## **Project Approval**

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

As delegate of the Minister for Planning and Infrastructure, the Planning Assessment Commission of New South Wales (the Commission) approves the project application referred to in Schedule 1, subject to the conditions in Schedules 2 to 6.

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.

Member of the Commission	Member of the Commission	
SIGNED 2 NOVEMBER 2011 Sydney	2011	
	SCHEDULE 1	
Application Number:	09_0161	
Applicant:	Wollongong Coal Limited	
Consent Authority:	Minister for Planning and Infrastructure	
Land:	See Appendix 1	
Development:	NRE Wongawilli Colliery – Nebo Area Project	

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

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

## **SUMMARY OF MODIFICATIONS**

Application Number	Determination Date	Decider	Modification Description
MP09_0161-Mod-1	27 November 2015	Planning Assessment Commission	Extension of time
MP09_0161-Mod-2	13 April 2022	Executive Director Energy, Resources and Industry Assessments	Modification of North West Mains Development and extension of time



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#### **DEFINITIONS**

Adaptive management Adaptive management includes monitoring subsidence effects and impacts

and, based on the results, modifying the mining plan as mining proceeds to ensure that the effects, impacts and/or associated environmental consequences remain within predicted and/or designated ranges and in

compliance with the conditions of this consent

Annual Review The review required by condition 3 of schedule 6

Applicant Wollongong Coal Limited (formerly Gujarat NRE FCGL Pty Ltd), or any person

carrying out any development under this consent

BCA Building Code of Australia

BC Act Biodiversity Conservation Act 2016

BCS Biodiversity Conservation and Science Directorate within the

Department

Built features Includes any building or work erected or constructed on land, and includes

dwellings and infrastructure such as any formed road, street, path, walk, or driveway; any pipeline, water, sewer, telephone, gas or other service main

CCC Community Consultative Committee

Cliffs Continuous rock face, including overhangs, having a minimum height of 10

metres and a minimum slope of 2 to 1, ie having a minimum angle to the

horizontal of 63°

Conditions of this consent Conditions contained in schedules 2 to 6 inclusive

Construction The demolition of buildings or works, carrying out of works and erection of

buildings covered by this consent

Council Wollongong City Council

Day The period from 7am to 6pm on Monday to Saturday, and 8am to 6pm on

Sundays and Public Holidays

DepartmentDepartment of Planning and EnvironmentDevelopmentThe development as described in the EADPE WaterThe Water Group within the Department

EA Environmental assessment titled NRE Wongawilli Colliery Nebo Area

Environmental Assessment, Volumes 1-2, dated October 2010, including the

associated response to submissions

Environmental consequences The environmental consequences of subsidence impacts, including: damage to

infrastructure, buildings and residential dwellings; loss of surface flows to the

subsurface; loss of standing pools; adverse water quality impacts;

development of iron bacterial mats; cliff falls; rock falls; damage to Aboriginal

heritage sites; impacts on aquatic ecology; and ponding Environmental Planning and Assessment Act 1979 Environmental Planning and Assessment Regulation 2021

EP&A Regulation Environmental Planning and Asses
EPA Environment Protection Authority

EPL Environment Protection Licence issued under the POEO Act

Evening The period from 6pm to 10pm

EP&A Act

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

to implement

First workings Development of main headings, roadways, cut throughs and the like, provided

that such workings are long-term stable and do not generate more than 20 mm

of vertical subsidence at the surface

Heritage NSW, Department of Premier and Cabinet

Incident A set of circumstances that causes or threatens to cause material harm to the

environment, and/or breaches or exceeds the limits or performance

measures/criteria in this consent

Land In general, the definition of land is consistent with the definition in the EP&A

Act. However, in relation to the noise and air quality conditions in schedule 4 it means 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 consent

Material harm to the environment Harm to the environment is material if it involves actual or potential harm to the health or safety of human beings or to ecosystems that is not trivial

EG Department of Regional NSW – Mining, Exploration and Geoscience

Mining operations

The carrying out of mining, including first workings, processing, stockpilin

The carrying out of mining, including first workings, processing, stockpiling and transportation of coal on the site and the associated removal, storage and/or

emplacement of vegetation, topsoil, overburden and reject material

Minor Small in quantity, size and degree given the relative context

Mitigation Activities associated with reducing the impacts of the development prior to or

during those impacts occurring

Modification 1 Modification Application 09 0161 MOD 1, accompanying letter report from

Wollongong Coal Limited dated 9 June 2015, including the associated

response to submissions

Modification 2 Modification Report titled Wongawilli Colliery Modification Report dated

> December 2020 as modified by the Submissions Report titled Wongawilli Colliery Modification 2 - North West Mains Development Submissions Report dated September 2021 and additional information responses dated September

2021, November 2021, December 2021 and January 2022

Small and unimportant, such as to be not worth considering Negligible

The period from 10pm to 7am on Monday to Saturday, and 10pm to 8am on Night

Sundays and Public Holidays

**NSW Natural Resources Access Regulator NRAR** 

Protection of the Environment Operations Act 1997 POEO Act

Privately-owned land Land that is not owned by a public agency, or a mining company (or its

subsidiary)

Reasonable Reasonable relates to the application of judgement in arriving at a decision,

taking into account; mitigation benefits, cost of mitigation versus benefits

provided, community views and the nature and extent of potential

improvements

Reasonable costs The costs agreed between the Department and the Applicant for obtaining

> independent experts to review the adequacy of any aspects of the extraction plan, or where such costs cannot be agreed, the costs determined by a dispute

resolution process

Rehabilitation The treatment or management of land disturbed by the development for the

purpose of establishing a safe, stable and non-polluting environment

Activities associated with partially or fully repairing or rehabilitating the impacts Remediation

of the development or controlling the environmental consequences of this

impact

ROM coal Run-of-mine coal

Department of Regional NSW - Resources Regulator **RR SA NSW** 

Subsidence Advisory NSW

Safe, serviceable & repairable Safe means no danger to users who are present, serviceable means available

for its intended use, and repairable means damaged components can be

repaired economically

Extraction of coal from longwall panels, mini-wall panels or pillar extraction Second workings

Secretary Planning Secretary of the Department, or nominee

Site The land referred to in schedule 1, and listed in Appendix 1

The Applicant's commitments in Appendix 3 Statement of commitments

An area of land having a gradient between 1 in 3 (33% or 18.3°) and 2 in 1 Steep slopes

(200% or 63.4°)

Subsidence The totality of subsidence effects, subsidence impacts and environmental

consequences of subsidence impacts

Subsidence effects Deformation of the ground mass due to mining, including all mining-induced

ground movements, such as vertical and horizontal displacement, tilt, strain

and curvature

Subsidence impacts Physical changes to the ground and its surface caused by subsidence effects. including tensile and shear cracking of the rock mass, localised buckling of

strata caused by valley closure and upsidence and surface depressions or

troughs

The Wongawilli and Avondale pit top areas; all ventilation shaft sites; sites Surface facilities sites

used for gas drainage or for other mining purposes infrastructure; and any other site subject to existing or proposed surface disturbance associated with

the development Transport for NSW

The State Water Corporation of NSW WaterNSW

**TFNSW** 

## SCHEDULE 2 ADMINISTRATIVE CONDITIONS

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

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

#### **TERMS OF CONSENT**

- 2. The Applicant must carry out the development:
  - (a) generally in accordance with the EA, Modification 1 and Modification 2;
  - (b) in accordance with the development layout and the Statement of Commitments; and
  - (c) in accordance with the conditions of this consent.

#### Notes:

- The development layout is shown in Appendix 2.
- The statement of commitments is reproduced in Appendix 3.
- The Department notes that approval of the Western Driveage component of the development does not indicate or imply any approval of future mining in the Western Area (as defined in the EA), which will be subject to a separate planning process and full merit assessment.
- If there is any inconsistency between the above documents, the more recent document shall prevail to the
  extent of the inconsistency. However, the conditions of this consent shall prevail to the extent of any
  inconsistency.
- 4. The Applicant must comply with any reasonable requirement/s of the Secretary arising from the Department's assessment of:
  - (a) any strategies, plans, programs, reviews, audits, reports or correspondence that are submitted in accordance with this consent:
  - (b) any reviews, reports or audits undertaken or commissioned by the Department regarding compliance with this consent; and
  - (c) the implementation of any actions or measures contained in these documents.

#### **LIMITS ON CONSENT**

#### **Mining Operations**

5. Mining operations for the development may take place until 30 June 2027.

Note: Under this consent, the Applicant is required to rehabilitate the site and perform additional undertakings to the satisfaction of either the Secretary or the RR. Consequently this consent will continue to apply in all other respects other than the right to conduct mining operations until the rehabilitation of the site and these additional undertakings have been carried out satisfactorily.

