

**Mt Arthur Coal**



**Attachment 1 –  
Mt Arthur Consolidation  
Project Approval**

# Project Approval

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

I approve the project application referred to in schedule 1, subject to the conditions in schedules 2 to 5.

These conditions are required to:

- prevent, minimise, and/or offset adverse environmental impacts;
- set standards and performance measures for acceptable environmental performance;
- require regular monitoring and reporting; and
- provide for the ongoing environmental management of the project.



The Hon Tony Kelly MLC  
Minister for Planning

Sydney

2010

24 SEP 2010

### SCHEDULE 1

<b>Application Number:</b>	09_0062
<b>Proponent:</b>	Hunter Valley Energy Coal Pty Ltd
<b>Approval Authority:</b>	Minister for Planning
<b>Land:</b>	See Appendix 1
<b>Project:</b>	Mt Arthur Coal Mine – Open Cut Consolidation Project

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## DEFINITIONS

Annual Review	The review required by condition 3 of schedule 5
BCA	Building Code of Australia
CCC	Community Consultative Committee
Conditions of this approval	Conditions contained in schedules 1 to 5
Council	Muswellbrook Shire Council
Day	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, or delegate
EA	Environmental Assessment titled <i>Mt Arthur Coal Consolidation Project Environmental Assessment</i> (6 volumes), dated November 2009, including the Response to Submissions
EP&A Act	<i>Environmental Planning and Assessment Act 1979</i>
EP&A Regulation	<i>Environmental Planning and Assessment Regulation 2000</i>
EPL	Environment Protection Licence issued under the POEO Act
Evening	The period from 6pm to 10pm
Feasible	Feasible relates to engineering considerations and what is practical to build
Heritage Branch	Heritage Branch of the Department
Incident	A set of circumstances that causes or threatens to cause material harm to the environment, and/or breaches or exceeds the limits or performance measures/criteria in this approval
I&I NSW	Department of Industry and Investment, trading as Industry & Investment NSW
Land	In general, the definition of land is consistent with the definition in the EP&A Act. However, in relation to the noise and air quality conditions in schedules 3 and 4 of this approval it means the whole of a lot, or contiguous lots owned by the same landowner, in a current plan registered at the Land Titles Office at the date of this approval
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
Mining operations	Includes all coal extraction, processing, handling, storage and transportation activities carried out on site
Minister	Minister for Planning, or delegate
Mitigation	Activities associated with reducing the impacts of the project
MSB	Mine Subsidence Board
Mt Arthur mine complex	The combined operations of the project (including the former Mt Arthur North mine, Bayswater No. 2 mine, Bayswater No. 3 mine and the South Pit Extension Project), and the Mt Arthur Underground Project (MP 06_0091)
Mt Arthur Underground Project	The underground mining operations approved under 06_0091
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
Offset strategy	The conservation and enhancement program described in the EA, and depicted conceptually in the figure in Appendix 8.
POEO Act	<i>Protection of the Environment Operations Act 1997</i>
Previous EAs	The previous environmental impact assessments for open cut operations at the Mt Arthur mine complex, as listed in Appendix 4
Privately-owned land	Land that is not owned by a public agency or a mining company (or its subsidiary)
Project	The development as described in the project application and EA, and to the extent not covered by these, the previous EAs
Proponent	Hunter Valley Energy Coal Pty Limited, or its successors in title
Reasonable	Reasonable relates to the application of judgement in arriving at a decision, taking into account: mitigation benefits, cost of mitigation versus benefits provided, community views and the nature and extent of potential improvements
Rehabilitation	The treatment or management of land disturbed by the project for the purpose of establishing a safe, stable and non-polluting environment
Response to submissions	The Proponent's responses to issues raised in submissions, including those titled <i>Mt Arthur Coal Consolidation Project Response to Submissions</i> , dated February 2010, and <i>Mt Arthur Coal Consolidation Project Response to DOP Questions</i> , dated 2 July 2010
ROM	Run of Mine
RTA	Roads and Traffic Authority
Site	The land referred to in schedule 1, and listed in Appendix 1
Statement of commitments	The Proponent's commitments in Appendix 3

## **SCHEDULE 2 ADMINISTRATIVE CONDITIONS**

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

1. The Proponent shall implement all reasonable and feasible measures to prevent and/or minimise any material harm to the environment that may result from the construction, operation, or rehabilitation of the project.

### **TERMS OF APPROVAL**

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

*Notes:*

- *The general layout of the project is shown in Appendix 2.*
- *The statement of commitments is reproduced in Appendix 3 (excluding the commitments which are directly reflected in, or inconsistent with, the conditions of this approval).*

3. If there is any inconsistency between the above documents, the most recent document shall prevail to the extent of the inconsistency. However, the conditions of this approval shall prevail to the extent of any inconsistency.
4. The Proponent shall comply with any reasonable requirement/s of the Director-General arising from the Department's assessment of:
  - (a) any reports, strategies, plans, programs, reviews, audits or correspondence that are submitted by the Proponent in accordance with this approval; and
  - (b) the implementation of any actions or measures contained in these documents.

### **LIMITS ON APPROVAL**

5. Mining operations for the project may take place until 30 June 2022.

*Note: Under this approval, the Proponent is required to rehabilitate the site and perform additional undertakings to the satisfaction of the Director-General and I&I NSW. Consequently this approval will continue to apply in all other respects other than the right to conduct mining operations until the site has been properly rehabilitated.*

6. The Proponent shall not extract more than:
  - (a) 32 million tonnes of ROM coal from the open cut mining operations in a calendar year; and
  - (b) 36 million tonnes of ROM coal from the combined Mt Arthur mine complex in a calendar year.
7. The Proponent shall:
  - (a) not transport coal from the site by road (except in an emergency situation and with the prior approval of the Director-General in consultation with Council); and
  - (b) restrict coal transport on the Antiene rail spur to a maximum of:
    - 27 million tonnes of product coal in a calendar year; and
    - 24 train movements a day,for the combined Mt Arthur mine complex, except under an agreement with the Drayton Mine to use some of its approved capacity, and where a copy of this agreement has been provided to the Director-General.

*Note: For the avoidance of doubt, each train entering and exiting the site is classified as 2 train movements, and a day refers to the 24 hours from midnight to midnight the next day.*

### **SURRENDER OF CONSENTS**

8. By the end of September 2011, or as otherwise agreed by the Director-General, the Proponent shall surrender all existing development consents/approvals for the project in accordance with sections 75YA and 104A of the EP&A Act, and to the satisfaction of the Director-General.

*Notes:*

- *This approval will apply to all components of the Mt Arthur mine complex's open cut operations from the date of approval. The existing management and monitoring plans/strategies/programs/protocols/committees for the project will continue to apply until the approval of the comparable plan/strategy/program/protocol/committee under this approval;*
- *The existing approvals are identified in Appendix 4.*

### **STRUCTURAL ADEQUACY**

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

*Notes:*

- *Under Part 4A of the EP&A Act, the Proponent 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 project;*
- *The project is located in the Muswellbrook Mine Subsidence District. Under Section 15 of the Mine Subsidence Compensation Act 1961, the Proponent is required to obtain the MSB's approval before constructing any improvements on the site.*

## **DEMOLITION**

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

## **PROTECTION OF PUBLIC INFRASTRUCTURE**

11. Unless the Proponent and the applicable authority agree otherwise, the Proponent shall:
- (a) repair, or pay the full costs associated with repairing, any public infrastructure that is damaged by the project; and
  - (b) relocate, or pay the full costs associated with relocating, any public infrastructure that needs to be relocated as a result of the project,
- except where such works have been compensated through the *Mining Act 1992* or the planning agreement referred to in condition 14 below.

## **OPERATION OF PLANT AND EQUIPMENT**

12. The Proponent 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 AND PROGRAMS**

13. With the approval of the Director-General, the Proponent may:
- (a) submit any strategy, plan or program required by this approval on a progressive basis; and
  - (b) combine any strategy, plan or program required by this approval with any similar strategy, plan or program for the Mt Arthur Underground Project.

*Note: For the avoidance of doubt, existing approved management plans, strategies or monitoring programs for the open cut operations of the Mt Arthur mine complex will continue to apply until the approval of a similar plan, strategy or program under this approval, or until the surrender of existing approvals (see condition 8 above).*

## **PLANNING AGREEMENT**

14. By the end of March 2011, unless otherwise agreed by the Director-General, the Proponent shall use its best endeavours to enter into a planning agreement with Council in accordance with Division 6 of Part 4 of the EP&A Act, that provides for a contribution to Council for:
- general community enhancement to address environmental, social amenity and community infrastructure requirements arising from the project; and
  - upgrade and maintenance of Council's road infrastructure affected by the project.

The contributions shall be generally consistent with the terms of the offer made in the statement of commitments, and summarised in Appendix 9.

If there is any dispute between the Proponent and Council during the formal drafting of the planning agreement, then either of the parties may refer the matter to the Director-General for resolution.

## SCHEDULE 3 ENVIRONMENTAL PERFORMANCE CONDITIONS

### ACQUISITION UPON REQUEST

#### Acquisition Upon Request

- Upon receiving a written request for acquisition from an owner of the land listed in Table 1, the Proponent shall acquire the land in accordance with the procedures in conditions 7-8 of schedule 4.

Table 1: Land subject to acquisition upon request

<b>Receiver No.<sup>1</sup></b>	<b>Receiver</b>	<b>Acquisition Basis</b>
1,8	Drake	Air quality
6	Scriven	Air quality
7	Webber	Air quality
9	Englebrecht	Air quality
28	McGoldrick	Air quality
29	Barnett	Air quality
101 <sup>2</sup>	Horder	Noise
102	Robertson	Noise
203, 204	Latham	Air quality
206	Wild	Air quality
207, 208	Zahra	Air quality
209, 210, 211	Rankin	Air quality
212 <sup>3</sup>	Chudyk	Air quality, Noise
226	Wynne & Roots	Air quality
241	Lane	Air quality
264	Moore	Air quality

Notes:

- To interpret the locations referred to in Table 1, see the applicable figure in Appendix 5.
- The Proponent is only required to acquire this property if acquisition is no longer reasonably achievable under the approval for the Drayton mine.
- The Proponent is only required to acquire this property if acquisition is no longer reasonably achievable under the approval for the Bengalla mine.

### NOISE

#### Impact Assessment Criteria

- The Proponent shall ensure that the noise generated by the Mt Arthur mine complex does not exceed the noise impact assessment criteria in Table 2 at any residence on privately-owned land or on more than 25 per cent of any privately-owned land, except where such exceedance is predicted in the EA. For these properties, the Proponent shall comply with the noise level predictions in the EA.

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

Table 2: Noise Impact Assessment Criteria dB(A)

<b>Location</b>	<b>Day (L<sub>Aeq</sub> (15min))</b>	<b>Evening (L<sub>Aeq</sub> (15min))</b>	<b>Night (L<sub>Aeq</sub> (15min))</b>	<b>Night (L<sub>A1</sub> (1 min))</b>
A – Antiene Estate	37	40	38	45
B – Skelletar Stock Route, Thomas Mitchell Drive, Denman Road East	39	38	37	45

<b>Location</b>	<b>Day</b> ( <i>L<sub>Aeq</sub></i> (15min))	<b>Evening</b> ( <i>L<sub>Aeq</sub></i> (15min))	<b>Night</b> ( <i>L<sub>Aeq</sub></i> (15min))	<b>Night</b> ( <i>L<sub>A1</sub></i> (1 min))
C – Racecourse Road	41	40	39	45
D – Denman Road North-west, Roxburgh Vineyard (north-east), Roxburgh Road	37	36	35	45
E – South Muswellbrook	39	39	39	45
F – Denman Road West, Roxburgh Vineyard (west)	37	36	35	45
G – East Antiene	41	40	39	45

Notes:

- To interpret the locations referred to Table 2, see the applicable figures in Appendix 5.
- Noise generated by the project is to be measured in accordance with the relevant requirements, and exemptions (including certain meteorological conditions), of the NSW Industrial Noise Policy.

### Land Acquisition Criteria

- If the noise generated by the Mt Arthur mine complex exceeds the criteria in Table 3 at any residence on privately-owned land or on more than 25 per cent of any privately-owned land, the Proponent shall, upon receiving a written request for acquisition from the landowner, acquire the land in accordance with the procedures in conditions 7-8 of schedule 4.

Table 3: Land acquisition criteria dB(A) *L<sub>Aeq</sub>* (15min)

<b>Location</b>	<b>Day</b>	<b>Evening</b>	<b>Night</b>
A – Antiene Estate	42	45	43
B – Skelletar Stock Route, Thomas Mitchell Drive, Denman Road East	44	43	42
C – Racecourse Road	46	45	44
D – Denman Road North-west, Roxburgh Vineyard (north-east), Roxburgh Road	42	41	40
E – South Muswellbrook	44	44	44
F – Denman Road West, Roxburgh Vineyard (west)	42	41	40
G – East Antiene	46	45	44

Notes:

- To interpret the locations referred to Table 3, see the applicable figures in Appendix 5.
- Noise generated by the project is to be measured in accordance with the relevant requirements, and exemptions (including certain meteorological conditions), of the NSW Industrial Noise Policy.
- For this condition to apply, the exceedance of the criteria must be systemic.

### Cumulative Noise Criteria

- Except for the noise-affected land in Table 1, the Proponent shall implement all reasonable and feasible measures to ensure that the noise generated by the Mt Arthur mine complex combined with the noise generated by other mines and industries does not exceed the criteria in Table 4 at any residence on privately-owned land or on more than 25 per cent of any privately-owned land.

Table 4: Cumulative noise impact assessment criteria dB(A) *L<sub>Aeq</sub>* (period)

<b>Location</b>	<b>Day</b>	<b>Evening</b>	<b>Night</b>
All privately-owned land	50	45	40

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

- If the cumulative noise generated by the Mt Arthur mine complex combined with the noise generated by other mines exceeds the criteria in Table 5 at any residence on privately-owned land or on more than 25 per cent of any privately-owned land, then upon receiving a written request from the landowner, the Proponent shall acquire the land on as equitable basis as possible with the relevant mines, in accordance with the procedures in conditions 7-8 of schedule 4.



Table 5: Cumulative noise land acquisition criteria dB(A)  $L_{Aeq}$  (period)

Location	Day	Evening	Night
All privately-owned land	55	50	45

Note: The cumulative noise generated by the Mt Arthur mine complex combined with the noise generated by other mines is to be measured in accordance with the relevant requirements, and exemptions (including certain meteorological conditions), of the NSW Industrial Noise Policy.

### Traffic Noise Impact Assessment Criteria

6. The Proponent shall take all reasonable and feasible measures to ensure that the traffic noise generated by the Mt Arthur mine complex does not exceed the traffic noise impact assessment criteria in Table 6, except where such an exceedance is predicted in the EA. For these properties, the Proponent shall comply with the noise levels predicted in the EA.

