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Project Approval

Section 75J of the *Environmental Planning and 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.

SIGNED 1 FEBRUARY 2008

Frank Sartor MP
Minister for Planning

Sydney

2007

SCHEDULE 1

Application Number:

06_0202

Proponent:

Anglo Coal (Drayton Management) Pty Limited

Approval Authority:

Minister for Planning

Land:

See Appendix 1

Project:

Drayton Mine Extension

Blue represents October 2009 modification

Green represents February 2012 modification

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DEFINITIONS

AEMR	Annual Environmental Management Report
BCA	Building Code of Australia
CCC	Community Consultative Committee
CHPP	Coal Handling & Preparation Plant
Council	Muswellbrook Shire Council
Day	The period from 7 am to 6 pm on Monday to Saturday, and 8 am to 6 pm on Sundays and Public Holidays
(Deleted)	
Department	Department of Planning
(Deleted)	
Director-General	Director-General of Department of Planning, or delegate
DST	Daylight Savings Time
DRE	Division of Resources and Energy
EA	Environmental assessment titled <i>Drayton Mine Extension Environmental Assessment, Volumes 1 and 2</i> , dated August 2007, including the response to submissions, dated November 2007.
EA (Mod 1)	Environmental Assessment titled <i>Project Approval Modification Environmental Assessment</i> (including its Statement of Commitments), dated July 2009, and the response to submissions dated September 2009.
EA (Mod 2)	Environmental Assessment titled <i>East pit tailings emplacement & explosives storage facility environmental assessment</i> dated July 2011, and Response to Submissions dated 3 November 2011, and Preliminary Hazard Analysis dated November 2011.
EEC	Endangered Ecological Community as defined under the NSW <i>Threatened Species Conservation Act 1995</i>
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
EST	Eastern Standard Time
Evening	The period from 6 pm to 10 pm
Land	Land 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
Mining Operations	Includes all coal extraction, processing, and transportation activities carried out on site
Minister	Minister for Planning, or delegate
Night	The period from 10 pm to 7 am on Monday to Saturday, and 10 pm to 8 am on Sundays and Public Holidays
NOW	NSW Office of Water
OEH	Office of Environment and Heritage
Privately-owned land	Land that is not owned by a public agency, or a mining company or its subsidiary, and which is not subject to a negotiated agreement between the Proponent and the applicable landowner
Project	The project as described in the EA
Proponent	Anglo Coal (Drayton Management) Pty Limited, or its successor
Reasonable and Feasible	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. Feasible relates to engineering considerations and what is practical to build
ROM	Run of Mine
(Deleted)	
RMS	Roads and Maritime Services
Saline water	Water from the project's saline water management system as described in the EA
Site	The land referred to 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 practicable measures to prevent and/or minimise any 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;
 - (c) EA (Mod 1);
 - (d) EA (Mod 2); and
 - (e) conditions of this approval.

Note: The general layout of the project is shown in Appendix 2.

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 consent 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, plans, programs, strategies or correspondence that are submitted in accordance with this approval; and
 - (b) the implementation of any actions or measures contained in these reports, plans, programs, strategies or correspondence.
- 4A. Within 3 months of any modification to this approval, the Proponent shall review and if necessary revise any strategies/plans/programs required under this approval which are relevant to the modification to the satisfaction of the Director-General.

Limits on Approval

5. Mining operations may take place on the site until 31 December 2017.

Note: Under this approval, the Proponent is required to rehabilitate the site and provide offsets to the satisfaction of the Director-General. Consequently, this approval will continue to apply in all other respects other than the right to conduct mining operations until the site has been rehabilitated and the offset provided to a satisfactory standard.

6. The Proponent shall not extract or process more than 8 million tonnes of ROM coal a year on site.
7. The Proponent shall only transport coal from the site by rail or overland conveyor.

Surrender of Consents

8. Within 12 months of this approval, the Proponent shall surrender all previous development consents for the Drayton coal mine to the satisfaction of the Director-General.

Staged Submission of Management Plans/Monitoring Programs

9. With the approval of the Director-General, the Proponent may submit any management plan or monitoring program required by this approval on a progressive basis.

Structural Adequacy

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

Notes:

- Under Part 4A of the EP&A Act, the Proponent is required to obtain construction and occupation certificates for the proposed building works.
- Part 8 of the EP&A Regulation sets out the requirements for the certification of development.

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Demolition

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

Operation of Plant and Equipment

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.

Planning Agreement

13. Within 12 months of this approval, the Proponent shall enter into a planning agreement with Council and the Minister, in accordance with:
 - (a) Division 6 of Part 4 of the EP&A Act; and
 - (b) the terms of the Proponent's offer to the Council on 19 January 2007, which includes the matters set out in Appendix 4.
-

SCHEDULE 3 SPECIFIC ENVIRONMENTAL CONDITIONS

NOISE

Noise Impact Assessment Criteria

1. The Proponent shall ensure that the noise generated by the project does not exceed the noise impact assessment criteria in Table 1 at any residence on privately-owned land, or on more than 25 percent of any privately-owned land.

Table 1: Noise impact assessment criteria dB(A)

Land Number	Day	Evening	Night	
	$L_{Aeq}(15 \text{ min})$	$L_{Aeq}(15 \text{ min})$	$L_{Aeq}(15 \text{ min})$	$L_{A1}(1 \text{ min})$
34	35	35	36	45
29	35	35	36	47
31	35	35	37	47
33, 86	35	35	38	45
32	35	35	40	47
71, 75	35	35	41	47
70	35	36	41	47
76	35	36	42	47
28	35	37	40	47
69	35	37	41	47
13	36	36	35	45
12	36	36	36	47
25	36	37	37	47
26	36	37	38	47
27	36	37	39	47
72	36	37	42	47
17	37	38	36	47
21, 22	38	38	38	45
18	38	39	38	47
20, 61	39	40	39	45
14	40	39	38	47
19	40	40	39	47
16	41	41	39	47
23	35	35	35	47
All other privately-owned land	35	35	35	45

However, if the Proponent has a written negotiated noise agreement with any landowner of the land listed in Table 1, and a copy of this agreement has been forwarded to the Department and [OEH](#), then the Proponent may exceed the noise limits in Table 1 in accordance with the negotiated noise agreement.

Notes:

- For information on the numbering and identification of properties used in this approval, see Appendix 5.
- To determine compliance with the $L_{Aeq}(15 \text{ minute})$ noise limits, noise from the project is to be measured at the most affected point within the residential boundary, or at the most affected point within 30 metres of a dwelling (rural situations) where the dwelling is more than 30 metres from the boundary. Where it can be demonstrated that direct measurement of noise from the project is impractical, the [OEH](#) may accept alternative means of determining compliance (see Chapter 11 of the NSW Industrial Noise Policy). The modification factors in Section 4 of the NSW Industrial Noise Policy shall also be applied to the measured noise levels where applicable.
- To determine compliance with the $L_{A1}(1 \text{ minute})$ noise limits, noise from the project is to be measured at 1 metre from the dwelling façade. Where it can be demonstrated that direct measurement of noise from the project is impractical, the [OEH](#) may accept alternative means of determining compliance (see Chapter 11 of the NSW Industrial Noise Policy).

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- The noise emission limits identified in the above table apply under meteorological conditions of:
 - wind speeds of up to 3 m/s at 10 metres above ground level; or
 - temperature inversion conditions of up to 3°C/100m, and wind speeds of up to 2 m/s at 10 metres above ground level.

Land Acquisition Criteria

- If the noise generated by the project exceeds the criteria in Table 2 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 8-10 of Schedule 4.

Table 2: Land acquisition criteria dB(A)

Land Number	Day/Evening/Night $L_{Aeq(15min)}$
12, 14, 16, 17, 18, 19, 23, 25, 26, 27, 28, 29, 31, 32, 69, 70, 71, 72, 75, 76	42
All other private land owners not listed in Table 1, or on more than 25 percent of, any privately owned land.	40

Note: Noise generated by the project is to be measured in accordance with the notes to Table 1.

