

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 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**

- 9. If the Proponent receives a written request from the owner of any privately-owned land within 2 kilometres of the approved open cut pit on site for a property inspection to establish the baseline condition of any buildings and/or structures on their 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 has been approved by the Secretary to:
    - establish the baseline condition of the 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 projects on these buildings and/or structures; and
  - (b) give the landowner a copy of the new or updated property inspection report.

## **Property Investigations**

- 10. If the owner of any privately-owned land claims that the buildings and/or structures on their land have been damaged as a result of blasting on site, then within 2 months of receiving this claim the Proponent shall:
  - (a) commission a suitably qualified, experienced and independent person, whose appointment has been approved by the Secretary, 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 damage to the satisfaction of the Secretary.

If the Proponent or landowner disagrees with the findings of the independent property investigation, then either party may refer the matter to the Secretary for resolution.

## **Operating Conditions**

(a)

- 11. The Proponent shall:
  - implement best practice blasting management on site to:
    - protect the safety of people and livestock in the surrounding area;
    - protect private or public property in the surrounding area;
    - minimise the dust and fume emissions of the blasting; and
  - (b) minimise the duration and frequency of any road closures for blasting;
  - (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 Secretary.
- 12. The Proponent shall not carry out blasting on site that is within 500 metres of:
  - (a) Werris Creek Road without the approval of RMS;
  - (b) the Main Northern Railway without the approval of ARTC; and
  - (c) any land outside the site that is 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 the Secretary in writing of the terms of this agreement; or
    - the Proponent has:
      - demonstrated to the satisfaction of the Secretary that the blasting can be carried out closer to the land without compromising the safety of 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**

- 13. The Proponent shall prepare and implement a Blast Management Plan for the project to the satisfaction of the Secretary. This plan must:
  - (a) be prepared in consultation with EPA, RMS and ARTC;
  - (b) be submitted to the Secretary for approval by the end of April 2012;
  - (c) describe the mitigation measures that would be implemented to ensure compliance with the relevant conditions of this approval;
  - (d) describe the measures that would be implemented to ensure that the public can get up-to-date information on the proposed blasting schedule on site; and
  - (e) include a blast monitoring program for evaluating the performance of the project, including:
    - compliance with the applicable criteria; and
    - minimising the fume emissions from the site.

## AIR QUALITY & GREENHOUSE GAS

## Odour

14. The Proponent shall ensure that no offensive odours, as defined under the POEO Act, are emitted from the site.

#### **Greenhouse Gas Emissions**

15. 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 Secretary.

#### Air Quality Criteria

16. The Proponent shall ensure that all reasonable and feasible avoidance and mitigation measures are employed so that particulate matter emissions generated by the project do not exceed the criteria listed in Tables 6, 7 and 8 at any residence on privately-owned land or on more than 25 percent of any privately-owned land.

Pollutant	Averaging Period	<sup>d</sup> Criterion
Total suspended particulate (TSP) matter	Annual	<sup>a</sup> 90 µg/m³
Particulate matter < 10 μm (PM <sub>10</sub> )	Annual	<sup>a</sup> 30 µg/m³

#### Table 6: Long-term criteria for particulate matter

Table 7: Short-term criterion for particulate matter

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

#### Table 8: Long-term criteria for deposited dust

Pollutant	Averaging Period	Maximum increase in deposited dust level	Maximum total deposited dust level
<sup>c</sup> Deposited dust	Annual	<sup>b</sup> 2 g/m <sup>2</sup> /month	<sup>a</sup> 4 g/m²/month

Notes to Tables 6-8:

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

- <sup>b</sup> Incremental impact (ie incremental increase in concentrations due to the project on its own);
- <sup>c</sup> Deposited dust is to be assessed as insoluble solids as defined by Standards Australia, AS/NZS 3580.10.1:2003: Methods for Sampling and Analysis of Ambient Air - Determination of Particulate Matter -Deposited Matter - Gravimetric Method.
- <sup>d</sup> Excludes extraordinary events such as bushfires, prescribed burning, dust storms, fire incidents, illegal activities or any other activity agreed by the Secretary in consultation with EPA.

## Air Quality Acquisition Criteria

17. If particulate matter emissions generated by the project exceed the criteria in Tables 9, 10, and 11 at any residence on privately-owned land, or on more than 25 percent of any privately owned land, then upon written request for acquisition from the landowner, the Proponent shall acquire the land in accordance with the procedures in conditions 5-6 of schedule 4.

Table 9: Long term land acquisition criteria for particulate matter

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

Table 10: Short term land acquisition criteria for particulate matter

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

Table 11: Long term land acquisition criteria for deposited dust

Pollutant	Averaging	Maximum increase <sup>2</sup> in	Maximum total <sup>1</sup> deposited
	period	deposited dust level	dust level
° Deposited dust	Annual	<sup>b</sup> 2 g/m <sup>2</sup> /month	<sup>a</sup> 4 g/m <sup>2</sup> /month

Notes to Tables 9-11:

- <sup>a</sup> Total impact (i.e. incremental increase in concentrations due to the development plus background concentrations due to all other sources);
- <sup>b</sup> Incremental impact (i.e. incremental increase in concentrations due to the development on its own);
- <sup>C</sup> Deposited dust is to be assessed as insoluble solids as defined by Standards Australia, AS/NZS 3580.10.1:2003: Methods for Sampling and Analysis of Ambient Air - Determination of Particulate Matter -Deposited Matter - Gravimetric Method; and
- *d* Excludes extraordinary events such as bushfires, prescribed burning, dust storms, sea fog, fire incidents or any other activity agreed by the Secretary.

## **Operating Conditions**

- 18. The Proponent shall:
  - (a) implement best practice air quality management on site to minimise the off-site odour, fume and particulate matter emissions of the project, including the dust emissions associated with the transport coal produced on site by road or rail;
  - (b) minimise any visible air pollution generated by the project;
  - (c) minimise any surface disturbance on site; and
  - (d) regularly assess the real-time air quality monitoring and meteorological forecasting data and relocate, modify and/or stop operations on site to ensure compliance with the relevant conditions of this approval,

to the satisfaction of the Secretary.