Table 6: Traffic noise impact assessment criteria dB(A)

Road	Day/Evening $L_{Aeq}$ (1 hour)	Night $L_{Aeq}$ (1 hour)
Thomas Mitchell Drive, Denman Road (east of Thomas Mitchell Drive)	60	55
Denman Road (west of Thomas Mitchell Drive)	55	50

Note: Traffic noise generated by the Mt Arthur mine complex is to be measured in accordance with the relevant procedures in the DECCW's Environmental Criteria for Road Traffic Noise.

### Additional Noise Mitigation Measures

7. Upon receiving a written request from the owner of any residence:
- on the noise affected land listed in Table 1;
  - on the land listed in Table 7;
  - on any other privately-owned land where subsequent operational noise monitoring shows the noise generated by the Mt Arthur mine complex exceeds the noise limits in Table 2 by more than 2 decibels; and
  - on Thomas Mitchell Drive or Denman Road where subsequent noise monitoring shows traffic noise levels generated by the Mt Arthur mine complex exceed the traffic noise criteria in Table 6,
- the Proponent shall implement reasonable and feasible noise mitigation measures (such as double glazing, insulation, and/or air conditioning) at any residence in consultation with the owner.

If within 3 months of receiving this request from the landowner, the Proponent and the landowner cannot agree on the measures to be implemented, or there is a dispute about the implementation of these measures, then either party may refer the matter to the Director-General for resolution.

Table 7: Land subject to additional noise mitigation upon request

Receiver No. <sup>1</sup>	Receiver
11	Drake
12	Tubb
13	Turner & Upper Hunter Developers P/L
39, 40	Buckley
41	Ray
42	Hallett & Campbell
49	Webber
94	Skinner
97	Clifton
98	Jones
99	Hunter (2 residences)
100	Sharman

Note: To interpret the locations referred to in Table 7, see the applicable figure in Appendix 5.

## Operating Conditions

8. The Proponent shall:
- (a) implement best noise management practice, which includes implementing all reasonable and feasible noise mitigation measures;
  - (b) ensure that the real-time noise monitoring and meteorological forecasting data are assessed regularly, and that mining operations are relocated, modified and/or suspended to ensure compliance with the relevant conditions of this approval; and
  - (c) regularly investigate ways to reduce the operational, low frequency, rail and road traffic noise generated by the project, and report on these investigations in the annual review (see condition 3 of schedule 5), to the satisfaction of the Director-General.

## Noise Management Plan

9. The Proponent shall prepare and implement a Noise Management Plan for the Mt Arthur mine complex to the satisfaction of the Director-General. This plan must:
- (a) be prepared in consultation with DECCW, and be submitted to the Director-General for approval by the end of March 2011;
  - (b) describe the noise mitigation measures that would be implemented to ensure compliance with the relevant conditions of this approval, including a real-time noise management system; and
  - (c) include a noise monitoring program, that uses a combination of real-time and supplementary attended monitoring measures to evaluate the performance of the Mt Arthur mine complex, and includes a protocol for determining exceedances of the relevant conditions in this approval.

## BLASTING

### Blast Impact Assessment Criteria

10. The Proponent shall ensure that blasts on site do not cause exceedances of the criteria in Table 8.

Table 8: *Blasting impact assessment criteria*

<b>Location</b>	<b>Airblast overpressure (dB(Lin Peak))</b>	<b>Ground vibration (mm/s)</b>	<b>Allowable exceedance</b>
Residence on privately owned land	120	10	0%
	115	5	5% of the total number of blasts over a period of 12 months
Heritage sites, including Edinglassie and Rous Lench	133	10	0%

### Blasting Hours

11. The Proponent shall only carry out blasting on site between 9am and 5pm Monday to Saturday inclusive. No blasting is allowed on Sundays, public holidays, or at any other time without the written approval of the Director-General.

### Blasting Frequency

12. The Proponent may carry out a maximum of:
- (a) 2 blasts a day;
  - (b) 12 blasts a week; and
  - (c) 4 blasts a week with a maximum instantaneous charge of greater than 1,500 kilograms, averaged over a 12 month period, for all open cut operations at the Mt Arthur mine complex.

This condition does not apply to blasts that generate ground vibration of 0.5 mm/s or less at any residence on privately-owned land.

### Property Inspections

13. By the end of November 2010, the Proponent shall advise the owners of privately-owned land within 3 kilometres of any approved blasting operations that they are entitled to a structural property inspection to establish the baseline condition of buildings and other structures on the property.
14. If the Proponent receives a written request for a property inspection from any such landowner, the Proponent shall:
- (a) within 2 months of receiving this request commission a suitably qualified, experienced and independent person, whose appointment has been approved by the Director-General, to:

- establish the baseline condition of any buildings and other structures on the land; and
  - identify measures that should be implemented to minimise the potential blasting impacts of the project on these buildings or structures; and
- (b) give the landowner a copy of the property inspection report.

### **Property Investigations**

15. If any landowner of privately-owned land within 3 kilometres (including the whole of the Racecourse Road area and the area southwest of Skellatar Stock Route) of blasting operations, or any other landowner nominated by the Director-General claims that buildings and/or structures on his/her land have been damaged as a result of blasting at the project, the Proponent shall within 3 months of receiving this request:
- (a) commission a suitably qualified, experienced and independent person, whose appointment has been approved by the Director-General, to investigate the claim; and
  - (b) give the landowner a copy of the property investigation report.

If this independent property investigation confirms the landowner's claim, and both parties agree with these findings, then the Proponent shall repair the damage to the satisfaction of the Director-General.

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

### **Operating Conditions**

16. During mining operations on site, the Proponent shall:
- (a) implement best blasting practice to:
    - protect the safety of people and livestock in the area surrounding blasting operations;
    - protect public or private infrastructure/property in the area surrounding blasting operations from blasting damage; and
    - minimise the dust and fume emissions from blasting at the project;
  - (b) co-ordinate the timing of blasting on site with the timing of blasting at the Drayton and Bengalla coal mines to minimise the potential cumulative blasting impacts of the three mines; and
  - (c) operate a suitable system to enable the general public and surrounding landowners and tenants to get up-to-date information on the proposed blasting schedule on site, to the satisfaction of the Director-General.

### **Blast Management Plan**

17. The Proponent shall prepare and implement a Blast Management Plan for the project to the satisfaction of the Director-General. This plan must:
- (a) be prepared in consultation with DECCW, and be submitted to the Director-General for approval by the end of March 2011; and
  - (b) describe the blast mitigation measures that would be implemented to ensure compliance with the relevant conditions of this approval, including detailed demonstration that blasting within the hatched area shown on the figure in Appendix 6 can be undertaken in a manner that will meet the blast impact assessment criteria in Table 8 at all times;
  - (c) describe the measures that would be implemented to ensure that the general public and surrounding landowners and tenants to get up-to-date information on the blasting schedule;
  - (d) include a road closure management plan, prepared in consultation with the applicable roads authority, that includes provisions for:
    - minimising the duration of closures, both on a per event basis and weekly basis;
    - avoiding peak traffic periods as far as practicable; and
    - coordinating with neighbouring mines to minimise the cumulative effect of road closures; and
  - (d) include a blast monitoring program for evaluating blast-related impacts (including blast-induced seismic activity) on, and demonstrating compliance with the blasting criteria in this approval for:
    - privately-owned residences and structures;
    - items of Aboriginal (including scarred trees and axe grinding grooves) and non-indigenous cultural heritage significance (including Edinglassie, Rous Lench and Balmoral); and
    - publicly-owned infrastructure;

## **AIR QUALITY AND GREENHOUSE GAS**

### **Odour**

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

## Greenhouse Gas Emissions

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

## Impact Assessment Criteria

20. The Proponent shall ensure that the dust emissions generated by the Mt Arthur mine complex do not cause additional exceedances of the air quality impact assessment criteria listed in Tables 9, 10 and 11 at any residence on privately owned land, or on more than 25 percent of any privately owned land, except where such exceedance is predicted in the EA. For these properties, the Proponent shall comply with the air quality predictions in the EA.

Table 9: Long term impact assessment criteria for particulate matter

Pollutant	Averaging period	Criterion	Basis
Total suspended particulate (TSP) matter	Annual	90 µg/m <sup>3</sup>	Total <sup>1</sup>
Particulate matter < 10 µm (PM <sub>10</sub> )	Annual	30 µg/m <sup>3</sup>	Total <sup>1</sup>

Table 10: Short term impact assessment criterion for particulate matter

Pollutant	Averaging period	Criterion	Basis
Particulate matter < 10 µm (PM <sub>10</sub> )	24 hour	50 µg/m <sup>3</sup>	Total <sup>1</sup>

Table 11: Long term impact assessment criteria for deposited dust

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

<sup>1</sup> Background concentrations due to all other sources plus the incremental increase in concentrations due to the mine complex alone.

<sup>2</sup> Incremental increase in concentrations due to the mine complex alone.

Note: Deposited dust is 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.

## Land Acquisition Criteria

21. If the dust emissions generated by the Mt Arthur mine complex exceed the criteria in Tables 12, 13, and 14 at any residence on privately owned land, or on more than 25 percent of any privately owned land, the Proponent shall, upon receiving a written request for acquisition from the landowner, acquire the land in accordance with the procedures in conditions 7-8 of schedule 4.

Table 12: Long term land acquisition criteria for particulate matter

Pollutant	Averaging period	Criterion	Basis
Total suspended particulate (TSP) matter	Annual	90 µg/m <sup>3</sup>	Total <sup>1</sup>
Particulate matter < 10 µm (PM <sub>10</sub> )	Annual	30 µg/m <sup>3</sup>	Total <sup>1</sup>

Table 13: Short term land acquisition criteria for particulate matter

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

Table 14: Long term land acquisition criteria for deposited dust

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

<sup>1</sup> Background concentrations due to all other sources plus the incremental increase in concentrations due to the mine complex alone.

<sup>2</sup> Incremental increase in concentrations due to the mine complex alone.

<sup>3</sup> Based on the number of block 24 hour averages in an annual period.

<sup>4</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 DECCW.

Note: Deposited dust is 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.

#### Additional Air Quality Mitigation Measures

22. Upon receiving a written request from the owner of any residences:
- (a) on the air quality affected land listed in Table 1;
  - (b) on the land listed in Table 15; and
  - (c) on any other privately-owned land where subsequent air quality monitoring shows the dust generated by the Mt Arthur mine complex exceeds the air quality limits in Tables 9, 10 or 11,
- the Proponent shall implement reasonable dust mitigation measures (such as a first-flush roof system, internal or external air filters and/or air conditioning) at the residence in consultation with the owner.

If within 3 months of receiving this request from the owner, the Proponent and the owner cannot agree on the measures to be implemented, or there is a dispute about the implementation of these measures, then either party may refer the matter to the Director-General for resolution.

Table 15: Land subject to additional air quality mitigation upon request

Receiver No. <sup>1</sup>	Receiver
91	Doherty
94	Skinner
187	Duncan
200	Walsh
201	Denton
205	Lambkin

Note: To interpret the locations referred to in Table 15, see the applicable figure in Appendix 5.

#### Operating Conditions

23. The Proponent shall:
- (a) implement best practice air quality management, including all reasonable and feasible measures to minimise offsite odour, fume and dust emissions of the Mt Arthur mine complex;
  - (b) ensure that the real-time air quality monitoring and meteorological forecasting data are assessed regularly, and that mining operations are relocated, modified and/or suspended to ensure compliance with the relevant conditions of this approval;
  - (c) ensure any visible air pollution generated by the Mt Arthur mine complex is assessed regularly, and that operations are relocated, modified, and/or suspended to minimise air quality impacts on privately-owned land; and
  - (d) implement all reasonable and feasible measures to minimise off-site odour and fume emissions generated by the Mt Arthur mine complex, including those generated by any spontaneous combustion,
- to the satisfaction of the Director-General.

#### Air Quality and Greenhouse Gas Management Plan

24. The Proponent shall prepare and implement an Air Quality and Greenhouse Gas Management Plan for the Mt Arthur mine complex to the satisfaction of the Director-General. This plan must:
- (a) be prepared in consultation with DECCW, and be submitted to the Director-General for approval by the end of March 2011;
  - (b) describe the air quality mitigation measures that would be implemented to ensure compliance with the relevant conditions of this approval, including a real-time air quality management system; and
  - (c) include an air quality monitoring program, that uses a combination of real-time monitors, high volume samplers and dust deposition gauges to evaluate the performance of the Mt Arthur mine complex, and includes a protocol for determining exceedances of the relevant conditions in this approval.

#### METEOROLOGICAL MONITORING

25. During the life of the project, the Proponent shall ensure that there is a suitable meteorological station in the vicinity of the site that:

- (a) complies with the requirements in the *Approved Methods for Sampling of Air Pollutants in New South Wales* guideline; and
- (b) is capable of continuous real-time measurement of temperature lapse rate in accordance with the *NSW Industrial Noise Policy*.

## **SOIL AND WATER**

### **Water Supply**

26. The Proponent shall ensure that it has sufficient water for all stages of the project, and if necessary, adjust the scale of mining operations to match its available water supply, to the satisfaction of the Director-General.

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

### **Discharge Limits**

27. The Proponent shall not discharge any water from the site except as may be expressly provided by an EPL, or in accordance with section 120 of the *Protection of the Environment Operations Act 1997*.

### **Hunter River and Saddlers Creek Alluvials**

28. The Proponent shall not undertake any open cut mining operations within 150 metres of the Hunter River alluvials and Saddlers Creek alluvials that has not been granted approval under previous consents/approvals for Mt Arthur mine complex without the prior written approval of the Director-General. In seeking this approval the Proponent shall demonstrate, to the satisfaction of the Director-General in consultation with NOW, that adequate safeguards have been incorporated into the Surface and Ground Water Response Plan (see condition 34 below) to minimise, prevent or offset groundwater leakage from the alluvial aquifers.