- 5A. Underground mining operations may only be carried out within the boundaries of the area covered by the approved mine plan shown in Appendix 2.
- 5B. The Applicant must limit the coal extraction method utilised for the development to first workings only and must not undertake second workings.

### **Coal Production & Transport**

- The Applicant must:
  - (a) not transport coal from the site by road (except in an emergency situation and with the prior approval of the Secretary in consultation with Council);
  - restrict coal processing and transport from the site to a maximum of 486,000 tonnes of ROM coal over the remaining life of this consent; and
  - (c) restrict train movements to/from the site to a maximum of (except with the prior approval of the Secretary) 4 train movements (maximum weekly rolling average) a day.

Note: For the purposes of this condition each train entering and exiting the site is classified as 2 train movements; a day refers to the 24 hours from midnight to midnight the next day.

#### **Hours of Operation**

7. The Applicant must restrict the following activities to between the hours of 7am to 6pm Monday to Friday and 8am to 4pm Saturday, unless the Secretary agrees otherwise:

- (a) operation of the lower pit top, including the operation of plant or equipment, the conveyance of coal from the upper pit top to lower pit top, loading/unloading to/from the coal stockpile and coal storage bins and train loading;
- (b) train movements on the Wongawilli rail spur; and
- (c) construction and demolition.

Note: Underground mining operations, and other surface facilities operation may be undertaken at any time.

#### SURRENDER OF CONSENTS AND APPROVALS

- 8. Within 6 months of this consent, or as otherwise agreed by the Secretary, the Applicant must surrender all existing development consents and project approvals for mining operations relied on by the Applicant for the site (other than this consent) in accordance with Sections 75YA and 104A of the EP&A Act.
  - Note: This requirement does not extend to the surrender of construction and occupation certificates for existing and proposed building works under Part 4A of the EP&A Act. Surrender of a consent or approval should not be understood as implying that works legally constructed under a valid consent or approval can no longer be legally maintained or used.
- 9. Prior to the surrender of these consents and/or approvals, the conditions of this consent (including any notes) shall prevail to the extent of any inconsistency with the conditions of these consents and/or approvals.

#### STRUCTURAL ADEQUACY

- 10. The Applicant must ensure that all new buildings and structures, and any alterations or additions to existing buildings and structure, that are part of the development are constructed in accordance with:
  - (a) the relevant requirements of the BCA; and
  - (b) any additional requirements of the SA NSW where the building or structure is located on land within declared Mine Subsidence Districts.

#### Notes:

- Under Part 4A of the EP&A Act, the Applicant is required to obtain construction and occupation certificates for the proposed building works.
- deleted.
- Under the Coal Mine Subsidence Compensation Act 2017, the Applicant is required to obtain SA NSW's approval before constructing any improvements within a Mine Subsidence District.

#### **DEMOLITION**

11. The Applicant must ensure that all demolition work 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 Applicant must ensure that all plant and equipment used at the site is:
  - (a) maintained in a proper and efficient condition; and
  - (b) operated in a proper and efficient manner.
- 12A. The Applicant must not operate a crusher, sizer or screen at the surface within the surface facilities sites.

#### STAGED SUBMISSION OF STRATEGIES, PLANS OR PROGRAMS

13. With the approval of the Secretary, the Applicant may submit any strategies, plans or programs required by this consent on a progressive basis.

Note: The conditions of this consent require certain strategies, plans, and programs to be prepared for the development. They also require these documents to be reviewed and audited on a regular basis to ensure they remain effective. However, in some instances, it will not be necessary or practicable to prepare these documents for the whole development at any one time; particularly as these documents are intended to be dynamic and improved over time. Consequently, the documents may be prepared and implemented on a progressive basis. In doing this however, the Applicant will need to demonstrate that it has suitable documents in place to manage the existing operations of the development.

#### PROTECTION OF PUBLIC INFRASTRUCTURE

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

Note: This condition does not apply to any damage to public infrastructure subject to compensation payable under the Coal Mine Subsidence Compensation Act 2017, or to damage to roads caused as a result of general road usage.

#### **RELOCATION OF SURFACE INFRASTRUCTURE**

15. Within nine months of the date of approval of Modification 2, or as otherwise agreed by the Secretary, the Applicant must relocate the existing crusher, sizer and screen underground, as described in Modification 2, or remove this infrastructure from the site.



## SCHEDULE 3 SPECIFIC ENVIRONMENTAL CONDITIONS – UNDERGROUND MINING

#### **SUBSIDENCE**

#### **Performance Measures**

 The Applicant must ensure that the development does not cause any exceedances of the performance measures in Table 1, to the satisfaction of the Secretary.

Table 1: Subsidence Impact Performance Measures

Table 1: Subsidence Impact Performance Measures	
Water Resources	
Catchment yield to the Upper Cordeaux	Negligible reduction to the quality or quantity of water
Reservoirs (No. 1 and No. 2) and Avon	resources reaching the reservoirs
Reservoir	
	No connective cracking between the surface and the
	mine
Upper Cordeaux Reservoirs (No. 1 and No.	Negligible leakage from the reservoirs
2) and Avon Reservoir	
	Negligible reduction in the water quality of reservoirs
Watercourses	
Wattle Creek, Little Wattle Tree Creek,	Negligible environmental consequences, including:
Cordeaux River, Gallaghers Creek	<ul> <li>negligible diversion of flows or changes in the</li> </ul>
	natural drainage behaviour of pools;
	<ul> <li>negligible gas releases and iron staining; and</li> </ul>
	negligible increase in water cloudiness
Other watercourses	No greater subsidence impact or environmental
	consequences than predicted in the EA
Upland Swamps (No 22 and No 39)	Negligible environmental consequences including:
	<ul> <li>negligible change in the size of swamps;</li> </ul>
	<ul> <li>negligible change in the functioning of swamps;</li> </ul>
4	negligible change to the composition or distribution
	of species within swamps; and
	negligible drainage of water from swamps, or
	redistribution of water within swamps
Land	
Illawarra Escarpment State Conservation	Negligible environmental consequences.
Area, Metropolitan Special Area	
Cliffs	Negligible environmental consequences (that is
	occasional rockfalls, displacement or dislodgement of
	boulders or slabs, or fracturing, that in total do not
	impact more than 0.5% of the total face area of such
	cliffs within the longwall mining area)
Biodiversity	
Threatened species, threatened	Negligible environmental consequences
populations, or endangered ecological	
communities	
Heritage Features	
Aboriginal heritage sites	Negligible impact or environmental consequence
Non-Aboriginal heritage sites (including	Negligible loss of heritage value
'Historic 1', 'Historic 2' and 'Historic 3')	

#### Notes to Table 1:

- The Applicant will be required to define more detailed performance indicators (including impact assessment criteria) for each of these performance measures in the various management plans that are required under this consent.
- Measurement and/or monitoring of compliance with performance measures and performance indicators is to be undertaken using generally accepted methods that are appropriate to the environment and circumstances in which the feature or characteristic is located. These methods are to be fully described in the relevant management plans. In the event of a dispute over the appropriateness of proposed methods, the Secretary will be the final arbiter.
- In the case of the Illawarra Escarpment State Conservation Area, the Secretary's satisfaction can only be expressed
  following consultation with BCS.
- In the case of the Metropolitan Special Area, the Secretary's satisfaction can only be expressed following consultation with WaterNSW.
- The requirements of this condition only apply to the impacts and consequences of mining operations, construction or demolition undertaken following the date of this consent.
- The Applicant must assess and manage development-related risks to ensure that there are no exceedances
  of the performance measures in Table 1. Any exceedance of these performance measures constitutes a
  breach of this consent and may be subject to penalty or offence provisions under the EP&A Act or EP&A

Regulation, notwithstanding actions taken pursuant to paragraphs (a)-(c) or condition 3 below. Where any exceedance of these performance measures has occurred, the Applicant 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 and submit a report to the Department describing those options and any preferred remediation measures or other course of action; and
- (c) implement remediation measures as directed by the Secretary, to the satisfaction of the Secretary.

#### Offsets

- 3. If the Applicant exceeds the performance measures in Table 1 and the Secretary determines that:
  - (a) it is not reasonable or feasible to remediate the impact or environmental consequence; or
  - remediation measures implemented by the Applicant have failed to satisfactorily remediate the impact or environmental consequence;

then the Applicant must provide a suitable offset to compensate for the impact or environmental consequence, to the satisfaction of the Secretary.

Note: Any offset required under this condition must be proportionate with the significance of the impact or environmental consequence.

4. The Applicant must ensure that the development does not cause any exceedances of the performance measures in Table 2, to the satisfaction of the Secretary.

