

# Development Consent

## Section 80 of the *Environmental Planning & Assessment Act 1979*

I, the Minister Assisting the Minister for Infrastructure and Planning (Planning Administration), approve the Development Application referred to in Schedule 1, subject to the conditions in Schedules 3 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 on-going environmental management of the development.

Diane Beamer MP  
**Minister Assisting the  
Minister for Infrastructure and Planning  
(Planning Administration)**

Sydney,

2004

File No: S02/02148

Blue type represents April 2006 modification (4-1-2006)

Red type represents October 2006 modification (113-9-2006)

Green type represents October 2007 modification (1-10-2007)

Purple type represents July 2010 modification

### SCHEDULE 1

<b>Development Application:</b>	DA 376-8-2003;
<b>Applicant:</b>	Bulga Coal Management Pty Limited;
<b>Consent Authority:</b>	Minister for Infrastructure and Planning;
<b>Land:</b>	See Appendix 1;
<b>Proposed Development:</b>	<p>The development of underground mining operations at the Bulga Complex in general accordance with the Environmental Impact Statement for <i>the Bulga Coal Continued Underground Operations</i>, which includes:</p> <ul style="list-style-type: none"><li>• underground mining in 4 coal seams, producing up to 14 million tonnes of run-of-mine (ROM) coal a year;</li><li>• processing a maximum of 20 million tonnes of ROM coal a year from the Bulga Complex (which includes open cut and underground mining operations);</li><li>• constructing a range of associated infrastructure, including new amenities, offices, road intersections, coal conveyors, gas drainage plants, and gas drainage and dewatering bores;</li><li>• using, and in some cases upgrading existing infrastructure; and</li><li>• transporting coal to Newcastle Port by rail.</li></ul>
<b>State Significant</b>	The proposal is classified as State significant development,

<b>Development:</b>	under section 76A(7) of the <i>Environmental Planning &amp; Assessment Act 1979</i> , because it involves coal-mining related development that requires a new mining lease under section 63 of the <i>Mining Act 1992</i> .	
<b>Integrated Development:</b>	<p>The proposal is classified as integrated development, under section 91 of the <i>Environmental Planning &amp; Assessment Act 1979</i>, because it requires additional approvals under the:</p> <ul style="list-style-type: none"> <li>• <i>Protection of the Environment Operations Act 1997</i>;</li> <li>• <i>National Parks &amp; Wildlife Act 1974</i>;</li> <li>• <i>Water Act 1912</i>;</li> <li>• <i>Roads Act 1993</i>; and</li> <li>• <i>Mine Subsidence Compensation Act 1961</i>.</li> </ul>	
<b>Designated Development:</b>	<p>The proposal is classified as designated development, under section 77A of the <i>Environmental Planning &amp; Assessment Act 1979</i>, because it is for an underground coal mine, and consequently meets the criteria for designated development in schedule 3 of the <i>Environmental Planning &amp; Assessment Regulation 2000</i>.</p>	
<b>BCA Classification:</b>	Class 5:	Offices
	Class 6:	Crib room
	Class 8:	Workshop
	Class 9b:	Bathhouse
	Class 10a:	Gas drainage bore infrastructure
		De-watering bore infrastructure
	Class 10b:	Coal conveyor
		Coal stockpile

*Note:*

- 1) To find out when this consent becomes effective, see section 83 of the *Environmental Planning & Assessment Act 1979 (EP&A Act)*;
  - 2) To find out when this consent is liable to lapse, see section 95 of the *EP&A Act*; and
  - 3) To find out about appeal rights, see section 97 of the *EP&A Act*.
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## SCHEDULE 2 DEFINITIONS

AEMR	Annual Environmental Management Report
Applicant	Bulga Coal Management Pty Limited
BCA	Building Code of Australia
Bulga Mining Complex	The development approved under this consent, together with the development approved under the consent for the Bulga Open Cut Coal Mine (DA 41-03-99), considered collectively
Bore	Any bore or well or excavation or other work connected or proposed to be connected with sources of sub-surface water, and used or proposed to be used or capable of being used to obtain supplies of such water whether the water flows naturally at all times or has to be raised whether wholly or at times by pumping or other artificial means
CCC	Community Consultative Committee
Council	Singleton Shire Council
DA	Development Application
Day	Day is defined as the period from 7am to 6pm on Monday to Saturday, and 8am to 6pm on Sundays and Public Holidays
DECCW	Department of Environment, Climate Change and Water
Department	Department of Planning
Director-General	Director-General of the Department of Planning, or delegate
DII(Minerals)	Department of Industry and Investment (Mineral Resources)
EIS	Environmental Impact Statement for <i>Bulga Coal Continued Underground Operations</i>
EP&A Act	<i>Environmental Planning and Assessment Act 1979</i>
EP&A Regulation	<i>Environmental Planning and Assessment Regulation 2000</i>
Evening	Evening is defined as the period from 6pm to 10pm
GTA	General Term of Approval
Land	Land means the whole of a lot in a current plan registered at the Land Titles Office at the date of this consent
Land Acquisition Criteria	Land Acquisition Criteria for air quality impacts and noise impacts are applied at a dwelling and/or a proposed dwelling
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
Minister	Minister for Infrastructure and Planning, or delegate
MOP	Mining Operations Plan
MSB	Mine Subsidence Board
Night	Night is defined as the period from 10pm to 7am on Monday to Saturday, and 10pm to 8am on Sundays and Public Holidays
NOW	NSW Office of Water
PCA	Principal Certifying Authority appointed under Section 109E of the EP&A Act
Privately-owned land	Land excluding land owned by a mining company, where: <ul style="list-style-type: none"> <li>• A private agreement does not exist between the Applicant and the land owner; and</li> <li>• There are no land acquisition provisions requiring the Applicant to purchase the land upon request from the land owner</li> </ul>
ROM Coal	Run-of-mine coal
RTA	Roads and Traffic Authority
Site	Land to which the DA applies
Vacant land	Vacant land is defined as the whole of the lot in a current plan registered at the Land Titles Office that does not have a dwelling situated on the lot and is permitted to have a dwelling on that lot at the date of this consent.
VAM Abatement Unit	Ventilation Air Methane Abatement Unit
2007 SEE	<i>Statement of Environmental Effects for the Bulga Underground – Southern Mining Area Modification – Section 96(2) Application to Modify Consent DA 376-8-2003</i>

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## SCHEDULE 3 ADMINISTRATIVE CONDITIONS

### Obligation to Minimise Harm to the Environment

1. The Applicant shall implement all practicable 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 Approval

2. The Applicant shall carry out the development generally in accordance with the:
  - (a) DA 376-8-2003;
  - (b) EIS titled *Bulga Coal Continued Underground Operations*, volumes 1-5, dated July 2003;
  - (c) MOD 4-1-2006 and the letter from Umwelt (Australia) Pty Limited to the Department of Planning titled *Section 96(1A) Modification of Bulga Coal Underground Operations (DA 376-8-2003) – Relocation of Men and Materials Drifts*, dated 23 December 2005;
  - (d) MOD 113-9-2006 Statement of Environmental Effects titled *Coal Handling and Processing Plant – Increased Throughput*, dated September 2006; and
  - (e) the modification application MOD 19-3-2007 and accompanying Statement of Environmental Effects entitled *Statement of Environmental Effects for the Bulga Underground – Southern Mining Area Modification – Section 96(2) Application to Modify Consent DA 376-8-2003*, prepared by Umwelt Environmental Consultants and dated March 2007;
  - (f) the Response to Submissions prepared by Umwelt Environmental Consultants and dated July 2007;
  - (g) the modification application 376-8-2003 MOD 4 and Environmental Assessment prepared by Umwelt (Australia) Pty Limited, dated December 2009, and the response to submissions letter dated 22 April 2010; and
  - (h) the conditions of this consent.
3. If there is any inconsistency between the above documents, the latter document shall prevail over the former to the extent of the inconsistency. However, the conditions of this consent shall prevail over all such documents 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 reports, plans or correspondence that are submitted in accordance with this consent; and
  - (b) the implementation of any actions or measures contained in these reports, plans or correspondence.

### Management Plans/Monitoring Programs

- 4A. Within 3 months of any modification to this consent, the Applicant shall review and if necessary revise all strategies/plans/programs required under this consent which are relevant to the modification, to the satisfaction of the Director-General.

### Limits on Approval

5. This consent lapses 27 years after the date it commences.
6. The Applicant shall not extract more than 14 million tonnes of ROM coal per calendar year from the development by underground mining methods
7. The Applicant shall not process more than 20 million tonnes of ROM coal per calendar year from the Bulga Complex.
- 7A. The Applicant shall not commence extraction in the Blakefield Seam in the Bulga Southern underground mining area, until the design of the coal transportation system between the Blakefield Seam development headings and the Bulga coal stockpile area, has been finalised and approved by the Minister.