*Note: The alluvial aquifers and 150 metre buffers are shown conceptually on the figure in Appendix 7.*

### **Site Water Management Plan**

29. The Proponent shall prepare and implement a Water Management Plan for the Mt Arthur mine complex to the satisfaction of the Director-General. This plan must:
- (a) be prepared in consultation with NOW and DECCW, and be submitted to the Director-General for approval by the end of March 2011; and
  - (b) include a:
    - Site Water Balance;
    - Erosion and Sediment Control Plan;
    - Surface Water Monitoring Program;
    - Groundwater Monitoring Program; and
    - Surface and Ground Water Response Plan.
30. The Site Water Balance must:
- (a) include details of:
    - sources and security of water supply;
    - water use on site;
    - water management on site;
    - any off-site water transfers;
    - reporting procedures; and
  - (b) investigate and implement all reasonable and feasible measures to minimise water use by the Mt Arthur mine complex.
31. The Erosion and Sediment Control Plan must:
- (a) be consistent with the requirements of *Managing Urban Stormwater: Soils and Construction, Volume 1, 4<sup>th</sup> Edition, 2004* (Landcom);
  - (b) identify activities that could cause soil erosion, generate sediment or affect flooding;
  - (c) describe measures to minimise soil erosion and the potential for the transport of sediment to downstream waters, and manage flood risk;
  - (d) describe the location, function, and capacity of erosion and sediment control structures and flood management structures; and
  - (e) describe what measures would be implemented to maintain the structures over time.
32. The Surface Water Monitoring Program must include:
- (a) detailed baseline data on surface water flows and quality in creeks and other waterbodies that could potentially be affected by the project;
  - (b) surface water and stream health impact assessment criteria;
  - (c) a program to monitor and assess:
    - surface water flows and quality;

- impacts on water users;
  - stream health;
  - channel stability,
- in Quarry Creek, Fairford Creek, Whites Creek (and the Whites Creek diversion), Saddlers Creek, Ramrod Creek and other unnamed creeks; and
- (d) reporting procedures for the results of the monitoring program.
33. The Groundwater Monitoring Program must include:
- (a) detailed baseline data of groundwater levels, yield and quality in the region, and privately-owned groundwater bores, that could be affected by the project;
  - (b) groundwater impact assessment criteria;
  - (c) a program to monitor:
    - groundwater inflows to the mining operations;
    - impacts on regional aquifers;
    - impacts on the groundwater supply of potentially affected landowners;
    - impacts on the Hunter River and Saddlers Creek alluvial aquifers; and
    - impacts on any groundwater dependent ecosystems and riparian vegetation;
  - (d) procedures for the verification of the groundwater model; and
  - (e) reporting procedures for the results of the monitoring program and model verification.
34. The Surface and Ground Water Response Plan must describe the measures and/or procedures that would be implemented to:
- (a) investigate, notify and mitigate any exceedances of the surface water, stream health and groundwater impact assessment criteria;
  - (b) compensate landowners of privately-owned land whose water supply is adversely affected by the project, including provision of an alternative supply of water to the affected landowner that is equivalent to the loss attributed to the project;
  - (c) minimise, prevent or offset potential groundwater leakage from the Hunter River and Saddlers Creek alluvial aquifers; and
  - (d) mitigate and/or offset any adverse impacts on groundwater dependent ecosystems or riparian vegetation.

## Site Contamination

35. The Proponent shall prepare and implement a Remedial Action Plan for the former Bayswater No. 2 infrastructure area to the satisfaction of the Director-General. The Remedial Action Plan shall be prepared by a suitably qualified consultant, in accordance with the *Contaminated Land Management Act 1997* and applicable DECCW guidelines, and be submitted to the Director-General for approval prior to undertaking any overburden placement in this area.

## BIODIVERSITY

### Biodiversity Offsets

36. The Proponent shall implement the biodiversity offset strategy as outlined in Table 16 and as generally described in the EA (and shown conceptually in Appendix 8), to the satisfaction of the Director-General.

Table 16: Biodiversity Offset Strategy

Area	Offset Type	Minimum Size (hectares)
Mt Arthur Conservation Area	Existing vegetation	105
Saddlers Creek Conservation Area	Existing vegetation	295
Thomas Mitchell Drive Off-site Offset Area	Existing vegetation and vegetation to be established	495
Thomas Mitchell Drive On-site Offset Area	Vegetation to be established	222
Roxburgh Road 'Constable' Offset Area	Existing vegetation and vegetation to be established	110
Additional Off-site Offset Area <sup>1</sup>	Existing vegetation and vegetation to be established	165
Rehabilitation Area <sup>2</sup>	Vegetation to be established	1,915
<b>Total</b>		<b>3,307</b>

<sup>1</sup> See condition 37.

<sup>2</sup> See condition 42(f).

37. By the end of September 2012, unless otherwise agreed by the Director-General, the Proponent shall revise the offset strategy to identify the Additional Off-site Offset Area presented in Table 16 above. The revised strategy shall be prepared in consultation with DECCW, and to the satisfaction of the Director-General.

*Note: The 165 hectare size for the Additional Off-site Offset Area identified in Table 16 above is to be taken as a minimum only. The actual size of the offset shall be determined in consultation with DECCW and, together with the other offset areas listed in Table 16, shall fully offset the biodiversity impacts of the project.*

38. The Proponent shall ensure that the offset strategy and/or rehabilitation strategy is focused on the re-establishment of:
- (a) significant and/or threatened plant communities, including:
    - Upper Hunter White Box – Ironbark Grassy Woodland;
    - Central Hunter Box – Ironbark Woodland;
    - Central Hunter Ironbark – Spotted Grey-Gum Box Forest;
    - Narrabeen Footslopes Slaty Box Woodland;
    - Hunter Floodplain Red Gum Woodland Complex; and
  - (b) significant and/or threatened plant species, including:
    - Lobed Blue-grass (*Bothriochloa biloba*);
    - Tiger Orchid (*Cymbidium canaliculatum*);
    - Weeping Myall (*Acacia pendula*); and
  - (c) habitat for significant and/or threatened animal species.

### Long Term Security of Offsets

39. The Proponent shall make suitable arrangements to provide appropriate long term security for the:
- (a) Mt Arthur Conservation Area, Saddlers Creek Conservation Area and Thomas Mitchell Drive Off-site and On-site Offset Areas, by the end of September 2012;
  - (b) Additional Off-site Offset Area, by the end of September 2014; and
  - (c) woody vegetation to be established in the Rehabilitation Area, at least 2 years prior to the completion of mining activities associated with the project, to the satisfaction of the Director-General.

### Biodiversity Management Plan

40. The Proponent shall prepare and implement a Biodiversity Management Plan for the project to the satisfaction of the Director-General. This plan must:
- (a) be prepared in consultation with DECCW, NOW and Council, and be submitted to the Director-General for approval by the end of March 2012;
  - (b) describe how the implementation of the offset strategy would be integrated with the overall rehabilitation of the site (see below);
  - (c) include:
    - (i) a description of the short, medium, and long term measures that would be implemented to:
      - implement the offset strategy; and
      - manage the remnant vegetation and habitat on the site and in the offset areas;
    - (ii) detailed performance and completion criteria for the implementation of the offset strategy;
    - (iii) a detailed description of the measures that would be implemented over the next 3 years, including the procedures to be implemented for:
      - implementing revegetation and regeneration within the disturbance areas and offset areas, including establishment of canopy, sub-canopy (if relevant), understorey and ground strata;
      - protecting vegetation and soil outside the disturbance areas;
      - rehabilitating creeks and drainage lines on the site (both inside and outside the disturbance areas), to ensure no net loss of stream length and aquatic habitat;
      - managing salinity;
      - conserving and reusing topsoil;
      - undertaking pre-clearance surveys;
      - managing impacts on fauna;
      - landscaping the site and along public roads (including Thomas Mitchell Drive, Denman Road, Edderton Road and Roxburgh Road) to minimise visual and lighting impacts;
      - collecting and propagating seed;
      - salvaging and reusing material from the site for habitat enhancement;
      - salvaging, transplanting and/or propagating threatened flora and native grassland;
      - controlling weeds and feral pests;
      - managing grazing and agriculture on site;
      - controlling access; and
      - bushfire management;



- (iv) a program to monitor the effectiveness of these measures, and progress against the performance and completion criteria;
- (v) a description of the potential risks to successful revegetation, and a description of the contingency measures that would be implemented to mitigate these risks; and
- (vi) details of who would be responsible for monitoring, reviewing, and implementing the plan.

### **Conservation Bond**

41. Within 6 months of the approval of the Biodiversity Management Plan (see condition 40), the Proponent shall lodge a conservation and biodiversity bond with the Department to ensure that the offset strategy is implemented in accordance with the performance and completion criteria of the Biodiversity Management Plan. The sum of the bond shall be determined by:
- (a) calculating the full cost of implementing the offset strategy; and
  - (b) employing a suitably qualified quantity surveyor to verify the calculated costs, to the satisfaction of the Director-General.

*Notes:*

- *If the offset strategy is completed to the satisfaction of the Director-General, the Director-General will release the conservation bond.*
- *If the offset strategy is not completed to the satisfaction of the Director-General, the Director-General will call in all or part of the conservation bond, and arrange for the satisfactory completion of the relevant works.*
- *The conservation bond does not apply to areas subject to equivalent bonding arrangements under the Mining Act 1992. If amendments to the Mining Act allow the Minister for Mineral Resources to require rehabilitation securities under a Mining Lease which apply to the implementation of rehabilitation works outside the boundary of a Mining Lease, the Proponent may transfer the conservation bond required under this approval to the Minister of Mineral Resources provided the Director-General and I&I NSW agree to the transfer.*

### **REHABILITATION**

#### **Rehabilitation Strategy**

42. The Proponent shall prepare a Rehabilitation Strategy for the project to the satisfaction of the Director-General. This strategy must:
- (a) be prepared by a team of suitably qualified and experienced persons whose appointment has been endorsed by the Director-General, and be submitted to the Director-General for approval by the end of September 2011;
  - (b) be prepared in consultation with relevant stakeholders, including I&I NSW, Council and the CCC;
  - (c) investigate options for the future use of disturbed areas including voids upon the completion of mining;
  - (d) describe and justify the proposed rehabilitation strategy for the site, including the final landform and use;
  - (e) define the rehabilitation objectives for the site, as well as the proposed completion criteria for this rehabilitation; and
  - (f) provide for at least 30% of the disturbance area for open cut operations at the Mt Arthur mine complex to be rehabilitated to woody vegetation.

*Note: The strategy should build on the concept strategy depicted in Appendix 8.*

#### **Progressive Rehabilitation**

43. The Proponent shall:
- (a) carry out rehabilitation progressively, that is, as soon as reasonably practicable following disturbance (particularly on the face of emplacements that are visible off-site); and
  - (b) achieve the rehabilitation objectives in the Rehabilitation Strategy (see condition 42), to the satisfaction of the Director-General of I&I NSW.

#### **Rehabilitation Management Plan**

44. The Proponent shall prepare and implement a Rehabilitation Management Plan for the project to the satisfaction of the Director-General of I&I NSW. This plan must:
- (a) be prepared in consultation with the Department, DECCW, NOW, Council and the CCC, and be submitted to the Director-General of I&I NSW for approval by the end of March 2012;
  - (b) be prepared in accordance with the relevant I&I NSW guideline, and be consistent with the Rehabilitation Strategy (see condition 42);
  - (c) build, to the maximum extent practicable, on the existing management plans required under this approval; and
  - (d) include a research program that seeks to improve the understanding and application of rehabilitation techniques and methods in the Hunter Valley.

## HERITAGE

### Heritage Management Plan

45. The Proponent shall prepare and implement a Heritage Management Plan for the project to the satisfaction of the Director-General. This plan must:
- (a) be prepared in consultation with DECCW, the Aboriginal community, the Heritage Branch, Council, local historical organisations and relevant landowners, and be submitted to the Director-General for approval by the end of March 2011;
  - (b) include the following for the management of Aboriginal heritage on site:
    - a plan of management for the Thomas Mitchell Drive Offset Area; and
    - a program/procedures for:
      - salvage, excavation and/or management of Aboriginal sites and potential archaeological deposits within the project disturbance area;
      - protection and monitoring of Aboriginal sites outside the project disturbance area, including the 10 scarred trees and 3 axe grinding grooves identified on the site;
      - managing the discovery of any new Aboriginal objects or skeletal remains during the project;
      - maintaining and managing access to archaeological sites by the Aboriginal community; and
      - ongoing consultation and involvement of the Aboriginal communities in the conservation and management of Aboriginal cultural heritage on the site; and
  - (c) include the following for the management of other historic heritage on site:
    - conservation management plans for the Edinglassie and Rous Lench homesteads;
    - a detailed plan for the relocation of the Beer Homestead, including provision for a landscape study to determine the most appropriate location and an architectural report to determine the most sympathetic method for relocation; and
    - a program/procedures for:
      - photographic and archival recording of potentially affected heritage items;
      - protection and monitoring of heritage items outside the project disturbance area;
      - monitoring, notifying and managing the effects of blasting on potentially affected heritage items; and
      - additional archaeological excavation and/or recording of any significant heritage items requiring demolition.

## TRANSPORT

### Monitoring of Coal Transport

46. The Proponent shall keep records of the:
- (a) amount of coal transported from the site in each calendar year;
  - (b) number of coal haulage train movements generated by the Mt Arthur mine complex (on a daily basis); and
  - (c) make these records available on its website at the end of each calendar year.

### Road Construction and Access

47. The Proponent shall:
- (a) fund the upgrade of Thomas Mitchell Drive, as outlined in the RTA's *Review of Thomas Mitchell Drive Route Assessment (August 2010)*, in accordance with the terms of the planning agreement required in condition 14 of schedule 2;
  - (b) upgrade the Thomas Mitchell Drive/New England Highway intersection to the satisfaction of the applicable roads authority, by the end of June 2011 unless otherwise agreed by the roads authority;
  - (c) upgrade the Thomas Mitchell Drive/Denman Road intersection to the satisfaction of the applicable roads authority, by the end of December 2019 unless otherwise agreed by the roads authority;
  - (d) realign Edderton Road and its intersection with Denman Road prior to mining within 200 metres of the road, to the satisfaction of Council and the RTA; and
  - (e) maintain reasonable access to the summit of Mt Arthur for emergency services and legitimate users on a 24 hour per day basis, except for temporary closures as required for blasting.

The upgrades referred to in (b), (c) and (d) above may be satisfied through funding the required upgrades, subject to the agreement of the applicable roads authority, and subject to providing the funding such that the upgrades can be completed within the stated timeframe.

If there is any dispute between the Proponent and Council or the RTA in relation to the funding or completion of the upgrades, then any of the parties may refer the matter to the Director-General for resolution.

## Railway Crossing

48. The Proponent shall implement all reasonable and feasible measures to minimise blocking the railway crossing on Antiene Railway Station Road, to the satisfaction of the Director-General

## VISUAL

### Mining Operations Additional Visual Impact Mitigation

49. Within 6 months of this approval, the Proponent shall prepare a report that:
- identifies the privately-owned land that is likely to experience significant visual impacts during the project; and
  - describes (in general terms) the additional mitigation measures that could be implemented to reduce the visibility of the mine from these properties, to the satisfaction of the Director-General.

