

# Development Consent

## Section 89E 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 development 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 development.

**Member of the Commission**

**Member of the Commission**

Sydney

2014

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### SCHEDULE 1

**Application Number:**

SSD-4974

**Applicant:**

Wyang Areas Coal Joint Venture

**Consent Authority:**

Minister for Planning and Infrastructure

**Land:**

See Appendix 1

**Development:**

Wallerah 2 Coal Project

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## DEFINITIONS

Approved mine plan	The mine plan for Years 1-28 shown in Figure 1 of Appendix 3
Annual review	The review required by Condition 4 of Schedule 6
Applicant	Wyong Areas Coal Joint Venture, or any other person or persons who rely on this consent to carry out the development that is subject to this consent
ARTC	Australian Rail Track Corporation
BCA	Building Code of Australia
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
Conditions of this consent	Conditions contained in Schedules 2 to 6 inclusive
Construction	The construction works for the development as described in the EIS. Construction work does not include surveys, acquisitions, fencing, investigative drilling or excavation, minor clearing, minor access roads, minor adjustments to services/utilities, works which allow isolation of the site so that access for construction can be provided (including service relocations) and establishing temporary facilities for construction (including for example an office and amenities compounds, temporary water and communications, construction compounds, materials storage compounds, maintenance workshops, testing laboratory or material stockpile areas).
CPI	Consumer Price Index, as published by the Australian Bureau of Statistics
Day	The period from 7am to 6pm on Monday to Saturday, and 8am to 6pm on Sundays and Public Holidays
Department	Department of Planning and Infrastructure
Development	The development described in the EIS
Development area	All land to which the development application applies, including the longwall mining domains and the surface facilities sites, as listed in Appendix 1
Director-General	Director-General of the Department, or delegate
DRE	Division of Resources and Energy within the Department of Trade & Investment, Regional Infrastructure & Services
EIS	Environmental Impact Statement titled <i>Wallarrah 2 Coal Project Environmental Impact Statement</i> , dated April 2013, associated response to issues raised in submissions, titled <i>Wallarrah 2 Coal Project Response to Submissions</i> , dated September 2013, and addition information regarding residual concerns, titled <i>Residual Matters Report</i> , dated October 2013
Environmental consequences	The environmental consequences of subsidence impacts, including: damage to built features; loss of surface water flows to the subsurface; loss of standing pools; slope changes to streams; adverse water quality impacts; development of iron bacterial mats; cliff falls; rock falls; landslides; damage to Aboriginal heritage sites; impacts on aquatic ecology; and ponding.
EPA	Environment Protection Authority
EP&A Act	<i>Environmental Planning and Assessment Act 1979</i>
EP&A Regulation	<i>Environmental Planning and Assessment Regulation 2000</i>
EPL	Environment Protection Licence issued under the POEO Act
Executive Director Mineral Resources	Executive Director Mineral Resources within DRE, or the equivalent role
Evening	The period from 6pm to 10pm
Feasible	Feasible relates to engineering considerations and what is practical to build or to implement
First workings	Development of main headings, longwall gate roads, related cut throughs and the like
Fisheries NSW	Fisheries NSW, within the Department of Primary Industries
Ha	Hectare
Heritage item	An item as defined under the <i>Heritage Act 1977</i> and/or an Aboriginal object or Aboriginal place as defined under the <i>National Parks and Wildlife Act 1974</i>
Incident	A set of circumstances that: <ul style="list-style-type: none"> <li>causes or threatens to cause material harm to the environment; and/or</li> <li>breaches or exceeds the limits or performance measures/criteria in this consent</li> </ul>
Jilliby SCA	Jilliby State Conservation Area
Land	As defined in the EP&A Act, except for where the term is used in the noise and air quality conditions in schedule 4 of this consent 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 consent

Material harm to the environment	Actual or potential harm to the health or safety of human beings or to ecosystems that is not trivial
Mining operations	Includes all extraction, processing, handling, storage and transportation of coal carried out on the site
Minister	Minister for Planning and Infrastructure, or delegate
Minor	Not very large, important or serious
Minor cliff	A continuous rock face, including overhangs, having a minimum height of 5 metres and a minimum slope of 2 in 1 (>63.4°)
Mitigation	Activities associated with reducing the impacts of the development prior to or during those impacts occurring
MSB	Mine Subsidence Board
Negligible	Small and unimportant, such as to be not worth considering
Night	The period from 10pm to 7am on Monday to Saturday, and 10pm to 8am on Sundays and Public Holidays
NOW	NSW Office of Water
OEH	Office of Environment and Heritage
POEO Act	<i>Protection of the Environment Operations Act 1997</i>
Privately-owned land	Land that is not owned by a public agency, or a mining company (or its subsidiary)
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 an Extraction Plan, or where such costs cannot be agreed, the costs determined by the dispute resolution process
Rehabilitation	The restoration of land disturbed by the development to a good condition to ensure it is safe, stable and non-polluting
Remediation	Activities associated with partially or fully repairing or rehabilitating the impacts of the development or controlling the environmental consequences of this impact
RMS	Roads and Maritime Services
Rock face feature	A rock face having a minimum length of 20 metres, heights between 3 metres and 5 metres and a minimum slope of 2 to 1 (>63.4°)
ROM coal	Run-of-mine coal
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
Second workings	Extraction of coal from longwall panels, mini-wall panels or pillar extraction
Site	All land within the Development Area (see Appendix 2)
Statement of commitments	The Management and Monitoring Summary set out in the EIS
Steep slopes	An area of land having a gradient between 1 in 3 (33% or 18.3°) and 2 in 1 (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
Surface facilities sites	The Buttonderry Site and Tooheys Road Site areas; all ventilation shaft sites; and any other site subject to proposed surface disturbance (excluding subsidence impacts) associated with the development (see Appendix 4)
TNSW	Transport for New South Wales
WSC	Wyong Shire Council

## **SCHEDULE 2 ADMINISTRATIVE CONDITIONS**

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

1. In addition to meeting the specific performance criteria established under this consent, the Applicant shall 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 shall carry out the development generally in accordance with the:
  - (a) EIS;
  - (b) statement of commitments; and
  - (c) conditions of this consent.

*Note: The general layout of the development is shown in Appendices 2 to 4*

3. 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 shall comply with any reasonable requirement/s of the Director-General 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; and
  - (b) the implementation of any actions or measures contained in these documents.

### **LIMITS ON CONSENT**

#### **Mining Operations**

5. The Applicant may carry out mining operations on the site until 31 March 2042.

*Note: Under this consent, the Applicant is required to rehabilitate the site and perform additional undertakings to the satisfaction of either the Director-General or the Executive Director Mineral Resources. 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.*

6. The Applicant may only carry out underground mining operations within the area covered by the approved mine plan.

#### **Coal Extraction and Transportation**

7. The Applicant shall not extract more than 5 million tonnes of ROM coal from the site in any calendar year.
8. The Applicant shall transport all ROM coal from the site by rail.

#### **Hours of Operation**

9. The Applicant may undertake mining operations 24 hours a day, 7 days a week.

#### **Construction Hours**

10. Except for construction which is carried out underground, the Applicant may only undertake construction activities between the hours of 7am to 6pm Monday to Friday, and 8am to 1pm Saturday, with no construction activities on Sundays or public holidays, unless otherwise agreed to by the Director-General in accordance with condition 2 of schedule 4.

### **STRUCTURAL ADEQUACY**

11. The Applicant shall 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 MSB 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.
- Part 8 of the EP&A Regulation sets out the requirements for the certification of the development.
- Under Section 15 of the Mine Subsidence Compensation Act 1961, the Applicant is required to obtain the MSB's approval before subdivision or constructing any improvements in a Mine Subsidence District.

## **DEMOLITION**

12. The Applicant shall 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**

13. The Applicant shall 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.

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

14. With the approval of the Director-General, the Applicant may submit any strategies, plans or programs required by this consent on a progressive basis.

Notes:

- 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.

## **PLANNING AGREEMENT**

15. TBC.

Note: The Applicant is in discussions with WSC. The terms of offer will be reflected in any final conditions for the development.

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### SCHEDULE 3 SPECIFIC ENVIRONMENTAL CONDITIONS – UNDERGROUND MINING

#### SUBSIDENCE

#### Performance Measures – Natural and Heritage Features

- The Applicant shall ensure that the development does not cause any exceedances of the performance measures in Table 1, to the satisfaction of the Director-General.