### Surrender of Consents

8. Within 12 months of the date of this consent, the Applicant shall surrender all existing development consents for underground mining development at the site to the Director-General, in accordance with Clause 97 of the *EP&A Regulation*.

### **Structural Adequacy**

9. The Applicant shall ensure that all new buildings and structures, and any alterations or additions to existing buildings and structures, are constructed in accordance with the relevant requirements of the BCA.

*Notes:*

- *Under Part 4A of the EP&A Act, the 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 development.*
- *The development is located in the Patrick Plains Mine Subsidence District. Under section 15 of the Mine Subsidence Compensation Act 1961, the Applicant is required to obtain the Mine Subsidence Board's approval before constructing or relocating any improvements on the site.*

### **Demolition**

10. The Applicant shall ensure that all demolition work is carried out in accordance with AS 2601-2001: *The Demolition of Structures*, or its latest version.

### **Operation of Plant and Equipment**

11. The Applicant shall ensure that all plant and equipment used at the site, including the rail loop on the site, are:
- (a) maintained in a proper and efficient condition; and
  - (b) operated in a proper and efficient manner.

### **Community Enhancement Contribution**

12. Within 6 months of the date of this consent, or as agreed otherwise by Council, the Applicant shall pay Council up to \$15,000 for water quality enhancement works in the Wollombi Brook. If Council has not carried out these enhancement works within 12 months of payment, the Applicant may retrieve the funds from Council.

## SCHEDULE 4 SPECIFIC ENVIRONMENTAL CONDITIONS

### ACQUISITION UPON REQUEST

1. Upon receiving a written request for acquisition from the landowner of the land listed in Table 1, the Applicant shall acquire the land in accordance with the procedures in Conditions 9-11 of Schedule 5:

Property D - Kennedy	Property L - Dwyer Estates P/L
Property F - Russell	Property R - Myers
Property H - Cobcroft Wines P/L	149 – E. McNerney
6 – I.B. Headley	150 – E. McNerney
7 – I.B. Headley	151 – R.D. & L.M. Lewis
9 – I.B. & J.D. Headley	216 – R.D. & G.W. Turnbull
10– I.B. & J.D. Headley	

*Table 1: Land subject to acquisition upon request*

*Note: For more information on the alphabetical references to land used in this condition, see Table 4.1 and Figure 4.1 of the EIS, and for more information on the numerical references to land used in this condition, see the figures in Appendix 2.*

2. If the Applicant submits a Subsidence Management Plan to the DII(Minerals) that includes longwall mining or subsidence impacts on either of the winery buildings within Property G, and subsequently receives a written request for acquisition from the owner of Property G, then the Applicant shall acquire the land in accordance with the procedures in Conditions 9-11 of Schedule 5.

*Note: For more information on the alphabetical references to land used in this condition, see Table 4.1 and Figure 4.1 of the EIS.*

3. While the land listed in Conditions 1 and 2 are privately-owned, the Applicant shall implement all practicable measures to ensure that the impacts of the development comply with the predictions in the EIS, to the satisfaction of the Director-General.

### SUBSIDENCE

*Note: This development will generally be regulated under the new approval process for managing the impacts of coal mining subsidence under the Mining Act 1992, which takes effect on 18 March 2004. The company has made a commitment to prepare and implement individual property subsidence management plans for all landowners that would be affected by subsidence caused by the development.*

#### Subsidence Management Plan

4. Before carrying out any underground mining operations that will potentially lead to subsidence of the land surface, the Applicant shall prepare a Subsidence Management Plan for those operations in accordance with the following DII(Minerals) documents (or the most current and updated versions of these documents):
  - *New Approval Process for Management of Coal Mining Subsidence - Policy*; and
  - *Guideline for Applications for Subsidence Management Approvals*, to the satisfaction of the Director-General of DII(Minerals).
- 4(A). In fulfilling condition 4 above, the Applicant must:
  - (a) prepare Subsidence Management Plans for longwall panels SB1 – SB7 and SEB1 – SEB2. These plans must take into account subsidence predictions arising from any case studies (i.e. empirical data) made available by the DII(Minerals) and be reviewed by an independent expert;
  - (b) submit an independent expert's review of the:
    - subsidence, groundwater and surface water monitoring results (compared with predictions) for panel SB1 (and, where available) panel SB2 to the DII(Minerals) three months prior to the commencement of extraction of panel SB3;
    - remaining subsidence, groundwater and surface water monitoring results (compared with predictions) for panel SB2 to the DII(Minerals) one month prior to the commencement of extraction of panel SB3; and

- (c) revise the Subsidence Management Plans required under paragraph (a), prior to longwall extraction in panel SB3, if the reviews required under paragraph (b) indicate that the plans should be modified or if directed by the Director-General. Any revised plans must take into account the recalibration of subsidence models using subsidence data available from panels SB1 and SB2 and results of the audit undertaken under condition 5 below.

### Independent Audit

5. Prior to seeking approval from the **DII(Minerals)** for a set of longwall panels (excluding the first set of longwall panels included in the first Subsidence Management Plan accepted under this development consent), unless the Director-General directs otherwise, the Applicant shall commission a suitably qualified person, whose appointment has been approved by the Director-General, to conduct an independent audit of the subsidence, surface water, and ground water impacts of the development. The audit shall:
  - (a) review the monitoring data for the development;
  - (b) identify any trends in the monitoring data;
  - (c) examine the subsidence, surface water, and ground water impacts of the development;
  - (d) compare these impacts against the relevant impact assessment criteria and predictions in the EIS; and, if necessary,
  - (e) recommend measures to reduce, mitigate, or remediate these impacts.
6. Within 3 months of commissioning this audit, or as other wise agreed by the Director-General, the Applicant shall submit a copy of the audit report to the Director-General.
7. If the independent audit determines that the subsidence, surface water, and/or ground water impacts resulting from the underground mining operations are greater than those predicted, the Applicant shall:
  - (a) assess the significance of these impacts;
  - (b) investigate measures to minimise these impacts, including modifying subsequent mine plans; and
  - (c) describe what measures would be implemented to reduce, minimise, mitigate or remediate these impacts in the future;
 to the satisfaction of the Director-General.

### <sup>1</sup>SURFACE & GROUND WATER

*Note: The Applicant is required to obtain licences for the development under the Water Act 1912 and the Protection of the Environment Operations Act 1997.*

#### Pollution of Waters

8. Except as may be expressly provided by an Environment Protection Licence, the Applicant shall comply with section 120 of the *Protection of the Environment Operations Act 1997* during the carrying out of the development.

#### Discharge Limits

9. Except as may be expressly provided by an Environment Protection Licence or the *Protection of the Environment Operations (Hunter River Salinity Trading Scheme) Regulation 2002*, the Applicant shall:
  - (a) not discharge more than 55 ML/day from the licensed discharge point/s at the development; and
  - (b) ensure that the discharges from any licensed discharge points comply with the limits in Table 2:

Pollutant	Units of measure	100 percentile concentration limit
pH	pH	6.5 ≤ pH ≤ 9.5
Non-filterable residue	mg/litre	NFR ≤ 120

*Table 2: Discharge Limits*

*Note: This condition does not authorise the pollution of waters by any other pollutants.*

<sup>1</sup> Incorporates **DECCW** GTA



## Site Water Balance

10. <sup>2</sup>Each year, the Applicant shall:
- review the site water balance for the development against the predictions in the EIS;
  - re-calculate the site water balance for the development; and
  - report the results of this review in the AEMR.

## Flood Exclusion Levee

11. The Applicant shall design, construct, maintain, and rehabilitate the Flood Exclusion Levee to the satisfaction of the Director-General. This levee shall:
- remain stable under a 1 in a 100 year ARI flood event; and
  - not cause an increase in backwater stream heights in Wollombi Brook of greater than 20mm upstream of the confluence of the unnamed watercourse and Wollombi Brook under conditions up to and including a 1 in a 100 year ARI flood event.
12. Within one month of completing the construction of the Flood Exclusion Levee, the Applicant shall submit an as-executed report, certified by a practising registered engineer, to the Director-General.