## Air Quality and Greenhouse Gas Management Plan

- 19. The Proponent shall prepare and implement an Air Quality and Greenhouse Gas Management Plan for the project to the satisfaction of the Secretary. This plan must:
  - (a) be prepared in consultation with EPA, and submitted to the Secretary by the end of April 2012;
  - (b) describe the measures that would be implemented to ensure compliance with the relevant conditions of this approval, including a real-time air quality management system that employs both reactive and proactive mitigation measures;
  - (c) describe the measures that would be implemented to minimise the release of greenhouse gas emissions from the site; and
  - (d) include an air quality monitoring program, that:
    - uses a combination of real-time monitors and supplementary monitors, to evaluate the performance of the project;
    - evaluates and reports on the effectiveness of the real-time air quality management system; and
    - includes a protocol for determining any exceedances of the relevant conditions of this approval.

## METEOROLOGICAL MONITORING

- 20. For the life of the project, the Proponent shall ensure that there is a suitable meteorological station operating 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*, or as otherwise approved by EPA.

## SOIL AND WATER

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

- 21. The Proponent shall ensure that it has sufficient water for all stages of the project, and if necessary, adjust the scale of mining operations to match its available water supply, to the satisfaction of the Secretary.
- 21A. The Proponent must provide a compensatory water supply to any landowner of privately-owned land whose rightful water supply is predicted to be adversely impacted (other than an impact that is minor or negligible) as a result of the development, to the satisfaction of the Secretary. The burden of proof that any loss of surface water or groundwater access is not due to mining impacts rests with the Proponent.
- 21B. If the Proponent is unable to provide an alternative long-term supply of water, then the Proponent must provide compensation, to the satisfaction of the Secretary.

#### **Surface Water Discharges**

22. 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.

#### **Void Water Irrigation**

22A. The Proponent shall not provide any water for the purpose of irrigation or stock watering, unless the activity has been approved by the Secretary as part of the Water Management Plan.

## Water Management Plan

23. The Proponent shall prepare and implement a Water Management Plan for the project to the satisfaction of the Secretary. This plan must be prepared in consultation with Water Group and EPA by suitably qualified and experienced persons whose appointment has been approved by the Secretary, and submitted to the Secretary by the end of April 2012.

In addition to the standard requirements for management plans (see condition 2 of schedule 5), this plan must include:

- (a) a Site Water Balance that:
  - includes details of:
    - sources of water supply;
    - water use on site;
    - water management on site;
    - reporting procedures, which provide for the update of the site water balance in each annual review; and
    - describes what measures would be implemented to minimise potable water use on site;
- (b) a Surface Water Management Plan, that includes:
  - detailed baseline data of the surface water flows and quality in the waterbodies that could be affected by the project;
  - a detailed description of the water management system on site, including the:
    - clean water diversion systems;
    - erosion and sediment controls; and
    - water storages;
  - a plan for identifying, extracting, handling, and the long-term storage of potentially acid forming material on site;
  - detailed plans, including design objectives and performance criteria, for:
    - design and management of the final void;
    - 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;
    - a program to monitor the effectiveness of the water management system;
  - a plan to respond to any exceedances of the performance criteria, and mitigate and/or offset any adverse surface water impacts of the project;
- (c) a Groundwater Management Plan, which includes:

- detailed baseline data of groundwater levels and quality surrounding the site;
- groundwater assessment criteria, including trigger levels for investigating any potentially adverse groundwater impacts;
- a program to monitor :
  - groundwater inflows to the open cut mining operations;
  - the impacts of the project on any groundwater bores on privately-owned land;
  - the seepage/leachate from water storages or backfilled voids on site; and
- a program to validate the groundwater model for the project, and calibrate it to site specific conditions; and
- a plan to respond to any exceedances of the performance criteria, and mitigate and/or offset any adverse groundwater impacts of the project; and
- (d) an Irrigation Management Plan, which includes:
  - a detailed methodology for the transfer (including for pipeline and/or road transportation) and application of void water for each irrigation site;
  - detailed consideration of the irrigation activities guided by the Environmental Guideline "Use of Effluent by Irrigation, DEC 2014", including site specific soil analysis and consideration of the short and long term impacts of salinity and sodicity on soils;
  - parameters for the sustainable application of void water to maximise water uptake and minimise deep percolation to groundwater and/or run-off from the application site;
  - identification of the appropriate approvals held under the Water Management Act 2000;
  - a program to monitor void water quality and soil characteristics; and
  - a description of the procedures to be implemented to measure and report on the quantity of water supplied to each individual user and the quantity of void water used against the parameters identified.

# Void Water Dam 1

23a Within 2 months of the completion of construction works for the expanded Void Water Dam 1, the Proponent shall submit a "works as-executed" report to the Secretary and EPA, certified by a practising engineer, confirming that the expanded dam has been constructed to its design specifications.

#### BIODIVERSITY

#### **Biodiversity Offset Strategy**

24. The Proponent shall implement the biodiversity offset strategy for the project described in the EA, summarised in Table 12, and shown conceptually on the figure in Appendix 4 to the satisfaction of the Secretary.