Cumulative Noise Criteria

- The Proponent shall take all reasonable and feasible measures to ensure that the noise generated by the project combined with the noise generated by other mines does not exceed the following amenity criteria at any residence on privately-owned land or on more than 25 percent of any privately owned land:
 - $L_{Aeq(11\text{ hour})}$ 50 dB(A) – Day;
 - $L_{Aeq(4\text{ hour})}$ 45 dB(A) – Evening;
 - $L_{Aeq(9\text{ hour})}$ 40 dB(A) – Night.
- If the noise generated by the project combined with the noise generated by other mines exceeds the following amenity criteria at any residence on privately owned-land or on more than 25 percent 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 8-10 of Schedule 4:
 - $L_{Aeq(11\text{ hour})}$ 53 dB(A) – Day;
 - $L_{Aeq(4\text{ hour})}$ 48 dB(A) – Evening;
 - $L_{Aeq(9\text{ hour})}$ 43 dB(A) – Night.

Notes: The cumulative noise generated by the project combined with the noise generated by other mines is to be measured in accordance with the relevant procedures in the NSW Industrial Noise Policy.

Noise Mitigation

- Within 12 months of this approval, unless otherwise agreed by the Director-General, the Proponent shall implement the noise mitigation measures outlined in Section 4.5 of the noise impact assessment, of the EA (see Appendix 6).

Note: Any request to vary the noise mitigation measures must be accompanied by a noise assessment that demonstrates that the proposed variation would not result in any increase of the noise levels as predicted in the EA.

- Upon receiving a written request from the owner of:
 - the following land: 14, 16, 19, 20, 21, 22, 28, 32, 33, 61, 69, 70, 71, 72, 75, 76, 86; or
 - any residence on privately-owned land where subsequent noise monitoring shows the noise generated by the project is greater than or equal to the relevant criteria in Table 3,
 the Proponent shall implement additional noise mitigation measures such as double glazing, insulation, and/or air conditioning at any residence on the land in consultation with the landowner.

Table 3: Land acquisition criteria dB(A)

$L_{Aeq(15min)}$	Land Number
40	12, 17, 18, 23, 25, 26, 27, 29, 31
38	All other private land owners

These additional mitigation measures must be reasonable and feasible.

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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.

Within 3 months of this approval, the Proponent shall notify all applicable landowners that they are entitled to receive additional noise mitigation measures.

Continuous Improvement

7. The Proponent shall:
 - (a) implement all reasonable and feasible noise mitigation measures;
 - (b) investigate ways to reduce the noise generated by the project, including maximum noise levels which may result in sleep disturbance; and
 - (c) report on these investigations and the implementation and effectiveness of these measures in the AEMR.

Monitoring

8. *(Deleted)*

Noise Management Plan

8. The Proponent shall prepare and implement a Noise Management Plan for the project to the satisfaction of the Director-General. This plan must:
 - (a) be submitted to the Director-General by 31 October 2012 for approval;
 - (b) describe the measures that would be implemented (including a real-time noise management system that employs both reactive and proactive mitigation measures) to ensure:
 - best management practice is being employed;
 - compliance with the relevant conditions of this approval;
 - (c) describe the proposed noise management system in detail;
 - (d) include a noise monitoring program that:
 - uses a combination of real-time and supplementary attended monitoring measures to evaluate the performance of the project;
 - adequately supports the proactive and reactive noise management system on site;
 - includes a protocol for determining exceedances of the relevant conditions in this approval;
 - evaluates and reports on the effectiveness of the noise management system on site;
 - provides for the annual validation of the noise model for the project; and
 - (e) include a protocol that has been prepared in consultation with the owners of nearby mines (including the Mt Arthur mine) to minimise the cumulative noise impacts of the mines.

BLASTING AND VIBRATION

Airblast Overpressure Criteria

9. The Proponent shall ensure that the airblast overpressure level from blasting at the project does not exceed the criteria in Table 4 at any residence on privately-owned land.

Table 4: Airblast overpressure impact assessment criteria

Airblast overpressure level (dB(Lin Peak))	Allowable exceedance
115	5% of the total number of blasts over a period of 12 months
120	0%

Ground Vibration Impact Assessment Criteria

10. The Proponent shall ensure that the ground vibration level from blasting at the project does not exceed the criteria in Table 5 at any residence on privately-owned land.

Table 5: Ground vibration impact assessment criteria

Peak particle velocity (mm/s)	Allowable exceedance
5	5% of the total number of blasts over a period of 12 months

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10	0%
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Blasting Hours

11. The Proponent shall only carry out blasting on the site between 9am and 5pm Monday to Saturday (EST), and 9am to 6pm Monday to Saturday (DST) inclusive. No blasting is allowed on Sundays, public holidays, or at any other time without the written approval of OEH.

Blasting Frequency

12. The Proponent may carry out a maximum of:
- (a) 2 blasts a day; and
 - (b) 8 blasts a week, averaged over a 12 month period.

Operating Conditions

13. During mining operations, 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; and
 - (b) co-ordinate blasting on site with the blasting at the adjoining Mt Arthur coal mine to minimise the potential cumulative blasting impacts of the two mines, to the satisfaction of the Director-General.
14. The Proponent shall not undertake blasting within 500 metres of:
- (a) Thomas Mitchell Drive without the approval of Council; and
 - (b) any privately-owned land or land not owned by the Proponent, unless suitable arrangements have been made with the landowner and any tenants to minimise the risk of flyrock-related impact to the property to the satisfaction of the Director-General.

Road Closure

15. (Deleted)

Public Notice

16. During mining operations, the Proponent shall:
- (a) notify the landowner/occupier of any residence within 2 kilometres of the site who registers an interest in being notified about the blasting schedule at the mine;
 - (b) operate a Blasting Hotline, or alternate system agreed to by the Director-General, to enable the public to get up-to-date information on the blasting schedule at the mine;
 - (c) advertise the blasting hotline number in a local newspaper at least 4 times each year; and
 - (d) publicise an updated blasting schedule on its website, to the satisfaction of the Director-General.

Property Inspections

17. Within 6 months of this approval, the Proponent shall advise all landowners of privately-owned land within 2 kilometres of the project that they are entitled to a structural property inspection.
18. If the Proponent receives a written request for a structural property inspection from any of these land owners, 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 inspect the condition of any building or structure on the land, and recommend measures to mitigate any potential blasting impacts; and
 - (b) give the landowner a copy of the property inspection report.

Property Investigations

19. If any landowner of privately owned land within 2 kilometres of the site 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 claim:
- (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.

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If this independent property investigation confirms the landowner's claim, and both parties agree with these findings, then the Proponent shall repair the damages 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.

If the matter cannot be resolved within 21 days, the Director-General shall refer the matter to an Independent Dispute Resolution Process (see Appendix 10).

Blast Monitoring Program

20. (Deleted)

Blast Management Plan

20. The Proponent shall prepare and implement a Blast Management Plan for the project to the satisfaction of the Director-General. This plan must:
- be submitted to the Director-General for approval by 31 October 2012;
 - describe the measures that would be implemented to ensure:
 - best management practice is being employed;
 - compliance with the relevant conditions of this approval;
 - include a road closure management plan for blasting within 500 metres of a public road, that has been prepared in consultation with the RTA and Council;
 - include a monitoring program for evaluating the performance of the project, including:
 - compliance with the applicable criteria
 - minimising the fume emissions from the site; and
 - include a protocol that has been prepared in consultation with the owners of nearby mines (including the Mt Arthur mine) to minimise the cumulative blasting impacts of these mines and the project.

AIR QUALITY

Impact Assessment Criteria

21. The Proponent shall ensure that the dust emissions generated by the project do not cause additional exceedances of the air quality impact assessment criteria listed in Tables 6, 7 and 8 at any residence, on privately-owned land, or on more than 25 percent of any privately-owned land.

Table 6: Long term impact assessment criteria for particulate matter

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

Table 7: Short term impact assessment criterion for particulate matter

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

Table 8: Long term impact assessment criteria for deposited dust

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

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.

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Land Acquisition Criteria

22. If the dust emissions generated by the project exceed the criteria in Tables 8, 9 and 10 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 8-10 of Schedule 4.

Table 8: Long term land acquisition criteria for particulate matter

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

Table 9: Short term land acquisition criteria for particulate matter

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

Notes:

¹Based on the number of block 24 hour averages in an annual period.

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

³Background PM₁₀ concentrations due to all other sources plus the incremental increase in PM₁₀ concentrations due to the mine alone.

⁴Incremental increase in PM₁₀ concentrations due to the mine alone.