Table 1: Subsidence Impact Performance Measures

<b>Watercourses</b>	
6 <sup>th</sup> Order Streams	<ul style="list-style-type: none"> <li>Negligible environmental consequences.</li> </ul>
3 <sup>rd</sup> , 4 <sup>th</sup> and 5 <sup>th</sup> Order Streams	<ul style="list-style-type: none"> <li>For each stream, negligible environmental consequences over at least 80% of the stream length subject to vertical subsidence &gt;20 mm.</li> <li>No connective cracking between the surface, or the base of the alluvium, and the underground workings.</li> <li>No subsidence impact or environmental consequence greater than minor.</li> </ul>
1 <sup>st</sup> and 2 <sup>nd</sup> Order Streams	<ul style="list-style-type: none"> <li>No subsidence impact or environmental consequences greater than predicted in the EIS.</li> <li>No connective cracking between the surface and the underground workings.</li> </ul>
<b>Land</b>	
Minor cliffs	Environmental consequences (including occasional rockfalls, displacement or dislodgement of boulders or slabs, or fracturing) that are neither: <ul style="list-style-type: none"> <li>greater than “minor” (as defined); nor</li> <li>when summed together, impact on more than 3% of the total face area of such features within the mining area.</li> </ul>
Rock face features	Environmental consequences (including occasional rockfalls, displacement or dislodgement of boulders or slabs, or fracturing) that are neither: <ul style="list-style-type: none"> <li>greater than “minor” (as defined); nor</li> <li>when summed together, impact on more than 5% of the total face area of such features within the mining area.</li> </ul>
<b>Biodiversity</b>	
Threatened species, threatened populations, or endangered ecological communities	Negligible environmental consequences.
<b>Heritage sites</b>	
Aboriginal heritage sites listed in Table 1 of Appendix 4	Negligible subsidence impacts or environmental consequences
Historic heritage sites listed in Table 2 of Appendix 4	Negligible loss of heritage value.
Other Aboriginal and historic heritage sites	Negligible subsidence impacts or environmental consequences.
<b>Mine workings</b>	
First workings under an approved Extraction Plan beneath any feature where performance measures in this table require negligible subsidence impacts or negligible environmental consequences	To remain longterm stable and non-subsiding.
Second workings	To be carried out only within the approved mine plan, in accordance only with an approved Extraction Plan.

**Notes:**

- Classification of streams in accordance with Strahler stream order system.
- 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 (see condition 5(h)-(k) of Schedule 3.
- 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 Director-General will be the final arbiter.

- In the case of features within the Jilliby State Conservation Area, the Director-General's satisfaction can only be expressed following consultation with OEH.

## Offsets

- If the Applicant exceeds the performance measures in Table 1 and the Director-General determines that:
  - it is not reasonable or feasible to remediate the impact or environmental consequences; or
  - remediation measures implemented by the Applicant have failed to satisfactorily remediate the impact or environmental consequence;
 then the Applicant shall provide a suitable offset to compensate for the impact or environmental consequence, to the satisfaction of the Director-General.

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

## Performance Measures – Built Features

- The Applicant shall ensure that the development does not cause any exceedances of the performance measures in Table 2, to the satisfaction of the Director-General.

Table 2: Subsidence Impact Performance Measures

<b>Key Public Infrastructure</b>	
<ul style="list-style-type: none"> <li>• M1 Motorway;</li> <li>• Mardi to Mangrove Creek Dam Pipeline;</li> <li>• Main Northern Railway; and</li> <li>• TransGrid Towers.</li> </ul>	<p>Always safe and serviceable.</p> <p>Damage that does not affect safety or serviceability must be fully repairable, and must be fully repaired.</p>
<b>Other Infrastructure</b>	
Power lines and timber power poles	Always safe.
Privately-owned residences	Serviceability should be maintained wherever practicable.
Roads	Loss of serviceability must be fully compensated.
Other built features and improvements, Including farm dams, swimming pools, tennis courts, roads, tracks and fences	Damage must be fully repairable, and must be fully repaired or else replaced or fully compensated.
<b>Public safety</b>	
Public Safety	Negligible additional risk.

### Notes:

- The Applicant will be required to define more detailed performance indicators for each of these performance measures in Built Features Management Plans or Public Safety Management Plan (see condition 5 below).
- 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 Director-General will be the final arbiter.
- 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.
- Requirements under this condition may be met by measures undertaken in accordance with the Mine Subsidence Compensation Act 1961.

- 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 Director-General, following consultation with the Executive Director Mineral Resources. Any decision by the Director-General shall be final and not subject to further dispute resolution under this consent.

## Extraction Plan

- The Applicant shall prepare and implement an Extraction Plan for all second workings on site to the satisfaction of the Director-General. Each extraction plan must:
  - be prepared by suitably qualified and experienced persons whose appointment has been endorsed by the Director-General;
  - be approved by the Director-General before the Applicant carries out any of the second workings covered by the plan;
  - include detailed plans of existing and proposed first and second workings and any associated surface development;
  - include detailed performance indicators for each of the performance measures in Tables 1 and 2;

- (e) provide revised predictions of the potential subsidence effects, subsidence impacts and environmental consequences of the proposed second workings, incorporating any relevant information obtained since this consent;
- (f) describe the measures that would be implemented to ensure compliance with the performance measures in Tables 1 and 2, and manage or remediate any impacts and/or environmental consequences;
- (g) include a Built Features Management Plan, which has been prepared in consultation with DRE and the owners of affected built features, to manage the potential subsidence impacts and/or environmental consequences of the proposed second workings, and which:
  - addresses in appropriate detail all items of key public infrastructure (with particular consideration of angle towers on transmission lines and powerlines), other public infrastructure and all other built features;
  - has been prepared following appropriate consultation with the owner/s of potentially affected feature/s;
  - recommends appropriate remedial measures and includes commitments to mitigate, repair, replace or compensate all predicted impacts on potentially affected built features in a timely manner; and
  - in the case of all key public infrastructure, and other public infrastructure except roads, trails and associated structures, reports external auditing for compliance with ISO 31000 (or alternative standard agreed with the infrastructure owner), and provides for annual auditing of compliance and effectiveness during extraction which may impact the infrastructure;
- (h) include a Water Management Plan, which has been prepared in consultation with EPA and NOW, 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, including trigger levels for investigating any potentially adverse impacts on water resources or water quality;
  - a program to monitor and report on stream morphology and stream flows, assess any changes resulting from subsidence impacts, including potential impacts on town water extraction availability under various climatic scenarios and remediate stream stability;
  - a program to monitor flooding (including updated flood modelling); minimise, manage and mitigate (whether prospectively or retrospectively) flood impacts on residences, private properties, roads, other infrastructure and other built features; and identify private properties where mitigation measures are not reasonable or feasible and compensation would instead be offered;
  - a program to monitor and report groundwater inflows to underground workings;
  - a program to predict, manage and monitor impacts to groundwater bores on privately-owned land; and
  - a program to monitor impacts on any groundwater dependent ecosystems, threatened species habitat and riparian vegetation, particularly within the Jiliby SCA; and
- (i) include a Biodiversity Management Plan, which has been prepared in consultation with OEH, which establishes a baseline data for the existing habitat on the site, including water table depth, vegetation condition, stream morphology and threatened species habitat, and 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;
- (j) include a 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, rock face features, steep slopes and agricultural enterprises;
- (k) include a Heritage Management Plan, which has been prepared in consultation with OEH and relevant stakeholders for both Aboriginal and historic heritage, to manage the potential environmental consequences of the proposed second workings on both Aboriginal and non-Aboriginal heritage items, and reflects the requirements of condition 21 of schedule 4;
- (l) include a Public Safety Management Plan, which has been prepared in consultation with DRE, to ensure that the proposed second workings do not impact on public safety;
- (m) include a Subsidence Monitoring Program, which has been prepared in consultation with DRE; to:
  - provide data to assist with the management of the risks associated with subsidence;
  - validate the subsidence predictions;
  - analyse the relationship between the predicted and resulting subsidence effects and predicted and resulting impacts under the plan and any ensuing environmental consequences; and
  - inform the contingency plan and adaptive management process;
- (n) 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;
- (o) proposes appropriate revisions to the Rehabilitation Management Plan required under condition 29 of Schedule 4; and
- (p) include a program to collect sufficient baseline data for future Extraction Plans.

*Note: In accordance with Condition 5 of Schedule 2, the preparation and implementation of Extraction Plans may be staged, with each plan covering a defined area of underground workings. In addition, these plans are only required to contain management plans that are relevant to the specific underground workings that are being carried out.*

6. The Applicant shall ensure that the management plans required under conditions 5(g)-(m) 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.

#### **First Workings**

7. The Applicant may carry out first workings within the development area, other than in accordance with an approved extraction plan, provided that DRE is satisfied that the first workings are designed to remain stable and non-subsiding, except insofar as they may be impacted by approved second workings.

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

8. The Applicant shall 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.

### **SURFACE INFRASTRUCTURE MANAGEMENT**

#### **Gas Drainage**

9. The Applicant shall ensure that all gas drainage pipelines (other than connection points, monitoring points, dewatering facilities, regulation or isolation points) between gas drainage plants are buried, unless otherwise agreed with the relevant landowner or unless burial is inappropriate for safety or other reasons, to the satisfaction of the Director-General.