#### Notes:

- The additional visual impact mitigation measures should be aimed at reducing the visibility of the mine from significantly affected residences or areas on privately-owned land subject to tourist and/or general public access, and do not necessarily require measures to reduce visibility of the mine from other locations on affected properties. The additional visual impact mitigation measures do not necessarily have to include measures on the affected property itself (i.e. the additional measures may consist of measures outside the affected property boundary that provide an effective reduction in visual impacts).*
- Except in exceptional circumstances, the Director-General will not require additional visual impact mitigation to be undertaken for residences that are more than 5 kilometres from the mining operations.*

50. Within 3 months of the Director-General approving this report, the Proponent shall advise all owners of privately-owned land identified in the report that they are entitled to additional mitigation measures to reduce the visibility of the mine from their properties.
51. Upon receiving a written request from an owner of privately-owned land identified in this report, or upon receiving a direction from the Director-General regarding any other privately-owned land, the Proponent shall implement additional visual impact mitigation measures (such as landscaping treatments or vegetation screens) in consultation with the landowner, and to the satisfaction of the Director-General.

These mitigation measures must be reasonable and feasible, and must be implemented within a reasonable timeframe.

If within 3 months of receiving this request from the owner, the Proponent and the owner cannot agree on the measures to be implemented, or there is a dispute about the implementation of these measures, then either party may refer the matter to the Director-General for resolution.

## Visual Amenity and Lighting

52. The Proponent shall:
- implement all reasonable and feasible measures to mitigate visual and off-site lighting impacts of the project;
  - ensure no outdoor lights shine above the horizontal; and
  - ensure that all external lighting associated with the project complies with *Australian Standard AS4282 (INT) 1997 – Control of Obtrusive Effects of Outdoor Lighting*, to the satisfaction of the Director-General.

## WASTE

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

## **SCHEDULE 4 ADDITIONAL PROCEDURES**

### **NOTIFICATION OF LANDOWNERS**

1. By the end of November 2010, the Proponent shall notify in writing the owners of the land listed in:
  - (a) Table 1 of schedule 3 that they have the right to require the Proponent to acquire their land at any stage during the project;
  - (b) Table 1 (noise affected land) and Table 7 of schedule 3 that they are entitled to ask the Proponent to install additional noise mitigation measures at their residence at any stage during the project; and
  - (c) Table 1 (air quality affected land) and Table 15 of schedule 3 that they are entitled to ask the Proponent to install additional air quality mitigation measures at their residence at any stage during the project.

2. If the results of the monitoring required in schedule 3 identify that impacts generated by the project are greater than the relevant impact assessment criteria, except where a negotiated agreement has been entered into in relation to that impact, then the Proponent shall, within 2 weeks of obtaining the monitoring results notify the Director-General, the affected landowners and tenants (including tenants of mine-owned properties) accordingly, and provide regular monitoring results to each of these parties until the results show that the project is complying with the criteria in schedule 3.

If the monitoring results exceed the relevant 'additional noise mitigation measures' criteria in condition 7 of schedule 3 or 'additional air quality mitigation measures' criteria in condition 22 of schedule 3 at a residence on privately-owned land, then the Proponent shall also notify the landowner that they are entitled to ask the Proponent to install additional noise or air quality mitigation measures at their residence.

3. The Proponent shall send a copy of the NSW Health fact sheet entitled "Mine Dust and You" (as may be updated from time to time) to all landowners and/or existing or future tenants (including tenants of mine owned properties) of properties where:
  - (a) the predictions in the EA identify that the dust emissions generated by the project are likely to be greater than the air quality land acquisition criteria in schedule 3, with such notice to be provided by the end of November 2010; and
  - (b) monitoring results identify that the mine is exceeding the air quality land acquisition criteria in schedule 3, with such notice to be provided within 2 weeks of identifying the exceedance.

### **INDEPENDENT REVIEW**

4. If a landowner of privately-owned land considers the project to be exceeding the impact assessment criteria in schedule 3, then he/she may ask the Director-General in writing for an independent review of the impacts of the project on his/her land.

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

- (a) commission a suitably qualified, experienced and independent expert, whose appointment has been approved by the Director-General, to:
    - consult with the landowner to determine his/her concerns;
    - conduct monitoring to determine whether the project is complying with the relevant impact assessment criteria in schedule 3; and
    - if the project is not complying with these criteria then:
      - determine if the more than one mine is responsible for the exceedance, and if so the relative share of each mine regarding the impact on the land;
      - identify the measures that could be implemented to ensure compliance with the relevant criteria; and
  - (b) give the Director-General and landowner a copy of the independent review.
5. If the independent review determines that the project is complying with the relevant impact assessment criteria in schedule 3, then the Proponent may discontinue the independent review with the approval of the Director-General.

If the independent review determines that the project is not complying with the relevant impact assessment criteria in schedule 3, and that the project is primarily responsible for this non-compliance, then the Proponent shall:

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

If the measures referred to in (a) do not achieve compliance with the air quality and/or noise land acquisition criteria in schedule 3, and the Proponent cannot secure a written agreement with the landowner to allow these exceedances within 3 months, then upon receiving a written request from the landowner, the Proponent shall acquire all or part of the landowner's land in accordance with the procedures in conditions 7-8 below.

6. If the independent review determines that the relevant impact assessment criteria in schedule 3 are being exceeded, but that more than one mine is responsible for this non-compliance, then the Proponent shall, together with the relevant mine/s:
- (a) implement all reasonable and feasible mitigation measures, in consultation with the landowner and appointed independent expert, and conduct further monitoring until there is compliance with the relevant criteria; or
  - (b) secure a written agreement with the landowner and other relevant mines to allow exceedances of the relevant impact assessment criteria in schedule 3, to the satisfaction of the Director-General.

If the measures referred to in (a) do not achieve compliance with the air quality and/or noise land acquisition criteria in schedule 3, and the Proponent together with the relevant mine/s cannot secure a written agreement with the landowner to allow these exceedances within 3 months, then upon receiving a written request from the landowner, the Proponent shall acquire all or part of the landowner's land on as equitable a basis as possible with the relevant mine/s, in accordance with the procedures in conditions 7-8 below.

## LAND ACQUISITION

7. Within 3 months of receiving a written request from a landowner with acquisition rights, the Proponent shall make a binding written offer to the landowner based on:
- (a) the current market value of the landowner's interest in the property at the date of this written request, as if the property was unaffected by the project, having regard to the:
    - existing and permissible use of the land, in accordance with the applicable planning instruments at the date of the written request; and
    - presence of improvements on the 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 7 of schedule 3, 'additional air quality mitigation measures' in condition 22 of schedule 3, or 'compensatory water supplies' in condition 34 of schedule 3;
  - (b) the reasonable costs associated with:
    - relocating within the Muswellbrook, Singleton or Scone local government area, or to any other local government area determined by the Director-General; and
    - obtaining legal advice and expert advice for determining the acquisition price of the land, and the terms upon which it is to be acquired; and
  - (c) reasonable compensation for any disturbance caused by the land acquisition process.

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

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

- consider submissions from both parties;
- determine a fair and reasonable acquisition price for the land and/or the terms upon which the land is to be acquired, having regard to the matters referred to in paragraphs (a)-(c) above;
- prepare a detailed report setting out the reasons for any determination; and
- provide a copy of the report to both parties.

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

However, if either party disputes the independent valuer's determination, then within 14 days of receiving the independent valuer's report, they may refer the matter to the Director-General for review. Any request for a review must be accompanied by a detailed report setting out the reasons why the party disputes the independent valuer's determination. Following consultation with the independent valuer and both parties, the Director-General 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. Within 14 days of this determination, the Proponent shall make a binding written offer to the landowner to purchase the land at a price not less than the Director-General's determination.

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

8. The Proponent shall pay all reasonable costs associated with the land acquisition process described in condition 7 above, including the costs associated with obtaining Council approval for any plan of subdivision (where permissible), and registration of this plan at the Office of the Registrar-General.
-

## **SCHEDULE 5 ENVIRONMENTAL MANAGEMENT, REPORTING AND AUDITING**

### **ENVIRONMENTAL MANAGEMENT**

#### **Environmental Management Strategy**

1. The Proponent shall prepare and implement an Environmental Management Strategy for the project to the satisfaction of the Director-General. The strategy must:
  - (a) be submitted to the Director-General for approval by the end of March 2011;
  - (b) provide the strategic framework for environmental management of the project;
  - (c) identify the statutory approvals that apply to the project;
  - (d) describe the role, responsibility, authority and accountability of all key personnel involved in the environmental management of the project;
  - (e) describe the procedures that would be implemented to:
    - keep the local community and relevant agencies informed about the operation and environmental performance of the project;
    - receive, handle, respond to, and record complaints;
    - resolve any disputes that may arise during the course of the project;
    - respond to any non-compliance;
    - respond to emergencies; and
  - (f) include:
    - copies of the various strategies, plans and programs that are required under the conditions of this approval once they have been approved; and
    - a clear plan depicting all the monitoring to be carried out in relation to the project.

#### **Management Plan Requirements**

2. The Proponent shall ensure that the management plans required under this approval are prepared in accordance with any relevant guidelines, and include:
  - (a) detailed baseline data;
  - (b) a description of:
    - the relevant statutory requirements (including any relevant approval, licence or lease conditions);
    - any relevant limits or performance measures/criteria;
    - the specific performance indicators that are proposed to be used to judge the performance of, or guide the implementation of, the project or any management measures;
  - (c) a description of the measures that would be implemented to comply with the relevant statutory requirements, limits, or performance measures/criteria;
  - (d) a program to monitor and report on the:
    - impacts and environmental performance of the project;
    - effectiveness of any management measures (see c above);
  - (e) a contingency plan to manage any unpredicted impacts and their consequences;
  - (f) a program to investigate and implement ways to improve the environmental performance of the project over time;
  - (g) a protocol for managing and reporting any:
    - incidents;
    - complaints;
    - non-compliances with statutory requirements; and
    - exceedances of the impact assessment criteria and/or performance criteria; and
  - (h) a protocol for periodic review of the plan.

#### **Annual Review**

3. By the end of 2010, and annually thereafter, the Proponent shall review the environmental performance of the project to the satisfaction of the Director-General. This review must:
  - (a) describe the works that were carried out in the past year, and the works that are proposed to be carried out over the next year;
  - (b) include a comprehensive review of the monitoring results and complaints records of the project over the past year, which includes a comparison of these results against the
    - the relevant statutory requirements, limits or performance measures/criteria;
    - the monitoring results of previous years; and
    - the relevant predictions in the EA;
  - (c) identify any non-compliance over the last year, and describe what actions were (or are being) taken to ensure compliance;
  - (d) identify any trends in the monitoring data over the life of the project;
  - (e) identify any discrepancies between the predicted and actual impacts of the project, and analyse the potential cause of any significant discrepancies; and

- (f) describe what measures will be implemented over the next year to improve the environmental performance of the project.

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

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

*Note: This is to ensure the strategies, plans and programs are updated on a regular basis, and incorporate any recommended measures to improve the environmental performance of the project.*

#### **Community Consultative Committee**

5. The Proponent shall establish and operate a Community Consultative Committee (CCC) for the project to the satisfaction of the Director-General. This CCC must be established by the end of March 2011 and be operated in general accordance with the *Guidelines for Establishing and Operating Community Consultative Committees for Mining Projects* (Department of Planning, 2007, or its latest version).

*Notes:*

- *The CCC is an advisory committee. The Department and other relevant agencies are responsible for ensuring that the Proponent complies with this approval.*
- *In accordance with the Guideline, the Committee should comprise an independent chair (Council if available) and appropriate representation from the Proponent, affected councils and the general community.*
- *In establishing the CCC, the Department will accept the continued representation from existing CCC members, however the Proponent should ensure that adequate representation is achieved for landowners surrounding the mine expansion areas.*

#### **Management of Cumulative Impacts**

6. In conjunction with the owners of the nearby Drayton and Bengalla mines, the Proponent shall use its best endeavours to minimise the cumulative impacts of the project on the surrounding area to the satisfaction of the Director-General.

*Note: Nothing in this approval is to be construed as requiring the Proponent to act in a manner which is contrary to the Trade Practices Act 1974.*

#### **REPORTING**

##### **Incident Reporting**

7. The Proponent shall notify the Director-General and any other relevant agencies of any incident associated with the project as soon as practicable after the Proponent becomes aware of the incident. Within 7 days of becoming aware of the incident, the Proponent shall provide the Director-General and any relevant agencies with a detailed report on the incident.

##### **Regular Reporting**

8. The Proponent shall provide regular reporting on the environmental performance of the project on its website, in accordance with the reporting arrangements in any plans or programs approved under the conditions of this approval, and to the satisfaction of the Director-General.

#### **INDEPENDENT ENVIRONMENTAL AUDIT**

9. By the end of December 2011, and every 3 years thereafter, unless the Director-General directs otherwise, the Proponent shall commission and pay the full cost of an Independent Environmental Audit of the project. This audit must:
- (a) be conducted by a suitably qualified, experienced and independent team of experts whose appointment has been endorsed by the Director-General;
  - (b) include consultation with the relevant agencies;
  - (c) assess the environmental performance of the project and assess whether it is complying with the requirements in this approval and any 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 project, and/or any assessment, plan or program required under the abovementioned approvals.