## Monitoring

13. The Applicant shall:
- measure:
    - the volume of water discharged from the site via the licensed discharge points;
    - water use on the site;
    - dam and water structure storage level for dams associated with the mine discharge system;
    - water transfers across the site; and
    - water transfers between the site and surrounding mines;
  - monitor the quality of the surface water:
    - discharged from the licensed discharge point/s at the development; and
    - upstream and downstream of the development;
  - monitor flows in the Wollombi Brook;
  - monitor the volume and quality of water inflows to and from the underground workings; and
  - monitor regional ground water levels and quality in the alluvial, coal seam, and inter-burden aquifers during the development and at least 10 years after mining, and
  - periodically assess groundwater pressure response in the coal measures; in consultation with DECCW and NOW and to the satisfaction of the Director-General.

## Site Water Management Plan

14. Within 12 months of the date of this consent, the Applicant shall prepare or update the existing Site Water Management Plan for the development in consultation with DECCW, and to the satisfaction of the Director-General. This plan must include:
- the predicted site water balance;
  - a Surface Water Monitoring Program;
  - a Ground Water Monitoring Program;
  - a Surface and Ground Water Response Plan; and
  - a strategy for decommissioning water management structures on the site.
15. <sup>3</sup>The Surface Water Monitoring Program shall include:
- detailed baseline data on surface water flows and quality in the Wollombi Brook and Loders Creek;
  - surface water impact assessment criteria;
  - a program to monitor surface water flows and quality in the Wollombi Brook and Loders Creek; and
  - a program to monitor the effectiveness of the Erosion and Sediment Control Plan.
16. The Ground Water Monitoring Program shall include:
- detailed baseline data on ground water levels and quality, based on statistical analysis, to benchmark the pre-mining natural variation in groundwater levels and quality;
  - ground water impact assessment criteria;

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<sup>2</sup> These calculations must exclude the clean water system, including any sediment control structures, and any dams in the mine lease area which fall under the Maximum Harvestable Right Dam Capacity; include any dams that are licensable under Section 205 of the *Water Act 1912*, and water harvested from any non-harvestable rights dam on the mine lease area; address balances of inflows, licensed water extractions, and transfers of water from the site to other sites; include an accounting system for water budgets; and include a salt budget.

<sup>3</sup> Incorporates DECCW GTA

- (c) a program to monitor the volume and quality of ground water seeping into the underground mine workings; and
  - (d) a program to monitor regional ground water levels and quality in the alluvial and coal seam aquifers.
17. The Surface and Ground Water Response Plan shall include:
- (a) measures to mitigate any adverse impacts on existing water supply bores or wells in either the alluvial or coal measure aquifer systems;
  - (b) measures to remediate any connective cracking between the underground mine workings and any surface water stream channels, floodplain areas, or the alluvial aquifer;
  - (c) measures to address a decrease in throughflow rates caused by the development within the Wollombi Brook/Monkey Place Creek alluvium adjacent to or downstream of the development within the mine lease boundary; and
  - (d) the procedures that would be followed if any unforeseen impacts are detected during the development.

#### **Flood Levee Plan**

18. Three months prior to the commencement of construction of the flood levee on the northern drainage line, the Applicant shall submit a Flood Exclusion Levee Plan for the Director-General's approval. The Plan shall include:
- (a) the detailed design and specifications of the levee, including any measures to allow waters to flow through the levee when required;
  - (b) the measures that would be implemented to minimise soil erosion and the potential for the migration of sediments to downstream waters;
  - (c) a construction program for the levee, describing how the work would be staged, and integrated with the proposed works in the Northern Drainage Line; and
  - (d) a program to inspect and maintain the levee and associated revegetation works during the development.

#### **Erosion and Sediment Control Plan**

19. Three months prior to the commencement of construction works outside the Bulga Complex Water Management System or subsidence remediation, the Applicant shall submit an Erosion and Sediment Control Plan for the Director-General's approval. The Plan shall:
- (a) be consistent with the requirements of the Department of Housing's *Managing Urban Stormwater: Soils and Construction* manual;
  - (b) identify activities that could cause soil erosion and generate sediment;
  - (c) describe the location, function, and capacity of erosion and sediment control structures; and
  - (d) describe the measures to minimise soil erosion and the potential for the migration of sediments to downstream waters.

*Note: The Erosion & Sediment Control Plan should only relate to development that is scheduled to occur outside the mine's "dirty water" system. Given that this development is likely to be staged, the Department accepts that the Erosion & Sediment Control Plan is likely to be prepared in stages to coincide with the relevant stages of the development.*

#### **Surface & Sub-surface Investigation & Monitoring Program**

20. Within 12 months of the date of this consent, or prior to the commencement of longwall extraction in the approved panels, whichever occurs first, the Applicant shall develop and implement a surface and subsurface investigation and monitoring program to assess the likely fracturing of geological strata and hydraulic property changes above each longwall panel, to the satisfaction of the Director-General. This program shall:
- (a) assess the impact on groundwater resources and surface expression resulting from underground mining at varying depths;
  - (b) compare the results from all longwall panels against pre-mining baseline geological conditions, in order to assess the level of variability of fracture and changes in hydraulic properties between panels; and
  - (c) be repeated for each coal seam as it is mined.

#### **Final Void Management**

21. At least 5 years prior to the completion of the development, the Applicant shall evaluate the potential long-term impacts of any final pit voids on groundwater resources, and develop an appropriate management plan to the satisfaction of the Director-General.

## AIR QUALITY

### Impact Assessment Criteria

22. The Applicant shall ensure that the air pollution generated by the development does not exceed the criteria listed in Tables 3, 4, and 5 at any privately-owned land.

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

Table 3: Long term impact assessment criteria for particulate matter

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

Table 4: Short term impact assessment criterion for particulate matter

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

Table 5: Long term impact assessment criteria for deposited dust

Note: Deposited dust is assessed as insoluble solids as defined by Standards Australia, 1991, AS 3580.10.1-1991: Methods for Sampling and Analysis of Ambient Air - Determination of Particulates - Deposited Matter - Gravimetric Method.

### Land Acquisition Criteria

23. If the air pollution generated by the development exceeds the criteria in Tables 6, 7, and 8 at any privately-owned land, the Applicant shall, upon receiving a written request for acquisition from the landowner, acquire the land in accordance with the procedures in Conditions 9-11 of Schedule 5.

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

Table 6: Long term land acquisition criteria for particulate matter

Pollutant	Averaging period	Criterion	Percentile <sup>1</sup>	Basis
Particulate matter < 10 µm (PM <sub>10</sub> )	24 hour	150 µg/m <sup>3</sup>	99 <sup>2</sup>	Total <sup>3</sup>
Particulate matter < 10 µm (PM <sub>10</sub> )	24 hour	50 µg/m <sup>3</sup>	98.6	Increment <sup>4</sup>

Table 7: Short term land acquisition criteria for particulate matter

<sup>1</sup>Based on the number of block 24 hour averages in an annual period.

<sup>2</sup>Excludes extraordinary events such as bushfires, prescribed burning, dust storms, sea fog, fire incidents, illegal activities or any other activity agreed by the Director-General in consultation with the DECCW.

<sup>3</sup>Background PM<sub>10</sub> concentrations due to all other sources plus the incremental increase in PM<sub>10</sub> concentrations due to the development alone.

<sup>4</sup>Incremental increase in PM<sub>10</sub> concentrations due to the development alone.

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

Table 8: Long term land acquisition criteria for deposited dust

Note: Deposited dust is assessed as insoluble solids as defined by Standards Australia, 1991, AS 3580.10.1-1991: Methods for Sampling and Analysis of Ambient Air - Determination of Particulates - Deposited Matter - Gravimetric Method.

## Odour

24. Except as may be expressly provided by an Environment Protection Licence, the Applicant shall not cause or permit the emission of offensive odour beyond the site.

## <sup>4</sup>Monitoring

25. The Applicant shall monitor (by sampling and obtaining results by analysis) the concentration of each pollutant in Table 9 to the satisfaction of DECCW and the Director-General, using the specified averaging period, frequency, and sampling method:

Pollutant	Units of Measure	Averaging Period	Frequency	Sampling method <sup>1</sup>
TSP	µg/m <sup>3</sup>	24 hour, annual	1 day in 6	AM-15
Dust Deposition	g/m <sup>2</sup> /month	Month, annual	Continuous	AM-19
Siting	-	-	-	AM-1

Table 9: Air quality monitoring

<sup>1</sup> NSW EPA, 2001, Approved Methods for the Sampling and Analysis of Air Pollutants in NSW.

<sup>2</sup> Standards Australia, 2001, AS3580.9.8-2002, Method for Sampling and Analysis of Ambient Air - Determination of Suspended Particulate Matter - PM<sub>10</sub> Continuous Direct Mass Method using a Tapered Element Oscillating Microbalance Analyser, or any other method that is approved by the DECCW and the Director-General.