Table 2: Subsidence Impact Performance Measures

Built Features	
Key public infrastructure: including	Always safe and serviceable.
WaterNSW infrastructure (Avon Dam,	
Upper Cordeaux No.1 and No.2 dams,	Damage that does not affect safety or serviceability
water supply pipelines), high pressure gas	must be fully repairable, and must be fully repaired.
pipelines, electricity transmission lines, fibre	
optic networks	
Gas distribution pipelines, electricity	Always safe.
distribution lines, roads, fire trails, other	
public infrastructure, other built features	Serviceability should be maintained wherever
	practicable. Loss of serviceability must be fully
	compensated.
	Damaga must be fully renaizable, and must be fully
	Damage must be fully repairable, and must be fully
Public Cofety	repaired or else replaced or fully compensated.
Public Safety	
Public safety	No additional risk

#### Notes to Table 2:

- The Applicant will be required to define more detailed performance indicators (including impact assessment criteria) for each of these performance measures in the various management plans that are required under this consent.
- Measurement and/or monitoring of compliance with performance measures and performance indicators is to be
  undertaken using generally accepted methods that are appropriate to the environment and circumstances in which
  the feature or characteristic is located. These methods are to be fully described in the relevant management plans.
  In the event of a dispute over the appropriateness of proposed methods, the Secretary will be the final arbiter.
- The requirements of this condition only apply to the impacts and consequences of mining operations undertaken following the date of this consent.
- Any breach of this condition is taken to be a breach of this consent, and may be subject to penalty or offence
  provisions under the EP&A Act or EP&A Regulation.
- Requirements regarding safety or serviceability do not prevent preventative or mitigatory actions being taken prior to or during mining in order to achieve or maintain these outcomes.
- 5. Any dispute between the Applicant and the owner of any built feature over the interpretation, application or implementation of the performance measures in Table 2 is to be settled by the Secretary, following consultation with SA NSW and the RR. Any decision by the Secretary shall be final and not subject to further dispute resolution under this consent.

#### **First Workings**

6. The Applicant may carry out first workings on site, other than in accordance with an approved Extraction Plan or Subsidence Monitoring Program, provided that RR is satisfied that the first workings are designed to remain long-term stable and non-subsiding, except insofar as they may be impacted by approved second workings.

Note: The intent of this condition is not to require an additional approval for first workings, but to ensure that first workings are built to geotechnical and engineering standards sufficient to ensure long term stability, with zero resulting subsidence impacts.

#### **Dam Safety Management Plan**

- 6A. The Applicant must prepare a Dam Safety Management Plan for the development. The plan must:
  - (a) be prepared by a suitably qualified and experienced person/s;
  - (b) be prepared in consultation with Dam Safety NSW, RR and WaterNSW;
  - (c) be submitted to the Secretary prior to mining operations progressing to within 150 metres of Lake Avon:
  - (d) describe the subsidence monitoring program proposed for mining operations within 150 metres of Lake Avon:
  - (e) describe the risk control measures proposed to identify and manage potential zones of elevated hydraulic conductivity and measure to prevent potential inflows from Lake Avon into the first workings;
  - (f) describe the water monitoring program designed to identify potential inflows from Lake Avon into the first workings;
  - (g) include suitable Trigger Action Response Plans, which contain
    - appropriate triggers to warn of increased risks of mining-related impacts to Lake Avon;
    - specific actions to respond to increasing risk; and
    - adaptive management measures where monitoring indicates the potential for unacceptable mining-related impacts to Lake Avon, and
  - (h) include a contingency plan to prevent or halt inrush.

#### **Subsidence Monitoring Program**

- 6B. The Applicant must prepare and implement a Subsidence Monitoring Program. The program must:
  - (a) be prepared by a suitably qualified and experienced person who appointment has been endorsed by the Secretary:
  - (b) be approved by the Secretary prior to the recommencement of mining operations under Modification 2;
  - (c) be prepared in consultation with the Resources Regulator, Dam Safety NSW and Water NSW;
  - (d) describe the ongoing conventional and non-conventional subsidence monitoring program, which must;
    - · provide for the collection of sufficient baseline data;
    - provide data to assist with the management of the risks associated with subsidence; and
    - validate the subsidence predictions;
  - (e) ensure that mining does not cause greater than 20mm vertical subsidence at the ground surface;
  - f) include suitable Trigger Action Response Plans, which contain:
    - all features in Tables 1 and 2 and appropriate triggers to warn of increased risk of exceedance of any performance measure;
    - specific actions to respond to increasing risk; and
    - adaptive management measures where monitoring indicates the potential for unacceptable mining-related impacts;
  - (g) include a contingency plan that expressly provides for adaptive management where monitoring indicates that there has been an exceedance of any performance measure in Table 1 and Table 2, or where any such exceedance appears likely.

#### **Extraction Plan**

- 7. The Applicant must prepare and implement an Extraction Plan for any second workings on site, to the satisfaction of the Secretary. The plan must:
  - (a) be prepared by suitably qualified and experienced persons whose appointment has been endorsed by the Secretary;
  - (b) be approved by the Secretary before the Applicant carries out any of the second workings covered by the plan;
  - (c) include detailed plans of existing and proposed first and second workings and any associated surface development;
  - (d) provide revised predictions of the conventional and non-conventional subsidence effects, subsidence impacts and environmental consequences of the proposed second workings, incorporating any relevant information obtained since this consent;
  - (e) include detailed performance indicators for each of the performance measures in Tables 1 and 2;

- (f) describe the measures that would be implemented to:
  - ensure compliance with the performance measures in Tables 1 and 2; and
  - manage or remediate subsidence impacts and/or environmental consequences;
- (g) include a contingency plan that expressly provides for adaptive management where monitoring indicates that there has been an exceedance of any performance measure in Tables 1 and 2, or where any such exceedance appears likely;
- (h) include the following to the satisfaction of RR:
  - a subsidence monitoring program to:
    - o provide data to assist with the management of the risks associated with subsidence;
    - o validate the subsidence predictions;
    - o monitor the integrity of the overlying strata, particularly the Cordeaux Crinanite; and
    - analyse the relationship between the predicted and resulting subsidence effects and predicted and resulting impacts under the plan and any ensuing environmental consequences; and
    - o inform the contingency plan and adaptive management process;
  - a coal resource recovery plan that demonstrates effective recovery of the available resource;
  - a Built Features Management Plan, which has been prepared in consultation with the owners
    of such features, to manage the potential impacts and consequences of subsidence on any
    built features:
  - a Public Safety Management Plan to ensure public safety in the mining area; and
  - appropriate revisions to the Rehabilitation Management Plan required under condition 26 of schedule 4; and
- (i) include a:
  - Water Management Plan, which has been prepared in consultation with EPA, WaterNSW and DPE Water, which provides for the management of the potential impacts and/or environmental consequences of the proposed second workings on watercourses and aquifers, including:
    - surface and groundwater impact assessment criteria based on at least 2 years of baseline data, including trigger levels for investigating any potentially adverse impacts on water resources or water quality:
    - o a program to monitor and report groundwater inflows to underground workings; and
    - a program to predict, manage and monitor impacts on any groundwater bores on privately-owned land;
  - Biodiversity Management Plan, which has been prepared in consultation with BCS and MEG, which provides for the management of the potential impacts and/or environmental consequences of the proposed second workings on aquatic and terrestrial flora and fauna, with a specific focus on threatened species, populations and their habitats; endangered ecological communities, and water dependent ecosystems;
  - Land Management Plan, which has been prepared in consultation with any affected public authorities, to manage the potential impacts and/or environmental consequences of the proposed second workings on land in general, with a specific focus on cliffs and steep slopes; and
  - Heritage Management Plan, to manage the potential environmental consequences of the proposed second workings on both Aboriginal and non-Aboriginal heritage sites or values; and
- (j) include a program to collect sufficient baseline data for future Extraction Plans.

Note: An SMP that is substantially consistent with this condition and which is approved by MEG prior to 31 December 2011 is taken to satisfy the requirements of this condition.

- 8. The Applicant must ensure that the management plans required under condition 7(i) above include:
  - (a) an assessment of the potential environmental consequences of the Extraction Plan, incorporating any relevant information that has been obtained since this consent; and
  - (b) a detailed description of the measures that would be implemented to remediate predicted impacts.

#### **Payment of Reasonable Costs**

The Applicant must pay all reasonable costs incurred by the Department to engage suitably qualified, experienced and independent experts to review the adequacy of any aspect of an Extraction Plan or Subsidence Monitoring Program.

# SCHEDULE 4 SPECIFIC ENVIRONMENTAL CONDITIONS – GENERAL

#### NOISE

#### **Noise Criteria**

1. The Applicant must ensure that the noise generated by the development (including train loading and shunting within the yard but excluding train movements on the Wongawilli rail spur) does not exceed the criteria in Table 3 and Table 4 at any residence on privately-owned land or on more than 25 percent of any privately-owned land.