*Notes:*

- *This audit team must be led by a suitably qualified auditor and include experts in surface water, groundwater and any other fields specified by the Director-General.*
- *The audits should be coordinated with similar auditing requirements for the Mt Arthur Underground Project.*

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

**ACCESS TO INFORMATION**

11. From the end of December 2010, the Proponent shall:
- (a) make the following information publicly available on its website:
    - a copy of all current statutory approvals for the project;
    - a copy of the current environmental management strategy and associated plans and programs;
    - a summary of the monitoring results of the project, which have been reported in accordance with the various plans and programs approved under the conditions of this approval;
    - a complaints register, which is to be updated on a monthly basis;
    - a copy of the minutes of CCC meetings;
    - a copy of any Annual Reviews (over the last 5 years);
    - a copy of any Independent Environmental Audit, and the Proponent's response to the recommendations in any audit;
    - any other matter required by the Director-General; and
  - (b) keep this information up to date, to the satisfaction of the Director-General.
-

**APPENDIX 1  
SCHEDULE OF LAND**

Property Ownership within EA Boundary		
Ownership	Lot	DP
Anglo Coal (Drayton Management) Pty Limited	321	625513
Anglo Coal (Drayton Management) Pty Limited	3	701496
Anglo Coal (Drayton Management) Pty Limited	4	701496
Anglo Coal (Drayton Management) Pty Limited	6	701496
Anglo Coal (Drayton Management) Pty Limited	8	843635
Anglo Coal (Drayton Management) Pty Limited	64	850818
Anglo Coal (Drayton Management) Pty Limited	65	850818
Anglo Coal (Drayton Management) Pty Limited	1	1004725
Anglo Coal (Drayton Management) Pty Limited	22	1018587
Anglo Coal (Drayton Management) Pty Limited	180	812852
Crown	2	48776
Crown	3	48776
Crown	4	48776
Crown	5	48776
Crown	6	48776
Crown	7	48776
Crown	8	48776
Crown	7003	93323
Crown	11	632691
Crown	160	722249
Crown	1	752486
Crown	85	752500
Crown	10	793428
Crown	1	532672
Crown	108	43392
Crown	1	47302
Freehold (PR & M Burgmann)	4	6090
Freehold (Rosebrook Pty Limited)	1	34397
Freehold (Rosebrook Pty Limited)	2	34397
Freehold (Energy Australia)	1	223018
Freehold (Coal Operations Australia Limited)	111	633293
Freehold (Muswellbrook Council)	112	633293
Freehold (Bayswater Colliery Company Pty Limited)	5	726248
Freehold (MH & RE Wolfgang)	1	752441
Freehold (MH & RE Wolfgang)	97	752441
Freehold (MH & RE Wolfgang)	98	752441
Freehold (MH & RE Wolfgang)	102	752441
Freehold (MH & RE Wolfgang)	1	956112
Freehold (MH & RE Wolfgang)	68	752500
Freehold (MH & RE Wolfgang)	69	752500
Freehold (MH & RE Wolfgang)	70	752500
Freehold (MH & RE Wolfgang)	71	752500
Hunter Valley Energy Coal Limited	1	1090735
Hunter Valley Energy Coal Limited	2	1090735
Hunter Valley Energy Coal Limited	3	1090735
Hunter Valley Energy Coal Limited	4	1090735
Hunter Valley Energy Coal Limited	5	1090735
Hunter Valley Energy Coal Limited	6	1090735
Hunter Valley Energy Coal Limited	8	26211
Hunter Valley Energy Coal Limited	9	26211
Hunter Valley Energy Coal Limited	10	26211
Hunter Valley Energy Coal Limited	1	27346
Hunter Valley Energy Coal Limited	2	27346
Hunter Valley Energy Coal Limited	3	27346
Hunter Valley Energy Coal Limited	4	27346
Hunter Valley Energy Coal Limited	5	27346
Hunter Valley Energy Coal Limited	6	27346

Property Ownership within EA Boundary		
Ownership	Lot	DP
Hunter Valley Energy Coal Limited	7	27346
Hunter Valley Energy Coal Limited	8	27346
Hunter Valley Energy Coal Limited	11	27346
Hunter Valley Energy Coal Limited	12	27346
Hunter Valley Energy Coal Limited	13	27346
Hunter Valley Energy Coal Limited	14	27346
Hunter Valley Energy Coal Limited	15	27346
Hunter Valley Energy Coal Limited	16	27346
Hunter Valley Energy Coal Limited	1	29950
Hunter Valley Energy Coal Limited	2	29950
Hunter Valley Energy Coal Limited	3	29950
Hunter Valley Energy Coal Limited	4	29950
Hunter Valley Energy Coal Limited	5	29950
Hunter Valley Energy Coal Limited	6	29950
Hunter Valley Energy Coal Limited	7	29950
Hunter Valley Energy Coal Limited	8	29950
Hunter Valley Energy Coal Limited	9	29950
Hunter Valley Energy Coal Limited	10	29950
Hunter Valley Energy Coal Limited	11	29950
Hunter Valley Energy Coal Limited	12	29950
Hunter Valley Energy Coal Limited	1	101142
Hunter Valley Energy Coal Limited	1	113689
Hunter Valley Energy Coal Limited	1	133634
Hunter Valley Energy Coal Limited	2	133634
Hunter Valley Energy Coal Limited	1	204369
Hunter Valley Energy Coal Limited	4	204369
Hunter Valley Energy Coal Limited	13	228159
Hunter Valley Energy Coal Limited	115	246348
Hunter Valley Energy Coal Limited	111	246348
Hunter Valley Energy Coal Limited	112	246348
Hunter Valley Energy Coal Limited	113	246348
Hunter Valley Energy Coal Limited	114	246348
Hunter Valley Energy Coal Limited	4	247064
Hunter Valley Energy Coal Limited	1	249536
Hunter Valley Energy Coal Limited	2	249536
Hunter Valley Energy Coal Limited	3	249536
Hunter Valley Energy Coal Limited	4	249536
Hunter Valley Energy Coal Limited	5	249536
Hunter Valley Energy Coal Limited	6	249536
Hunter Valley Energy Coal Limited	1	308136
Hunter Valley Energy Coal Limited	1	372862
Hunter Valley Energy Coal Limited	1	385720
Hunter Valley Energy Coal Limited	2	385720
Hunter Valley Energy Coal Limited	2	387021
Hunter Valley Energy Coal Limited	3	387021
Hunter Valley Energy Coal Limited	4	390143
Hunter Valley Energy Coal Limited	1	403081
Hunter Valley Energy Coal Limited	A	407349
Hunter Valley Energy Coal Limited	C	407349
Hunter Valley Energy Coal Limited	1	503827
Hunter Valley Energy Coal Limited	111	514759
Hunter Valley Energy Coal Limited	112	514759
Hunter Valley Energy Coal Limited	1	515936
Hunter Valley Energy Coal Limited	2	515936
Hunter Valley Energy Coal Limited	11	526344
Hunter Valley Energy Coal Limited	20	550431
Hunter Valley Energy Coal Limited	1	573259

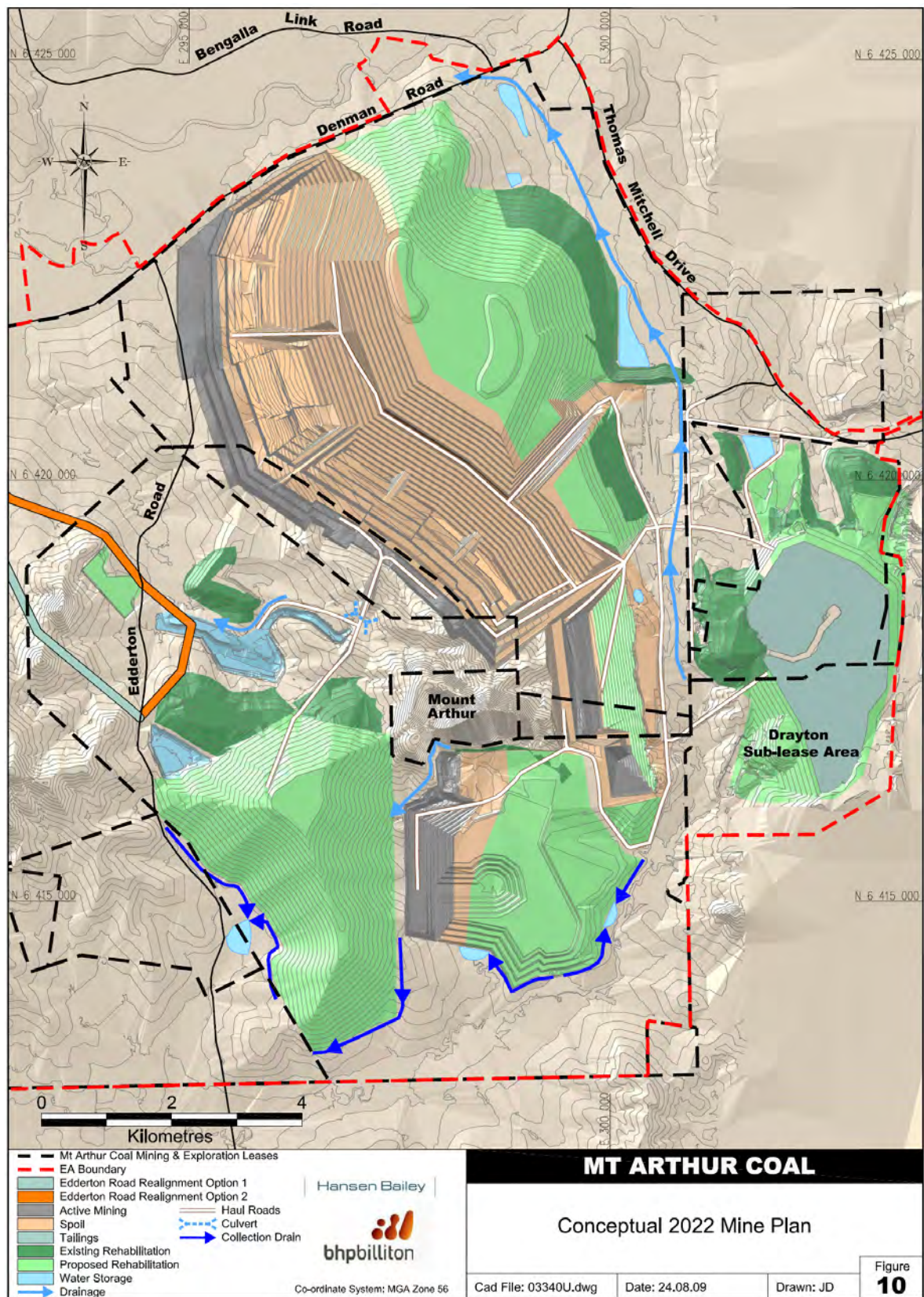
Property Ownership within EA Boundary		
Ownership	Lot	DP
Hunter Valley Energy Coal Limited	2	573259
Hunter Valley Energy Coal Limited	121	575515
Hunter Valley Energy Coal Limited	122	575515
Hunter Valley Energy Coal Limited	123	575515
Hunter Valley Energy Coal Limited	124	575515
Hunter Valley Energy Coal Limited	2	601359
Hunter Valley Energy Coal Limited	10	632691
Hunter Valley Energy Coal Limited	9	655749
Hunter Valley Energy Coal Limited	159	722249
Hunter Valley Energy Coal Limited	110	727767
Hunter Valley Energy Coal Limited	63	752449
Hunter Valley Energy Coal Limited	49	752500
Hunter Valley Energy Coal Limited	83	752500
Hunter Valley Energy Coal Limited	154	752500
Hunter Valley Energy Coal Limited	166	752503
Hunter Valley Energy Coal Limited	30	787702
Hunter Valley Energy Coal Limited	604	802124
Hunter Valley Energy Coal Limited	605	802124
Hunter Valley Energy Coal Limited	607	802124
Hunter Valley Energy Coal Limited	1	806149
Hunter Valley Energy Coal Limited	2	806149
Hunter Valley Energy Coal Limited	201	842045
Hunter Valley Energy Coal Limited	1	843634
Hunter Valley Energy Coal Limited	2	843634
Hunter Valley Energy Coal Limited	3	843634
Hunter Valley Energy Coal Limited	4	843634
Hunter Valley Energy Coal Limited	6	843635
Hunter Valley Energy Coal Limited	7	843635
Hunter Valley Energy Coal Limited	9	843635
Hunter Valley Energy Coal Limited	66	850818
Hunter Valley Energy Coal Limited	21	1018587
Hunter Valley Energy Coal Limited	113	1078759
Hunter Valley Energy Coal Limited	115	1078759
Macquarie Generation	1	790994
Macquarie Generation	181	812852
Macquarie Generation	46	241179
Macquarie Generation	45	241179
Macquarie Generation	44	241179
Macquarie Generation	1	556370
Macquarie Generation	1	238862
Macquarie Generation	PT5	752486
Macquarie Generation	PT2	752486
Macquarie Generation	22	241179

**Notes:**

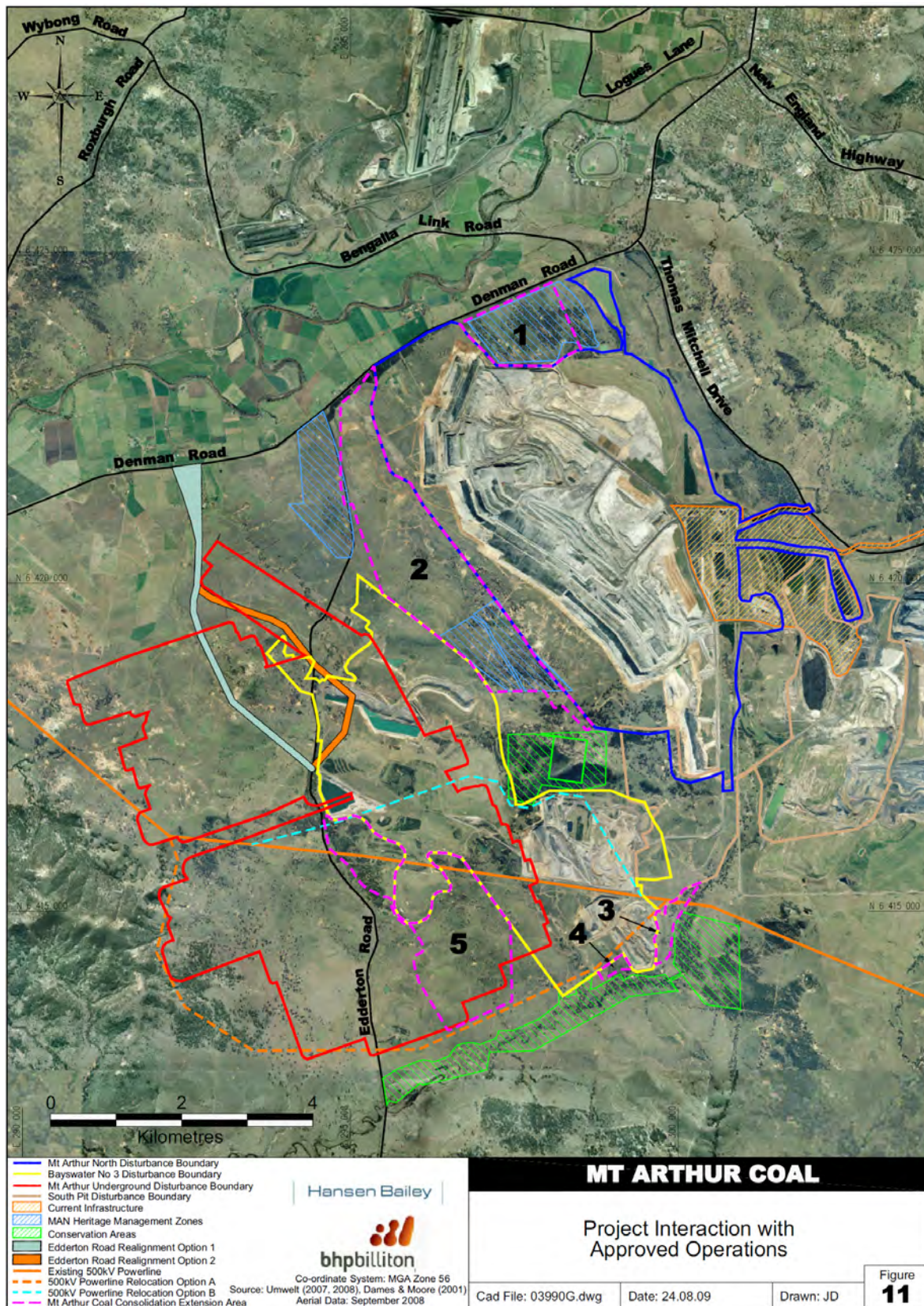
1. Schedule of Land also applies to those areas within the EA Boundary.
2. The cadastral information for the lands to which the EA applies was sourced from the NSW LPI records database in February and March 2009.