26. Within 12 months of this consent, the Applicant shall prepare an Air Quality Monitoring Program, in consultation with DECCW, and to the satisfaction of the Director-General.

## Post Commissioning Report

27. Within 3 months of commissioning a ventilation shaft discharge vent, the Applicant shall:
- carry out ventilation shaft monitoring (by sampling and obtaining results by analysis) of the concentration of each parameter in Table 10, using the specified sampling method; and
  - submit the results to DECCW.

Parameter	Units of Measure	Sampling method <sup>1</sup>
Solid particles	mg/m <sup>3</sup>	TM-15
Odour	OU	OM-7
Velocity	m/s	TM-2
Volumetric flow rate	m <sup>3</sup> /s	TM-2
Temperature	°C	TM-2
Moisture	%	TM-22
Dry gas density	kg/m <sup>3</sup>	TM-23
Molecular weight of stack gases	g/g.mol	TM-23
Carbon dioxide	%	TM-24
Selection of sampling positions	-	TM-1

Table 10: Ventilation Shaft Monitoring

<sup>1</sup> NSW EPA, 2001, Approved Methods for the Sampling and Analysis of Air Pollutants in NSW.

<sup>4</sup> Incorporates DECCW GTA

28. If the results of the ventilation shaft monitoring are outside the range used in the dispersion modelling study in the EIS as modified by the 2007 SEE, the Applicant shall reassess the odour and dust impacts from the ventilation shafts, and submit the results to DECCW.

#### Post Commissioning Report – Power Generation Plant and VAM Abatement Unit

- 28A Within 3 months of commissioning any gas engine within the power generation plant and/or the VAM abatement unit, the Applicant shall:
- carry out air emissions monitoring (by sampling and obtaining results by analysis) of the concentration of each parameter in Table 11, for the stack serving each gas-fired engine and the stack serving the VAM abatement unit;
  - demonstrate compliance with DECCW's ground level concentration criteria; and
  - submit the results to DECCW.

Table 11: Power Generation Plant and VAM Abatement Unit Monitoring

Parameter	Units of Measure	Sampling method <sup>1</sup>
Carbon monoxide	mg/m3	TM-32
Nitrogen dioxide (NO <sub>2</sub> ) or nitric oxide (NO) or both, as NO <sub>2</sub> equivalent	mg/m3	OM-11
Volatile organic compounds	mg/m3	TM-34
Volumetric flow rate	m3/s	TM-2
Oxygen	%	TM-25
Moisture	%	TM-22
Dry gas density	kg/m3	TM-23
Molecular weight of stack gases	g/g.mol	TM-23
Selection of sampling positions	-	TM-1

<sup>1</sup> NSW EPA, 2001, Approved Methods for the Sampling and Analysis of Air Pollutants in NSW.

#### <sup>5</sup>NOISE

##### Land Acquisition Criteria

29. If the noise generated by the development exceeds the criteria in Table 12 at any residence on privately-owned land or on more than 25 per cent of any privately-owned land, the Applicant shall, upon receiving a written request for acquisition from the landowner, acquire the land in accordance with the procedures in conditions 6-8 of schedule 3.

Table 12: Land Acquisition Criteria dB(A)

Day/Evening/Night <i>L</i> <sub>Aeq(15 minute)</sub>	Land
40	All privately owned land, excluding the land listed in Table 1.

Notes:

- Noise generated by the development is to be measured and evaluated in accordance with the relevant procedures and exemptions (including certain meteorological conditions) of the NSW Industrial Noise Policy.
- These noise limits do not apply on land if the Applicant has a negotiated agreement with the relevant owner/s of that land to generate higher noise levels, and the Applicant has advised the Department in writing of the terms of this agreement.

##### Noise Impact Assessment Criteria

30. The Applicant shall ensure that the noise generated by the development does not exceed the noise impact assessment criteria in Table 13 at any residence on privately-owned land, or on more than 25 percent of any privately-owned land.

Table 13: Noise Impact Assessment Criteria dB(A)

Residence/Land	Day	Evening	Night	
	<i>L</i> <sub>Aeq(15 min)</sub>	<i>L</i> <sub>Aeq(15 min)</sub>	<i>L</i> <sub>Aeq(15 min)</sub>	<i>L</i> <sub>A1(1 min)</sub>

<sup>5</sup> Incorporates DECCW GTAs

Residence/Land	Day	Evening	Night	
	$L_{Aeq(15\ min)}$	$L_{Aeq(15\ min)}$	$L_{Aeq(15\ min)}$	$L_{A1(1\ min)}$
249	40	40	40	45
8, 195	39	39	39	45
157, 179, 307	38	38	38	45
1, 2s, 154, 237, 239, 250, 252, 261, 262, 308	37	37	37	45
232	37	37	36	45
97, 153, 163, 169e, 171, 183, 184, 197, 217s, 217m, 217n, 234, 235, 240, 263, 264, 266, 267, 272, 273, 274, 276, 279, 280, 282	36	36	36	45
33, 156w, 230, 281	36	36	35	45
All other privately owned land, excluding the land listed in Table 1.	35	35	35	45

**Notes:**

- To interpret the numerical references to land referred to in Tables 1 and 13, see the applicable figures in Appendix 2.
- Noise generated by the development is to be measured and evaluated in accordance with the relevant procedures and exemptions (including certain meteorological conditions) of the NSW Industrial Noise Policy.
- These noise limits do not apply at residences or land if the Applicant has a negotiated agreement with the relevant owner/s of that residence or land to generate higher noise levels, and the Applicant has advised the Department in writing of the terms of this agreement.

### Additional Noise Mitigation Measures

31. Upon receiving a written request from:
- a landowner of the land listed in Table 1 (unless the landowner has requested acquisition); or
  - a landowner of residence/land 8, 157, 179, 195, 249 or 307 (unless a negotiated agreement is in place); or
  - the owner of any other residence where subsequent operational noise monitoring shows the noise generated by the development is greater than, or equal to, 38 dB(A)  $L_{Aeq(15\ minute)}$  (unless a negotiated agreement is in place),

the Applicant shall implement additional noise mitigation measures such as double glazing, insulation, and/or air conditioning at any residence on the land in consultation with the landowner.

These additional mitigation measures must be reasonable and feasible. The Applicant shall notify all landowners by 31 July 2010 that they are entitled to receive additional noise mitigation measures in accordance with this condition, to the satisfaction of the Director-General.

If within 3 months of receiving such a request from the landowner, 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.

### Cumulative Noise Impact Assessment Criteria

32. The Applicant shall implement all reasonable and feasible measures to ensure that the noise generated by the development combined with the noise generated by other mines does not exceed the amenity criteria in Table 14 at any residence on privately-owned land or on more than 25 per cent of any privately-owned land, to the satisfaction of the Director-General.

Table 14: Cumulative Noise Impact Assessment Criteria dB(A)  $L_{Aeq}$  (period)

Location	Day	Evening	Night
	$L_{Aeq(11\ hour)}$	$L_{Aeq(4\ hour)}$	$L_{Aeq(9\ hour)}$
All privately owned land, excluding the land listed in Table 1.	50	45	40

*Note: Cumulative noise is to be measured and evaluated in accordance with the relevant procedures and exemptions (including certain meteorological conditions) of the NSW Industrial Noise Policy.*

### Cumulative Land Acquisition Criteria

- 32A. If the cumulative noise generated by the development combined with the noise generated by other mines exceeds the amenity criteria in Table 15 at any residence on privately owned land, or on more than 25% of privately owned land, then upon receiving a written request from the landowner, the Applicant shall take all reasonable and feasible measures to acquire the land on as equitable basis as possible with the relevant mines, in accordance with the procedures in conditions 9-11 of schedule 5, to the satisfaction of the Director-General.

*Table 15: Cumulative Land Acquisition Criteria dB(A)*

Location	Day	Evening	Night
	<i>L<sub>Aeq</sub>(11 hour)</i>	<i>L<sub>Aeq</sub>(4 hour)</i>	<i>L<sub>Aeq</sub>(9 hour)</i>
All privately owned land, excluding the land listed in Table 1.	53	48	43

*Notes:*

- *For the purpose of this condition, the expression “Applicant” in conditions 9-11 of schedule 5 should be interpreted as the Applicant and any other relevant mines.*
- *Cumulative noise is to be measured and evaluated in accordance with the relevant procedures and exemptions (including certain meteorological conditions) of the NSW Industrial Noise Policy.*

### Continuous Improvement

- 32B. The Applicant shall:
- implement all reasonable and feasible best practice noise mitigation measures;
  - progressively upgrade and replace its mobile equipment fleet;
  - report the implementation and effectiveness of these measures in the AEMR, to the satisfaction of the Director-General.