Table 3: Noise Criteria dB(A) – Intrusive Noise Limits – Existing Residences

Location	Day	Evening	Night
Location	LAeq (15 min)	LAeq (15 min)	LAeq (15 min)
R2	41	38	38
R9	41	35	35
R20	47	39	39
R55	40	35	35
R57	40	35	35
R58	40	35	35

Table 4: Noise Criteria dB(A) – Amenity Noise Limits – All Residences

Receiver Area	Day	Evening	Night
Receiver Area	L <sub>Aeq (11 hour)</sub>	L <sub>Aeq</sub> (4 hour)	L <sub>Aeq</sub> (9 hour)
All privately-owned land	60	50	45

Notes to Tables 3 and 4:

- To interpret the locations referred to in Table 3, see Appendix 4.
- Noise generated by the development is to be measured in accordance with the relevant requirements, and exemptions (including certain meteorological conditions), of the NSW Noise Policy for Industry.

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

#### 2. deleted

#### **Rail Noise**

3. The Applicant must ensure that the noise generated by railway activities on the Wongawilli rail spur outside of the yard limits (excluding any train shunting or when loading is taking place) does not exceed the criteria in Table 6 at any existing residence on privately-owned land.

Table 6: Noise Criteria dB(A) – Rail Noise Limits – Existing residences

Receiver Area	Day	Evening	Night
Neceiver Area	LAeq (period)	LAeq (period)	LAeq (period)
All existing residential receivers	60	50	45

Note: Noise generated by the railway activities is to be measured in accordance with the relevant requirements, and exemptions of the Rail Infrastructure Noise Guideline (EPA 2013).

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

- 4. By the end of July 2013, or other timing as may be agreed by the Secretary, the Applicant must use its best endeavours to ensure that its rail spur is only accessed by:
  - (a) locomotives that are approved to operate on the NSW rail network in accordance with noise limits L6.1 to L6.4 in RailCorp's EPL (No. 12208); and
  - (b) trains comprising no less than 30 wagons.
- The Applicant must restrict train speeds on the Wongawilli rail spur to a maximum of 20 km/h.

#### **Operating Conditions**

- 6. The Applicant must:
  - (a) take all reasonable steps to minimise the construction, operational and rail noise associated with the development, including low frequency noise and other audible characteristics;
  - (b) implement reasonable and feasible noise attenuation measures on all plant and equipment that will operate in noise sensitive areas, and monitors and reports on these measures;
  - (c) monitor and record all major equipment use and make this data readily available at the request of the Department or the EPA;
  - (d) minimise the noise impacts of the development during all meteorological conditions in order to satisfy the noise criteria in Table 3;
  - (e) operate a comprehensive noise management system that uses a combination of meteorological forecasts, predictive noise modelling and real-time monitoring to guide the day to day planning of mining operations and the implementation of adaptive management both proactive and reactive noise mitigation measures to ensure compliance with the relevant conditions of this consent;
  - (f) carry out attended noise monitoring (quarterly or as otherwise agreed with the Secretary) to determine whether the development is complying with the relevant conditions of consent, and
  - (g) regularly assess noise monitoring data and modify and/or stop operations on site to ensure compliance with the relevant conditions of this consent.

#### **Noise Audit**

- 7. The Applicant must prepare and implement a Noise Audit for the development to the satisfaction of the Secretary. The audit must:
  - (a) be prepared by a suitably qualified and experienced expert, whose appointment has been approved by the Secretary;
  - (b) be prepared in consultation with EPA, and be submitted to the Secretary for approval by the end of June 2013:
  - (c) undertake improved background noise monitoring;
  - (d) investigate and evaluate:
    - all reasonable and feasible measures to mitigate operational noise levels to comply with the noise goals in Table 5; and
    - all reasonable and feasible measures to mitigate rail noise associated with the development (eg locomotive use, use of longer trains and 3-pack wagons, track works);
  - (e) review the feasibility of reducing the maximum train movements, particularly at night (see condition 6 of schedule 2), based on the minimum train length required under condition 4 above; and
  - (f) include an action plan to implement the audit recommendations and a protocol for monitoring the effectiveness of these measures.

#### **Noise Mitigation**

- 7A. Within nine months of the date of approval of Modification 2, or as otherwise agreed by the Secretary, the Applicant must complete the installation, construction or procurement of all reasonable and feasible noise mitigation measures identified in the EA, including:
  - (a) augmentation of rail load-out facilities;
  - (b) noise suppression kits for, or procurement of new, dozer and front-end loader; and
  - (c) extension of the existing rail noise barrier as shown in Appendix 2.

#### Noise Management Plan

- 8. The Applicant must prepare and implement a Noise Management Plan for the development to the satisfaction of the Secretary. This plan must:
  - (a) be prepared in consultation with EPA and Council, and submitted to the Secretary for approval within 6 months of this consent;
  - (b) describe the noise mitigation measures that would be implemented to ensure compliance with the relevant conditions of this consent;
  - (c) include a protocol for continual improvement of noise performance, and reporting progress in meeting the noise goals in Table 5:
  - (d) include a protocol for notifying residents of advertised campaigns (see condition 6 of schedule 2); and
  - (e) include a noise monitoring program that:
    - uses a combination of attended and unattended monitoring to evaluate the performance of the development; and
    - includes a protocol for determining exceedances of the relevant conditions of this consent.

#### **AIR QUALITY & GREENHOUSE GAS**

#### Odour

9. The Applicant must ensure that no offensive odours are emitted from the site, as defined under the POEO Act, unless otherwise authorised by an EPL.

#### **Greenhouse Gas Emissions**

10. The Applicant must implement all reasonable and feasible measures to minimise the release of greenhouse gas emissions from the site to the satisfaction of the Secretary.

Note: This condition does not extend to Scope 3 emissions, as defined in the National Greenhouse Energy Reporting Guidelines.

#### **Air Quality Criteria**

11. The Applicant must implement all reasonable and feasible mitigation measures to ensure that the particulate emissions generated by the development do not exceed the criteria listed in Tables 7, 8 and 9 at any residence on privately-owned land or on more than 25 percent of any privately-owned land.

Table 7: Long term criteria for particulate matter

Pollutant	Averaging period	<sup>d</sup> Criterion
Total suspended particulate (TSP) matter	Annual	<sup>a</sup> 90 μg/m <sup>3</sup>
Particulate matter < 10 µm (PM <sub>10</sub> )	Annual	<sup>a</sup> 25 μg/m <sup>3</sup>

Table 8: 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/m <sup>3</sup>

Table 9: 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/m <sup>2</sup> /month

Notes to Tables 7-9:

#### **Air Quality Acquisition Criteria**

12. If the particulate matter emissions generated by the development exceed the criteria in Tables 10, 11, and 12 on a systematic basis 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 Applicant must acquire the land in accordance with the procedures in conditions 4-5 of schedule 5.

Table 10: Long term 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> 25 μg/m <sup>3</sup>

<sup>&</sup>lt;sup>a</sup> Total impact (ie incremental increase in concentrations due to the development plus background concentrations due to other sources):

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

<sup>&</sup>lt;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

<sup>&</sup>lt;sup>d</sup> Excludes extraordinary events such as bushfires, prescribed burning, dust storms, sea fog, fire incidents, illegal activities or any other activity agree to by the Secretary in consultation with EPA.

Table 11: Short term acquisition criteria for particulate matter

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

Table 12: Long term acquisition criteria for deposited dust

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

Notes to Tables 10-12:

#### **Operating Conditions**

- 13. The Applicant must:
  - implement best practice air quality management, including all reasonable and feasible measures to minimise off-site odour, fume and dust emissions generated by the development, including from any spontaneous combustion on site,
  - (b) minimise any visible air pollution generated by the development; and
  - (c) regularly assess the real-time air quality monitoring and meteorological forecasting data, and relocate, modify and/or suspend operations to ensure compliance with the relevant conditions of this consent; to the satisfaction of the Secretary.

#### Air Quality & Greenhouse Gas Management Plan

- 14. The Applicant must prepare and implement a detailed Air Quality & Greenhouse Gas Management Plan for the development to the satisfaction of the Secretary. This plan must:
  - (a) be prepared in consultation with BCS and EPA, and submitted to the Secretary for approval within 6
    months of this consent;
  - (b) describe the measures that would be implemented to ensure compliance with the relevant conditions of this consent, 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:
    - ensure best practice management of greenhouse gas emissions is being employed at the site in respect of minimising greenhouse gas emissions and improve energy efficiency;
    - reduce or offset greenhouse gas emissions by four per cent per year from 2022 to 2027; and
    - monitor and report on the development's Scope 1 and Scope 2 greenhouse gas emissions.
  - (d) include an air quality monitoring program that:
    - uses a combination of real-time monitors and supplementary monitors to evaluate the performance of the development; and
    - includes a protocol for determining exceedances with the relevant conditions of this consent.