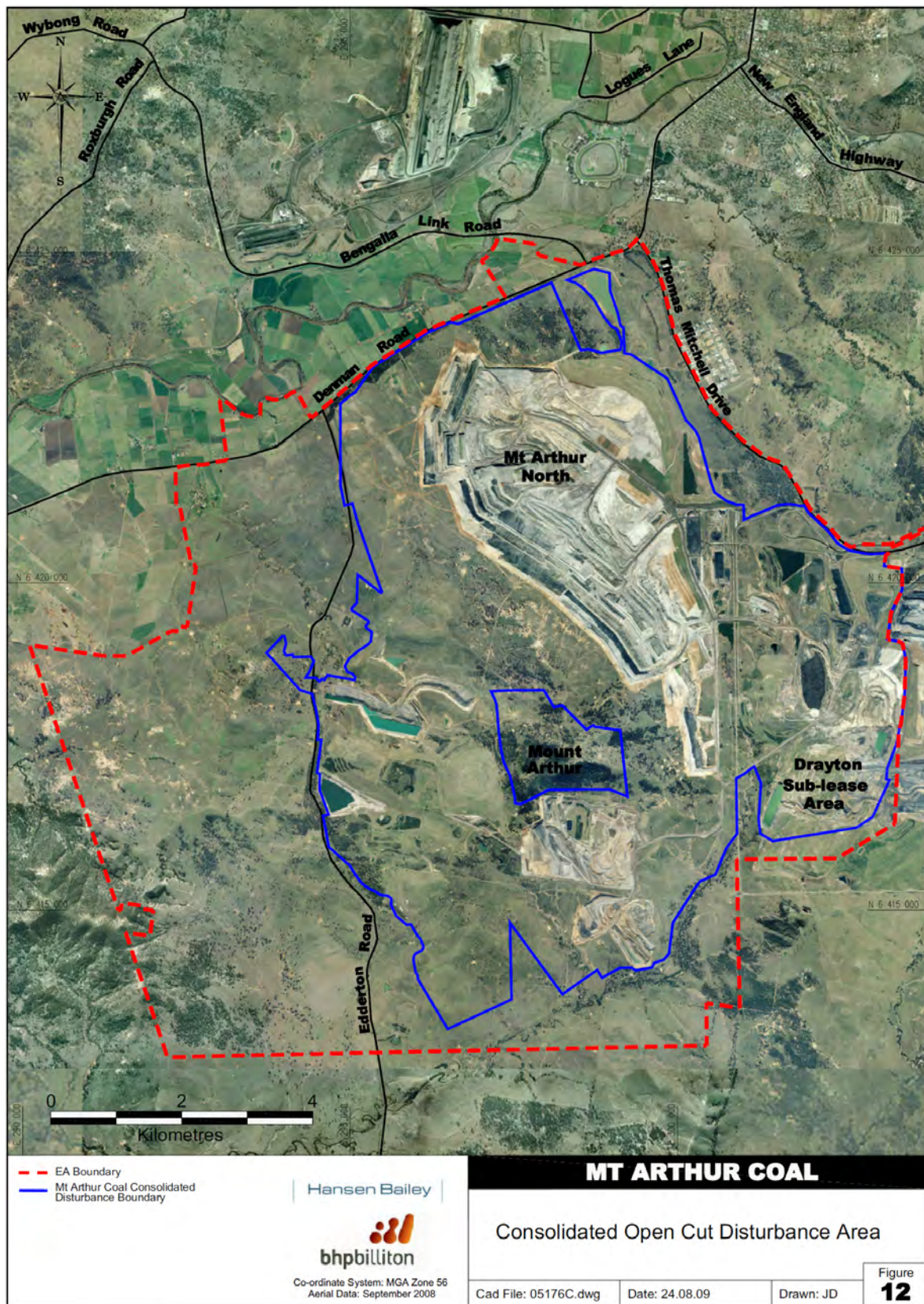
## APPENDIX 2 PROJECT LAYOUT PLANS











### APPENDIX 3 STATEMENT OF COMMITMENTS

[Note: References to tables, sections, figures and appendices are references to the EA]

Ref	Commitment	EA Volume 1 Section
<b>Environmental Management &amp; Monitoring</b>		
1.	Mt Arthur Coal's Environmental Monitoring Programs for air quality, water quality, noise and blasting will be reviewed and updated as required, in consultation with relevant regulators for approval by the Department.	8.0
2.	Management Plans will be revised and / or prepared in consultation with relevant regulators for approval by the Department for the following areas: <ul style="list-style-type: none"> <li>• Water Management;</li> <li>• Flora &amp; Fauna;</li> <li>• Rehabilitation &amp; Landscape (including Void Management); and</li> <li>• Aboriginal Archaeology &amp; Cultural Heritage.</li> </ul>	8.0
<b>Air Quality</b>		
3.	In addition to the best practice management measures currently in place, Mt Arthur Coal will apply a road sealant or dust suppressant product on all active coal and overburden haul roads and / or utilise other such technologies and initiatives as required to ensure that the air quality outcomes described in the EA are achieved.	8.1.3
4.	Mt Arthur Coal will undertake regular reviews and monitoring of greenhouse gas emissions and energy efficiency initiatives to ensure that greenhouse gas emissions per tonne of product coal are kept to the minimum practicable level.	8.1.3
5.	Mt Arthur Coal will establish a new real-time Tapered Element Oscillating Microbalances (TEOM) monitoring station or stations on the Mt Arthur site positioned so that it (they) provide data that are representative of air quality conditions on the site itself and on nearby properties where air quality data may be needed for mine management purposes. Data collected is to be published in the Project's Annual Reviews.	N/A
<b>Noise &amp; Blasting</b>		
6.	Mt Arthur Coal shall ensure that Project noise at the northern boundary of the Woodlands property does not exceed the lowest intrusive noise criteria provide by the EPA/DECCW's Industrial Noise Policy of an RBL of 30 dBA LAeq (15 minutes) plus 5 dBA.	N/A
7.	Mt Arthur Coal shall undertake blast monitoring and associated reporting at the Woodlands property in accordance with protocols approved by the Department of Planning and for a time frame to be agreed with Woodlands.	N/A
<b>Water Resources</b>		
8	Mt Arthur Coal will continue to monitor hydro-geomorphological conditions and scrutinise for evidence of any groundwater ingress or endwall instability indicators as it progresses the previously approved mining towards the Hunter River Alluvials. Mining (other than that already approved in the MAN EIS) will not extend beyond a nominal 150 m buffer zone from the Hunter River Alluvials until agreement is reached with NOW regarding the installation of a lower permeability barrier along the point of connections of mining and the alluvium or other appropriate safeguards.	8.10.4
9	Mt Arthur Coal will undertake a census of privately owned groundwater bores to ascertain their current usage and provide a baseline against which to compare any future impacts. In the event of interruption to water supply resulting from the Project, an alternative water supply will be provided, until such interruption ceases.	8.10.4
10.	Mt Arthur Coal will install and maintain for the life of the mine a real time surface water monitoring station, downstream of the mine in Saddlers Creek but upstream from any water off-takes, with the following characteristics: <ul style="list-style-type: none"> <li>• The station would continuously monitor in real time the following parameters as a minimum: <ul style="list-style-type: none"> <li>— Flows;</li> <li>— Conductivity; and</li> <li>— Turbidity.</li> </ul> </li> <li>• Agreed trigger levels would be established in consultation with Darley for conductivity and turbidity;</li> <li>• If trigger levels are exceeded, nominated Darley staff would be automatically notified by SMS or other agreed alarm protocols; and</li> </ul> Annual water quality reports incorporating raw data and professional interpretation would be provided annually to Darley and the Department.	N/A



Ref	Commitment	EA Volume 1 Section
11	Water at Mt Arthur Coal will continue to be managed in accordance with best practice and the reduce, reuse, recycle principles. Development of modern tailings storage facilities and possible modifications to coal preparation processes to reduce water usage on site will continue to be developed and assessed, and water use and reduction initiatives will be reported annually in the Annual Review.	N/A
<b>Traffic</b>		
12.	Mt Arthur Coal will liaise with Anglo Coal, Council, Macquarie Generation and the ARTC to address legal and appropriate access for properties along Antiene Railway Station Road.	8.17.3
13.	Transgrid will be consulted consistent with current practice when blasting in close proximity to the high voltage transmission line located near to the southern boundary of the mining area (as per South Pit Extension EA Statement of Commitment No. 6.4.3).	N/A
14.	<p>The following commitments will form the basis of a voluntary planning agreement with Council:</p> <ol style="list-style-type: none"> <li>1. Mt Arthur Coal will provide a capital contribution of \$3M towards the cost of the upgrade of Thomas Mitchell Drive.</li> <li>2. In addition Mt Arthur Coal will contribute a further \$4.06M capital, repayable to Mt Arthur Coal in accordance with the terms detailed in item 4 below.</li> <li>3. The total capital contribution of \$7.06M will be payable in yearly instalments that will match Council's execution of the works.</li> <li>4. The \$4.06M repayable portion (detailed in item 2 above) will be repaid to Mt Arthur Coal by Council from planning contributions to be made to Council by other developments via other agreements established by Council with these individual developments. Council will have an obligation to actively pursue these agreements as a matter of priority in these negotiations so as to ensure Mt Arthur Coal is made whole in as short a timeframe as possible.</li> <li>5. Mt Arthur will provide Council with \$120,000 (indexed) per annum for the purpose of a sinking fund connected with the ongoing maintenance of Thomas Mitchell Drive and restricted for that purpose.</li> </ol>	N/A
<b>Ecology</b>		
15.	The mine rehabilitation program will focus on the re-establishment of 500 ha White Box Yellow Box Blakely's Red Gum Woodland.	8.6
16.	<p>Within four years from the date of Project Approval, Mt Arthur Coal will acquire an additional minimum of 165 ha of land to be permanently conserved as offsets to help compensate for the total ecological impacts of the project. The flora and fauna values on the additional land are to further contribute to the compensation for the ecological impacts of the Project.</p> <p>The additional land for the offset package will be surveyed by the proponent to demonstrate its suitability for impacted flora and fauna. When selecting land for the offset, preference will be given to land adjacent to the existing offset package. Management of the additional land will be as prescribed for the other elements of the offset package.</p>	N/A
<b>Visual</b>		
17.	Mt Arthur Coal will progressively rehabilitate the mining and overburden emplacement areas.	8.4.3
18.	Upon Project Approval, guidelines will be prepared to include: treatment methods for primary and secondary view areas from affected residences; consultation requirements with residents in those key areas of high sensitivity, and action plans to mitigate visual impacts of the Project (depending on extent of visibility and its sensitivity). This will be detailed in a report to be submitted to the Department.	8.4.3
19.	Upon Project Approval, Mt Arthur Coal will prepare draft plans to screen and filter views of the Mt Arthur Project Area from affected sections of Woodlands. The draft plans will be prepared in consultation with Darley and submitted for approval by the Director General of the Department. Mt Arthur Coal will then implement the works in the plans to ensure that views from Woodlands of the Project are appropriately screened to the greatest extent practicable, and ensure that the works are effectively maintained throughout the life of the project, at the cost to Mt Arthur Coal. The plans are to be prepared by a suitably qualified and experienced landscape architect.	N/A
20.	Mt Arthur Coal will minimise views from the Woodlands Property within the Primary View Zone to active overburden faces on the out of pit emplacement areas of the Project to ensure the extent of any primary view is less than 2.5%, as described in Appendix 1 of the EA Report.	N/A
<b>Aboriginal Archaeology &amp; Cultural Heritage</b>		
21.	All of the Aboriginal heritage management initiatives described in the MAU EA as listed in <b>Section 8.7.3</b> will be implemented as part of the Project.	8.7.3
22.	To offset the disturbance of previously established Heritage Management Zones, a 495 ha Offset Area to the east of the mine site will be managed to ensure the protection of Aboriginal objects and the enhancement of Aboriginal cultural heritage.	8.7.3
23.	The salvage and the protection of any remaining Aboriginal objects within the EA Boundary will continue to be managed in accordance with a revised Aboriginal Archaeology & Cultural Heritage Management Plan in consultation with the local Aboriginal community and DECCW.	8.7.3
<b>Non-Aboriginal Heritage</b>		

Ref	Commitment	EA Volume 1 Section
24.	Mt Arthur Coal will undertake archival recordings of the Belmont Homestead Complex and Beer Homestead slab hut prior to any disturbance or relocation of these sites.	8.8.3
<b>Community</b>		
25.	<p>Within 12 months of this approval, unless otherwise agreed by the Director-General, Mt Arthur Coal will use its best endeavours to enter into a planning agreement with Council in accordance with Division 6 of Part 4 of the EP&amp;A Act, that provides for a contribution to Council for the purpose of community enhancement to address the social amenity and community infrastructure requirements arising from the additional impacts caused by the Project and the Mt Arthur Coal Mine Underground Project, as approved in the development approval, No 06_0091 and granted on 2 December 2008, such sum to be not less than \$500,000 (indexed) per annum and a further \$20,000 (indexed) for environmental and planning services connected with local coal mining undertaken by Council for each year of the Project approval.</p> <p>The entering into of this planning agreement will meet the requirements included in the development approval for the Mt Arthur Coal Mine – Underground Project (development approval No. 06_0091), and in particular will satisfy condition 14 in schedule 2 of the approval for the Mt Arthur Coal Mine – Underground Project (development approval No. 06_0091).</p>	8.12.7
<b>Reporting</b>		
26.	Mt Arthur Coal will prepare a consolidated Annual Review (which summarises monitoring results and reviews performance) for the Mt Arthur Coal Complex and distribute it to the relevant regulatory departments.	8.0
27.	Mt Arthur Coal will monitor the proportion of its additional employees ('new employees') needed for the Consolidation Project that are recruited from outside the local area (defined as Muswellbrook, Upper Hunter and Singleton Local Government Areas) and will report on this in its Annual Reviews for the Project. If the proportion of employees recruited from outside the local area excessively differs from the 20 per cent level forecast in the EA, that is 30 per cent or above in-migrant new employees in any one calendar year, Mt Arthur Coal will review its recruitment program to encourage greater local recruitment and will publish in its next Annual Review the measure it proposes to adopt to achieve this including the timeframe for their implementation and how their effectiveness would be monitored.	N/A
<b>Employment</b>		
28.	Mt Arthur Coal will use its best endeavours to employ at least eight first year apprentices per annum for the life of the Project, sourced from the local area (best endeavours applying). Mt Arthur recognises that the sourcing of quality candidates is becoming increasingly competitive however will undertake a rigorous recruitment plan to attract and retain 8 first year apprentices per annum.	N/A

## **APPENDIX 4 PREVIOUS EAS**

### **Mt Arthur North Mine**

Development Application 144-05-2000 and Environmental Impact Statement titled *The Mt Arthur North Coal Project*, dated April 2000, and prepared by URS Australia, as amended by the following:

- Submissions to the Commission of Inquiry; and
- the 2002 modification application, including the plans titled *Mount Arthur North Industrial Area Facilities – General Arrangement*, prepared by Sinclair Knight Merz, dated 26 November 2002.