Offset Areas	Minimum Size (hectares)
Eurunderee	363.93
Hillview	57.32
Marengo	284.12
Railway View	243.69
Mine Site	215.86
Greenslopes/Banool	123
TOTAL	1,287.92

Table 12: Summary of the Biodiversity Offset Strategy

Notes:

• To identify the areas referred to in Table 12, see the applicable figure in Appendix 4;

- The strategy includes the enhancement of existing fauna habitat within these areas, and where necessary the targeted establishment of naturally scarce fauna habitat; and
- Greenslopes/Banool must have at least 74 hectares of Box Gum Woodland EEC.
- 25. By the end of June 2012, unless the Secretary agrees otherwise, the Proponent shall update the biodiversity offset strategy for the project, in consultation with BCS, and to the satisfaction of the Secretary. The updated strategy must include the specific details of the Additional Offset Area (see Table 12).
- 26. The Proponent shall ensure that the biodiversity offset strategy and/or rehabilitation strategy is focused on the re-establishment and/or enhancement of:
  - (a) the following endangered ecological communities:
    - White Box-Yellow Box-Blakely's Red Gum Woodland EEC; and

- White Box-Yellow Box-Blakely's Red Gum Grassy Woodland and Derived Native Grassland CEEC; and
- (b) habitat for threatened fauna species, including the:
  - Regent Honeyeater, Swift Parrot, Brown Treecreeper, Hooded Robin, Little Lorikeet, and Barking Owl; and
  - Eastern Bent-wing Bat, Eastern False pipistrelle, Yellow-bellied Bent-wing Bat and Greater Broad-nosed Bat.

## Long Term Security of Offsets

27. The Proponent shall make suitable arrangements to provide appropriate long-term security for the offset areas (excluding the rehabilitation areas) by December 2012, or other date agreed by the Secretary, to the satisfaction of the Secretary.

## Biodiversity Offset Management Plan

- 28. The Proponent shall prepare and implement a Biodiversity Management Plan for the project to the satisfaction of the Secretary. This plan must:
  - (a) be prepared in consultation with BCS, and submitted to the Secretary for approval by the end of December 2012;
  - (b) describe how the implementation of the biodiversity offset strategy would be integrated with the overall rehabilitation of the site;
  - (c) describe the short, medium, and long term measures that would be implemented to:
    - manage the remnant vegetation and habitat on the site and in the offset area/s (if and when applicable); and
    - implement the biodiversity offset strategy (if and when applicable), including detailed performance and completion criteria;
  - (d) include detailed performance and completion criteria for evaluating the performance of the biodiversity offset strategy, and triggering remedial action (if necessary);
  - (e) include a detailed description of the measures that would be implemented over the next 3 years, including the procedures to be implemented for:
    - enhancing the quality of existing vegetation and fauna habitat;
    - restoring native vegetation and fauna habitat on the biodiversity areas and rehabilitation area through focusing on assisted natural regeneration, targeted vegetation establishment and the introduction of naturally scarce fauna habitat features (where necessary);
    - landscaping the land on site that faces public roads to minimise the visual and lighting impacts of the project;
    - maximising the salvage of resources within the approved disturbance area including vegetative, soil and cultural heritage resources – for beneficial reuse in the enhancement of the biodiversity areas or rehabilitation area;
    - collecting and propagating seed;
    - minimising the impacts on fauna on site, including undertaking pre-clearance surveys;
    - managing any potential conflicts between the proposed restoration works in the biodiversity areas and any Aboriginal heritage values (both cultural and archaeological);
    - managing salinity;
    - controlling weeds and feral pests;
    - controlling erosion;
    - managing grazing and agriculture on site;
    - controlling access; and
    - bushfire management;
  - (f) include a seasonally-based program to monitor and report on the effectiveness of these measures, and progress against the detailed performance and completion criteria;
  - (g) identify the potential risks to the successful implementation of the biodiversity offset strategy, and include a description of the contingency measures that would be implemented to mitigate against these risks; and
  - (h) include details of who would be responsible for monitoring, reviewing, and implementing the plan.

## **Conservation Bond**

- 29. Within 6 months of the approval of the biodiversity offset strategy, the Proponent shall lodge a conservation bond with the Department to ensure that the biodiversity offset strategy is implemented in accordance with the performance and completion criteria of the Biodiversity Management Plan.
  - The sum of the bond shall be determined by:
  - (a) calculating the full cost of implementing the 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 Secretary.

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

If the offset strategy is not completed generally in accordance with the completion criteria in the Biodiversity Management Plan, the <u>Secretary</u> 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 Secretary, this bond may be combined with rehabilitation security deposit administered by Resources Regulator.

## HERITAGE

#### Historic Heritage

- 30. By the end of April 2012, the Proponent shall:
  - undertake primary historical investigations and provide a report prepared by an experienced heritage consultant approved by the <u>Secretary</u> on the archaeological potential of the former Werris Creek Colliery site, remaining buildings and surrounds;
  - (b) provide recommendations for the management, salvage or recording of any archaeological features on the site and a timetable for the implementation of these recommendations;
  - (c) include in this report detailed archival recording, including photographic recording and location plans of any structures relating to the former Werris Creek Colliery; and
  - (d) provide a copy of this report to the Department, Heritage Council of NSW and Council,
  - to the satisfaction of the Secretary.

#### **Human Remains**

31. This approval does not allow the Proponent to disturb any human remains found on the site.

#### Heritage Management Plan

- 32. The Proponent shall prepare and implement a Heritage Management Plan for the project to the satisfaction of the Secretary. This plan must:
  - (a) be prepared by suitably qualified and experienced persons whose appointment has been endorsed by the Secretary;
  - (b) be prepared in consultation with Heritage NSW and the Aboriginal stakeholders (in relation to the management of Aboriginal heritage values);
  - (c) be submitted to the Secretary for approval by the end of June 2012, unless the Secretary agrees otherwise;
  - (d) include the following for the management of Aboriginal Heritage:
    - a description of the measures that would be implemented for:
    - protecting, relocating, monitoring and/or managing the axe-grinding grooves known as the "Narrawolga site";
    - managing the discovery of any human remains or previously unidentified Aboriginal objects on site;
    - maintaining and managing reasonable access for Aboriginal stakeholders to heritage items on site and within any Aboriginal heritage conservation areas;
    - ongoing consultation with the Aboriginal stakeholders in the conservation and management of Aboriginal cultural heritage both on site and within any Aboriginal heritage conservation areas; and
    - ensuring any workers on site receive suitable heritage inductions and that suitable records are kept of these inductions;
    - a strategy for the storage of any heritage items salvaged on site, both during the project and in the long-term;
  - (e) include the following for the management of historic heritage:
    - a detailed plan for the implementation of any measures resulting from the further investigations into the former Werris Creek Colliery site and buildings;
    - 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 any workers on site receive suitable heritage inductions and that suitable records are kept of these inductions.