#### **METEOROLOGICAL MONITORING**

- 15. During the life of the development, the Applicant must 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 Noise Policy for Industry*, or as otherwise approved by EPA.

#### **SOIL & WATER**

#### **Water Licences**

16. The Applicant must ensure that it has sufficient water for all stages of the development, and if necessary, adjust the scale of mining operations to match its available water supply, to the satisfaction of the Secretary.

<sup>&</sup>lt;sup>a</sup> Total impact (ie incremental increase in concentrations due to the development plus background concentrations due to other sources):

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

<sup>&</sup>lt;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

<sup>&</sup>lt;sup>d</sup> Excludes extraordinary events such as bushfires, prescribed burning, dust storms, sea fog, fire incidents, illegal activities or any other activity agree to by the Secretary in consultation with EPA.

Note: The Applicant is required to obtain all necessary water licences and approvals for the development under the Water Act 1912 and/or Water Management Act 2000.

#### **Baseflow Offsets**

17. The Applicant must offset the loss of any baseflow to watercourses caused by the development to the satisfaction of the Secretary. This condition does not apply if the Secretary subsequently determines that the loss of baseflow is negligible.

Note: Offsets for long-term losses should be provided via the retirement of adequate water entitlements to account for the loss attributable to the development.

#### **Compensatory Water Supply**

18. The Applicant must provide a compensatory water supply to any landowner of privately-owned land whose water entitlements are adversely impacted (other than an impact that is negligible) as a result of the development, in consultation with DPE Water, and to the satisfaction of the Secretary.

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

If the Applicant 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 Secretary for resolution.

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

#### **Surface Water Discharges**

19. The Applicant must ensure that all surface water discharges from the site comply with the discharge limits (both volume and quality) set for the development in any EPL.

#### Water Management Plan

- 20. The Applicant must prepare and implement a Water Management Plan for the development to the satisfaction of the Secretary. This plan must:
  - (a) be prepared by a suitably qualified and experienced person/s;
  - (b) be prepared in consultation with DPE Water, EPA, WaterNSW, Dams Safety NSW and Council;
  - be approved by the Secretary prior to the recommencement of mining operations following approval of Modification 2;
  - (d) describe the measures to be implemented to ensure compliance with the water resources and watercourses performance measures in Table 1:
  - (e) include a:
    - i. Site Water Balance that includes details of:
      - predicted annual inflows to and outflows from the site;
        - sources and security of water supply for the life of the development;
      - water storage capacity;
      - water use and management on the site, including any water transfers or sharing with other industries;
      - licensed discharge points and limits; and
      - reporting procedures, including the annual preparation of an updated site water balance;
    - ii. Salt Balance that includes details of:
      - sources of saline material on the site;
      - saline material and saline water management on the site;
      - measures to minimise discharge of saline water from the site; and
      - reporting procedures, including the annual preparation of an updated salt balance;
    - iii. Erosion and Sediment Control Plan that:
      - is consistent with the requirements of *Managing Urban Stormwater: Soils and Construction Volume 1: Blue Book* (Landcom, 2004) and *Volume 2E: Mines and Quarries* (DECC, 2008);
      - identifies activities that could cause soil erosion, generate sediment or affect flooding;
      - includes a program to review the adequacy of flood protection works, and ensure they comply with the relevant performance measures listed in Table 1;
      - describes measures to minimise soil erosion and the potential for the transport of sediment to downstream waters, and manage flood risk;

- describes the location, function, and capacity of erosion and sediment control structures and flood management structures; and
- describes what measures would be implemented to maintain (and if necessary decommission) the structures over time;

#### iv. Surface Water Management Plan that:

- is consistent with the Guidelines for Controlled Activities on Waterfront Land (NRAR, 2018);
- includes detailed baseline data on surface water flows and quality of watercourses and/or water bodies potentially impacted by the development, including:
  - stream and riparian vegetation health;
  - channel stability (geomorphology); and
  - water supply for other surface water users;
- includes a detailed description of the surface water management system;
- includes detailed plans, design objectives and performance criteria for water management infrastructure, including:
  - water run-off diversions and catch drains;
  - water storages and sediment dams; and
  - reinstated drainage networks on rehabilitated areas of the site;
- includes detailed performance criteria, including trigger levels for identifying and investigating any potentially adverse impacts (or trends) associated with the development, for:
  - downstream surface water flows and quality;
  - channel stability;
  - downstream flooding impacts;
  - stream and riparian vegetation heath;
  - water supply for other water users; and
  - post-mining water pollution from rehabilitated areas of the site;
- includes a program to monitor and evaluate:
  - compliance with the relevant performance measures listed in Table 1 and the performance criteria in this plan;
  - controlled and uncontrolled discharges and seepage/leachate from the site;
  - surface water inflows, outflows and storage volumes, to inform the Site Water Balance; and
  - the effectiveness of the surface water management system and the measures in the Erosion and Sediment Control Plan;
- includes reporting procedures for the results of the monitoring program, including notifying other water users of any elevated results; and
- includes a trigger action response plan to respond to any exceedances of the
  performance measures or performance criteria, and repair, mitigate and/or offset any
  adverse surface water impacts of the development;

### v. Groundwater Management Plan that includes:

- detailed baseline data of groundwater levels, yield and quality for groundwater resources potentially impacted by the development;
- a detailed description of the groundwater management system;
- groundwater performance criteria, including trigger levels for identifying and investigating any potentially adverse groundwater impacts associated with the development, on:
  - regional and local aguifers (alluvial and hardrock):
  - groundwater supply for other water users such as licensed privately-owned groundwater bores; and
  - groundwater dependent ecosystems and swamps;
- a program for confirming zones of elevated hydraulic conductivity and preventing potential inflows from Lake Avon into the first workings;
- a program designed to satisfy Before After Control Impact (BACI) principles to monitor and evaluate:
  - compliance with the relevant performance measures listed in Table 1 and the performance criteria in this plan;
  - the hydrology of swamps in the vicinity of the approved mine plan, and include a minimum of 12 months of baseline monitoring prior to undermining any swamp;
  - water loss/seepage from water storages into the groundwater system;
  - groundwater inflows, outflows and storage volumes, to inform the Site Water Balance:
  - the hydrogeological setting of any nearby alluvial aquifers and the likelihood of any indirect impacts from the development;
  - the effectiveness of the groundwater management system;

- reporting procedures for the results of the monitoring program, including notifying other water users of any elevated results;
- a trigger action response plan to respond to any exceedances of the groundwater performance criteria, and repair, mitigate and/or offset any adverse groundwater impacts of the development; and
- a program to periodically validate the groundwater model for the development, including an independent review of the model every 3 years, and a comparison of monitoring results with modelled predictions; and
- vi. a protocol to report on the measures, monitoring results and performance criteria identified above in the Annual Review referred to in Schedule 6 condition 3.
- 20A. The Applicant must implement the Water Management Plan as approved by the Secretary.

#### **HERITAGE**

#### **Historic Heritage Management Plan**

- 21. The Applicant must prepare and implement a Historic Heritage Management Plan, in respect of all non-Aboriginal cultural heritage items, for the development to the satisfaction of the Secretary. This plan must:
  - (a) be prepared in consultation with Heritage NSW and Council and be submitted to the Secretary for approval within 6 months of the date of approval of Modification 2, or as otherwise agreed with the Secretary;
  - (b) deleted
  - (c) include the following for managing historic heritage on site:
    - a conservation management plan for the Wongawilli Colliery, that balances heritage management with the operational, safety, and rehabilitation requirements of the mine; and
    - a program/procedures for:
      - o photographic and archival recording of potentially affected heritage items;
      - protection and monitoring of heritage items outside the development disturbance area;
         and
      - additional archaeological excavation and/or recording of any significant heritage items requiring demolition.
- 21A. The Applicant must implement the Historic Heritage Management plan as approved by the Secretary.

#### **Aboriginal Cultural Heritage Management Plan**

- 21B. The Applicant must prepare an Aboriginal Cultural Heritage Management Plan for the development. The plan must:
  - (a) be prepared by suitably qualified and experienced persons;
  - (b) be prepared in consultation with Heritage NSW and Registered Aboriginal Parties;
  - (c) be submitted to the Secretary for approval within six months of the date of approval of Modification 2;
  - (d) include the outcome of Aboriginal community consultation that meets the requirements of the Aboriginal Cultural Heritage Consultation Requirements for Proponents (DECCW, 2010);
  - (e) describe the measures to be implemented on the site to:
    - (i) comply with the heritage-related operating conditions of this consent;
    - (ii) ensure all workers receive suitable Aboriginal cultural heritage inductions prior to carrying out any activities which may cause impacts to Aboriginal objects or Aboriginal places, and that suitable records are kept of these inductions;
    - (iii) monitor identified Aboriginal objects and Aboriginal places within the development disturbance area;
    - (iv) manage the discovery of suspected human remains and any new Aboriginal objects or Aboriginal places, including provisions for burials, over the life of the development;
    - (v) maintain and manage reasonable access for relevant Aboriginal stakeholders to Aboriginal objects and Aboriginal places; and
    - (vi) facilitate ongoing consultation and involvement of Registered Aboriginal Parties in the conservation and management of Aboriginal cultural heritage on the site.
- 21C. The Applicant must implement the Aboriginal Cultural Heritage Management Plan approved by the Secretary.