#### **Surface Infrastructure Management Plans**

10. The Applicant shall prepare and implement a Gas Drainage Management Plan, a Service Boreholes Management Plan and a PED Communications Management Plan in respect of construction and use of future gas drainage infrastructure, future service boreholes and future PED communications infrastructure, respectively, to the satisfaction of the Director-General. Each of these plans must be submitted to the Director-General for approval prior to the construction of the relevant infrastructure and must include details of the Applicant's commitments regarding:
    - (a) community consultation;
    - (b) landholder agreements;
    - (c) assessment of noise, air quality, traffic, biodiversity, heritage, public safety and other impacts in accordance with approved methods;
    - (d) avoidance of significant impacts and minimisation of impacts generally;
    - (e) beneficial re-use or flaring of drained hydrocarbon gases, wherever practicable (in the case of the Gas Drainage Management Plan);
    - (f) achievement of applicable standards and goals;
    - (g) mitigation and/or compensation for significant noise, air quality and visual impacts; and
    - (h) rehabilitation of disturbed sites.
-

## SCHEDULE 4 SPECIFIC ENVIRONMENTAL CONDITIONS – GENERAL

### NOISE

#### Construction Noise

1. The Applicant shall ensure that the noise generated by construction complies with the requirements of the *Interim Construction Noise Guideline* (DECC, 2009).

#### Out of Hours Construction Works

2. If the Applicant proposes to undertake any construction works outside the hours specified in condition 10 of Schedule 2, then the Applicant must prepare and implement an Out of Hours Work Protocol for these works to the satisfaction of the Director-General. This protocol must be prepared in consultation with the EPA and the residents who would be affected by the noise generated by these works, and are consistent with the requirements of the ICNG. The Applicant shall not carry out any out of hours construction works before this protocol has been approved by the Director-General.

#### Operational Noise Criteria

3. Except for the carrying out of construction, the Applicant shall ensure that the noise generated by the development does not exceed the criteria in Table 3 at any residence on privately-owned land, or within the Jilliby SCA.

Table 3: Operational Noise Criteria dB(A)

Location	Day <i>L<sub>Aeq</sub></i> (15 min)	Evening <i>L<sub>Aeq</sub></i> (15 min)	Night <i>L<sub>Aeq</sub></i> (15 min)	Night <i>L<sub>A1</sub></i> (1 min)
M9	38	38	38	48
P1	35	35	35	52
P2	35	35	35	52
P3	40	40	38	52
P4	35	35	35	54
P5	35	35	35	54
P6	39	39	37	48
P7	42	42	40	51
P8	45	45	43	57
P9	42	42	42	57
P10	37	37	37	58
	<i>L<sub>Aeq</sub></i> (period)			-
Jilliby SCA	50 (when in use)			-

Note: To identify the locations referred to in Table 3, refer to Appendix 6.

Noise generated by the development is to be measured in accordance with the relevant requirements and exemptions (including certain meteorological conditions) of the NSW Industrial Noise Policy. Appendix 5 sets out the meteorological conditions under which these criteria apply, and the requirements for evaluating compliance with these criteria.

However, these criteria do not apply if the Applicant has an agreement with the relevant landowner to exceed the noise criteria, and the Applicant has advised the Department in writing of the terms of this agreement.

#### Operating Conditions

4. The Applicant shall:
  - (a) implement best management practice to minimise the construction, operational, road and rail noise of the development;
  - (b) operate an on-site noise management system that uses a combination of predictions, forecasting and real-time noise monitoring of all noise associated with the development, including:
    - noise during construction and operations;
    - road noise generated by vehicles associated with the development; and
    - noise generated by employee commuter vehicles on public roads, particularly on Hue Hue Road and Bushells Ridge Road;
 to ensure compliance with the relevant conditions of this consent;

- (c) minimise the noise impacts of the development during meteorological conditions under which the noise limits in this consent do not apply (see Appendix 5);
  - (d) carry out regular monitoring to determine whether the development is complying with the relevant conditions of consent;
- to the satisfaction of the Director-General.

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

## Noise Management Plan

5. The Applicant shall prepare and implement a Noise Management Plan for the development to the satisfaction of the Director-General. This plan must:
  - (a) be prepared in consultation with EPA, and be approved by the Director-General prior to the commencement of the construction of the surface facilities sites;
  - (b) describe the mitigation measures that would be implemented to ensure compliance with the noise criteria and operating conditions in this consent;
  - (c) seek to minimise road traffic noise generated by employee commuter vehicles on public roads, particularly on Hue Hue Road and Bushells Ridge Road;
  - (d) describe the proposed noise management system in detail;
  - (e) include a noise monitoring program that:
    - uses a combination of real-time and supplementary attended monitoring to evaluate the performance of the development; and
    - evaluates and reports on:
      - the effectiveness of the on-site noise management system; and
      - compliance against the noise operating conditions; and
    - defines what constitutes a noise incident, and includes a protocol for identifying and notifying the Department and relevant stakeholders of any noise incidents.

## AIR QUALITY & GREENHOUSE GAS

### Odour

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

### Air Quality Criteria

7. The Applicant shall ensure that all reasonable and feasible avoidance and mitigation measures are employed so that the particulate emissions generated by the development do not exceed the criteria listed in Tables 4, 5 and 6 at any residence on privately-owned land.

*Table 4: Long term criteria for particulate matter*

<b>Pollutant</b>	<b>Averaging period</b>	<b><sup>d</sup> Criterion</b>
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 5: Short term criterion for particulate matter*

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

*Table 6: Long term criteria for deposited dust*

<b>Pollutant</b>	<b>Averaging period</b>	<b>Maximum increase in deposited dust level</b>	<b>Maximum total deposited dust level</b>
<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 for Tables 4-6:*

- <sup>a</sup> Total impact (ie incremental increase in concentrations due to the development plus background concentrations due to other sources);
- <sup>b</sup> Incremental impact (ie 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*
- <sup>d</sup> *Excludes extraordinary events such as bushfires, prescribed burning, dust storms, sea fog, fire incidents, illegal activities or any other activity agreed to by the Director-General in consultation with EPA.*

## Operating Conditions

8. The Applicant shall:
- implement best practice air quality management at the site to minimise off-site odour (including spontaneous combustion) and dust emissions generated by the development;
  - implement all reasonable and feasible measures to minimise the release of greenhouse gas emissions from the site;
  - minimise any visible off-site air pollution generated by the development;
  - minimise the surface disturbance of the site;
  - operate a comprehensive air quality management system that uses a combination of predictive meteorological forecasting and real-time air quality monitoring data to guide the day to day planning of mining operations and the implementation of both proactive and reactive air quality mitigation measures to ensure compliance with the relevant conditions of this consent;
  - minimise the air quality impacts of the development during adverse meteorological conditions and extraordinary events (see note d to Tables 4-6 above);
- to the satisfaction of the Director-General.

## Air Quality Management Plan

9. The Applicant shall prepare and implement a detailed Air Quality & Greenhouse Gas Management Plan for the development to the satisfaction of the Director-General. This plan must:
- be prepared in consultation with EPA, and be approved by the Director-General prior to the commencement of the construction of the surface facilities sites;
  - describe the measures that would be implemented to ensure compliance with the relevant air quality criteria and operating conditions of this consent;
  - describe the proposed on-site air quality management system; and
  - include an air quality monitoring program that:
    - adequately supports the air quality management system;
    - evaluates and reports on:
      - compliance with the air quality criteria;
      - the effectiveness of the air quality management system; and
      - compliance against the air quality operating conditions; and
    - defines what constitutes an air quality incident, and includes a protocol for identifying and notifying the Department and relevant stakeholders of any air quality incidents.

## METEOROLOGICAL MONITORING

10. During the life of the development, the Applicant shall ensure that there is a suitable meteorological station operating in the vicinity of the site that:
- complies with the requirements in the *Approved Methods for Sampling of Air Pollutants in New South Wales* guideline; and
  - is capable of continuous real-time measurement of temperature lapse rate in accordance with the *NSW Industrial Noise Policy*.

## WATER

### Water Supply

11. The Applicant shall 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.

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

### Water Pollution

12. Except as may be expressly provided by an EPL, the Applicant shall comply with Section 120 of the POEO Act.

## Compensatory Water Supply

13. The Applicant shall provide a compensatory water supply to any owner of privately-owned land whose water supply is adversely impacted (other than an impact that is negligible) as a result of the development, in consultation with NOW, and to the satisfaction of the Director-General.

The compensatory water supply measures must provide an alternative long-term supply of water that is equivalent to the loss attributed to the 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 Director-General for resolution.