Table 10: Long term land acquisition criteria for deposited dust

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

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.

Operating Conditions

23. The Proponent shall:
- ensure any visible air pollution generated by the project is assessed regularly, and that mining operations are relocated, modified, and/or stopped as required to minimise air quality impacts on privately-owned land;
 - ensure that the real-time air quality monitoring and meteorological monitoring data are assessed regularly, and that mining operations are relocated, modified and/or stopped as required to ensure compliance with the relevant air quality criteria; and
 - implement all practicable measures to minimise the off-site odour and fume emissions generated by any spontaneous combustion on site, to the satisfaction of the Director-General.

Spontaneous Combustion

24. The Proponent shall prepare and implement a Spontaneous Combustion Management Plan for the project to the satisfaction of the Director-General. This plan must:
- prepared in consultation with OEH and DRE by suitably qualified expert/s whose appointment/s have been approved by the Director-General; and
 - submitted to the Director-General for approval within 6 months of this approval.

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Monitoring

25. (Deleted)

Air Quality Management Plan

25. The Proponent shall prepare and implement an Air Quality and Greenhouse Gas Management Plan for the project to the satisfaction of the Director-General. This plan must:
- (a) be submitted to the Director-General by 31 October 2012 for approval;
 - (b) describe the measures that would be implemented (including a real-time air quality management system that employs both reactive and proactive mitigation measures) to ensure:
 - best management practice is being employed;
 - compliance with the relevant conditions of this approval;
 - (c) describe the proposed air quality management system;
 - (d) include an air quality monitoring program that:
 - uses a combination of real-time monitors and supplementary monitors to evaluate the performance of the development;
 - adequately supports the proactive and reactive air quality management system;
 - includes PM2.5 monitoring (although this obligation may be satisfied by the regional air quality monitoring network if sufficient justification is provided);
 - evaluates and reports on the effectiveness of the air quality management system;
 - includes a protocol for determining any exceedances of the relevant conditions of this consent; and
 - (e) include a protocol that has been prepared in consultation with the owners of nearby mines (including the Mt Arthur mine) to minimise the cumulative air quality impacts of the mines.

METEOROLOGICAL MONITORING

26. During the life of the project, the Proponent shall ensure that there is a suitable meteorological station in the vicinity of the site that complies with the requirements in the *Approved Methods for Sampling of Air Pollutants in New South Wales* guideline.

SURFACE AND GROUND WATER

Surface Water Discharges

27. The Proponent shall only discharge water from the site in accordance with the provisions of an EPL or the *Protection of the Environment Operations (Hunter River Salinity Trading Scheme) Regulation 2002*.

Water Management Plan

28. The Proponent shall prepare and implement a Site Water Management Plan for the project to the satisfaction of the Director-General. This plan must:
- (a) be prepared in consultation with **OEH** and **NOW** by suitably qualified expert/s whose appointment/s have been approved by the Director-General;
 - (b) be submitted to the Director-General for approval within 6 months of this approval; and
 - (c) include:
 - a Site Water Balance;
 - an Erosion and Sediment Control Plan;
 - a Surface Water Monitoring Program;
 - a Ground Water Monitoring Program; and
 - a Surface and Ground Water Response Plan.

Site Water Balance

29. The Site Water Balance must:
- (a) include details of;
 - sources and security of water supply;
 - water use on site;
 - water management on site;
 - off-site water transfers; and
 - (b) investigate and describe measures to minimise water use by the project.

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Erosion and Sediment Control

30. The Erosion and Sediment Control Plan must:
- (a) be consistent with the requirements of the *Managing Urban Stormwater: Soils and Construction Manual* (Landcom 2004, or its latest version);
 - (b) identify activities that could cause soil erosion and generate sediment;
 - (c) describe measures to minimise soil erosion and the potential for the transport of sediment to downstream waters;
 - (d) describe the location, function, and capacity of erosion and sediment control structures; and
 - (e) describe what measures would be implemented to maintain the structures over time.

Surface Water Monitoring

31. The Surface Water Management and Monitoring Plan must include:
- (a) detailed baseline data on surface water flows and quality in creeks and other waterbodies that could be affected by the project;
 - (b) surface water impact assessment criteria;
 - (c) a program to monitor the impact of the project on surface water flows and quality and downstream water users; and
 - (d) reporting procedures for the results of this monitoring.

Groundwater Monitoring

32. The Groundwater Monitoring Plan must include:
- (a) detailed baseline data of groundwater levels, yield and quality in the region (including privately owned groundwater bores within the predicted drawdown impact zone identified in the EA);
 - (b) a program to augment the baseline data over the life of the project
 - (c) groundwater assessment criteria, including trigger levels for investigating any potentially adverse groundwater impacts;
 - (d) a program to monitor:
 - regional groundwater levels and quality in the surrounding aquifers;
 - impacts on the groundwater supply of potentially affected landowners;
 - the volume of ground water seeping into the open cut mine workings;
 - the groundwater pressure response in the surrounding coal measures;
 - the seepage/leachate from any tailings dams, water storages or backfilled voids on site;
 - (e) procedures for the verification of the groundwater model; and
 - (f) reporting procedures for the results of the monitoring program and model verification.

Surface and Ground Water Response Plan

33. The Surface and Ground Water Response Plan must include:
- (a) a protocol for the investigation, notification and mitigation of any exceedances of the surface water and groundwater impact assessment criteria;
 - (b) measures to mitigate and/or compensate potentially affected landowners with privately owned groundwater bores within the predicted drawdown impact zone identified in the EA, including provision of alternative supply of water to the affected landowner that is equivalent to the loss attributed to the project;
 - (c) the procedures that would be followed if any unforeseen impacts are detected during the project.

REHABILITATION AND LANDSCAPE MANAGEMENT

Rehabilitation

34. The Proponent shall progressively rehabilitate the site in a manner that is generally consistent with the final landform and proposed rehabilitation strategy in the EA (shown conceptually in Appendix 7) to the satisfaction of the DRE.

Offset Strategy

35. The Proponent shall:
- (a) offset the following vegetation clearing of the project at a ratio of at least 2:1 to ensure there is a net improvement in the biodiversity value of the local area in the medium to long term:
 - 36 ha of Narrow-leaved Ironbark woodland;
 - 1 ha of Spotted Gum-Grey Box open forest woodland; and
 - 1.3 ha of Forest Red Gum open forest and woodland (Hunter Lowland Redgum Forest EEC); and
 - 6 ha of revegetated Yellow Box and Grey Gum woodland;

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- (b) ensure that this offset is located in close proximity to the Natural Zone of the Drayton Wildlife Refuge (see Appendix 8); and
- (c) make suitable arrangements to protect this offset from development in the long term, to the satisfaction of the Director-General.

Note: This offset may include land that is currently part of the existing Grazing Zone of the Drayton Wildlife Refuge (see Appendix 8).

35A. By the end of December 2009, the Proponent shall:

- (a) incorporate an offset of at least 12 hectares, generally consistent with the offset described in the 2009 EA, into the Drayton Wildlife Refuge; and
- (b) establish mechanisms within the Offset Strategy for long-term conservation and management of this offset in accordance with condition 36.

36. Within 6 months of this approval, the Proponent shall prepare an Offset Strategy for the project to the satisfaction of the Director-General. This strategy must:

- (a) be prepared in consultation with the OEH;
- (b) describe the measures that would be :
 - offset the specified vegetation clearing of the project;
 - ensure that adequate resources are dedicated towards the implementation of this offset;
 - demonstrate that the proposed offset is generally consistent with the principles in Appendix 9, and would result in a net improvement in the biodiversity value of the local area in the medium to long term; and
 - provide appropriate long term security for this offset.

Thomas Mitchell Drive Tree Screens

37. Within 2 years of this approval, the Proponent shall plant additional trees along the Thomas Mitchell Drive corridor to provide a mature tree screen for the project. These trees must be planted in consultation with Council, and subsequently monitored to the satisfaction of the Director-General.

Landscape Management Plan

38. The Proponent shall prepare and implement a detailed Landscape Management Plan for the project to the satisfaction of the DRE and the Director-General and. This plan must:

- (a) be prepared in consultation with OEH, NOW and Council by suitably qualified expert/s whose appointment/s have been approved by the Director-General
- (b) be submitted to the Director-General for approval within 12 months of this approval; and
- (c) include a:
 - Rehabilitation and Offset Management Plan;
 - Final Void Management Plan; and
 - Mine Closure Plan.