### Noise Management Plan

- 32C. The Applicant shall prepare and implement a Noise Management Plan for the development to the satisfaction of the Director-General. This program must:
- be prepared by a suitably qualified expert whose appointment has been approved by the Director-General, and submitted to the Director-General for approval by 30 August 2010; and
  - include a:
    - combination of unattended and attended monitoring measures;
    - noise monitoring protocol for evaluating the contribution of low frequency noise;
    - noise monitoring protocol for evaluating compliance with the relevant criteria for noise impact assessment, land acquisition, cumulative impact assessment and cumulative acquisition in this consent; and
    - response protocol that will immediately be followed if noise emissions are nearing or exceeding these criteria and a description of what contingency plans will be implemented on site if this occurs.

*Notes:*

- *The management responses to be followed in the event that noise emissions are nearing or exceeding the noise criteria in this consent should be staged in a manner that is commensurate with the level of noise emissions that may occur.*
- *Management responses should include relocating, modifying and/or ceasing operations until the exceedance is addressed and rectified. In the event of a breach of the noise criteria in this approval, noise traces for the offending period should be forwarded to the Department and DECCW as soon as practicable following the event.*

### <sup>6</sup>METEOROLOGICAL MONITORING

33. The Applicant shall monitor the parameters specified in Table 16 to the satisfaction of the Director-General, using the specified units of measure, averaging period, frequency, and sampling method in the table.

<sup>6</sup> Incorporates DECCW GTA

<b>Parameter</b>	<b>Units of measure</b>	<b>Averaging period</b>	<b>Frequency</b>	<b>Sampling method<sup>1</sup></b>
Lapse rate	°C/100m	1 hour	Continuous	Note <sup>2</sup>
Rainfall	mm/hr	1 hour	Continuous	AM-4
Sigma Theta @ 10 m	°	1 hour	Continuous	AM-2
Siting	-	-	-	AM-1
Temperature @ 10 m	K	1 hour	Continuous	AM-4
Temperature @ 2 m	K	1 hour	Continuous	AM-4
Total Solar Radiation @ 10m	W/m <sup>2</sup>	1 hour	Continuous	AM-4
Wind Direction @ 10 m	°	1 hour	Continuous	AM-2
Wind Speed @ 10 m	m/s	1 hour	Continuous	AM-2

**Table 16: Meteorological monitoring**

<sup>1</sup> NSW EPA, 2001, *Approved Methods for the Sampling and Analysis of Air Pollutants in NSW*.

<sup>2</sup> The Applicant shall calculate lapse rate from measurements made at 2m and 10m.

## **<sup>7</sup>ABORIGINAL CULTURAL HERITAGE**

*Note: The Applicant is required to obtain consent from DECCW under the National Parks Wildlife Act 1974 to destroy Aboriginal sites and objects on the site.*

### **Conservation Agreement**

34. The Applicant shall protect BCO10 and the associated landscape context within the proposed conservation area east of Wollombi Brook (see Figure 13.3 in the *Bulga Coal Continued Underground Operations EIS*), and consider options for extending this area to the satisfaction of DECCW.

### **Scarred Tree**

35. The Applicant shall protect the scarred tree at Bulga 6 (see Figure 7.2 in Appendix 13 of the *Bulga Coal Continued Underground Operations EIS*) to the satisfaction of DECCW.

### **Section 90 Consents**

36. The Applicant will receive Section 90 consents from DECCW to destroy the following Aboriginal artefact find locations, and the deposits between them: BCO2, BCO21, BMU1, BMU2 (B71 & Saxonvale B), BMU12, BMU17, IF Bulga South, GIF-IF1, GIF-IF2, GIF-IF3, GIF-IF4, BP2, G2, G3, G4, G9, G11, PART BCO1 (Saxonvale A), BCO3, BCO10 (G7, G6, G8, Bulga 7).

### **Salvage**

37. The Applicant shall develop a salvage program/s for the following sites in consultation with the Aboriginal community and to the satisfaction of DECCW: BCO2, BCO21, BMU2 (B71 & Saxonvale B), BP2, G2, G3, G4, G9, G11, PART BCO1 (Saxonvale A), BCO3, BCO10 (G7, G6, G8, Bulga 7).

*Note: The program/s will be considered as part of the Section 90 consent process.*

### **Aboriginal Heritage Management Plan**

38. The Applicant shall prepare an Aboriginal Heritage Management Plan for the site, in consultation with the Aboriginal community, and to the satisfaction of DECCW.

### **Trust Fund Contribution**

39. Within 6 months of the date of this consent, or as agreed otherwise by the Director-General, the Applicant shall contribute \$50,000 to the Hunter Aboriginal Cultural Heritage Trust Fund for further investigations into Aboriginal heritage, as defined by the Trust Deed.

## **HERITAGE**

*Note: For more information on the references used in the following conditions see Figure 13.1 of the EIS.*

### **Conservation**

40. The Applicant shall conserve heritage site BH15 to the satisfaction of the Director-General.

<sup>7</sup> Incorporates DECCW GTAs



## **Archival Record**

41. The Applicant shall investigate and prepare an archival record of heritage sites BH9 and BH11 in accordance with the requirements of the NSW Heritage Office, and to the satisfaction of the Director-General.

## **Other Measures**

42. The Applicant shall:
- (a) prepare a photographic record of the condition and integrity of heritage site BH13 before, during and after mining;
  - (b) mark BH12 to prevent accidental destruction; and
  - (c) fence and signpost BH7
- to the satisfaction of the Director-General.

## **FAUNA & FLORA**

### **Habitat Creation and Conservation**

43. The Applicant shall:
- (a) take all practicable measures to minimise vegetation clearing during the development, and wherever practicable, avoid clearing the existing woodland vegetation on site;
  - (b) establish and maintain the proposed flora and fauna corridors on site (see Figure 12.2 of the EIS);
  - (c) investigate the feasibility of extending these corridors into the proposed voluntary conservation area (see Figure 12.2 of the EIS);
  - (d) conserve and maintain the existing Warkworth Sands Woodland ecological community (see Figure 12.1 of the EIS);
  - (e) investigate the potential distribution of the Warkworth Sands Woodland ecological community on company owned land on and adjacent to the site, and consider options for providing long-term protection to the existing and potential areas of the Warkworth Sands Woodland ecological community;
  - (f) Re-establish and maintain riparian vegetation along the northern and southern drainage lines following remedial works (see Figures 7.2 & 7.3 of the EIS); and
  - (g) Create temporary aquatic habitat in the proposed northern diversion channel during creek restoration works (see Figures 7.2 & 7.3 of the EIS), and re-establish and maintain aquatic habitat following remedial works in the northern and southern drainage lines (see Figures 7.2 & 7.3 of the EIS); and
  - (h) Conduct regular flora and fauna monitoring on site during the development, to the satisfaction of the Director-General.

### **Flora & Fauna Management Plan**

44. Within 12 months of the date of this consent, the Applicant shall prepare a Flora & Fauna Management Plan for the development, in consultation with the Hunter Coalfield Flora and Fauna Advisory Committee, and to the satisfaction of the Director-General. This plan must include:
- (a) baseline data of the existing habitat on site;
  - (b) a detailed description of what measures would be implemented to satisfy the requirements in Condition 43;
  - (c) performance/completion criteria for the habitat creation and conservation works;
  - (d) the detailed procedures to:
    - salvage and reuse material from the site;
    - clear vegetation on site;
    - control erosion and sediment flows;
    - collect and propagate seeds from the local area;
    - control weeds;
    - control access to certain areas on site;
    - manage any potential conflicts between flora and fauna and Aboriginal heritage
  - (e) a flora and fauna monitoring program; and
  - (f) a description of who would be responsible for monitoring, reviewing, and implementing the plan.

### **Annual Review**

45. The Applicant must:
- (a) review the performance of the Flora & Fauna Management Plan, annually, in consultation with the Hunter Coalfield Flora & Fauna Advisory Committee; and

- (b) revise the Flora & Fauna Management Plan, as necessary to take into account any recommendations from the annual review.

#### **Hunter Coalfield Flora & Fauna Advisory Committee Contribution**

- 46. The Applicant shall contribute a reasonable amount, up to \$5,000, each year towards the operation of the Hunter Coalfield Flora & Fauna Advisory Committee.

#### **TRAFFIC & TRANSPORT**

##### **New Access Intersections**

*Note: The Applicant requires Council approval under the Roads Act 1993 for any works within the public road reserve.*

- 47. <sup>8</sup>The Applicant shall design, construct and maintain the proposed new Type C access intersections with Broke Road to the satisfaction of Council.