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

## Water Management Performance Measures

14. The Applicant shall comply with the performance measures in Table 7 to the satisfaction of the Director-General.

Table 7: Water Management Performance Measures

Feature	Performance Measure
Water Management - General	<ul style="list-style-type: none"> <li>Minimise the use of potable water on site</li> </ul>
Construction and operation of the rail spur	<ul style="list-style-type: none"> <li>Design, install and maintain erosion and sediment controls generally in accordance with the series <i>Managing Urban Stormwater: Soils and Construction</i> including <i>Volume 1</i>, <i>Volume 2A – Installation of Services</i> and <i>Volume 2C – Unsealed Roads</i></li> <li>Design, install and maintain the infrastructure within 40 m of watercourses generally in accordance with the <i>Guidelines for Controlled Activities on Waterfront Land (DPI 2007)</i>, or its latest version</li> <li>Design, installation and maintenance of creek crossings generally in accordance with the <i>Policy and Guidelines for Fish Friendly Waterway Crossings</i> (NSW Fisheries, 2003) and <i>Why Do Fish Need To Cross The Road? Fish Passage Requirements for Waterway Crossings</i> (NSW Fisheries 2003), or their latest versions</li> </ul>
Sediment Dams	<ul style="list-style-type: none"> <li>Design, install and maintain the dams generally in accordance with the series <i>Managing Urban Stormwater: Soils and Construction – Volume 1 and Volume 2E Mines and Quarries</i></li> </ul>
Clean water diversions & storage infrastructure	<ul style="list-style-type: none"> <li>Design, install and maintain the clean water system to capture and convey the 100 year ARI flood</li> <li>Maximise as far as reasonable and feasible the diversion of clean water around disturbed areas on site</li> </ul>
Mine water storages	<ul style="list-style-type: none"> <li>Mine water storage infrastructure is designed to store a 50 year ARI 72 hour storm event</li> <li>On-site storages (including tailings dams, mine infrastructure dams, groundwater storage and treatment dams) are suitably lined to comply with a permeability standard of <math>&lt; 1 \times 10^{-9}</math> m/s</li> </ul>
Chemical and hydrocarbon storage	<ul style="list-style-type: none"> <li>Chemical and hydrocarbon products to be stored in bunded areas in accordance with the relevant Australian Standards</li> </ul>
Aquatic and riparian ecosystems, including affected sections of Wallarah Creek	<ul style="list-style-type: none"> <li>Maintain or improve baseline channel stability</li> <li>Develop site-specific in-stream water quality objectives in accordance with ANZECC 2000 and <i>Using the ANZECC Guidelines and Water Quality Objectives in NSW</i> procedures (DECC 2006), or its latest version</li> </ul>

## Water Management Plan

15. The Applicant shall prepare and implement a Water Management Plan for the development, for all areas that are not, or will not, be subject to condition 5 of schedule 3 (including the surface facilities sites), to the satisfaction of the Director-General. This plan must be prepared in consultation with NOW, Fisheries NSW and the EPA, by suitably qualified and experienced persons, and be approved by the Director-General prior to the commencement of the construction of the surface facilities sites. This plan must include:
- (a) a comprehensive water balance for the development that includes details of:
    - sources and security of water supply;
    - water make in the underground workings;
    - measures to minimise potable water use and to reuse and recycle water; and
    - any water discharges;
  - (b) a Surface Facilities Water Management Plan, that includes:
    - a detailed description of water management systems for each surface facilities site, including:
      - clean water diversion systems;
      - erosion and sediment controls; and
      - any water storages;
    - a geomorphological assessment of Wallarah Creek to identify any existing erosion;
    - detailed baseline data on surface water flows and quality in creeks and other waterbodies that could potentially be affected by the surface facilities sites and other surface activities, including Wallarah Creek;
    - surface water and stream health impact assessment criteria including trigger levels for investigating any potentially adverse surface water impacts; and
    - monitoring and reporting procedures, including a program to monitor and assess:
      - surface water flows and quality;
      - impacts on water users;
      - stream health; and
      - channel stability; and
    - a plan to respond to any exceedances of the performance criteria, and mitigate any adverse surface water impacts of the development;
  - (c) a Brine Treatment Management Plan, which must include:
    - a detailed description of processes for managing brine treatment on site and disposal of brine and salt in underground mine workings, including:
      - the volumes of brine and salt produced;
      - the capacity of on-site and underground storages for brine and salt; and
      - measures to monitor and mitigate any impacts of underground brine and salt storage on groundwater and surface water resources.

## BIODIVERSITY

### Frog Research Program

16. The Applicant shall prepare and implement a research program into threatened frog species in the area to the satisfaction of the Director-General and allocate \$156,000 in total to this program for expenditure over a period of 4 years from the date of the program's approval. This program must:
- (a) be prepared in consultation with OEH, and submitted to the Director-General for approval within 12 months of the date of this consent;
  - (b) include a baseline study to identify and describe the existing populations of threatened frog species in the sections of Jilliby SCA within the development area, including the Stuttering, Giant Barred, Giant Burrowing, Green-thighed, Green and Golden Bell and Littlejohn's Green Tree Frogs;
  - (c) establish a monitoring program for the life of the development on the presence, population trends, and health of threatened frog species;
  - (d) be directed at research into improving the prediction, assessment, remediation and/or avoidance of subsidence impacts and environmental consequences and/or key threatening processes on threatened frog species; and
  - (e) be targeted at genuine research, as opposed to implementing other matters required by this consent.

The Applicant shall:

- (a) provide updates on the status of the research program in the Annual Review; and
  - (b) publish the findings of the research in a peer reviewed journal;
- to the satisfaction of the Director-General.

### Biodiversity Offset Strategy

17. The Applicant shall implement the biodiversity offset strategy described in the EIS and summarised in Table 8 to the satisfaction of the Director-General.

**Table 8: Summary of the Biodiversity Offset Strategy**

Area	Offset Type	Minimum Size (ha)
Hue Hue Road Offset area	Blackbutt-Turpentine open forest (EEC)	9.0
	Rough-barked Apple – Red Gum Grassy Woodland (EEC)	0.4
	Spotted Gum – Broad-leaved Ironbark grassy open forest (EEC)	55.4
	Remnant native vegetation	55.7
Tooheys Road Site North area	Paperbark swamp forest (EEC)	3.3
	Swamp Mahogany swamp forest (EEC)	0.3
	Remnant native vegetation	38.6
Tooheys Road Site South area	Swamp Mahogany swamp forest (EEC)	6.2
	Paperbark swamp forest (EEC)	0.6
	Blackbutt-Turpentine open forest (EEC)	7.8
	Remnant native vegetation	19.7
Jilliby SCA	Funding to OEH for conservation projects in Jilliby SCA	\$25,000 per annum whenever coal is being extracted within Jilliby SCA

*Note: To identify the areas referred to in Table 8 refer to the applicable figures in Appendix 7.*

### Long Term Security of Offsets

18. Within 12 months of the commencement of construction of the surface facilities sites, unless the Director-General agrees otherwise, the Applicant shall make suitable arrangements to provide appropriate long term security for the land within the Biodiversity Offset Strategy identified in Table 8, to the satisfaction of the Director-General.

*Note: In order of preference, mechanisms to provide appropriate long term security to the land within the Biodiversity Offset Strategy include incorporation into the nearby State Conservation Areas, Biobanking Agreement, or Voluntary Conservation Agreement.*

### Biodiversity Management Plan

19. The Applicant shall prepare and implement a Biodiversity Management Plan for the development, for all areas that are not, or will not, be subject to condition 5 of Schedule 3, to the satisfaction of the Director-General. This plan must:
- be prepared in consultation with OEH and Fisheries NSW, and be approved by the Director-General prior to the commencement of construction of the surface facilities sites;
  - describe how the implementation of the biodiversity offset strategy would be integrated with the overall rehabilitation of the site;
  - establish baseline data for the existing habitat in the offsite biodiversity offset area, including vegetation condition and threatened species habitat;
  - describe the short, medium, and long term measures that would be implemented to:
    - manage impacts of clearing vegetation, including pre-clearance surveys;
    - manage remnant vegetation and habitat in the offsite biodiversity offset area and on the site; and
    - implement the biodiversity offset strategy, including detailed performance and completion criteria;
  - include a seasonally-based program to monitor and report on the effectiveness of these measures, and progress against the detailed performance and completion criteria;
  - 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 these risks;
  - include a mechanism for the payment of the conservation funding component of the biodiversity offset strategy as detailed in Table 8, to the satisfaction of OEH; and
  - include details of who would be responsible for monitoring, reviewing, and implementing the plan.

### Conservation Bond

20. Within 6 months of the approval of the Biodiversity Management Plan in condition 19 of Schedule 4, the Applicant 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 described in 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.

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

If the offset strategy is not completed generally in accordance with the completion criteria in the Biodiversity Management Plan, the Director-General will call in all or part of the conservation bond, and arrange for the satisfactory completion of the relevant works.

## **HERITAGE**

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

21. The Applicant shall prepare and implement an Aboriginal Cultural Heritage Management Plan for the development, for all areas that are not, or will not, be subject to condition 5 of Schedule 3, to the satisfaction of the Director-General. This plan must:
- (a) be prepared in consultation with OEH and the Aboriginal community;
  - (b) be approved by the Director-General prior to commencement of construction of the surface facilities sites;
  - (c) include the following program/procedures for Aboriginal cultural heritage management:
    - managing Aboriginal cultural heritage sites, and the discovery of any new Aboriginal cultural heritage sites, objects or skeletal remains;
    - maintaining consultation with, and the involvement of, the Aboriginal community in the conservation and management of Aboriginal heritage sites, and managing access for the Aboriginal community to Aboriginal heritage sites and culturally significant areas; and
    - a trigger action response plan to manage unexpected subsidence impacts.

## **TRANSPORT**

### **Monitoring of Coal Transport**

22. The Applicant shall:
- (a) keep accurate records of the amount of coal transported from the site (on a daily basis); and
  - (b) make these records publicly available on its website at the end of each quarter.

### **Traffic Management Plan**

23. The Applicant shall prepare and implement a Traffic Management Plan for the development to the satisfaction of the Director-General. This plan must be prepared in consultation with the RMS, WSC and TNSW, and be submitted to the Director-General for approval prior to the commencement of construction of the surface facilities sites.