Note: It is accepted that the detailed plan for the implementation of any measures resulting from further investigations into the former Werris Creek Colliery site will not be submitted with the initial Heritage Management Plan. They should be progressively added to the plan once they are completed.

## TRANSPORT

#### Roadworks

33. Prior to the use of the Northern Site Access Road, the Proponent shall:

- (a) construct the intersection of the Northern Site Access Road (see the figure in Appendix 2) to the satisfaction of Council;
- (b) tar seal Escott Road from Werris Creek Road to the coal haul road to the satisfaction of Council;
- (c) upgrade the intersection of Escott Road and Werris Creek Road to a CHR type intersection to the satisfaction of RMS and Council;
- (d) install appropriate rail crossings at the rail loop on Escott Road; and
- (e) install appropriate advance warning signs and lighting on Escott Road and at the intersection of the Northern Site Access Road to the satisfaction of Council.
- 34. Within 3 months of the commencement of coal transport from the Northern Site Access Road, the Proponent shall close the existing mine entrance on Werris Creek Road (see Figure 1 of Appendix 2) to coal transport (unless required in an emergency).

## **Road Maintenance**

35. For the life of the project, the Proponent shall continue to provide funding towards the maintenance of Taylors Lane, in accordance with the existing road maintenance contributions agreement with Council.

## Monitoring of Coal Transport

- 36. The Proponent shall:
  - (a) keep accurate records of the amount of coal transported from the site (on a monthly basis); and
  - (b) make these records available on its website at the end of each calendar year.

## VISUAL

## **Visual Amenity**

- 37. The Proponent shall:
  - (a) implement all reasonable and feasible measures to minimise the visual and off-site lighting impacts of the project, including:
    - progressively rehabilitating overburden emplacement areas (particularly the outer batters), including partial rehabilitation of temporarily inactive areas and proposed topsoil storage stockpiles;
    - constructing a 15 metre high visual/amenity bund along the northeastern perimeter of the northern extent of the open-cut pit, and
    - planting trees at the foot of the overburden emplacement area along the eastern boundary of the site, in front of the visual/amenity bund, and to the north and east of the product coal stockpile and rail load-out facility;
  - (b) establish and maintain an effective vegetative screen along the boundary of the site adjoining public roads;
  - (c) ensure no outdoor lights shine above the horizontal; and
  - (d) ensure that all external lighting associated with the development complies with Australian Standard AS4282 (INT) 1995 Control of Obtrusive Effects of Outdoor Lighting,

to the satisfaction of the Secretary.

#### Additional Visual Impact Mitigation

38. 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 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 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 Secretary 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).

#### WASTE

- 39. The Proponent shall:
  - (a) implement all reasonable and feasible measures to minimise the waste generated by the project;

- (b) ensure that the waste generated by the project is appropriately stored, handled and disposed of; and
- (c) monitor and report on effectiveness of the waste minimisation and management measures in the annual review.

## **BUSHFIRE MANAGEMENT**

- 40. 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 and emergency services as much as possible if there is a fire in the surrounding area.

## REHABILITATION

## Rehabilitation Objectives

41. The Proponent must rehabilitate the site in accordance with the conditions imposed on the mining lease(s) associated with the development under the *Mining Act 1992*. This rehabilitation must be generally consistent with the proposed rehabilitation strategy described in the EA (and shown conceptually in the figure in Appendix 5), and comply with the objectives in Table 13.

#### Table 13: Rehabilitation objectives

Feature	Objective		
Mine Site (as a whole)	<ul> <li>Safe, stable and non-polluting;</li> <li>Constructed landforms sympathetic to natural landforms (including landform micro-relief) as far as practicable;</li> <li>Final land uses compatible with surrounding land uses; and</li> <li>Minimise visual impact of final landforms as far as reasonable and feasible.</li> </ul>		
Woodland areas and other vegetated land	<ul> <li>Establishment of at least 280 hectares of White Box-Yellow Box-Blakely's Red Gum Woodland EEC; and</li> <li>Restore ecosystem function, including maintaining or establishing self-sustaining ecosystems that is comprised of:         <ul> <li>local native plant species; and</li> <li>at least 180 hectares of shrubby woodland.</li> </ul> </li> </ul>		
Amenity Bunds and Overburden Emplacements	<ul> <li>Early revegetation and planting with local native woodland species; and</li> <li>Free draining.</li> </ul>		
Final Void	<ul> <li>Minimise to the greatest extent practicable:         <ul> <li>the size and depth of the void</li> <li>the drainage catchment of the final void</li> <li>any void wall geotechnical and erosional instability risks</li> </ul> </li> <li>All slopes within the final void to achieve a minimum factor of safety of 1.5, unless otherwise agreed by the Resources Regulator</li> </ul>		
Project infrastructure	• To be decommissioned and removed, unless the Executive Director, Resources Regulator agrees otherwise.		
Community	Minimise the adverse socio-economic effects associated with mine closure.		

## **Progressive Rehabilitation**

42. The Proponent shall rehabilitate the site progressively, that is, as soon as reasonably practicable following disturbance.

## **Rehabilitation Management Plan**

#### 43. Deleted

Note: The Proponent must prepare and implement a Rehabilitation Management Plan in accordance with the conditions imposed on the mining lease(s) associated with the development under the Mining Act 1992.

## SCHEDULE 4 ADDITIONAL PROCEDURES

## NOTIFICATION OF LANDOWNERS

- 1. By the end of December 2011, the Proponent shall:
  - (a) notify in writing the owners of:
    - any residence on the land listed in Table 3 of schedule 3 that they are entitled to ask the Proponent to install additional noise mitigation measures at their residence at any stage during the project; and
    - any privately-owned land within 2 kilometres of the approved open cut mining pit that they are entitled to ask the proponent for a property inspection to establish the baseline condition of any buildings or structures on their land, or to have a previous property inspection report updated; and
  - (b) 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 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. 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 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) to the affected landowners.