Note: The Department accepts that the initial Landscape Management Plan may not include the detailed Final Void Management Plan and Mine Closure Plan. However, if this occurs, the Proponent will be required to seek approval from the Director-General for an alternative timetable for the completion and approval of the Final Void Management Plan and Mine Closure Plan.

Rehabilitation and Offset Management Plan

39. The Rehabilitation and Offset Management Plan must include:

- (a) the objectives for the rehabilitation of the site and provisions of the offset;
- (b) a detailed description of how the rehabilitation of the site and implementation of the Offset Strategy would be integrated with the rehabilitation and Offset Strategy for the Mt Arthur North mine and remnant vegetation on Macquarie Generation's land, to ensure there is a comprehensive integrated strategy for the restoration and enhancement of the local landscape over time;
- (c) a description of the short, medium, and long term measures that would be implemented to:
 - rehabilitate the site;
 - implement the Offset Strategy;
 - implement the Thomas Mitchell Drive Tree Screens; and
 - manage the remnant vegetation and habitat on the site; and
- (d) a detailed description of what measures would be implemented over the next 3 years to rehabilitate the site and implement the Offset Strategy and Thomas Mitchell Drive tree screens, including the procedures to be implemented for:
 - progressively rehabilitating areas disturbed by mining;
 - implementing revegetation and regeneration within the disturbance areas and offset areas, including establishment of canopy, sub-canopy (if relevant), understorey and ground strata;
 - managing the remnant vegetation and habitat on site;

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- managing impacts on fauna;
 - reducing the visual impacts of the project;
 - landscaping the site to minimise visual impacts;
 - protecting areas outside the disturbance areas conserving and reusing topsoil;
 - collecting and propagating seeds for rehabilitation works;
 - salvaging and reusing material from the site for habitat enhancement;
 - controlling weeds and feral pests;
 - controlling access;
 - bushfire management; and
 - managing any potential conflicts between the rehabilitation of the mine and Aboriginal cultural heritage;
- (e) detailed performance and completion criteria for the rehabilitation of the site and implementation of the Offset Strategy and Thomas Mitchell Drive tree screens;
- (f) a detailed description of how the performance of the rehabilitation of the site and implementation of the Offset Strategy and Thomas Mitchell Drive tree screens would be monitored over time to achieve the relevant objectives and completion criteria;
- (g) a description of the potential risks to successful rehabilitation and/or revegetation, and a description of the contingency measures that would be implemented to mitigate these risks; and
- (h) details of who is responsible for monitoring, reviewing and implementing the plan.

Note: Reference to 'rehabilitation' in this approval includes all works associated with the rehabilitation and restoration of the site as described in the EA, and applies to all areas within the Mining Lease and Offsets Strategy.

- 39A. Within 6 months of the modification approval (06_0202 MOD 2) the Proponent shall review and update the Rehabilitation and Offset Management Plan referred to in Condition 39 with consideration of the Muswellbrook Shire Council Mining Rehabilitation Policy, in consultation with Council, DRE and to the satisfaction of the Director General.

Final Void Management

40. The Final Void Management Plan must:
- (a) justify the planned final location and future use of the final voids;
 - (b) incorporate design criteria and specifications for the final voids based on verified groundwater modelling predictions and a re-assessment of post-mining groundwater equilibration;
 - (c) assess the potential interactions between creeks on the site and the final voids; and
 - (d) describe what actions and measures would be implemented to:
 - minimise any potential adverse impacts associated with the final voids; and
 - manage and monitor the potential impacts of the final voids over time.

Mine Closure Plan

41. The Mine Closure Plan must:
- (a) define the objectives and criteria for mine closure;
 - (b) investigate options for the future use of the site, including the final voids;
 - (c) investigate ways to minimise the adverse socio-economic effects associated with mine closure, including reduction in local employment levels;
 - (d) describe the measures that would be implemented to minimise or manage the ongoing environmental effects of the project; and
 - (e) describe how the performance of these measures would be monitored over time.
- 41A. By 31 December 2012, the Proponent shall review the Rehabilitation and Offset Management Plan, Final Void Management Plan and Mine Closure Plan in consultation with Council and DRE and to the satisfaction of the Director General. This review must take Council's Mining Rehabilitation Policy into account.

Conservation and Biodiversity Bond

42. Within 3 months of the approval of the Landscape Management Plan, the Applicant shall lodge a conservation and biodiversity bond with either DRE or the Department to ensure that the Offset Strategy is implemented in accordance with the performance and completion criteria of the Landscape 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.

Notes:

- If the Offset Strategy is completed to the satisfaction of the Director-General, the DRE or the Department will release the conservation bond.

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- *If the Offset Strategy is not completed to the satisfaction of the Director-General, all or part of the conservation bond will be used to ensure the satisfactory completion of the relevant works.*
- *The conservation bond may be incorporated into rehabilitation bonding arrangements under the Mining Act 1993.*

ABORIGINAL CULTURAL HERITAGE

Aboriginal Heritage Plan

43. The Proponent shall prepare and implement an Aboriginal Heritage Plan to the satisfaction of the Director-General. This plan must:
- (a) be prepared in consultation with OEH and relevant Aboriginal communities;
 - (b) be submitted to the Director-General for approval within 6 months of this approval or prior to the disturbance of any Aboriginal object or site, whichever is the soonest; and
 - (c) include a:
 - detailed salvage program and management plan for all Aboriginal sites within the project disturbance area;
 - detailed description of the measures that would be implemented to protect Aboriginal sites outside the project disturbance area;
 - description of the measures that would be implemented if any new Aboriginal objects or skeletal remains are discovered during the project; and
 - protocol for the ongoing consultation and involvement of the Aboriginal communities in the conservation and management of Aboriginal cultural heritage on the site.

TRANSPORT

Monitoring of Coal Transport

44. The Proponent shall:
- (a) keep records of the:
 - amount of coal transported from the site each year; and
 - number of coal haulage train movements generated by the project (on a daily basis);
 - date and time of each train movement generated by the project; and
 - (b) include these records in the AEMR.
- 44A. By 31 June 2012, the Proponent shall contribute \$50,000 to Council towards the Council's costs for a Route and Upgrade Assessment of Thomas Mitchell Drive.

VISUAL IMPACT

45. The Proponent shall:
- (a) ensure that all external lighting associated with the development complies with *Australian Standard AS4282 (INT) 1995 – Control of Obtrusive Effects of Outdoor Lighting*,
 - (b) take all practicable measures to mitigate off-site lighting impacts from the development; and
 - (c) minimise the visual impacts of the development to the satisfaction of the Director-General, to the satisfaction of the Director-General.

GREENHOUSE & ENERGY EFFICIENCY

46. The Proponent shall prepare and implement a Greenhouse and Energy Efficiency Plan for the project to the satisfaction of the Director-General. This plan must:
- (a) be prepared generally in accordance with the *Guidelines for Energy Savings Action Plans* (DEUS 2005, or its latest version);
 - (b) be submitted to the Director-General for approval within 6 months of the date of this approval;
 - (c) include a program to monitor greenhouse gas emissions and energy use generated by the project;
 - (d) include a framework for investigating and implementing measures to reduce greenhouse gas emissions and energy use associated with the project; and
 - (e) describe how the performance of these measures would be monitored over time.

WASTE MINIMISATION

47. The Proponent shall:
- (a) monitor the amount of waste generated by the project;
 - (b) investigate ways to minimise waste generated by the project;
 - (c) implement reasonable and feasible measures to minimise waste generated by the project;
 - (d) ensure irrigation of treated wastewater is undertaken in accordance with OEH's *Environmental Guideline for the Utilisation of Treated Effluent*; and
 - (e) report on waste management and minimisation in the AEMR,

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to the satisfaction of the Director-General.

SCHEDULE 4 ADDITIONAL PROCEDURES

NOTIFICATION OF LANDOWNERS

1. Within 3 months of this approval, the Proponent shall notify the landowners of the land listed in Table 1 that they have the right to request an independent review of the impacts of the project in accordance with condition 3 of Schedule 4 if they believe the project is exceeding the relevant impact assessment criteria in this approval.
2. If the results of the monitoring required in Schedule 3 identify that the impacts of the project are greater than the relevant impact assessment criteria in Schedule 3, except where a negotiated agreement has been entered into in relation to that impact, then the Proponent shall notify the Director-General and the affected landowners and/or existing or future tenants (including tenants of mine owned properties) accordingly, and provide quarterly monitoring results to each of these parties until the results show that the project is complying with the criteria in Schedule 3.