### **South Pit Extension Project**

Project Application 06\_0108 and Environmental Assessment titled *Proposed South Pit Extension Project*, dated July 2007, including the response to submissions dated November 2007.

### **Bayswater No.3 Mine**

Development Application 210/93 and Environmental Impact Statement dated November 1993, and prepared by Resource Planning Pty Ltd, as amended by the following:

- Submissions to the Commission of Inquiry;
- the modification application and accompanying Statement of Environmental Effects, dated September 1999; and
- the modification application and accompanying Statement of Environmental Effects, dated 1 March 2001.

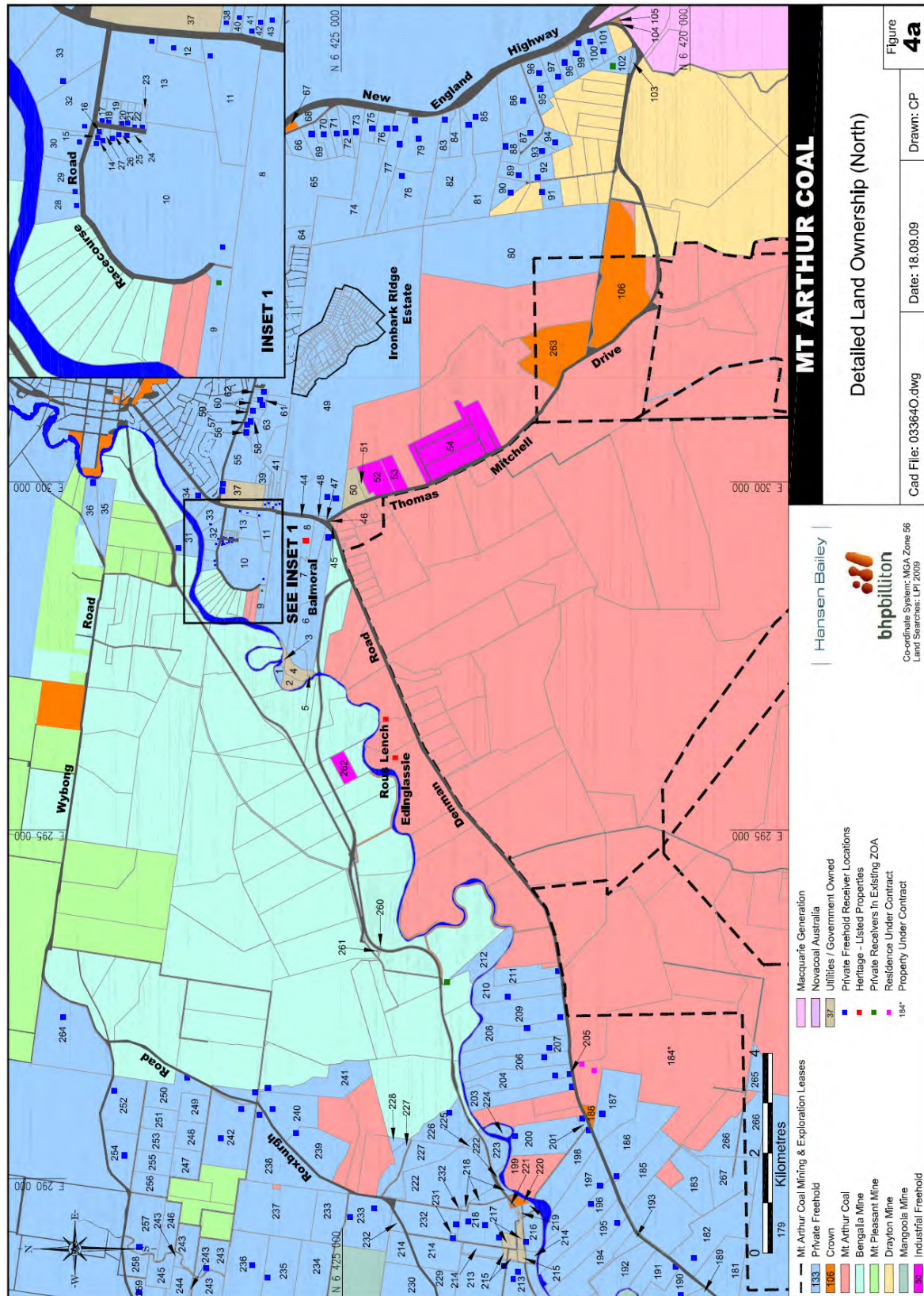
### **Bayswater Rail Loading Facility and Rail Loop**

Development Application 105-04-00 and Environmental Impact Statement dated March 2000, and prepared by Umwelt (Australia) Pty Ltd.

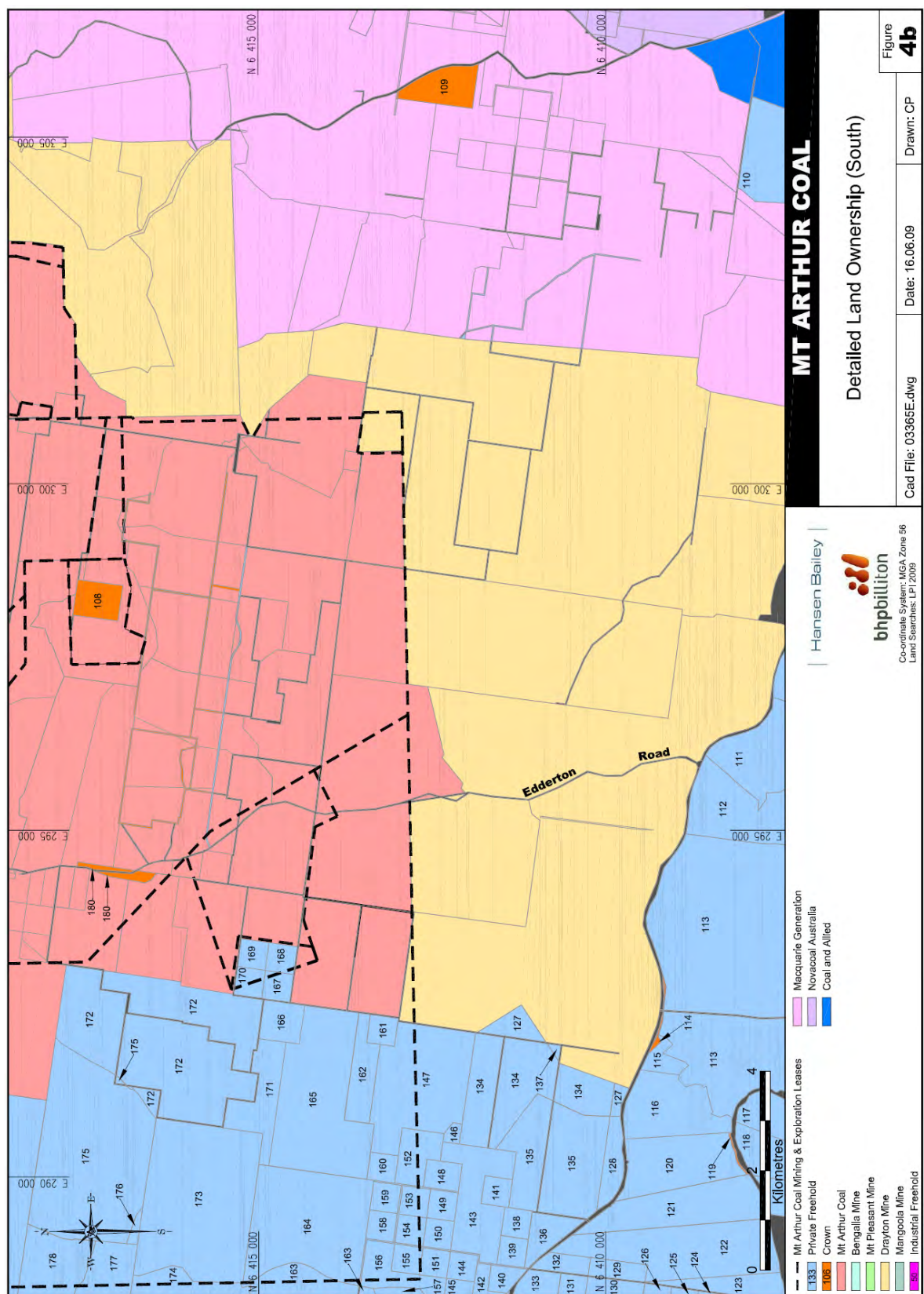
### **Bayswater Coal Preparation Plant**

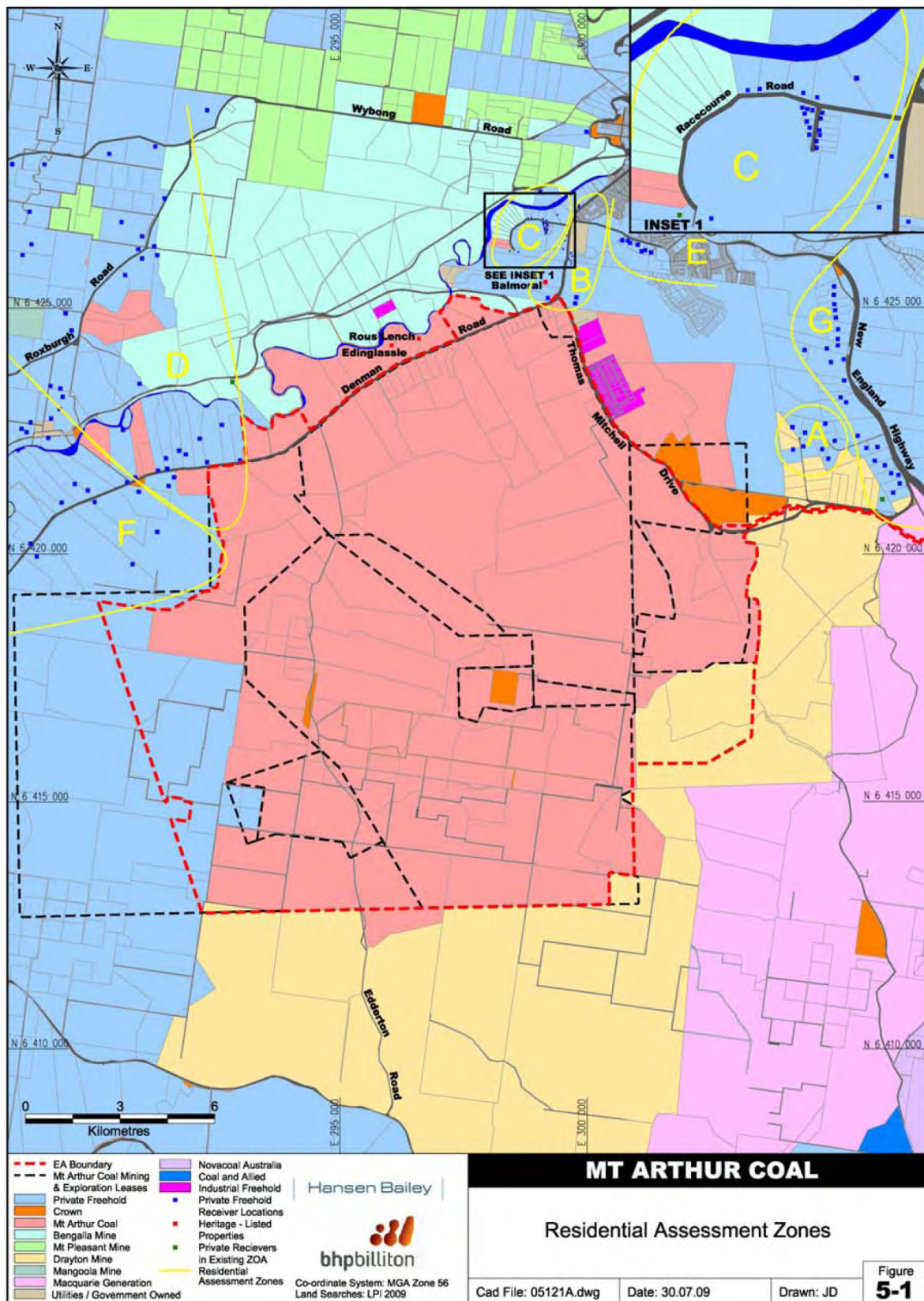
Development Application 24/97 and Environmental Impact Statement dated April 1997, and prepared by Umwelt (Australia) Pty Ltd.