#### **TRANSPORT**

### **Monitoring of Coal Transport**

22. The Applicant must:

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

#### **VISUAL**

### **Visual Amenity and Lighting**

- 23. The Applicant must:
  - implement all reasonable and feasible measures to minimise the visual and off-site lighting impacts of the development;
  - (b) ensure no unshielded outdoor lights shine above the horizontal; and
  - (c) 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.

#### **WASTE**

- 24. The Applicant must:
  - (a) minimise and monitor the waste generated by the development;
  - (b) ensure that the waste generated by the development is appropriately stored, handled and disposed of;
  - (c) manage on-site sewage treatment and disposal in accordance with the requirements of Council; and
  - (d) report on waste management and minimisation in the Annual Review,

to the satisfaction of the Secretary.

#### **BUSHFIRE**

- 25. The Applicant must:
  - (a) ensure that the development is suitably equipped to respond to fires on site; and
  - (b) assist the Rural Fire Service and emergency services as much as possible if there is a fire in the vicinity of the site.

#### **REHABILITATION**

#### **Rehabilitation Objectives**

26. The Applicant 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 documents listed in condition 2(a) of Schedule 2, and comply with the objectives in Table 13.

Table 13: Rehabilitation Objectives

Feature	Objective
Mine site (as a whole)	Safe, stable & non-polluting.
	Final land use compatible with surrounding land uses.
Surface infrastructure	To be decommissioned and removed, unless the RR agrees otherwise
Portals and vent shafts	
	Retain habitat for threatened species (eg bats), where practicable
Watercourses of 2 <sup>nd</sup> order or above Hydraulically and geomorphologically stable	
subject to subsidence impacts	
Cliffs No additional risk to public safety compared to prior to	
Other land affected by the development	Restore ecosystem function, including maintaining or establishing self-sustaining ecosystems comprised of:
	<ul> <li>local native plant species (unless the RR agrees otherwise); and</li> </ul>
	<ul> <li>a landform consistent with the surrounding environment</li> </ul>
Built features damaged by mining	Repair to pre-mining condition or equivalent unless:
operations	<ul> <li>the owner agrees otherwise; or</li> </ul>
	<ul> <li>the damage is fully restored, repaired or compensated under the Mine Subsidence Compensation Act 1961.</li> </ul>

Feature	Objective	
Community	Ensure public safety.	
	Minimise the adverse socio-economic effects associated with mine closure	

#### Notes to Table 13:

- These rehabilitation objectives apply to all subsidence impacts and environmental consequences caused by
  mining taking place after the date of this consent; and to all development surface infrastructure part of the
  development, whether constructed prior to or following the date of this consent.
- Rehabilitation of subsidence impacts and environmental consequences caused by mining which took place prior
  to the date of this consent may be subject to the requirements of other approvals (eg under a mining lease or an
  Subsidence Management Plan approval) or the Applicant's commitments.

#### **Progressive Rehabilitation**

 The Applicant must carry out the rehabilitation of the site progressively, that is, as soon as reasonably practicable following disturbance.

#### **Rehabilitation Management Plan**

- 28. The Applicant must prepare and implement a Rehabilitation Management Plan for the development in accordance with the conditions imposed on the mining lease(s) associated with the development under the *Mining Act 1992*. This plan must:
  - (a) be prepared in consultation with the Department, BCS, MEG, DPE Water, WaterNSW, Council and the CCC;
  - (b) be prepared in accordance with any relevant RR guideline, and be consistent with the rehabilitation objectives in the documents listed in condition 2(a) of Schedule 2 and in Table 13;
  - (c) build, to the maximum extent practicable, on the other management plans required under this consent;and
  - (d) address all aspects of rehabilitation and mine closure, including final land use assessment, rehabilitation objectives, domain objectives, completion criteria and rehabilitation monitoring.

#### Notes:

- The Rehabilitation Management Plan should address all land impacted by the development, whether prior to or following the date of this consent.
- The Rehabilitation Management Plan may be combined with a Mining Operations Plan, or similar plan, required under the mining lease granted for the development.

#### **BIODIVERSITY**

#### **Biodiversity Credit Requirements**

29. Unless otherwise agreed by the Secretary, the Applicant must retire the biodiversity credits specified in Table 14 below, prior to commencing vegetation clearing. The retirement of credits must be carried out in consultation with BCS and in accordance with the Biodiversity Offsets Scheme of the BC Act.

Table 14: Biodiversity credit requirements

Credit Type	Area (ha)	Offset Liability	
Ecosystem Credits			
PCT 906 - Lilly Pilly - Sassafras - Stinging Tree subtropical/warm temperate rainforest on moist fertile lowlands, southern Sydney Basin Bioregion - moderate	0.01	1	
PCT 1245 - Sydney Blue Gum x Bangalay - Lilly Pilly moist forest in gullies and on sheltered slopes, southern Sydney Basin Bioregion - low	0.02	1	
Species Credits			
Large Bent-winged Bat	0.02	1	
Little Bent-winged Bat	0.02	1	

Credit Type	Area (ha)	Offset Liability
Large-eared Pied Bat	0.02	1

#### Notes:

- The credits in Table 14 were calculated in accordance with Biodiversity Assessment Methodology (BAM) (DPIE, 2020).
- The available credit retirement options for the development include purchase and retirement of open market available biodiversity credits, payment into the Biodiversity Conservation Fund or establishment of a Biodiversity Stewardship Site.

#### **Biodiversity Management Plan**

- 30. The Applicant must prepare a Biodiversity Management Plan for the development, to the satisfaction of the Secretary. This plan must:
  - (a) be prepared by a suitably qualified and experienced person/s;
  - (b) be prepared in consultation with BCS;
  - (c) be approved by the Secretary prior to the recommencement of mining operations following approval of Modification 2:
  - (d) establish baseline data for the existing habitat on site, including water table depth, vegetation condition, stream morphology and threatened species habitat;
  - (e) describe the short, medium, and long-term measures to be undertaken to manage the remnant vegetation and habitat on the site;
  - (f) include detailed performance indicators for the biodiversity related performance measures in Table 1
  - (g) describe the measures that would be implemented to:
    - ensure compliance with the biodiversity related performance measures in Table 1;
    - minimise impacts to biodiversity on the site, including any species and communities listed under the BC Act and EPBC Act;
    - protect vegetation and fauna habitat outside of the approved disturbance areas;
    - control weeds, including measures to avoid and mitigate the spread of noxious weeds;
    - control feral pests;
    - control erosion;
    - · control access to vegetated or revegetated areas; and
    - manage bushfire hazards;
  - (h) include a program to monitor and report on the effectiveness of the above measures and identify measures that could be implemented to improve biodiversity outcomes; and
  - (i) include details of who would be responsible for monitoring, reviewing, and implementing the plan.
- 31. The Applicant must implement the Biodiversity Management Plan as approved by the Secretary.

## SCHEDULE 5 ADDITIONAL PROCEDURES

#### **NOTIFICATION OF LANDOWNERS**

- 1. As soon as practicable following obtaining monitoring results showing:
  - (a) an exceedance of the relevant criteria in schedule 4, the Applicant must notify the affected landowner and/or tenants in writing of the exceedance, and provide regular monitoring results to each of these parties until the development is complying with the relevant criteria again; or
  - (b) an exceedance of the relevant criteria in conditions 11 or 12 of schedule 4, the Applicant must 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 and/or existing tenants of the land (including the tenants of any mine-owned land).

#### INDEPENDENT REVIEW

 If an owner of privately-owned land considers the development to be exceeding the relevant criteria in schedule 4, then he/she may ask the Secretary in writing for an independent review of the impacts of the development 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 Applicant must:

- (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 development is complying with the relevant criteria in schedule 4; and
  - if the development 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.
- 3. If the independent review determines that the development is complying with the relevant criteria in schedule 4, then the Applicant may discontinue the independent review with the approval of the Secretary.

If the independent review determines that the development is not complying with the relevant impact assessment criteria in schedule 4, and that the development is primarily responsible for this non-compliance, then the Applicant must:

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

If the independent review determines that any relevant acquisition criteria in schedule 4 are being exceeded and that the development is primarily responsible for this non-compliance, then upon receiving a written request from the landowner, the Applicant must acquire all or part of the landowner's land in accordance with the procedures in conditions 4-5 below.