INDEPENDENT REVIEW

3. If a landowner 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 3 months of the Director-General's decision:

- (a) consult with the landowner to determine his/her concerns;
 - (b) commission a suitably qualified, experienced and independent person, whose appointment has been approved by the Director-General, to conduct monitoring on the land to:
 - determine whether the project is complying with the relevant impact assessment criteria in Schedule 3; and
 - identify the source(s) and scale of any impact on the land, and the project's contribution to this impact; and
 - (c) give the Director-General and landowner a copy of the independent review.
4. 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.
 5. 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) take all reasonable and feasible measures, in consultation with the landowner, to ensure that the project complies with the relevant criteria; and
 - (b) conduct further monitoring to determine whether these measures ensure compliance.

If the additional monitoring referred to above subsequently determines that the project is complying with the relevant criteria in Schedule 3, or the Proponent and landowner enter into a negotiated agreement to allow these exceedances, then the Proponent may discontinue the independent review with the approval of the Director-General.

6. If the independent review determines that the relevant 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) take all reasonable and feasible measures, in consultation with the landowner, to ensure that the relevant criteria are complied with; and
 - (b) conduct further monitoring to determine whether these measures ensure compliance; or
 - (c) secure a written agreement with the landowner and other relevant mines to allow exceedances of the criteria in Schedule 3.

If the additional monitoring referred to above subsequently determines that the noise generated by the project combined with the noise generated by other mines is complying with the relevant criteria in Schedule 3, then the Proponent may discontinue the independent review with the approval of the Director-General.

7. If the landowner disputes the results of the independent review, either the Proponent or the landowner may refer the matter to the Director-General for resolution.

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If the matter cannot be resolved within 21 days, the Director-General shall refer the matter to an Independent Dispute Resolution Process (see Appendix 10).

LAND ACQUISITION

8. 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 the subject of the project application, 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 conditions 5 and 6 of Schedule 3;
 - (b) the reasonable costs associated with:
 - relocating within the Muswellbrook local government area, or to any other local government area determined by the Director-General;
 - obtaining legal advice and expert advice for determining the acquisition price of the land, and the terms upon which it is required; 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 or Fellow of the Institute, to consider submissions from both parties, and determine a fair and reasonable acquisition price for the land, and/or terms upon which the land is to be acquired.

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

If the landowner refuses to accept this offer within 6 months of the Proponent's offer, the Proponent's obligations to acquire the land shall cease, unless otherwise agreed by the Director-General.

9. The Proponent shall bear the costs of any valuation or survey assessment requested by the independent valuer, or the Director-General, and the costs of determination referred above.
 10. If the Proponent and landowner agree that only part of the land shall be acquired, then the Proponent shall pay all reasonable costs associated with obtaining Council approval for any plan of subdivision (where permissible), and registration of the plan at the Office of the Registrar-General.
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SCHEDULE 5 ENVIRONMENTAL MANAGEMENT, MONITORING, AUDITING & REPORTING

ENVIRONMENTAL MANAGEMENT STRATEGY

1. The Proponent shall prepare and implement an Environmental Management Strategy for the project to the satisfaction of the Director-General. This strategy must be submitted to the Director-General within 6 months of this approval, and:
 - (a) provide the strategic framework for environmental management of the project;
 - (b) identify the statutory requirements that apply to the project;
 - (c) describe in general how the environmental performance of the project would be monitored and managed;
 - (d) describe the procedures that would be implemented to:
 - keep the local community and relevant agencies informed about the operation and environmental performance of the 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;
 - manage cumulative impacts; and
 - respond to emergencies; and
 - (e) describe the role, responsibility, authority, and accountability of all the key personnel involved in environmental management of the project.

ENVIRONMENTAL MONITORING PROGRAM

2. The Proponent shall prepare and implement an Environmental Monitoring Program for the project to the satisfaction of the Director-General. This program must be submitted to the Director-General within 6 months of this approval, and consolidate the various monitoring requirements in Schedule 3 of this approval into a single document, and be submitted to the Director-General concurrently with the submission of the relevant monitoring programs/plans.

REPORTING

Incident Reporting

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

Annual Reporting

5. Within 12 months of this approval, and annually thereafter, the Proponent shall submit an AEMR to the Director-General and relevant agencies. This report must:
 - (a) identify the standards and performance measures that apply to the project;
 - (b) describe the works carried out in the last 12 months;
 - (c) describe the works that will be carried out in the next 12 months;
 - (d) include a summary of the complaints received during the past year, and compare this to the complaints received in previous years;
 - (e) include a summary of the monitoring results for the project during the past year;
 - (f) include an analysis of these monitoring results against the relevant:
 - limits/criteria in this approval;
 - monitoring results from previous years; and
 - predictions in the EA;
 - (g) identify any trends in the monitoring results over the life of the project;
 - (h) identify and discuss any non-compliance during the previous year; and
 - (i) describe what actions were, or are being, taken to ensure compliance.

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INDEPENDENT ENVIRONMENTAL AUDIT

6. Within 2 years of this approval, 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) assess the environmental performance of the project, and its effects on the surrounding environment;
 - (c) assess whether the project is complying with the relevant standards, performance measures, and statutory requirements;
 - (d) review the adequacy of any strategy/plan/program required under this approval; and, if necessary,
 - (e) recommend measures or actions to improve the environmental performance of the project, and/or any strategy/plan/program required under this approval.

Note: This audit team must be led by a suitably qualified auditor, and include experts in the field of noise, and mine rehabilitation and closure.

7. Within 6 weeks of completing this audit, or as otherwise agreed by the Director-General, the Proponent shall submit a copy of the audit report to the Director-General with a response to any recommendations contained in the audit report.
8. Within 3 months of submitting the audit report to the Director-General, the Proponent shall review and if necessary revise the:
 - (a) strategies/plans/programs required under this consent; and
 - (b) Conservation and Biodiversity Conservation Bond,to the satisfaction of the Director-General.

COMMUNITY CONSULTATIVE COMMITTEE

9. The Proponent shall operate a Community Consultative Committee (CCC) for the project to the satisfaction of the Director-General, in general accordance with the *Guideline for Establishing and Operating Community Consultative Committees for Mining Projects*.

ACCESS TO INFORMATION

10. Within 3 months of the approval of any plan/strategy/program required under this approval (or any subsequent revision of these plans/strategies/programs), or the completion of the audits or AEMRs required under this approval, the Proponent shall:
 - (a) provide a copy of the relevant document/s to the relevant agencies and CCC; and
 - (b) put a copy of the relevant document/s on its website.
 11. During the development, the Proponent shall:
 - (a) include a copy of this approval, as may be modified from time to time, on its website;
 - (b) provide a full summary of monitoring results required under this approval on its website; and
 - (c) update these results on a regular basis (at least every 3 months).
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APPENDIX 1 SCHEDULE OF LAND

Ownership	Lot DP
Drayton Coal & Anglo Coal	Part 65 850818
Drayton Coal & Anglo Coal	Part 64 850818
Drayton Coal & Anglo Coal	13 701496
Drayton Coal & Anglo Coal	12 701496
Drayton Coal & Anglo Coal	1 247510
Drayton Coal & Anglo Coal	21 545087
Drayton Coal & Anglo Coal	10 701496
Drayton Coal & Anglo Coal	9 701496
Drayton Coal & Anglo Coal	14 701496
Drayton Coal & Anglo Coal	4 701496
Drayton Coal & Anglo Coal	Part 6 701496
Macquarie Generation	Part 1 790994
Macquarie Generation	Part 15 701496
Macquarie Generation	Part 11 701496
Macquarie Generation	16 701496
Macquarie Generation	Part 16 247944
Macquarie Generation	Part 162 1022834

Notes:

1. Schedule of Land 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 2006.

APPENDIX 2
GENERAL PROJECT LAYOUT



APPENDIX 3 STATEMENT OF COMMITMENTS

Ref	Commitment	EA Section
Mining Operations		
1	The existing Development Consents as identified in Table 8 will be relinquished with a single Project Approval being sought for Drayton (with the exception of the Antiene Rail Spur Development Consent (DA 106-04-00) required to transport product coal to the Port of Newcastle).	5.6
2	Drayton will ensure that an appropriate development consent will remain in place over the West Pit area until MAC obtains an appropriate planning approval over the area.	8.7.2
Environmental Management & Monitoring		
3	The SHECMS will continue to be relied upon for environmental management, mitigation and monitoring at Drayton. The SHECMS will be revised to reflect the Project as required.	3.3
4	An Environmental Monitoring Program (EMP) will be developed for the Project, in consultation with relevant regulators for approval by DoP, and will consolidate monitoring aspects associated with: <ul style="list-style-type: none"> Air Quality; Noise; and Blasting. 	8.2.4 8.3.4 8.4
5	The following Management Plans will be prepared and/or revised and relied upon for the operation of Drayton (in consultation with relevant regulators to the approval of DoP): <ul style="list-style-type: none"> Spontaneous Combustion Management Plan; Water Management Plan; Flora & Fauna Management Plan; Rehabilitation & Landscape Management Plan (including Void Management); and Aboriginal Archaeology & Cultural Heritage Management Plan. 	9.3.4 8.5.3 & 9.2.4 8.6.5 8.7.3 9.6.3
Air Quality		
6	Drayton will actively manage the dragline in the North Pit in accordance with the SHECMS, such that there is no visible dust encroaching on private residences when prevailing weather conditions are towards Antiene Estate.	8.2.4
7	Drayton will continue to monitor Scope 1 and Scope 2 greenhouse gas emissions and investigate ways to further reduce these emissions.	8.2.4
Noise		
8	Drayton will implement the necessary noise control and management measures to ensure that the modelled noise outcome listed in Table 21 is not exceeded.	8.3.4
9	Drayton will continue to manage the current noise monitoring program shown in Figure 7 and install a real-time noise monitor with audio link within Antiene Estate.	8.3.4
Water Resources		
10	Drayton will undertake a census of privately owned groundwater bores identified in Table 26 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.	8.5.3
11	Drayton will obtain all necessary Water Access Licences for the Project from NOW .	
Flora & Fauna		
12	The Drayton Wildlife Refuge will remain in place to preserve flora and fauna and to provide an ecological offset for the Project, exceeding OEH's recommended minimum 2:1 offset ratio.	8.6.5
13	Drayton will proactively manage key areas of the Drayton Wildlife Refuge to enhance its ecological values.	8.6.5
Spontaneous Combustion		
14	Drayton will continue to monitor spontaneous combustion and implement the mitigation and management	9.3.4

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Ref	Commitment	EA Section
	techniques discussed in Section 9.3.4 and in the revised SCMP.	
Visual		
15	Dense tree planting will be undertaken along the northern edge of the EA Boundary on Thomas Mitchell Drive to create a visual screen within the initial Project years.	9.5.4
16	All visual and night light impacts will continue to be managed in accordance with the SHECMS.	9.5.4
Aboriginal Archaeology & Cultural Heritage		
17	Aboriginal heritage will continue to be managed in accordance with the revised Aboriginal Archaeology & Cultural Heritage Management Plan in consultation with the local Aboriginal community and OEH .	9.7.3
Non-Aboriginal Heritage		
18	Non-Aboriginal heritage Sites 1, 3 and 4 identified in Section 9.8 will continue to be preserved and managed in accordance with the SHECMS. Site 5 identified in Table 32 will be physically barricaded to prevent accidental damage. Site 2 will be cleared prior to disturbance.	9.8
Community		
19	Drayton will enter into a VPA with MSC in the terms of the offer made by Drayton and agreed in principle by MSC.	9.12
20	Drayton will continue to facilitate the operation of the Drayton CCC.	8.0 & 9.0
Reporting		
21	Drayton will prepare and submit to relevant regulatory departments an AEMR which will discuss monitoring results and include a discussion on predictions and commitments made within this EA.	8.0 & 9.0
Macquarie Generation		
22	<p>Drayton Mine recognises Macquarie Generation's ultimate requirement for void space to deposit fly ash from its Power Stations. To this end Drayton will use its reasonable endeavours and will consult with Macquarie Generation with a view to cooperating with Macquarie Generation to:</p> <ul style="list-style-type: none"> (a) secure planning approval for and the use by Macquarie Generation of the East Pit mine void which will be left at the end of mining by Drayton in the general location indicated in Figure 11 in the EA for the purpose of the disposal of fly ash; and (b) reach agreement on reasonable terms to implement arrangements for the extension of the Liddell Ash Dam or such other works as may be agreed between Drayton and Macquarie Generation to accommodate fly ash from the Liddell Power Station that cannot be disposed of by Macquarie Generation in its existing facilities during the period from 2010 until the completion of mining by Drayton. 	<p>Project Alternatives Paper prepared by Hansen Bailey dated November 2007</p>

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APPENDIX 4 GENERAL TERMS FOR THE PLANNING AGREEMENT

Funding Area	Proponent Contribution	Funding Time Frame
Monetary Contribution – Community Enhancement Program	\$500,000	<ul style="list-style-type: none">– One instalment of \$200,000 to be paid to Council when Project Approval is granted.– Second instalment of \$300,000 to be paid to Council when the investment decision is made to spend the additional capital required to increase mine production to 8 Mtpa.

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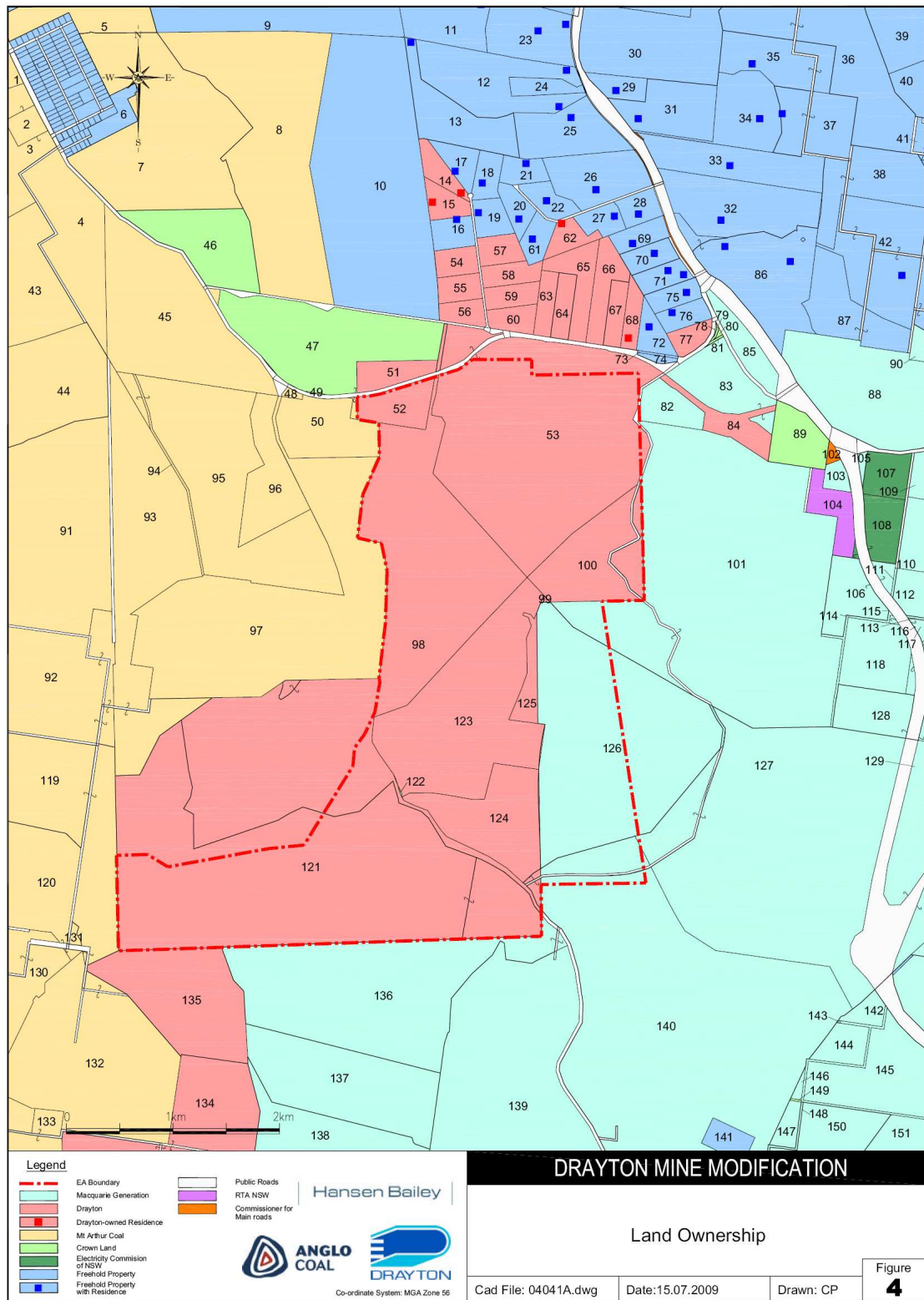
APPENDIX 5 PROPERTY NUMBERS AND LAND OWNERSHIP