## **VISUAL**

### **Visual Amenity and Lighting**

24. The Applicant shall:
- a) implement all reasonable and feasible measures to minimise the visual and off-site lighting impacts of the development;
  - b) ensure no fixed outdoor lights shine above the horizontal or above the building line or any illuminated structure;
  - c) take all practicable measures to further reduce visual impacts from the development, including:
    - screen planting along Hue Hue Road;
    - other appropriate visual impact mitigation measures for private residences within 2 kilometres, and with direct views, of the Tooheys Road Site; 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*; and
  - e) take all practical measures to shield views of mining operations from users of public roads and privately-owned residences;
- to the satisfaction of the Director-General.

## WASTE

25. The Applicant shall
- minimise and monitor the waste generated by the development;
  - ensure that the waste generated by the development is appropriately stored, handled and disposed of;
  - manage on-site sewage treatment and disposal in accordance with the requirements of WSC; and
  - report on waste management and minimisation in the Annual Review, to the satisfaction of the Director-General.

## BUSHFIRE MANAGEMENT

26. The Applicant shall:
- ensure that the development is suitably equipped to respond to fires on site; and
  - 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

27. The Applicant shall rehabilitate the site to the satisfaction of the Executive Director Mineral Resources. This rehabilitation must be generally consistent with the proposed rehabilitation strategy described in the EIS and comply with the objectives in Table 9.

**Table 9: Rehabilitation Objectives**

<b>Feature</b>	<b>Objective</b>
Mine site (as a whole)	Safe, stable & non-polluting
Surface infrastructure	<ul style="list-style-type: none"> <li>To be decommissioned and removed, unless the Executive Director Mineral Resources agrees otherwise</li> <li>Sites to be made safe, and hydraulically and geotechnically stable</li> <li>Site to be revegetated with suitable local native plant species, and a landform consistent with the surrounding environment</li> </ul>
All watercourses subject to subsidence impacts	<ul style="list-style-type: none"> <li>Hydraulically and geomorphologically stable, with riparian vegetation that is the same or better than prior to mining</li> </ul>
Steep slopes and rock face features	No additional risk to public safety compared to prior to mining
Built features damaged by mining operations	Repair to pre-mining condition or as nearly as practicable equivalent unless the owner agrees otherwise, or the damage is fully restored, repaired or compensated for under the <i>Mine Subsidence Compensation Act 1961</i>
Community	Ensure public safety Minimise the adverse socio-economic effects associated with mine closure

*Note: These rehabilitation objectives apply to all subsidence impacts and environmental consequences caused by all underground mining in the development area.*

### Progressive Rehabilitation

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

### Rehabilitation Management Plan

29. The Applicant shall prepare and implement shall prepare and implement a Rehabilitation Management Plan for the development to the satisfaction of the Director-General and the Executive Director Mineral Resources. This plan must:
- be prepared consultation with OEH, NOW, WSC, the CCC and the Department;
  - be submitted to the Director-General and the Executive Director Mineral Resources for approval prior to commencement of construction of the surface facilities sites;
  - be prepared in accordance with any relevant DRE guideline and be consistent with the rehabilitation objectives in the EIS and in Table 9;
  - describe how the performance of the rehabilitation would be monitored and assessed against the objectives in Table 9;

- (e) describe the process whereby additional measures would be identified and implemented to ensure the rehabilitation objectives are achieved;
- (f) provide for detailed mine closure planning, including measures to minimise socio-economic effects due to mine closure, to be conducted prior to the site being placed on care and maintenance; and
- (g) be integrated with the other management plans required under this consent.

*Note: The Rehabilitation Management Plan should address all land impacted by the development, whether prior to or following the date of this consent.*

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**SCHEDULE 5**  
**ADDITIONAL PROCEDURES**

**NOTIFICATION OF LANDOWNERS**

1. As soon as practicable after obtaining monitoring results showing:
  - (a) an exceedance of any relevant criteria in Schedule 4, the Applicant shall notify affected landowners in writing of the exceedance, and provide regular monitoring results to each affected landowner until the development is again complying with the relevant criteria; and
  - (b) an exceedance of any relevant air quality criteria in Schedule 4, the Applicant 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 and/or existing tenants of the land (including the tenants of any mine-owned land).

**INDEPENDENT REVIEW**

2. 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 Director-General in writing for an independent review of the impacts of the development on his/her land.

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

- (a) commission a suitably qualified, experienced and independent person, whose appointment has been approved by the Director-General, to:
    - consult with the landowner to determine his/her concerns;
    - conduct monitoring to determine whether the 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 Director-General and landowner a copy of the independent review.
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## SCHEDULE 6

### ENVIRONMENTAL MANAGEMENT, REPORTING AND AUDITING

#### ENVIRONMENTAL MANAGEMENT

##### Environmental Management Strategy

1. The Applicant shall prepare and implement an Environmental Management Strategy for the development to the satisfaction of the Director-General. This strategy must:
  - (a) be submitted to the Director-General for approval prior to the commencement of the construction of the surface facilities sites;
  - (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 shall ensure that the management plans required under this consent are prepared in accordance with any relevant guidelines, and include:
  - (a) detailed baseline data;
  - (b) a description of:
    - the relevant statutory requirements (including any relevant 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;
  - (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 development;
    - effectiveness of any management measures;
  - (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;
  - (f) 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 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 Director-General may waive some of these requirements if they are unnecessary or unwarranted for particular management plans.*

##### Adaptive Management

3. The Applicant must assess and manage development-related risks to ensure that there are no exceedances of the criteria and/or performance measures in Schedules 3 and 4. Any exceedance of these criteria and/or 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.

Where any exceedance of these criteria and/or 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 reoccur;
- (b) consider all reasonable and feasible options for remediation (where relevant) and submit a report to the Department describing those options and any preferred remediation measures or other course of action; and
- (c) implement remediation measures as directed by the Director-General, to the satisfaction of the Director-General.

#### **Annual Review**

4. By the end of March each year, or other timing as may be agreed by the Director-General, the Applicant shall review the environmental performance of the development to the satisfaction of the Director-General. This review must:
- (a) describe the development (including any rehabilitation) that was carried out in the past calendar year, and the development that is proposed to be carried out over the next year;
  - (b) include a comprehensive review of the monitoring results and complaints records of the development over the past calendar year, which includes a comparison of these results against the:
    - (i) relevant statutory requirements, limits or performance measures/criteria;
    - (ii) requirements of any plan or program required under this consent;
    - (iii) monitoring results of previous years; and
    - (iv) relevant predictions in the EIS;
  - (c) identify any non-compliance over the past calendar 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 current calendar year to improve the environmental performance of the development.

#### **Revision of Strategies, Plans and Programs**

5. Within 3 months of:
- (a) the submission of an annual review under Condition 4 above;
  - (b) the submission of an incident report under Condition 7 below;
  - (c) the submission of an audit report under Condition 9 below; or
  - (d) any modification to the conditions of this consent, (unless the conditions require otherwise),
- the Applicant shall review, and if necessary revise, the strategies, plans, and programs required under this consent to the satisfaction of the Director-General.

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 Director-General 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 development.*

#### **Community Consultative Committee**

6. The Applicant must establish a Community Consultative Committee (CCC) for the development to the satisfaction of the Director-General, prior to the commencement of construction of the surface facilities sites. This CCC must be operated in general accordance with the *Guidelines for Establishing and Operating Community Consultative Committees for Mining Developments* (Department of Planning, 2007, or its latest version).

*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, WSC, recognised environmental groups and the local community.*

#### **REPORTING**

##### **Incident Reporting**

7. The Applicant shall immediately notify the Director-General and any other relevant agencies of any incident that has caused, or threatens to cause, material harm to the environment. For any other incident associated with the development, the Applicant shall notify the Director-General and any other relevant agencies as

soon as practicable after the Applicant becomes aware of the incident. Within 7 days of the date of the incident, the Applicant shall provide the Director-General and any relevant agencies with a detailed report on the incident, and such further reports as may be requested.

### **Regular Reporting**

8. The Applicant shall provide regular reporting on the environmental performance of the development on its website, in accordance with the reporting arrangements in any plans or programs approved under the conditions of this consent.

### **INDEPENDENT ENVIRONMENTAL AUDIT**

9. Within 12 months of the commencement of construction of the surface facilities sites, and every 3 years thereafter, unless the Director-General directs otherwise, the Applicant shall 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 Director-General;
  - (b) include consultation with the relevant agencies;
  - (c) 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; and
  - (e) recommend appropriate measures or actions to improve the environmental performance of the development, and/or any assessment, plan or program required under the abovementioned approvals.

*Note: This audit team must be led by a suitably qualified auditor and include experts in any field specified by the Director-General.*

10. Within 6 weeks of the completion of this audit, or as otherwise agreed by the Director-General, the Applicant shall submit a copy of the audit report to the Director-General, together with its response to any recommendations contained in the audit report.