##### **Conveyors**

- 48. The Applicant shall design and construct the proposed conveyors over Broke Road to the satisfaction of Council.
- 49. The Applicant shall ensure that all construction work within the transmission line easement is carried out to the satisfaction of Transgrid.

#### **VISUAL IMPACT**

##### **Landscaping & Visual Screening**

- 50. The Applicant shall:
  - (a) landscape the proposed access intersections off Broke Road within 3 months of completing construction works; and
  - (b) maintain and augment as required, the visual screening along Broke Road throughout the life of the developmentto the satisfaction of the Director-General.

##### **Location & Construction of Gas Plants, and Gas & Dewatering Bores**

- 51. The Applicant shall minimise the potential visual impacts associated with locating and constructing the proposed gas plants, and gas and dewatering bores on site to the satisfaction of the Director-General.

##### **Lighting Emissions**

- 52. The Applicant shall take all practicable measures to mitigate off-site lighting impacts from the development to the satisfaction of the Director-General.
- 53. All external lighting associated with the development shall comply with *Australian Standard AS4282 (INT) 1995 – Control of Obtrusive Effects of Outdoor Lighting*.

#### **GREENHOUSE GAS**

- 54. The Applicant shall:
  - (a) monitor the greenhouse gas emissions generated by the development;
  - (b) investigate ways to reduce greenhouse gas emissions on site; and
  - (c) report on these investigations in the AEMR,to the satisfaction of the Director-General.

#### **WASTE MINIMISATION**

- 55. The Applicant shall minimise the amount of waste generated by the development to the satisfaction of the Director-General.

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<sup>8</sup> Incorporates RTA GTA

## **HAZARDS MANAGEMENT**

### **Spontaneous Combustion**

56. The Applicant shall take the necessary measures to prevent, as far as is practical, spontaneous combustion on the site.

### **Dangerous Goods**

57. The Applicant shall ensure that the storage, handling, and transport of dangerous goods is done in accordance with the relevant *Australian Standards*, particularly *AS1940* and *AS1596*, and the *Dangerous Goods Code*.

## **BUSHFIRE MANAGEMENT**

58. The Applicant shall:
- (a) ensure that the development is suitably equipped to respond to any fires on-site; and
  - (b) assist the Rural Fire Service and emergency services as much as possible if there is a fire on-site during the development.

## **MINE EXIT STRATEGY**

59. The Applicant shall work with the Council to investigate the minimisation of adverse socio-economic effects of a significant reduction in local employment levels and closure of the development at the end of its life.

## **SCHEDULE 5 ADDITIONAL PROCEDURES FOR AIR QUALITY, NOISE MANAGEMENT AND SUBSIDENCE MANAGEMENT**

### **NOTIFICATION OF LANDOWNERS**

1. Within 1 month of the date of this modification, the Applicant shall notify the landowners of the land listed in Table 1 of schedule 4 in writing that they have the right to require the Applicant to acquire their land at any stage during the development.
2. If the results of monitoring required in schedule 4 identify that impacts generated by the development are greater than the impact assessment criteria in schedule 4, except where this is predicted in the EA, and except where a negotiated agreement has been entered into in relation to that impact, then the Applicant shall notify the Director-General and the affected landowners and tenants (including tenants of mine owned properties) accordingly, and provide quarterly monitoring results to each of these parties until the results show that the development is complying with the criteria in schedule 4.
3. Within 6 months of the date of this consent, the Applicant shall develop a procedure in consultation with DECCW and NSW Health, for notifying landowners and tenants referred to in Condition 1. This procedure must ensure that:
  - (a) all existing and future tenants are advised in writing about:
    - air quality impacts likely to occur at the residence during the operational life of the mine; and
    - likely health and amenity impacts associated with exposure to particulate matter;
  - (b) the written advice in (a) is based on current air quality monitoring data, dispersion modelling results, research and literature; and
  - (c) there is an ongoing process for providing current air quality monitoring data, dispersion modelling results, research and literature to the tenants.

### **INDEPENDENT REVIEW**

4. If a landowner considers the development to be exceeding the impact assessment 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, the Applicant shall within 3 months of the Director-General advising that an independent review is warranted:

- (a) consult with the landowner to determine his/her concerns;
  - (b) commission a suitably qualified, experienced and independent person, whose appointment has been approved by the Director-General, to conduct monitoring on the land, to:
    - determine whether the development is complying with the relevant impact assessment criteria in schedule 4; and
    - identify the source(s) and scale of any impact on the land, and the development's contribution to this impact; and
  - (c) give the Director-General and landowner a copy of the independent review.
5. If the independent review determines that the development is complying with the relevant impact assessment criteria in schedule 4, then the Applicant may discontinue the independent review with the approval of the Director-General.
  6. 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 shall:
    - (a) implement all reasonable and feasible measures, in consultation with the landowner, to ensure that the development complies with the relevant criteria and conduct further monitoring to determine whether these measures ensure compliance; or
    - (b) secure a written agreement with the landowner to allow exceedances of the criteria in schedule 4,to the satisfaction of the Director-General.

If the Applicant is unable to finalise an agreement with the landowner, then the landowner may refer the matter to the Director-General for resolution.

If the additional monitoring referred to under paragraph (a) above 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 Director-General.

7. If the independent review determines that the development is not complying with the air quality and/or noise impact assessment criteria listed in schedule 4 at the dwelling, but that several mines are responsible for this non-compliance, then the Applicant shall, with the agreement of the landowner and other mine(s) prepare and implement a Cumulative Air Quality and/or Noise Impact Management Plan for the land to the satisfaction of the Director-General. This plan must provide the joint approach to be adopted by the Applicant and other mine(s) to manage cumulative air quality and/or noise impacts at the landowner's dwelling, and the acquisition of any land.

If the Applicant is unable to finalise an agreement with the landowner and/or other mine(s), and/or prepare a Cumulative Air Quality and Noise Impact Management Plan, then the Applicant or landowner may refer the matter to the Director-General for resolution.

If the matter cannot be resolved within 21 days, the Director-General shall refer the matter to an Independent Dispute Resolution Process.

If, following the Independent Dispute Resolution Process, the Director-General decides that the Applicant shall acquire all or part of the landowner's land, then the Applicant shall acquire this land in accordance with the procedures in conditions 9-11 below.

8. If the landowner disputes the results of the independent review (referred to in condition 4), either the Applicant or the landowner may refer the matter to the Director-General for resolution.

If the matter cannot be resolved within 21 days, the Director-General shall refer the matter to an Independent Dispute Resolution Process.

## LAND ACQUISITION

9. Within 3 months of receiving a written request from a landowner with acquisition rights, the Applicant shall make a binding written offer to the landowner based on:
- (a) the current market value of the landowner's interest in the property at the date of this written request, as if the property 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 property and/or any approved building or structure which has been physically commenced at the date of the landowner's written request, and is due to be completed subsequent to that date, but excluding any improvements that have resulted from the implementation of the 'additional noise mitigation measures' in condition 31 of schedule 4;
  - (b) the reasonable costs associated with:
    - relocating within the Singleton local government area, or to any other local government area determined by the Director-General; and
    - obtaining legal advice and expert advice for determining the acquisition price of the land, and the terms upon which it is to be acquired; and
  - (c) reasonable compensation for any disturbance caused by the land acquisition process.

However, if at the end of this period, the Applicant and landowner cannot agree on the acquisition price of the land, and/or the terms upon which the land is to be acquired, then either party may refer the matter to the Director-General for resolution.

Upon receiving such a request, the Director-General shall request the President of the NSW Division of the Australian Property Institute (API) to appoint a qualified independent valuer to:

- (a) consider submissions from both parties;
- (b) 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;
- (c) prepare a detailed report setting out the reasons for any determination; and
- (d) provide a copy of the report to both parties and the Director-General.

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

However, if either party disputes the independent valuer's determination, then within 14 days of receiving the independent valuer's report, they may refer the matter to the Director-General for review. Any request for a review must be accompanied by a detailed report setting out the reasons why the party disputes the independent valuer's determination. Following consultation with the independent valuer and both parties, the Director-General shall determine a fair and reasonable acquisition price for the land, having regard to the matters referred to in paragraphs (a)-(c) above, the independent valuer's report and the detailed report of the party that disputes the independent valuer's determination and any other relevant matters.

Within 14 days of the Director-General's determination, the Applicant shall make a binding written offer to the landowner to purchase the land at a price not less than the Director-General's determination.

If the landowner refuses to accept the 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 Director-General determines otherwise.