## APPENDIX 5 RECEIVER LOCATION PLANS



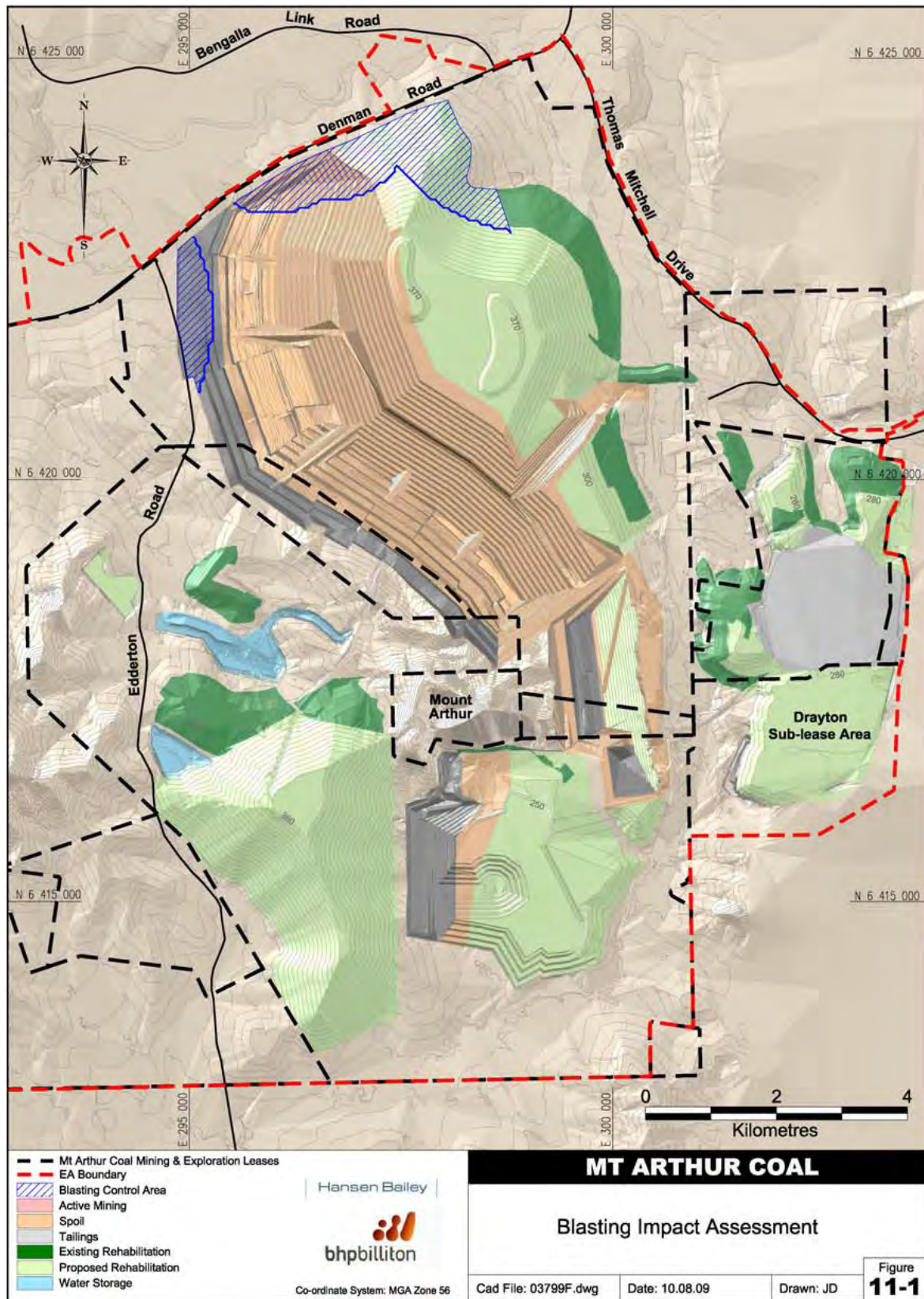






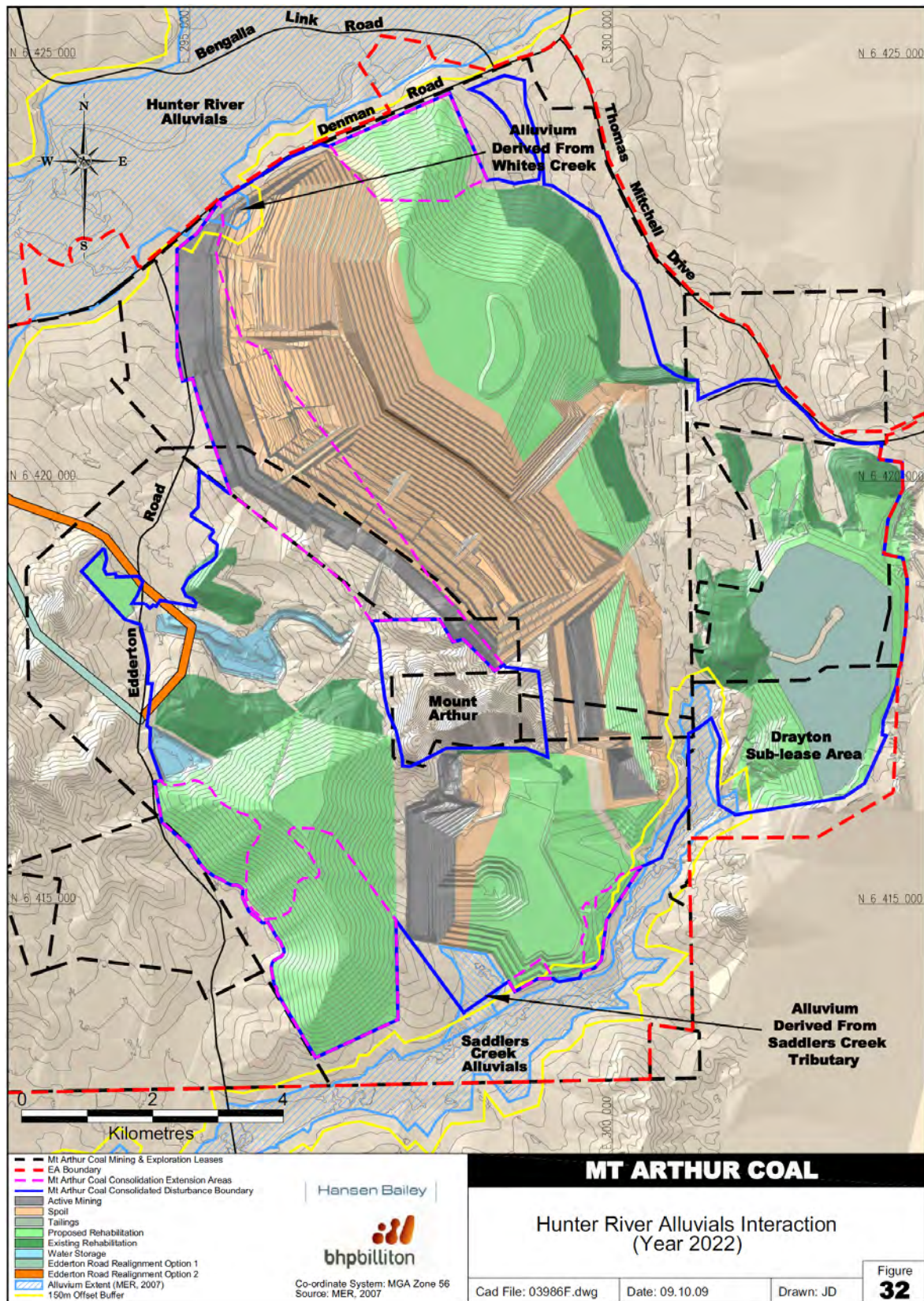


## APPENDIX 6 BLAST CONTROL AREA



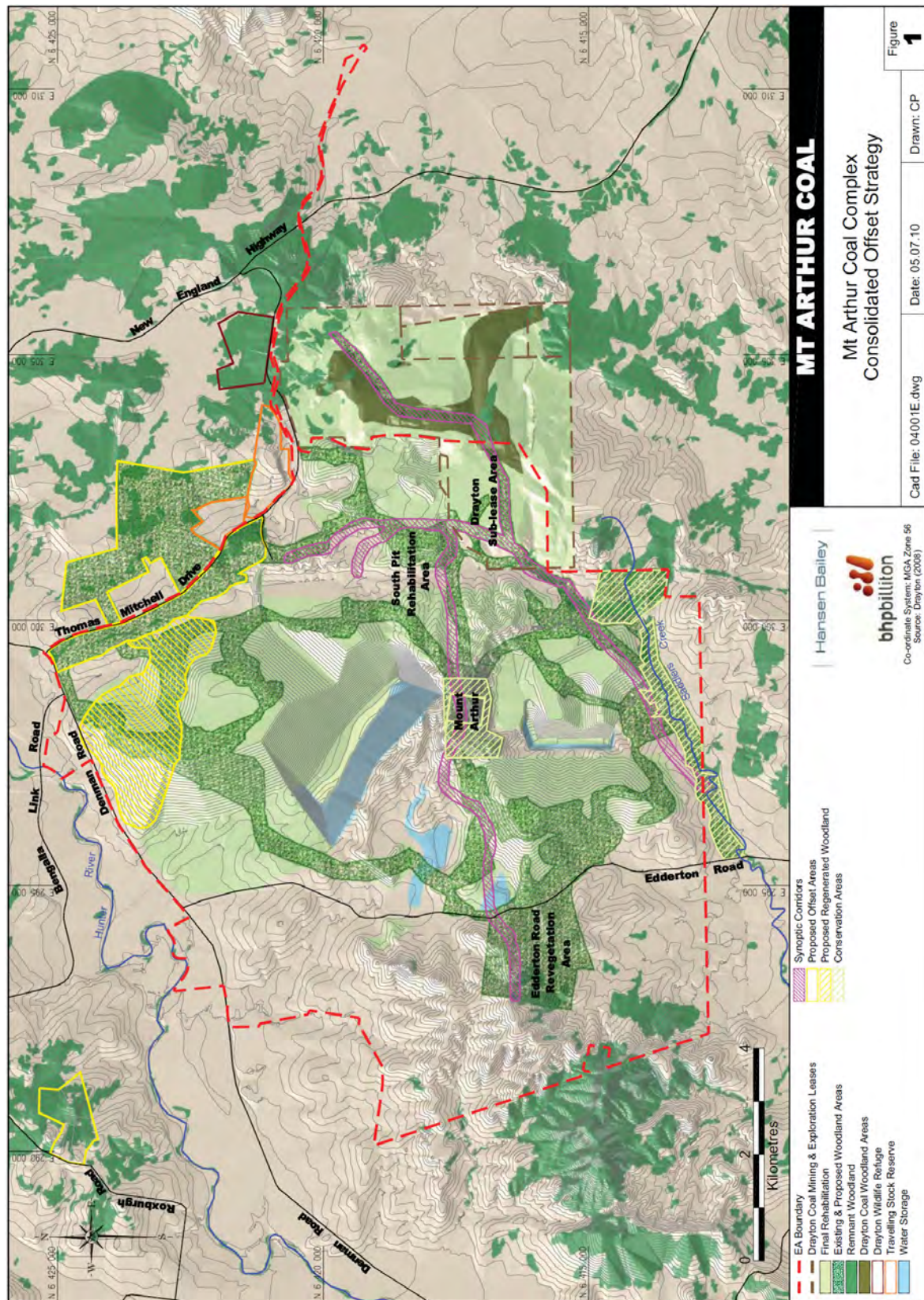


## APPENDIX 7 HUNTER RIVER AND SADDLERS CREEK ALLUVIALS

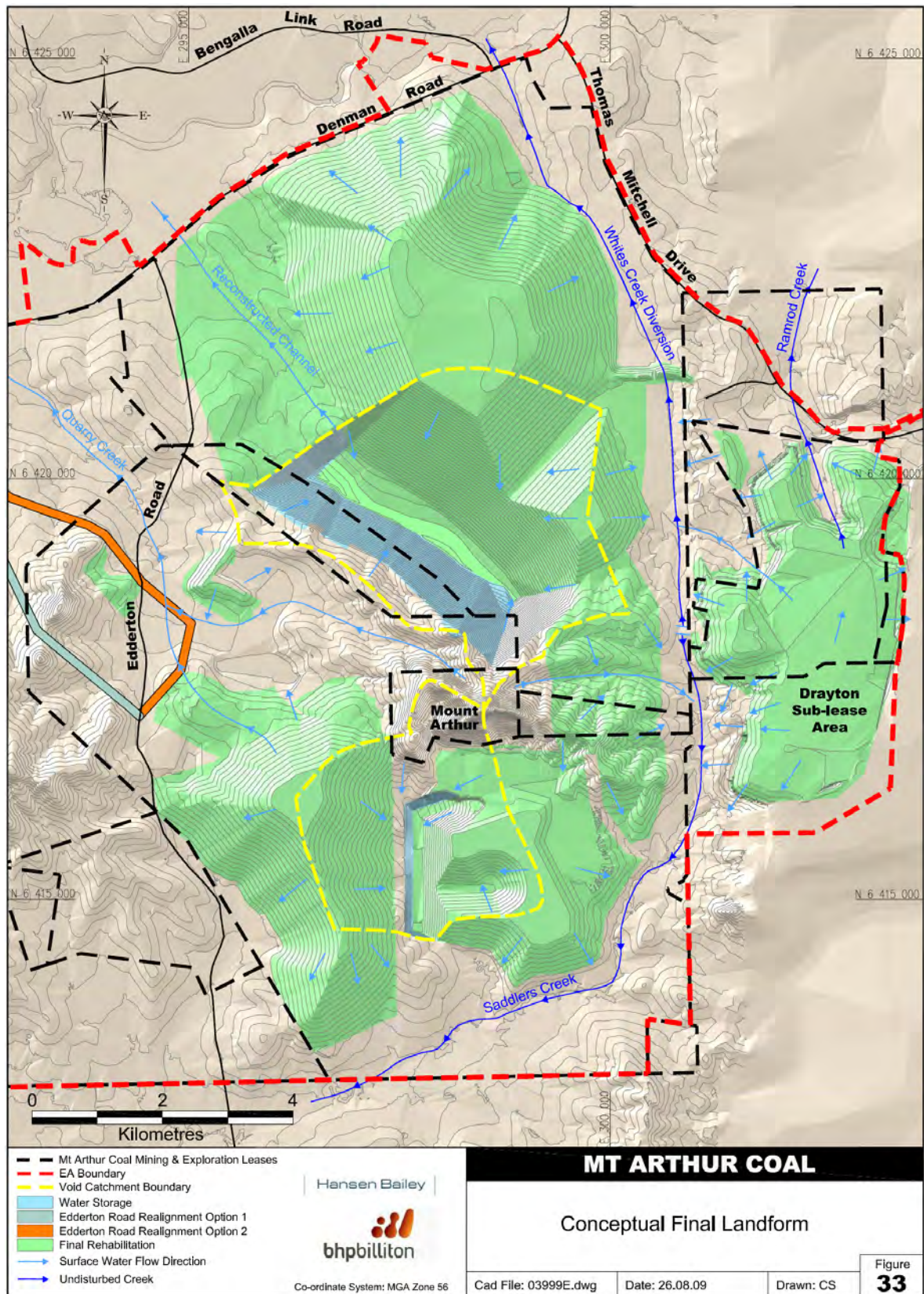




# APPENDIX 8 REHABILITATION PLAN AND OFFSET STRATEGY







**APPENDIX 9  
GENERAL TERMS FOR THE PLANNING AGREEMENT**

<b>Funding Area</b>	<b>Proponent Contribution</b>	<b>Notes / Funding Time Frame</b>
Thomas Mitchell Drive Upgrade	\$3,000,000, plus \$4,060,000 capital	<p>The total contribution of \$7,060,000 will be payable in yearly instalments to match execution of the works.</p> <p>The \$4,060,000 capital will be repayable to the Proponent by Council from contributions from other projects/developments, in accordance with the terms of the planning agreement.</p>
Thomas Mitchell Drive Maintenance	\$120,000 per annum (max.)	Contributions to start at year 2 of the completion of the Thomas Mitchell Drive upgrade works (contributions to be staged if the upgrade works are staged).
Mt Arthur Coal Community Fund	\$500,000 per annum	Contributions to start on commencement of construction.
Council Environmental Assessment	\$20,000 per annum	Contributions to start on commencement of construction.

**APPENDIX 10  
INDEPENDENT DISPUTE RESOLUTION PROCESS**