### **ACCESS TO INFORMATION**

11. Within 6 months of the date of this consent, the Applicant shall:
    - (a) make copies of the following publicly available on its website:
      - (i) the documents referred to in Condition 2 of Schedule 2;
      - (ii) all current statutory approvals for the development;
      - (iii) all approved strategies, plans and programs required under the conditions of this consent;
      - (iv) a comprehensive summary of the monitoring results of the development, reported in accordance with the specifications in any conditions of this consent, or any approved plans and programs;
      - (v) a complaints register, updated monthly;
      - (vi) minutes of CCC meetings;
      - (vii) the annual reviews of the development;
      - (viii) any independent environmental audit of the development, and the Applicant's response to the recommendations in any audit;
      - (ix) any other matter required by the Director-General; and
    - (b) keep this information up-to-date, to the satisfaction of the Director-General.
-

# APPENDIX 1: SCHEDULE OF LAND

DP	Lot
<b>Tooheys Road Site</b>	
DP260217	3
DP260217	1
DP658436	128
DP755245	124
DP755245	126
DP755245	102
DP755245	103
DP1032847	194
DP1032847	195
DP1032847	193
DP258584	4
DP260217	5
DP260217	4
DP1165648	7305
<b>Buttonderry Site</b>	
DP791157	1
DP791157	2
<b>Above Underground Drift</b>	
DP258692	31
DP719762	4
DP239089	10
DP239704	7
DP239704	8
DP239704	9
DP239704	6
DP239704	11
DP239704	4
DP240205	2
DP258692	33
DP259530	19
DP259531	5
DP603941	3
<b>Western Shaft Site</b>	
DP581339	1
Wyong State Forest	
<b>Above Underground Mine Plan</b>	
DP825848	6
DP703391	3
DP1006209	1
DP1006209	2
DP1010570	1

DP	Lot
DP1010570	2
DP1010979	1251
DP1010979	1252
DP1018301	21
DP1018301	22
DP1019048	100
DP1019048	101
DP1021290	7003
DP1028066	121
DP1028066	122
DP1028066	123
DP1028066	124
DP1028066	125
DP1028066	126
DP1028066	127
DP1030614	1922
DP1030614	1923
DP1031782	1255
DP1033538	6101
DP1033538	6102
DP1049672	1257
DP1049672	1258
DP1063979	25
DP1067367	10
DP1067367	11
DP1067367	12
DP1079430	13
DP1083358	12
DP1083358	11
DP1089118	100
DP1089118	101
DP1090449	44
DP1092061	1
DP1092061	2
DP109417	1
DP1102951	26
DP1110331	1
DP1110331	2
DP1114254	1
DP1114254	2
DP1128180	261
DP1128180	262

DP	Lot
DP1133862	103
DP114801	1
DP114801	2
DP1153971	1
DP1153971	2
DP126207	1
DP244881	1
DP244881	2
DP246677	1
DP246677	6
DP246677	7
DP246677	8
DP246727	2
DP246727	3
DP246727	4
DP246727	6
DP251953	7
DP251953	16
DP251953	20
DP251953	21
DP251953	5
DP251954	5
DP251954	8
DP258965	1
DP258965	2
DP258965	3
DP258965	4
DP258965	5
DP258965	6
DP258965	7
DP258965	8
DP258965	9
DP258965	11
DP258965	12
DP258965	13
DP258965	14
DP258965	15
DP261557	30
DP261577	20
DP265516	2011
DP265516	2012
DP304136	1
DP330671	1
DP335191	1

DP	Lot
DP3391	14
DP34871	1
DP410301	1
DP419700	2
DP4562	5
DP4562	7
DP503562	701
DP503562	702
DP527126	1
DP534677	1
DP534677	2
DP555826	1
DP555826	3
DP569812	31
DP569812	32
DP569812	33
DP578580	1
DP581339	1
DP598151	1
DP613648	10
DP613648	11
DP615333	3
DP615334	1
DP618001	12
DP619990	22
DP622808	1
DP657923	79
DP657924	150
DP657925	147
DP661854	109
DP661855	109
DP663620	6
DP663621	121
DP665252	16
DP665506	147
DP666736	6
DP700109	47
DP703391	1
DP703391	2
DP710526	222
DP715159	21
DP715159	22
DP731090	23
DP731090	24

DP	Lot
DP739318	102
DP740438	3
DP740438	4
DP740438	5
DP740438	6
DP740438	7
DP740438	8
DP740438	9
DP740438	10
DP740438	11
DP740438	12
DP740438	13
DP740438	14
DP740438	15
DP740438	16
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DP740438	20
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DP740438	26
DP740438	27
DP740438	28
DP740438	29
DP740438	30
DP740438	41
DP740438	42
DP740438	47
DP755271	32
DP755271	33
DP755271	42
DP755271	43
DP755271	69
DP755271	75
DP755271	76
DP755271	78
DP755271	106
DP755271	107
DP755271	110
DP755271	111

DP	Lot
DP755271	112
DP755271	117
DP755271	122
DP755271	148
DP755271	151
DP755271	160
DP755271	170
DP755271	178
DP755271	179
DP755271	200
DP755271	202
DP755271	203
DP755271	206
DP755271	213
DP755271	215
DP755271	216
DP755271	217
DP755271	222
DP755271	235
DP755271	236
DP755271	248
DP755271	252
DP755271	85
DP755271	201
DP773590	151
DP773590	152
DP773780	101
DP773780	102
DP785369	10
DP785369	11
DP788250	210
DP788250	211
DP788250	212
DP788251	221
DP788251	222
DP790135	2
DP792003	1
DP792003	2
DP792003	3
DP792003	4
DP792003	5
DP792003	7
DP800814	21
DP800814	22

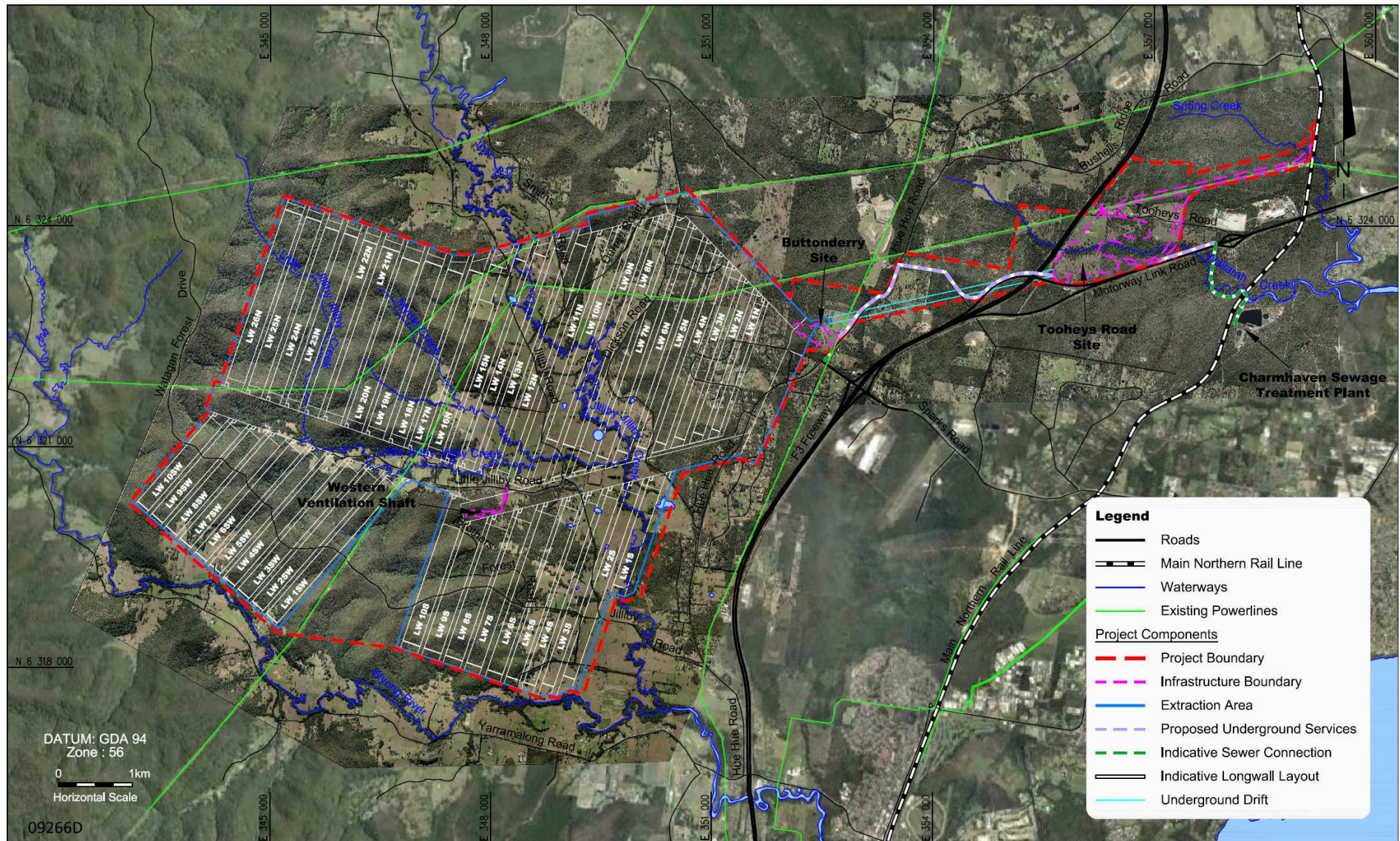
DP	Lot
DP800814	23
DP800814	24
DP802323	1
DP802323	2
DP802323	3
DP802323	4
DP802323	5
DP802323	6
DP802323	7
DP802323	8
DP802323	9
DP802323	10
DP802323	11
DP802323	12
DP802323	14
DP802323	15
DP802323	16
DP802323	17
DP806729	2
DP806729	4
DP810889	61
DP810889	62
DP810889	63
DP810889	64
DP813795	404
DP816322	19
DP816322	20
DP816322	21
DP816322	22
DP816322	23
DP816322	24
DP816322	25
DP816322	26
DP816322	27
DP816322	28
DP816322	29
DP816322	30
DP816322	31
DP816322	32
DP816322	33
DP816322	34
DP816322	35
DP816322	36
DP818092	4