10. The Applicant shall pay all reasonable costs associated with the land acquisition process described in condition 6 above.
11. If the Applicant and landowner agree that only part of the land shall be acquired, then the Applicant shall pay all reasonable costs associated with obtaining Council approval for any plan of subdivision (where permissible), and registration of the plan at the Office of the Registrar-General.

## **SCHEDULE 6**

### **ENVIRONMENTAL MANAGEMENT, MONITORING, AUDITING & REPORTING**

#### **ENVIRONMENTAL MANAGEMENT STRATEGY**

1. Within 12 months of the date of this consent, the Applicant shall prepare and implement an Environmental Management Strategy for the development to the satisfaction of the Director-General. This strategy must:
  - (a) provide the strategic context for environmental management of the development;
  - (b) identify the statutory requirements that apply to the development;
  - (c) describe in general how the environmental performance of the development would be monitored and managed during the development;
  - (d) 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;
    - manage cumulative impacts; and
    - respond to emergencies; and
  - (e) describe the role, responsibility, authority, and accountability of all the key personnel involved in environmental management of the development.
2. Within 14 days of the Director-General's approval, the Applicant shall:
  - (a) send copies of the approved strategy to the relevant agencies, Council, and the CCC; and
  - (b) ensure the approved strategy is publicly available during the development.

#### **ENVIRONMENTAL MONITORING PROGRAM**

3. Within 12 months of the date of this consent, the Applicant shall prepare an Environmental Monitoring Program for the development in consultation with the relevant agencies, and to the satisfaction of the Director-General. This program must consolidate the various monitoring requirements in schedule 4 of this consent into a single document.
4. The Applicant shall regularly review, and if necessary update, this program in consultation with the Director-General.

#### **ANNUAL REPORTING**

5. The Applicant shall submit an AEMR to the Director-General and the relevant agencies. This report must:
  - (a) identify the standards and performance measures that apply to the development;
  - (b) include a summary of the complaints received during the past year, and compare this to the complaints received in the previous 5 years;
  - (c) include a summary of the monitoring results on the development during the past year,
  - (d) include an analysis of these monitoring results against the relevant:
    - impact assessment criteria;
    - monitoring results from previous years; and
    - predictions in the EIS;
  - (e) identify any trends in the monitoring over the life of the development;
  - (f) identify any non-compliance during the previous year; and
  - (g) describe what actions were, or are being, taken to ensure compliance.

#### **INDEPENDENT ENVIRONMENTAL AUDIT**

6. Within two years of this approval, and every three 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 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 whether it is complying with the relevant requirements in this approval and any relevant mining lease or EPL (including any strategy, plan or program required under these approvals);
  - (d) review the adequacy of the strategies, plans or programs required under these approvals; and, if appropriate,
  - (e) recommend measures or actions to improve the environmental performance of the development, and/or any strategy/plan/program required under these approvals.

*Note: This audit team must include experts in the field of subsidence and groundwater management.*

7. Within six weeks of completing this audit, or as otherwise agreed by the Director-General, the Applicant shall submit a copy of the audit report to the Director-General, with its response to any recommendations contained in the audit report.
- 7A. Within three months of submitting the audit report to the Director-General, the Applicant shall review, and if necessary revise the strategies/plans/programs required under this approval, to the satisfaction of the Director-General.

#### **COMMUNITY CONSULTATIVE COMMITTEE**

8. The Applicant shall ensure that there is a Community Consultative Committee to oversee the environmental performance of the development. This committee shall:
  - (a) be comprised of:
    - 2 representatives from the Applicant, including the person responsible for environmental management at the mine;
    - 1 representative from Council; and
    - at least 3 representatives from the local community, whose appointment has been approved by the Director-General in consultation with the Council;
  - (b) be chaired by the representative from Council;
  - (c) meet at least twice a year; and
  - (d) review and provide advice on the environmental performance of the development, including any construction or environmental management plans, monitoring results, audit reports, or complaints.
9. The Applicant shall, at its own expense:
  - (a) ensure that 2 of its representatives attend the Committee's meetings;
  - (b) provide the Committee with regular information on the environmental performance and management of the development;
  - (c) provide meeting facilities for the Committee;
  - (d) arrange site inspections for the Committee, if necessary;
  - (e) take minutes of the Committee's meetings;
  - (f) make these minutes available to the public for inspection within 14 days of the Committee meeting, or as agreed to by the Committee;
  - (g) respond to any advice or recommendations the Committee may have in relation to the environmental management or performance of the development;
  - (h) forward a copy of the minutes of each Committee meeting, and any responses to the Committee's recommendations to the Director-General within a month of acceptance of the minutes by the Committee.
10. Within three months of approval of MOD 19-3-2007, and thereafter for the life of the development, the Applicant shall:
  - (a) place a copy of any plan/strategy/program required under this approval (or any subsequent revision of these plans/strategies/programs), or the completion of the audits or AEMRs required under this approval, on the Applicant's website; and
  - (b) provide a copy of each document to the agencies relevant to the matters addressed therein.
11. Within three months of approval of MOD 19-3-2007, and thereafter for the life of the development, the Applicant shall:
  - (a) make a summary of monitoring results required under this approval publicly available on its website; and
  - (b) update these results on a regular basis (at least every three months after the establishment of the website).

#### **INCIDENT REPORTING**

12. Within 24 hours of detecting an exceedance of the limits/performance criteria in this consent, or detecting an incident that causes (or may cause) material harm to the environment, the Applicant shall notify the Department and other relevant agencies of the exceedance/incident.
13. Within 6 days of notifying the Department and other relevant agencies of an exceedance/incident, the Applicant shall provide the department and these agencies with a written report that:
  - (a) describes the date, time and nature of the exceedance/incident;
  - (b) identifies the cause (or likely cause) of the exceedance/incident;
  - (c) describes what action has been taken to date; and
  - (d) describes the proposed measures to address the exceedance/incident.



# APPENDIX 1 SCHEDULE OF LAND

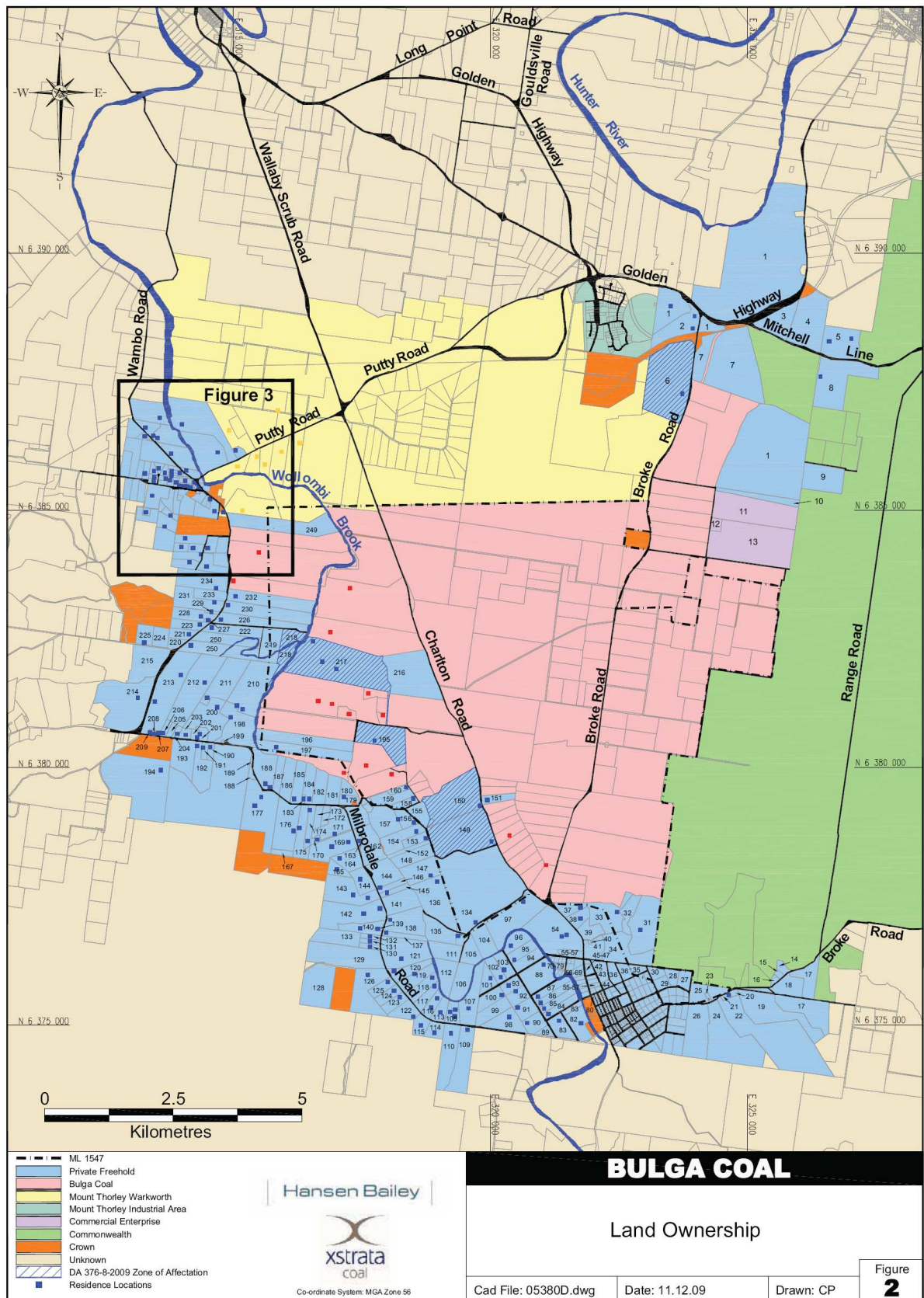
Local Government Area: Singleton Shire  
 Counties: Northumberland and Hunter  
 Parishes: Wollombi, Vere, Whybrow, Milbrodale and Broke