#### LAND ACQUISITION

- 4. Within 3 months of receiving a written request from a landowner with acquisition rights, the Applicant must 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 development, 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 on the land 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 any additional mitigation measures undertaken by the Applicant on the land:
  - (b) the reasonable costs associated with:
    - relocating within the Wollongong local government area, or to any other local government area determined by the Secretary; and
    - obtaining legal advice and expert advice for determining the acquisition price of the land, and the terms upon which it is to be acquired; and
  - (c) reasonable compensation for any disturbance caused by the land acquisition process.

If the Applicant and landowner cannot agree on the acquisition price of the land and/or the terms upon which the land is to be acquired within 28 days after the Applicant makes its written offer, 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 Applicant must 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, the detailed report disputing the independent valuer's determination, and any other relevant submissions.

Within 14 days of this determination, the Applicant must 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 Applicant's binding written offer under this condition within 6 months of the offer being made, then the Applicant's obligations to acquire the land shall cease, unless the Secretary determines otherwise.

5. The Applicant must 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 this plan at the Office of the Registrar-General.

# SCHEDULE 6 ENVIRONMENTAL MANAGEMENT, REPORTING & AUDITING

#### **ENVIRONMENTAL MANAGEMENT**

#### **Environmental Management Strategy**

- The Applicant must prepare and implement an Environmental Management Strategy for the development to the satisfaction of the Secretary. This strategy must:
  - (a) be submitted to the Secretary for approval within 6 months of this consent;
  - (b) provide the strategic framework for environmental management of the development;
  - (c) identify the statutory approvals that apply to the development;
  - (d) describe the role, responsibility, authority and accountability of all key personnel involved in the environmental management of the development;
  - (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 development;
    - receive, handle, respond to, and record complaints;
    - resolve any disputes that may arise during the course of the development:
    - 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 required to be carried out under the conditions of this
      consent.

#### **Management Plan Requirements**

- 2. The Applicant must 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 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 development or any management measures;
  - 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 development;
    - effectiveness of any management measures (see (c) above);
  - (e) a contingency plan to manage any unpredicted impacts and their consequences and to ensure that ongoing impacts reduce to levels below relevant impact assessment criteria as quickly as possible;
  - a program to investigate and implement ways to improve the environmental performance of the development over time;
  - (g) a protocol for managing and reporting any:
    - incidents;
    - complaints;
    - non-compliances with conditions of this consent and statutory requirements; and
    - exceedances of the impact assessment criteria and/or performance criteria; and
  - (h) a protocol for periodic review of the plan.

Note: The Secretary may waive some of these requirements if they are unnecessary or unwarranted for particular management plans.

#### **Annual Review**

- By the end of September each year (or other such timing as agreed by the Secretary), the Applicant must review the environmental performance of the development to the satisfaction of the Secretary. This review must:
  - (a) describe the works (including any rehabilitation) carried out in the past year, and the works proposed to be carried out over the next year:
  - (b) include a comprehensive review of the monitoring results and complaints records of the development 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 documents listed in condition 2(a) of Schedule 2;

- (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 development;
- (e) identify any discrepancies between the predicted and actual impacts of the development, 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 development.

#### Revision of Strategies, Plans and Programs

- Within 3 months of:
  - (a) the submission of an annual review under condition 3 above;
  - (b) the submission of an incident report under condition 6 below;
  - (c) the submission of an audit report under condition 8 below; and
  - (d) any modification to the conditions of this consent (unless the conditions require otherwise),

the Applicant must review, and if necessary revise, the strategies, plans, and programs required under this consent to the satisfaction of the Secretary.

Where this review leads to revisions in any such document, then within 4 weeks of the review, the revised document must be submitted to the Secretary for approval.

Note: This condition ensures that strategies, plans and programs are updated on a regular basis, and incorporate any recommended measures to improve the environmental performance of the development.

#### **Community Consultative Committee**

5. The Applicant must establish and operate a Community Consultative Committee (CCC) for the development in general accordance with the *Guidelines for Establishing and Operating Community Consultative Committees for Mining Projects* (Department of Planning, 2007, or its latest version), or alternative consultative framework as may be agreed by the Secretary, to the satisfaction of the Secretary. This CCC or alternative framework must be operating within 6 months of this consent.

#### Notes:

- The CCC is an advisory committee. The Department and other relevant agencies are responsible for ensuring that the Applicant complies with this consent.
- In accordance with the guideline, the Committee should be comprised of an independent chair and appropriate representation from the Applicant, Council, recognised environmental groups and the local community.
- In establishing the CCC, the Department will accept the continued representation from existing CCC members.

#### **REPORTING**

#### **Incident Reporting**

6. The Applicant must immediately notify the Department and any other relevant agencies immediately after it becomes aware of an incident. The notification must be in writing via the Major Projects Website and identify the development (including the development application number and name) and set out the location and nature of the incident.

#### **Regular Reporting**

7. Within seven days of becoming aware of a non-compliance, the Applicant must notify the Department of the noncompliance. The notification must be in writing via the Major Projects Website and identify the development (including the development application number and name), set out the condition of this consent that the development is noncompliant with, the way in which it does not comply and the reasons for the noncompliance (if known) and what actions have been, or will be, undertaken to address the non-compliance.

Note: A non-compliance which has been notified as an incident does not need to also be notified as a non-compliance

### INDEPENDENT ENVIRONMENTAL AUDIT

- 8. By the end of June 2013 (or other such timing as agreed by the Secretary), and every 3 years thereafter, unless the Secretary directs otherwise, the Applicant must commission and pay the full cost of an Independent Environmental Audit of the development. This audit must:
  - (a) be conducted by a suitably qualified, experienced and independent team of experts whose appointment has been endorsed by the Secretary;
  - (b) include consultation with the relevant agencies;
  - assess the environmental performance of the development and assess whether it is complying with the requirements in this consent and any relevant EPL or Mining Lease (including any assessment, plan or program required under these approvals);

- (d) review the adequacy of strategies, plans or programs required under the abovementioned approvals;
- (e) recommend measures or actions to improve the environmental performance of the development, 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 any field specified by the Secretary.

9. Within 6 weeks of the completion of this audit, or as otherwise agreed by the Secretary, the Applicant must 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. From the end of December 2011, the Applicant must:
  - (a) make copies of the following publicly available on its website:
    - the documents listed in condition 2(a) of Schedule 2;
    - all current statutory approvals for the development;
    - approved strategies, plans and programs required under the conditions of this consent;
    - a comprehensive summary of the monitoring results of the development, 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 annual reviews of the development;
    - any independent environmental audit, and the Applicant's response to the recommendations in any audit:
    - any other matter required by the Secretary; and
  - (b) keep this information up-to-date,

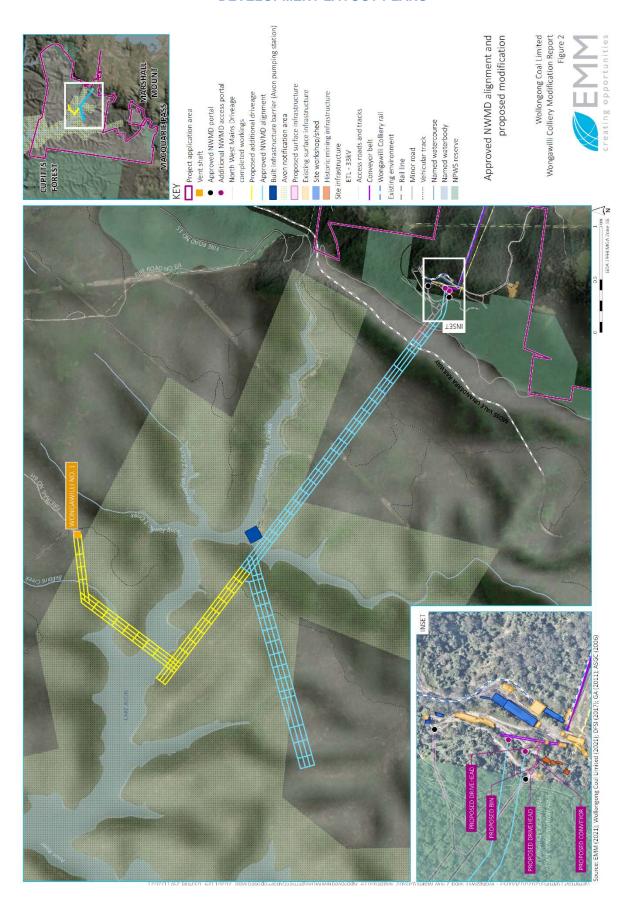
to the satisfaction of the Secretary.