DP	Lot
DP825848	1
DP825848	2
DP825848	3
DP825848	7
DP825848	8
DP830153	1
DP830153	25
DP830153	26
DP837287	1
DP837287	2
DP837287	3
DP837287	4
DP837287	5
DP837287	6
DP837287	7
DP837287	8
DP837287	9
DP837287	10
DP837287	11
DP837287	12
DP837287	13
DP837287	14
DP837287	15
DP843986	1
DP843987	10
DP843987	11
DP847172	121
DP847172	122
DP847172	123
DP847172	124
DP848003	191
DP848003	192
DP851685	21
DP851685	22
DP851954	2
DP859716	1
DP859716	2
DP859716	3
DP859716	4
DP859716	5
DP859716	6
DP859716	7
DP861701	5
DP861701	6

DP	Lot
DP861701	7
DP861701	8
DP861701	9
DP861701	10
DP861701	11
DP861701	12
DP864374	1
DP864374	2
DP864374	3
DP864374	4
DP866438	10
DP866438	11
DP866438	12
DP867346	611
DP869537	1
DP869537	2
DP869537	3
DP869537	4
DP869537	5

DP	Lot
DP869761	32
DP870564	33
DP870564	34
DP875041	20
DP876121	101
DP876433	11
DP876828	7
DP876828	8
DP876828	9
DP876828	11
DP877470	1202
DP882345	3
DP921810	1
DP922748	1
DP929372	1
DP929372	2
DP986881	1
Wyong State Forest	