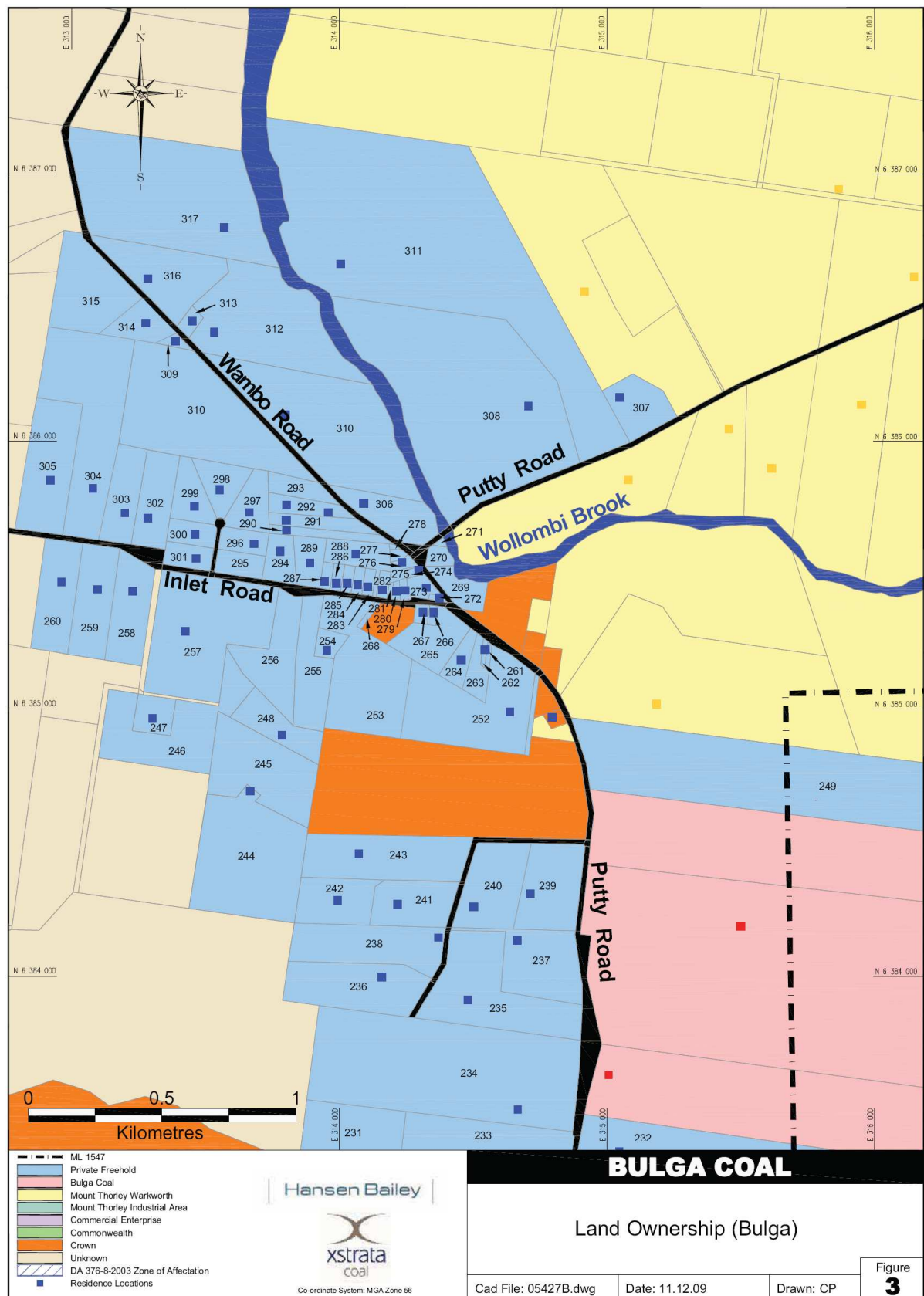
DP	Lot	DP	Lot
Road 14916		174788	A
Road 1033019		174788	B
part Moffat Street		205613	1
part Ellis Street		205613	2
part Blaxland Street		205613	3
part Adair Street		244826	10
Cobcroft Road		244826	11
part Charlton Road		247398	1
part Fordwich Road		247398	2
part Broke Road (MR 181)		247398	3
Part Butlers Lane		247398	4
closed road between Lot 72 & 73 DP 755270		247398	5
various unnamed crown roads		247398	6
3475md	ms	247398	7
10022	4	247398	8
10022	5	247398	9
10022	6	247398	10
10022	7	247398	11
10022	8	247398	12
10022	9	247398	13
10022	10	247398	14
606531	112	247398	15
10022	15	247398	16
10022	16	247398	17
10022	17	247398	18
10022	18	247398	19
62544	1	248448	4
62544	2	248448	5
102103	1	248448	6
102103	2	248448	7
133135	1	248448	8
133135	2	260663	274
133135	3	263943	20
133168	1	435160	1
133168	2	445449	1
133168	3	45581	1
171648	1	47305	1
545559	191	755264	29
545559	192	755264	30
561424	3	755264	31
561424	4	755264	33
561424	5	755264	34
561424	6	755264	35
563668	1	755264	36
564480	1	755264	43

DP	Lot	DP	Lot
587986	5	755264	44
599574	4	755264	51
612261	851	755264	52
612261	852	755264	53
615819	4	755264	54
634708	1	755264	56
657988	1	755264	61
662301	1	755264	80
703892	32	755264	81
704474	7	755264	82
705699	11	755264	83
705699	12	755264	85
705699	13	755264	86
723292	1	755264	98
729923	1	755264	103
729952	126	755264	105
745971	1	755264	109
749857	709	755264	111
755264	22	755264	113
755264	23	755264	125
755264	24	755270	37
755264	25	755270	38
755264	26	755270	39
755264	27	755270	40
755264	28	755270	41
755270	43	758164	3/33
755270	44	758164	4/33
755270	45	758164	5/33
755270	46	758164	6/33
755270	48	758164	7/33
755270	49	758164	8/33
755270	50	758164	3/50
755270	51	758164	1/51
755270	52	758164	2/51
755270	57	758164	3/51
755270	59	758164	4/51
755270	60	784032	1
755270	62	800688	30
755270	68	800688	31
755270	69	811613	20
755270	72	811613	21
755270	73	816636	24
755270	74	821150	1
755270	75	822165	1
755270	76	852571	26a
755270	77	852571	26
755270	78	852571	27
755270	79	861535	1
755270	120	861535	2
755270	121	861535	3

<b>DP</b>	<b>Lot</b>	<b>DP</b>	<b>Lot</b>
755270	122	861535	4
755270	123	861535	5
755270	125	822165	1
758164	6/21	877447	21
758164	7/21	966407	1
758164	8/21	986831	1
758164	1/33	986831	2
758164	2/33	1007798	3
1007798	4	1015814	1243
1007798	5	1015814	1244
1007798	6	1033019	100
1015814	1241	1033019	101
1015814	1242		

## APPENDIX 2 RECEIVER LOCATION PLANS\*





\* As identified in the Environmental Assessment dated 15 February 2010 and referenced in the development consent for Bulga Open Cut Coal Mine (DA 41-03-99).

**APPENDIX 3**  
**INDEPENDENT DISPUTE RESOLUTION PROCESS**

**Independent Dispute Resolution Process  
(Indicative only)**