ID	Name	Receiver	ID	Name	Receiver	ID	Name	Receiver
7	Coal Operations Australia		60	Drayton Coal		112	Macquarie Generation	
8	Coal Operations Australia		61	RC & LT Skinner		113	Macquarie Generation	
9	F & I Webber		62	Anglo Coal (Drayton Management) Pty Limited		114	Macquarie Generation	
10	EM Casben		63	Drayton Coal		115	Macquarie Generation	
11	Yarramalong Stud Pty Ltd		64	Drayton Coal		116	Macquarie Generation	
12	K Newton		65	Drayton Coal		117	Macquarie Generation	
13	CS Jacobsen		66	Drayton Coal		118	Macquarie Generation	
14	Anglo Coal (Drayton Management) Pty Limited		67	Drayton Coal & Anglo Coal		119	Hunter Valley Energy Coal Ltd	
15	Drayton Coal		68	Drayton Coal		120	Hunter Valley Energy Coal Ltd	
16	MF & AV Doherty		69	P & K Clifton		121	Drayton Coal & Anglo Coal	
17	BC & SR Page		70	BD & B Jones		122	Drayton Coal	
18	SR Page		71	DW & LM Hunter		123	Drayton Coal & Anglo Coal	
19	CJ & LE Duck		72	BJ & NH Robertson		124	Drayton Coal	
20	RD & DA Osborn		73	Muswellbrook Shire Council		125	Drayton Coal	
21	WJ Reynolds		74	Muswellbrook Shire Council		126	Macquarie Generation	
22	RB & LJ Halloran		75	EJ & MC Sharman		127	Macquarie Generation	
23	SJ & J Jackson		76	PG Horder		128	Macquarie Generation	
24	J Newton		77	Drayton Coal		129	Macquarie Generation	
25	PJ & KJ Collins		78	The State of NSW		130	Hunter Valley Energy Coal Ltd	
26	RE & ID Baxter		79	The State of NSW		131	Hunter Valley Energy Coal Ltd	
27	GJ & PH De Boer		80	The State of NSW		132	Hunter Valley Energy Coal Ltd	
28	MJ Bird		81	The State of NSW		133	Hunter Valley Energy Coal Ltd	
29	MJ & EJ Wallman		82	Macquarie Generation		134	Anglo Coal Australia Pty Ltd	
30	JM & BB & PS Mitchellhill & HB Rivett & IB Vineburg		83	Macquarie Generation		135	Anglo Coal Australia Pty Ltd	
31	RJ & IA Summerville		84	Drayton Coal		136	Macquarie Generation	
32	K & KI Cross		85	Macquarie Generation		137	Macquarie Generation	
33	CL & JA Fisher & CI Dennis		86	Wild Group Pty Ltd		138	Macquarie Generation	
34	BT & JE Davis		87	P Wild		139	Macquarie Generation	
35	GM Wilson		88	Macquarie Generation		140	Macquarie Generation	
36	JM Mitchellhill & HB Rivett & IB Vineburg		89	The State of NSW		141	TransGrid	
37	BJ & TL King		90	Macquarie Generation		136	Macquarie Generation	
38	NP & CJ O'Brien		91	Coal Operations Australia		137	Macquarie Generation	
39	CR & CP Stewart		92	Coal Operations Australia		138	Macquarie Generation	
40	PS & TG Adams		93	Hunter Valley Energy Coal Ltd		139	Macquarie Generation	
41	M & P Clifton		94	Bayswater Colliery Company		140	Macquarie Generation	
42	H Ray		95	Bayswater Colliery Company		141	TransGrid	
43	Coal Operations Australia		96	Bayswater Colliery Company		142	Macquarie Generation	
44	Coal Operations Australia		97	Bayswater Colliery Company		143	Macquarie Generation	
45	Coal Operations Australia		98	Drayton Coal & Anglo Coal		144	Macquarie Generation	
46	The State of NSW		99	Drayton Coal		145	Macquarie Generation	
47	The State of NSW		100	Drayton Coal		146	Macquarie Generation	
48	Hunter Valley Energy Coal Ltd.		101	Macquarie Generation		147	Macquarie Generation	
49	Hunter Valley Energy Coal Ltd.		102	The Commissioner for Main Roads		148	Macquarie Generation	
50	Coal Operations Australia		103	Macquarie Generation		149	Macquarie Generation	
51	Drayton Coal		104	RTA NSW		150	Macquarie Generation	
52	Drayton Coal		105	Macquarie Generation		151	Macquarie Generation	
53	Drayton Coal & Anglo Coal							

Notes:

- A coloured square denotes a receiver on the property.
- Each colour correlates to the shading in the following figure (Figure 4)