## APPENDIX 2: DEVELOPMENT AREA



### APPENDIX 3: DEVELOPMENT LAYOUT

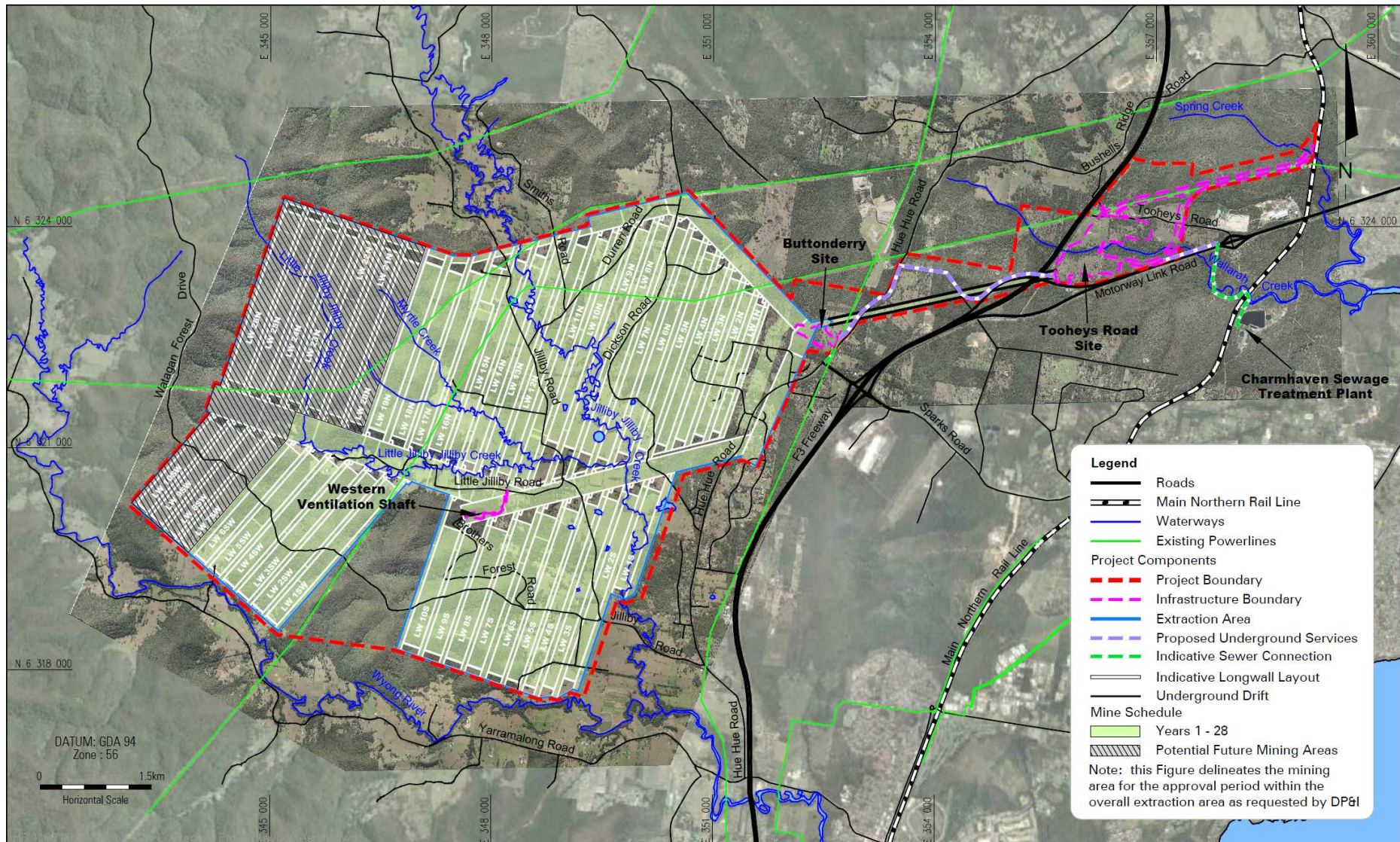


Figure 1: Mine Plan

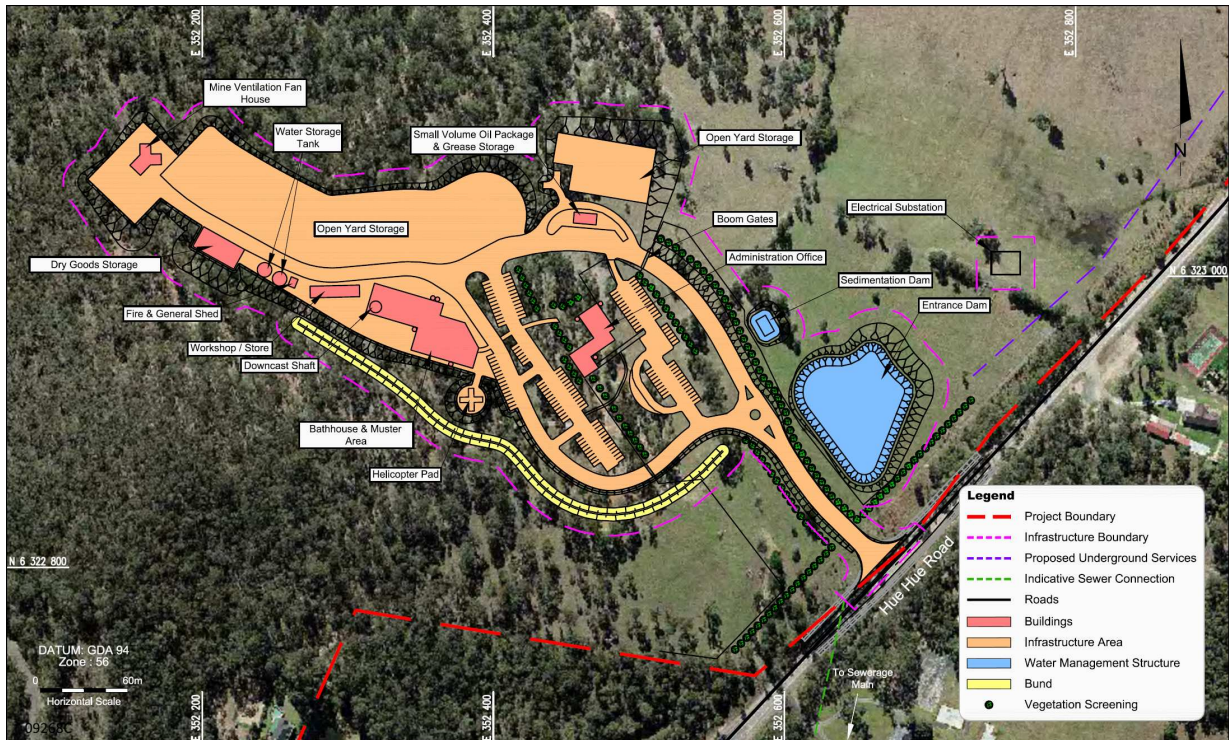


Figure 2: Buttenderry Site

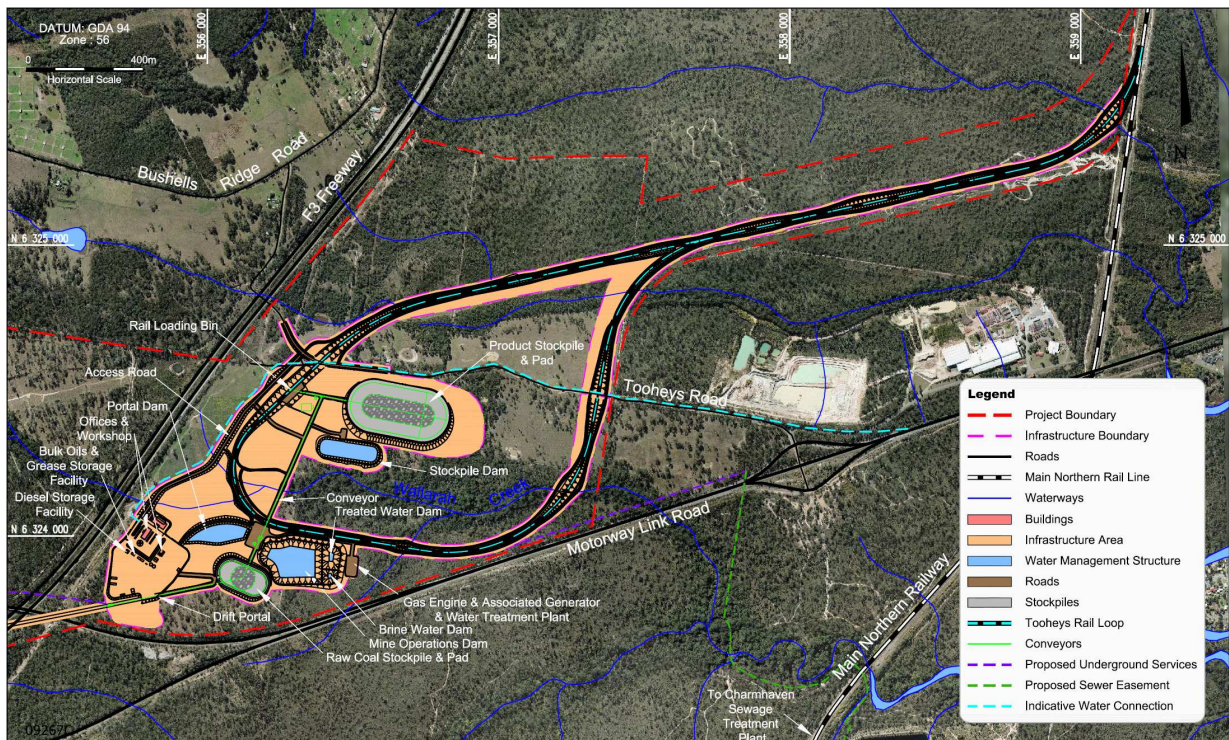


Figure 3: Tooheys Road Site

## APPENDIX 4: HERITAGE SITES

**Table 1:** *Aboriginal Heritage Sites*

Site	Description
WC-OS2	Open site (artefact scatter including flakes, cores and chips)
WSF-AG3	Axe grinding groove site
WSF-AG4	Axe grinding groove site
45-3-3040	Axe grinding groove site
45-3-3041	Axe grinding groove site
45-3-3042	Axe grinding groove site

**Table 2:** *Historic Heritage Sites*

Site	Description
1	Brick & Iron Silo
3	Dwelling "Bangalow"
K	Dwelling
M	Little Jilliby Road Bridge

## **APPENDIX 5: NOISE ASSESSMENT**

### **Applicable Meteorological Conditions**

1. The noise criteria in Table 3 are to apply under all meteorological conditions except the following:
  - (a) average wind speed at microphone height exceeds 5 m/s;
  - (b) wind speeds greater than 3 m/s measured at 10 m above ground level; or
  - (c) temperature inversion conditions greater than 3°C/100 m.

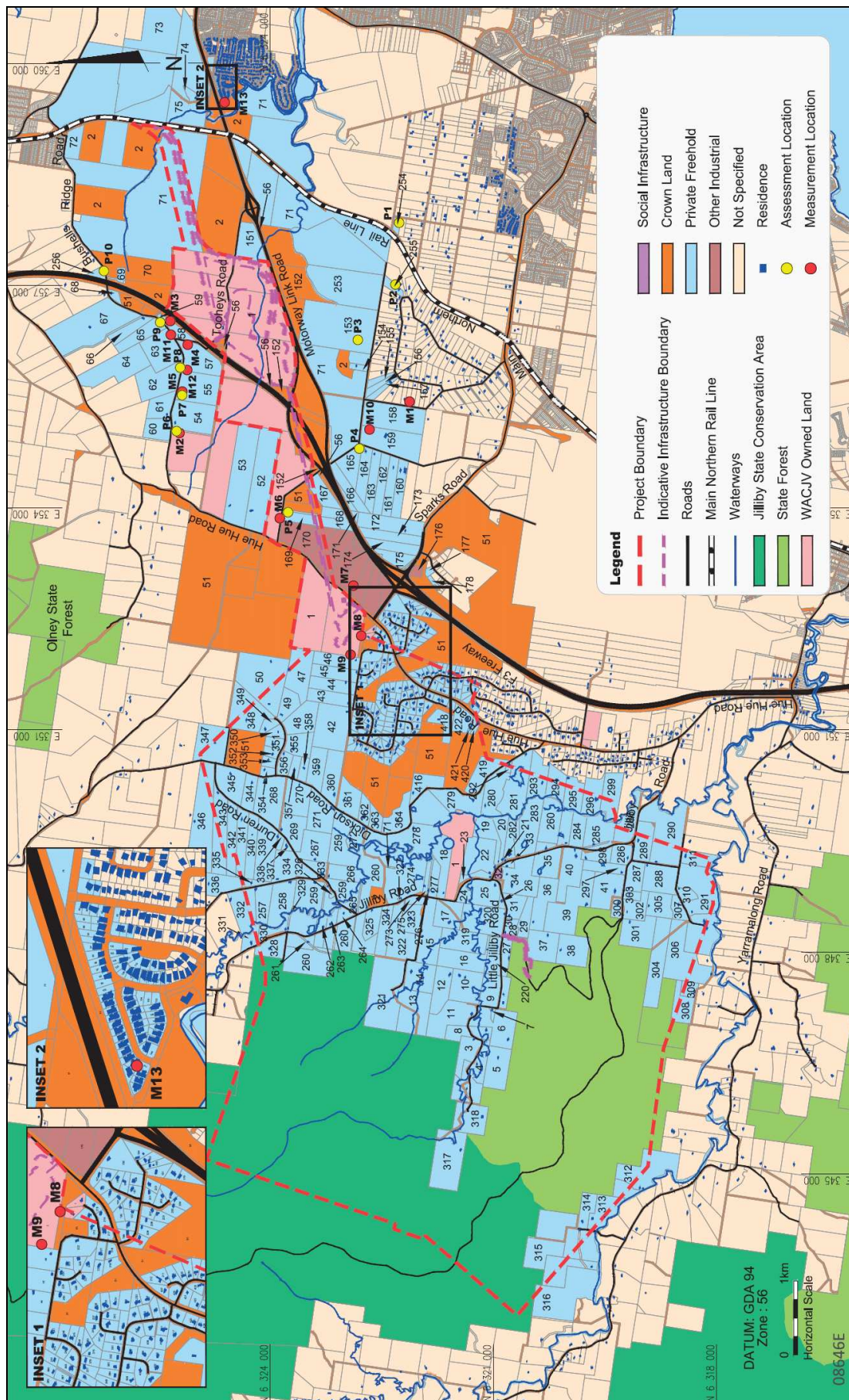
### **Determination of Meteorological Conditions**

2. Except for wind speed at microphone height, the data to be used for determining meteorological conditions shall be that recorded by the meteorological station located on the site.

### **Compliance Monitoring**

3. Attended monitoring is to be used to evaluate compliance with the relevant conditions of this consent.
4. Unless otherwise agreed with the Director-General, this monitoring is to be carried out in accordance with the relevant requirements for reviewing performance set out in the *NSW Industrial Noise Policy* (as amended from time to time), in particular the requirements relating to:
  - (a) monitoring locations for the collection of representative noise data;
  - (b) meteorological conditions during which collection of noise data is not appropriate;
  - (c) equipment used to collect noise data, and conformity with Australian Standards relevant to such equipment; and
  - (d) modifications to noise data collected, including for the exclusion of extraneous noise and/or penalties for modifying factors apart from adjustments for duration.

## APPENDIX 6: NOISE RECEIVER LOCATIONS



## APPENDIX 7: OFFSET AREAS