## INDEPENDENT REVIEW

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

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

- (a) commission a suitably qualified, experienced and independent person, whose appointment has been approved by the Secretary, to:
  - consult with the landowner to determine his/her concerns;
  - conduct monitoring to determine whether the project is complying with the relevant criteria in schedule 3; and
  - if the project is not complying with these criteria, then identify the measures that could be implemented to ensure compliance with the relevant criteria; and
- (b) give the Secretary and landowner a copy of the independent review.
- 4. 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 Secretary.

If the independent review determines that the project is not complying with the relevant criteria in schedule 3, then the Proponent shall:

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

If the independent review determines that the project is not complying with the relevant acquisition criteria, and that the project is primarily responsible for this non-compliance, then upon receiving a written request from the landowner, the Proponent shall acquire all or part of the landowner's land in accordance with the procedures in condition 5-6 below.

## LAND ACQUISITION

- 5. 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 'additional noise mitigation measures' in condition 4 of schedule 3;

- (b) the reasonable costs associated with:
  - relocating within the Liverpool Plains Shire local government area, or to any other local government area agreed to by the Secretary;
  - 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 Secretary for resolution.

Upon receiving such a request, the Secretary will 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 Secretary for review. Any request for a review must be accompanied by a detailed report setting out the reasons why the party disputes the independent valuer's determination. Following consultation with the independent valuer and both parties, the Secretary 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 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 Secretary'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 Secretary determines otherwise.

6. The Proponent shall pay all reasonable costs associated with the land acquisition process described in condition 4 above, including the costs associated with obtaining Council approval for any plan of subdivision (where permissible), and registration of the 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 Secretary. This strategy must:
  - (a) be submitted to the Secretary for approval by the end of April 2012;
  - (b) provide the strategic framework for the 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 approval; and
    - a clear plan depicting all the monitoring required to be carried out under the conditions of this approval.

## **Management Plan Requirements**

- 2. The Proponent shall ensure that the management plans required under this approval 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 approval, 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 project 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 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
  - (g) a protocol for periodic review of the plan.

## **Annual Review**

- 3. By the end of March each year, the Proponent shall review the environmental performance of the project to the satisfaction of the Secretary. This review must:
  - (a) describe the development (including any rehabilitation) that was carried out in the past year, and the development that is proposed to be carried out over the next 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 past 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**

- 4. Within 3 months of:
  - the submission of an annual review under condition 3 above; (a)
  - (b) the submission of an incident report under condition 6 below;
  - the submission of an audit under condition 8 below; or (c)

any modification to the conditions of this approval (unless the conditions require otherwise). (d) the Proponent shall review, and if necessary revise, the strategies, plans, and programs required under this approval to the satisfaction of the Secretary. Where this review leads to revisions of any plan then within four weeks of the review the revised document must be submitted to the Secretary and any other relevant agencies for approval.

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.

#### **Community Consultative Committee**

The Proponent shall operate a Community Consultative Committee (CCC) for the Werris Creek Coal 5. Mine for the life of the project, 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 to the satisfaction of the Secretary.

Notes:

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

## REPORTING

## **Incident Reporting**

The Proponent shall notify, at the earliest opportunity, the Secretary and any other relevant agencies of 6. 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 Secretary 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 Secretary and any relevant agencies with a detailed report on the incident, and such further reports as may be requested.

#### **Regular Reporting**

7. 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.

## INDEPENDENT ENVIRONMENTAL AUDIT

- 8 By the end of June 2014, and every 3 years thereafter, unless the Secretary directs otherwise, the Proponent shall commission and pay the full cost of an Independent Environmental Audit of the project. This audit must
  - be conducted by a suitably qualified, experienced and independent team of experts whose (a) appointment has been endorsed by the Secretary:
  - include consultation with the relevant agencies: (b)
  - (c) assess the:
    - environmental performance of the project; and •
    - whether it is complying with the requirements in this approval, any relevant EPL or Mining • Lease (including any assessment, plan or program required under these approvals); and
  - (d) recommend appropriate measures or actions to improve the environmental performance and rehabilitation of the project.

Note: This audit team must be led by a suitably qualified auditor and include experts in any fields specified by the Secretary.

9. Within 6 weeks of the completion of this audit, or as otherwise agreed by the Secretary, the Proponent shall submit a copy of the audit report to the Secretary, together with its response to any recommendations contained in the audit report.

# ACCESS TO INFORMATION

10. The Proponent shall:

- (a) make copies of the following publicly available on its website: •
  - the EA;

- current statutory approvals for the project;
- approved strategies, plans and programs required under the conditions of this approval;
- a comprehensive summary of the monitoring results of the project, which have been reported in accordance with the conditions of this approval or any approved plans or programs;
- a complaints register, which is to be updated on a monthly basis;
- minutes of any CCC meetings;
- the last five annual reviews;
- any independent environmental audit of the project, and the Proponent's response to the recommendations in any audit;
- any other matter required by the Secretary; and
- (b) keep this information up-to-date,

to the satisfaction of the Secretary.

## APPENDIX 1 SCHEDULE OF LAND

Lot(s)	DP Number			
19, 20, 65, 73-75, 83, 90, 92, 109, 110, 112, 120,	751017			
121, 123, 126-130, 131-135, 217, 225				
1-4	1022826			
1-4	1037145			
2	431951			
1	186633			
270	257307			
2	1095262			
1	344178			
1	1114226			
1	328762			
1	328763			
11-12	1160636			
2	1085891			
All Crown and public roads within the project boundary, as shown in Figure 1.				