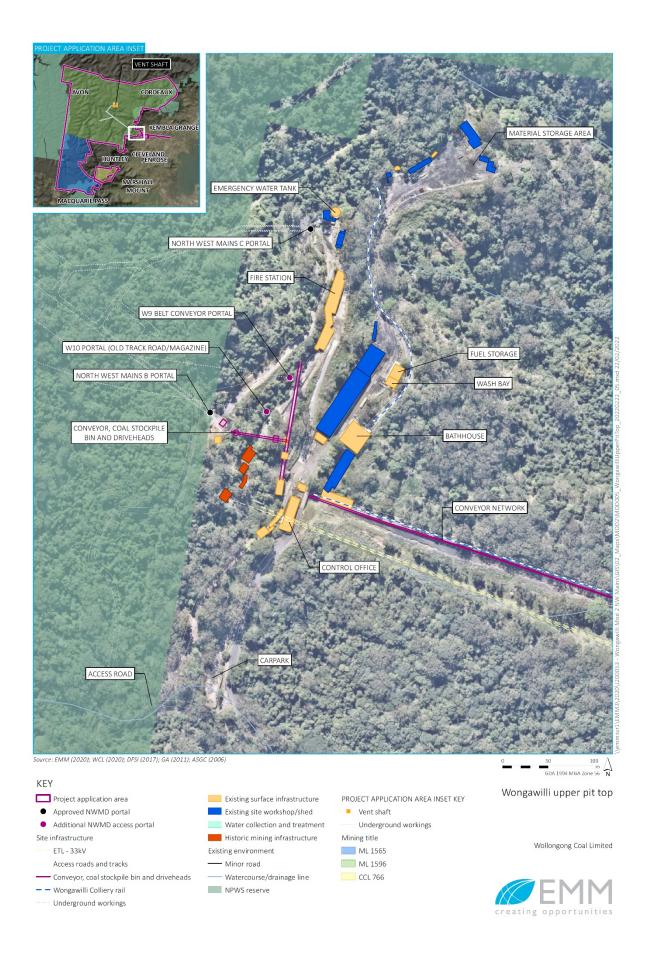
## APPENDIX 1: SCHEDULE OF LAND

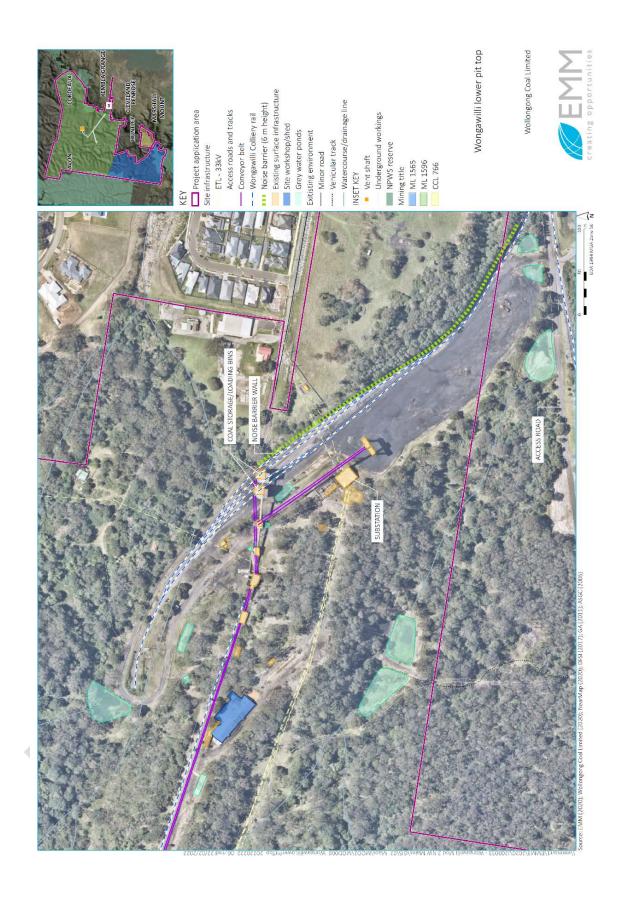
Property ID / Lot		
Number	DP Number	Owner
Wongawilli - ML1596		
Lot 1	321054	Gujarat NRE FCGL Pty Ltd
Lot 1	44325	Gujarat NRE FCGL Pty Ltd
Lot 1	212322	Gujarat NRE FCGL Pty Ltd
Lot 1	216373	Sydney Water
Lot 2	216373	Sydney Water
Lot 3	216373	Lexosu Pty Ltd
Lot 1	255284	Gujarat NRE FCGL Pty Ltd
Lot 2	255284	Gujarat NRE FCGL Pty Ltd
Lot 3	255284	Gujarat NRE FCGL Pty Ltd
Lot 4	255284	Gujarat NRE FCGL Pty Ltd
Lot 5	255284	Gujarat NRE FCGL Pty Ltd
Lot 6	255284	Gujarat NRE FCGL Pty Ltd
Lot 7	255284	Gujarat NRE FCGL Pty Ltd
Lot 14	255284	Gujarat NRE FCGL Pty Ltd
Lot 8	255585	Krishnaswamy & Uma Ramasamy
Lot 12	255285	Endeavour Coal Pty Ltd
Lot 1	383829	Gujarat NRE FCGL Pty Ltd
Lot 14	751278	DECCW (National park)
Lot 16	751278	DECCW (National park)
Lot 171	751278	DECCW (National park)
Lot 196	751278	Sydney Catchment Authority
Part Lot 217	751278	Sydney Catchment Authority
Lot 219	751278	Sydney Catchment Authority
Lot 220	751278	Sydney Catchment Authority
Lot 221	751278	Sydney Catchment Authority
Part Lot 275	751278	Dendrobium Coal Pty Ltd
Lot 295	751278	Springhill Farm Company Pty Ltd
Lot 281	751278	Sydney Catchment Authority
Lot 282	751278	DECCW (National park)
Lot 298	751278	DECCW (National park)
Lot 303	751278	Sydney Catchment Authority
Lot 304	751278	Sydney Catchment Authority
		Barbara Elaine Marshall, Katrina Jane
Lot 2	986776	Marshall, Kim Michele Marshall
		Barbara Elaine Marshall, Katrina Jane
Part Lot 1	986776	Marshall, Kim Michele Marshall
Part Lot 1	1001210	Sydney Catchment Authority
Lot 1	1001212	Sydney Catchment Authority

Property ID / Lot		
Number	DP Number	Owner
Lot 1	1001213	Sydney Catchment Authority
Lot 1	1006994	Sydney Catchment Authority
Lot 301	1087464	Sydney Catchment Authority
		Lawrence John Lawson & Dawn Mary
Lot 1	1033422	Lawson
Part Lot 1	1103666	Dendrobium Coal Pty Ltd
Part Lot 3	1103666	Dendrobium Coal Pty Ltd
Part Lot 1	1103781	Dendrobium Coal Pty Ltd
Lot 2	1103781	Dendrobium Coal Pty Ltd
Lot 3	1103781	Dendrobium Coal Pty Ltd
Part Lot 18	1111734	Dendrobium Coal Pty Ltd
Lot 422	1123956	Gujarat NRE FCGL Pty Ltd
Lot 423	1123956	Gujarat NRE FCGL Pty Ltd
Lot 424	1123956	Gujarat NRE FCGL Pty Ltd
Lot 425	1123956	Gujarat NRE FCGL Pty Ltd
Lot 19	1131362	Sydney Catchment Authority
Lot 1	1132869	The Minister for Public Works
Avondale - ML1565		
Lot 41	751263	Sherwood Hannington
Lot 42	751263	Gerard Kevin McCue
Part Lot 43	751263	Edward Roy Vergan & Kim Pamela Vergan
		Jason Bernard Voorwinden & Esther Olive
Lot 111	751263	Voorwinden
Part Lot 140	751277	Sydney Catchment Authority
Part Lot 181	751277	Sydney Catchment Authority
CCL 766		
Par Lot 27	3083	HTT Huntley Heritage Pty Ltd
Part Lot 111	585959	Craig Duren
Lot 2	751263	The Council of the City of Wollongong
		Angelo Vincenzo Di Martino & Sally
Part Lot 40	751263	Elizabeth Di Martino
Lot 49	751263	HTT Huntley Heritage Pty Ltd
Part Lot 55	751263	HTT Huntley Heritage Pty Ltd
Part Lot 3	852180	Caroline Joan Forbes
Lot 10	867347	HTT Huntley Heritage Pty Ltd
Across all leases		
Lot 32	1138149	Sydney Catchment Authority

# APPENDIX 2: DEVELOPMENT LAYOUT PLANS







## **APPENDIX 3:**

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# APPENDIX 4: RECEIVER LOCATION PLAN