ΤN MN G Lot 11 DP1160636 Lot 2 DP1085891 Escott Road Lot 270 DP257307 Lot 11 DP1160636 Lot 2 DP1085891 Lot 12 DP1160636 Lot 65 DP751017 Lot 12 DP1160636 Lot 2 DP1095262 Lot 1 Lot 3 DP344178 DP1037145 Lot 126 DP751017 Lot 121 DP751017 Lot 1 DP1114226 Lot 1 DP328762 Lot 127 DP751017 Lot 123 DP751017 Lot 4 DP1037145 Lot 1 DP186633 ~ Lot 2 DP1037145 Lot 1 DP328763 Lot 1 DP1037145 Lot 128 DP751017 Lot 129 DP751017 Lot 130 DP751017 Lot 120 DP751017 Werns Lot 1 DP1022826 Creek Lot 134 DP751017 Lot 132 DP751017 Lot 112 DP751017 Lot 133 DP751017 Lot 2 DP1022826 Quirindi Lot 109 DP751017 Lot 110 DP751017 Lot 92 DP751017 Lot 3 DP1022826 Lot 135 DP751017 Lot 131 DP751017 Lot 75 DP751017 Road Lot 83 DP751017 Lot 74 DP751017 Lot 90 DP751017 Lot 217 DP751017 Lot 73 DP751017 Lot 225 DP75101 Lot 20 DP751017 Lot 4 DP1022826 Lot 19 DP751017 Wadwells Lane REFERENCE **Project Site Boundary** Cadstral Boundary Crown Road Public Road

Figure 1: Schedule of Land

Lot(s)	DP Number			
19, 20, 65, 73-75, 83, 90, 92, 109, 110, 112, 120, 121, 123,	751017			
126-130, 131-135, 217, 225				
1-4	1022826			
1-4	1037145			
2	431951			
1	186633			
270	257307			
2	1095262			
1	344178			
1	1114226			
1	328762			
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11-12	1160636			
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All Crown and public roads within the project boundary, as shown in Figure 1.				

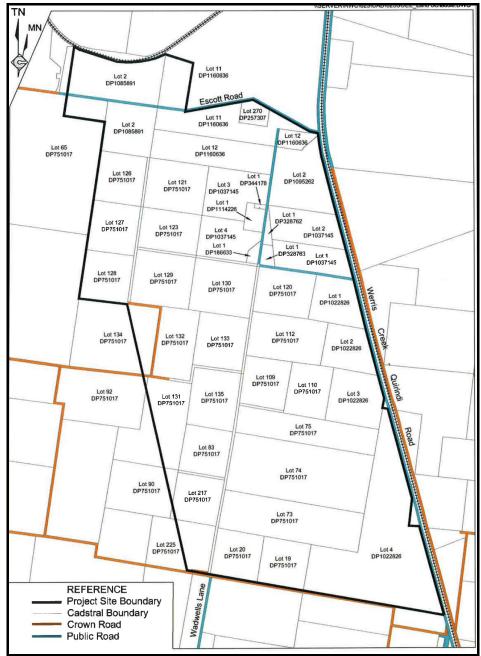
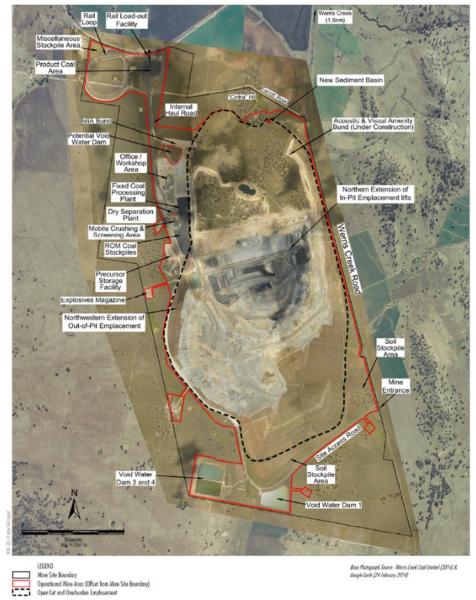


Figure 1: Schedule of Land

# APPENDIX 2 PROJECT LAYOUT PLAN



WERRIS CREEK COAL MINE Project Site Layout

Figure 1: Project Site Layout

# APPENDIX 3 NOISE RECEIVER LOCATIONS

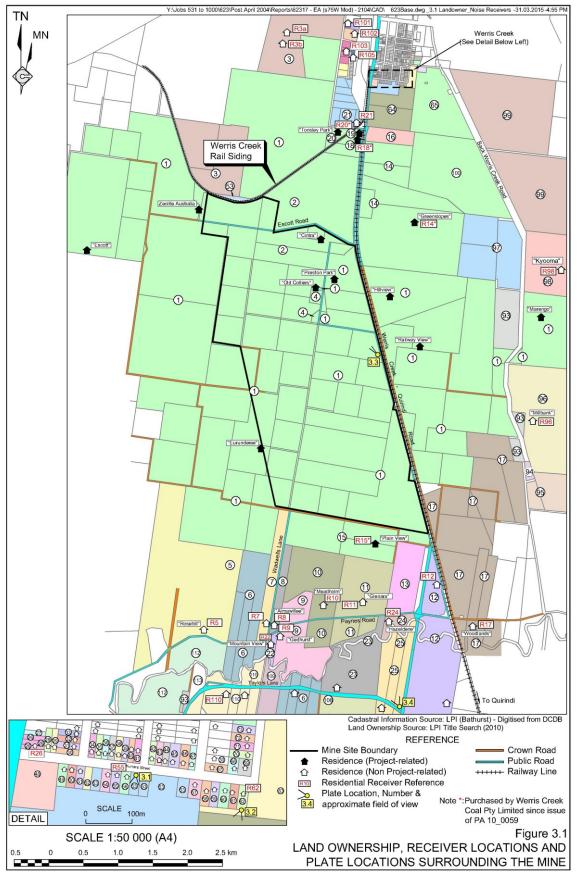


Figure:1 Noise Receiver Locations

# APPENDIX 4 BIODIVERSITY OFFSET STRATEGY

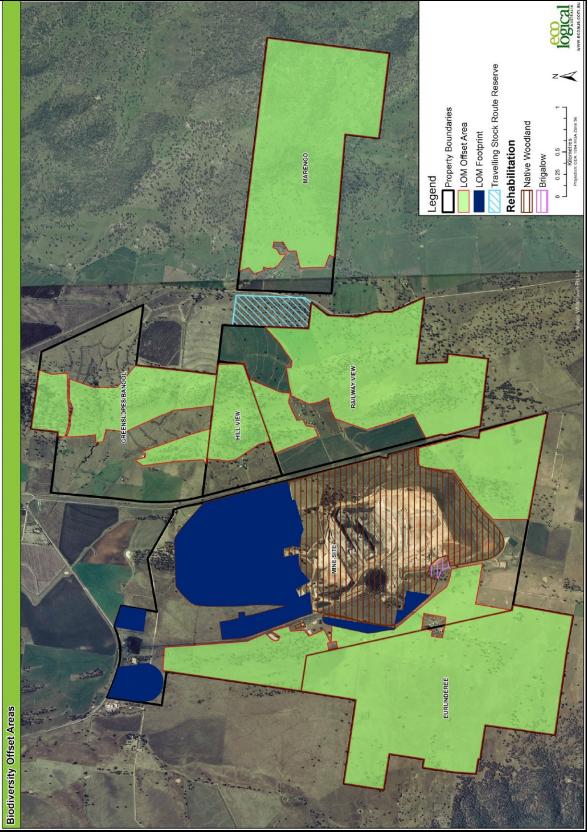


Figure 1: Modified Biodiversity Offset Strategy

APPENDIX 5 CONCEPTUAL FINAL LANDFORM PLAN

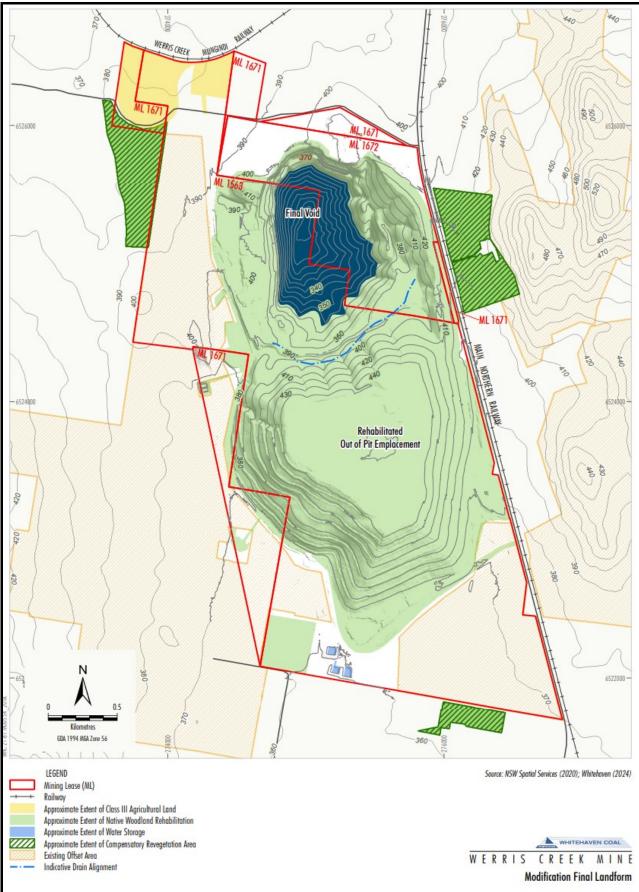


Figure 1: Conceptual Final Landform

# APPENDIX 6 STATEMENT OF COMMITMENTS

Desired Outcome	Action	Timing
	1. Environmental Management System	
A systematic set of documents are in place	1.1 Incorporate the environmental procedures in an on-site management system.	As required
to guide the planning and implementation of all environmental management strategies.	<ul> <li>1.2 Implement the following management plans; <ul> <li>Mining Operations Plan (Rehabilitation Management Plan)</li> <li>Heritage Management Plan</li> <li>Site Water Management Plan</li> <li>Noise Management Plan</li> <li>Blast Management Plan</li> <li>Air Quality and Greenhouse Gas Management Plan</li> <li>Biodiversity and Offset Management Plan</li> <li>Waste and Hydrocarbon Management Plan</li> </ul> </li> <li>1.3 Incorporate relevant environmental data / information in Annual Environmental</li> </ul>	Ongoing
	Management Reports.	
	2. Groundwater	
Effective management of the potential contamination and/or	2.1 Implement impact mitigation measures in accordance with an approved Site Water Management Plan.	As defined by the Site Water Management Plan
reduction in availability of groundwater resources.	2.2 Undertake groundwater monitoring in accordance an approved Site Water Management Plan.	As defined by the Site Water Management Plan
	2.3 Implement additional assessment, land owner notification and contingency or compensatory measures in accordance with an approved Site Water Management Plan.	As defined by the approved Site Water management Plan
Prevent Accumulation of void water within the final landform which may impact on final land form and land use.	2.4 Backfill overburden into the final void above the equilibrium water level.	Following the cessation of mining
	3. Surface Water	
Effective management of the potential contamination and/or reduction in availability of surface water resources.	3.1 Construct and maintain surface water management infrastructure of the Mine in accordance with an approved <i>Site Water</i> <i>Management Plan</i> .	Ongoing
	3.2 Implement impact mitigation measures in accordance with an approved <i>Site Water Management Plan.</i>	As defined by the Site Water Management Plan
	3.3 Undertake surface water monitoring in accordance an approved Site Water Management Plan.	As defined by the Site Water Management Plan

Desired Outcome	Outcome Action			
Prevention of void water discharge off site.	3.4	Operate void water dams with sufficient freeboard to prevent discharge during high rainfall events.	Ongoing	
	3.5	Complete an irrigation assessment for specific irrigation campaigns in accordance with EPA requirements.	Prior to commencement of off-site irrigation	
	3.6	Provide each irrigation assessment to the EPA for review and approval.	Prior to commencement of off-site irrigation	
		4. Biodiversity		
Avoid, minimise, mitigate or offset impacts (in that hierarchical order) on native vegetation	4.1	Implement the impact avoidance, minimisation, mitigation and offset measures of an approved Biodiversity Offset Strategy and Biodiversity and Offset Management Plan (BOMP) for the Mine in consultation with the BCS, DPE and DoE.	Ongoing	
(including the two identified EECs), native fauna (including	4.2	Include detail on the following activities in the BOMP.	As defined within the BOMP	
threatened species) and their habitat.		• Identification and demarcation of areas to be cleared.		
		Retention of felled trees for subsequent use     during rehabilitation activities		
		<ul> <li>Identification of biological resources within the disturbance area including habitat resources such as hollows, stag trees and</li> </ul>		
		coarse woody debris, and the availability of endemic seed.		
		<ul><li>Seed collection.</li><li>Monitoring and inspection programs.</li></ul>		
		<ul> <li>Noxious weed management.</li> </ul>		
Rehabilitate disturbed areas to create a final landform that maintains or improves biodiversity values of the Mine Site.	4.3	Complete rehabilitation in accordance with an approved Rehabilitation Management Plan (RMP) or Mining Operations Plan (MOP).	Ongoing	
		5. Heritage		
Maintain Aboriginal heritage values on site.	5.1	Implement the Heritage Management Plan for the Mine in consultation with Heritage NSW and DPE.	Ongoing	
	5.2	Relocate the Narrawolga Axe Grinding Grooves to the Willow Tree Visitor Information Centre (at Willow Tree), as nominated in the Mine Heritage Management Plan, and in accordance with a care agreement transferring the responsibility from Werris Creek Coal to Nungaroo LALC.	Completed 15 April 2015.	
		6. Transport Aspects		
Product haulage by public road is conducted	6.1 6.2	Adhere to the restricted hours of operation. Prevent spillage from the trucks through the	Ongoing Ongoing	
in an appropriate and		continuation of a 'covered load' policy.		

Desired Outcome	Action	1	Timing
safe manner.	6.3	Consult with DPE prior to undertaking any haulage of coal to the Gunnedah CHPP (to confirm compliance with PA 10_0059)	Prior to commencement of haulage to the Gunnedah CHPP
		7. Noise	
Attenuate mining noise sources to ensure compliance with Project Specific Noise Criteria.	7.1	Construct an Acoustic and Visual Amenity Bund at the northern extent of mining operations. Implement noise mitigation and	Prior to mining through the "Old Colliery" Hill Ongoing
		management measures in accordance with an approved Noise Management Plan (NMP).	
	7.3	Employ a dedicated Noise Control Operator (NCO) to continually monitor real time noise levels and inform the Open Cut Examiner (OCE) if the dominant noise source is mining.	Ongoing
	7.4	Modify or partially suspend mining operations to achieve the nominated noise criteria when elevated noise levels a result of mining noise.	On advice from NCO of elevated mining noise
Monitor and manage noise generated by the LOM Project	7.5	Implement noise monitoring in accordance with an approved NMP for the Mine.	As defined within the NMP
		8. Blasting	
Minimise impacts from blasting on surrounding receptors and infrastructure.	8.1	Undertake blasting in accordance with an approved Blast Management Plan (BMP).	Ongoing
	8.2	Continue to monitor blasting impacts in accordance with BMP.	All blasts
		9. Air Quality	
Minimise impacts to air quality relating to the Project.	9.1	Undertake all surface disturbance, mining, processing, transportation and other air emissions activities in accordance with an approved Air Quality and Greenhouse Gas Management Plan (AQGHGMP) for the Mine.	Ongoing
Monitor and manage dust emissions generated by the LOM Project.	9.2	Undertake air quality monitoring in accordance with an approved AQGHGMP for the Mine.	As defined within the AQGHGMP
		10. Visibility	
Screen the operation visually from the surrounding local area.	10.1	Construct an Acoustic and Visual Amenity Bund at the northern extent of mining operations.	Prior to mining through the "Old Colliery" Hill
	10.2	Maintain screening vegetation and constructed landforms in accordance with an approved RMP (or MOP).	Ongoing
	10.3	Continue to position and direct floodlights visible offsite to not shine above horizontal and generally orientated in a westerly direction away from Werris Creek Road and adjacent	During night-time operations

Desired Outcome	Actio	n	Timing
		communities.	
	10.4	Ensure fixed lights visible from offsite locations will comply with Australian Standard AS4282 (INT) 1995 – Control of Obtrusive Effects of Outdoor Lighting	During night-time operations
	10.5	Maintain a lighting camera located adjacent to R62 on southern edge of Werris Creek orientated towards the Mine.	Ongoing (or until advised by resident)
	10.6	Maintain the Mine Site in a clean and tidy condition at all times.	Ongoing
1	1. Soi	Is, Land Capability and Agricultural Suitability	
Create a final landform that is safe, stable and is amenable to a combination of agricultural and native flora/fauna conservation activities.	11.1	Undertake final landform construction and rehabilitation in accordance with an approved RMP or MOP.	Ongoing
		12. Waste	
Manage waste appropriately on site.	12.1	Prepare and implement waste management activities in accordance with an approved Waste and Hydrocarbon Management Plan (WHMP).	Ongoing
		13. Hazards	
Manage bushfire hazards appropriately.	13.1	Prepare and implement fire prevention, management and suppression measures in accordance with a Fire Management Strategy which forms part of an approved BOMP.	Ongoing.
The storage and handling of hazardous materials is appropriately managed.	13.2	Prepare and implement hydrocarbon management activities in accordance with an approved WHMP.	Ongoing
		14. Community Contributions	
Provide for ongoing support to the Werris Creek local community and Liverpool Plains Shire Council.	14.1	Maintain the Community Consultative Committee or similar and include local community representatives.	Ongoing
	14.2	Complete and distribute regular newsletters regarding project progress and operations.	Ongoing
	14.3	Continue to provide funding towards maintenance of Taylors Lane through Section 94 contributions.	Ongoing
	14.4	Implement the Community Enhancement Fund with the Liverpool Plains Shire Council and Community Consultative Committee.	Ongoing