Consolidated version

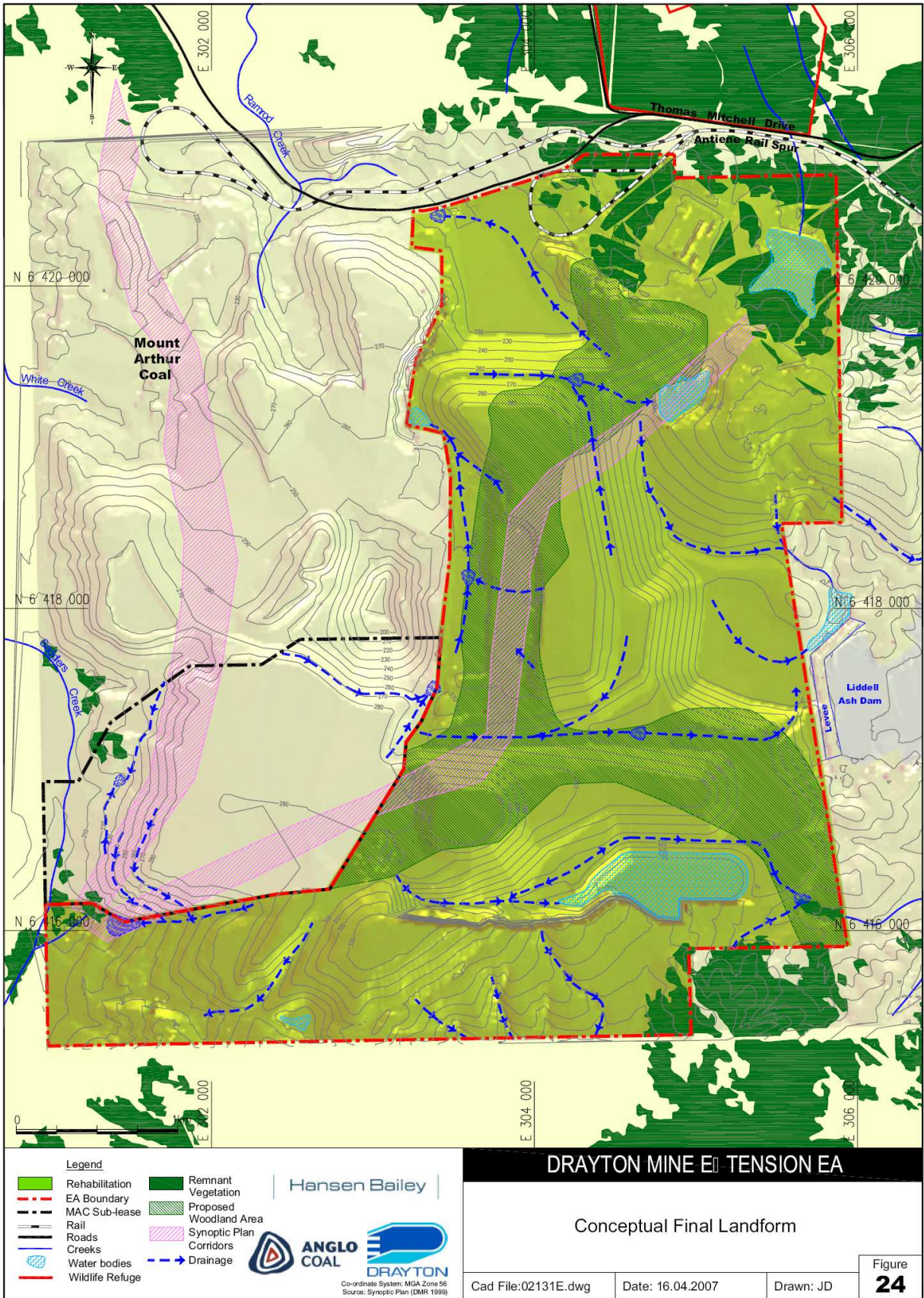


APPENDIX 6: NOISE MITIGATION MEASURES

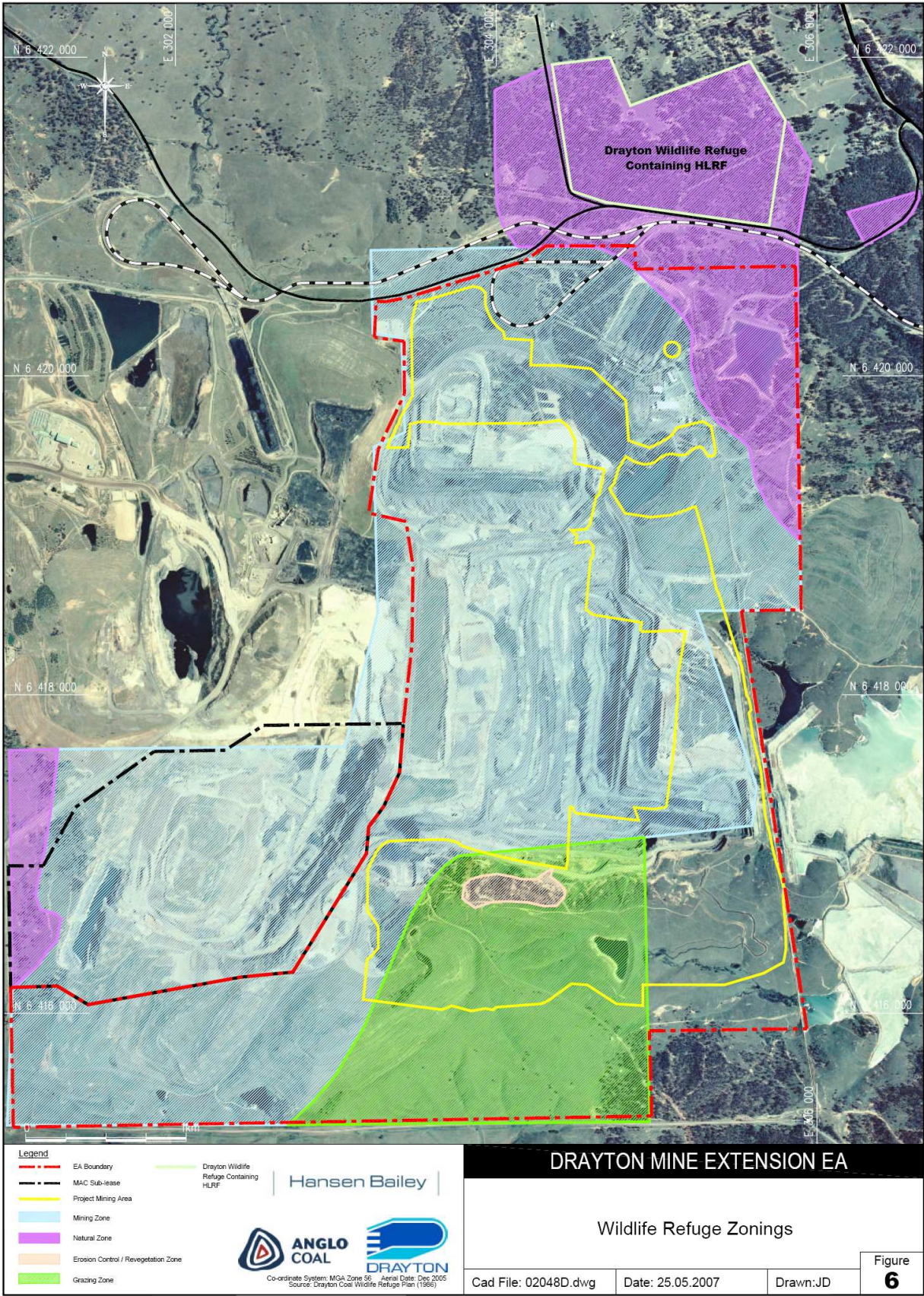
The following noise control or management measures have been adopted by Anglo Coal as part of the Project and have been incorporated into the noise model and mine plan:

- Only one loading unit (excavator or front end loader) would work in the North Pit during the evening or night, primarily to minimise exposed truck movements associated with overburden or coal haulage from the North Pit;
- North and East Pit overburden trucks would dump in shielded locations during the evening and night;
- North Pit prestrip haul roads would be shielded by the pit walls or a berm in the direction of residences, at least during the evening and night;
- Loading units within the North Pit prestrip area would be located in a shielded area below the natural surface during the evening and night;
- The coal haul road from the South Pit would be realigned to the lowest possible elevation, with minimal long straight sections of road directly in line with a residence and effective shielding with earth berms along the sides of the road where possible;
- The proposed ROM stockpile south of the workshop would have a 5 m wall or equivalent berm on the northern side and returned along part of the eastern and western sides to minimise noise from the loader and trucks working on the stockpile;
- A 4 m berm and/or wall would be constructed along the eastern side of the coal haul road from the ROM stockpile to meet the existing ROM hopper wall, including returns along side roads to minimise the effect of gaps in the barrier;
- A sound power limit of 103 dBA each for the three new reclaimers and one ROM coal stacker;
- Steel sheeting would be installed on the northern face of the secondary crusher building after removal of the rotary breaker and installation of the new screen and crusher; and
- Upgraded exhaust mufflers on some trucks with the exception of the South Pit overburden fleet.

APPENDIX 7:
CONCEPTUAL FINAL LANDFORM DESIGN



APPENDIX 8
DRAYTON WILDLIFE REFUGE



APPENDIX 9 OFFSETTING PRINCIPLES

1. Impacts must be avoided first by using prevention and mitigation measures.

Offsets are then used to address remaining impacts.

This may include modifying the proposal to avoid areas of biodiversity value or putting in place measures to prevent offsite impacts.

- Clearing or development can only proceed where offsets (and conservation actions) improve or maintain biodiversity.

2. All regulatory requirements must be met. Offsets cannot be used to satisfy approvals or assessments under other legislation, for example, assessment requirements for Aboriginal heritage sites, polluting activities or other environmental impacts unless specifically provided for by legislation, or additional approvals.

3. Offsets must never reward ongoing poor performance. Offset schemes will not reward landholders who deliberately degrade or mismanage land in order to provide an offset. Offsets must not reward poorly designed developments.

4. Offsets will complement other government programs. A range of tools are required to achieve the NSW Government's conservation objectives, including the establishment and management of new conservation areas, regional parks and incentives for private landholders to manage for conservation purposes.

5. Offsets must be underpinned by sound ecological principles.

- They must include the consideration of structure, function and compositional elements of biodiversity, including threatened species.
- They must enhance biodiversity at a range of scales, that is, at the genetic, species and ecosystem levels.
- They must consider conservation status of ecological communities.
- They must ensure the long-term viability and functionality of biodiversity.

Biodiversity management actions, such as enhancement of existing habitat and securing and managing land of conservation value for biodiversity, can be suitable offsets. Reconstruction of ecological communities involves high risks and uncertainties and time delays for biodiversity outcomes. It is generally less preferable than other management strategies such as enhancing existing habitat.

6. Offsets should aim to result in a net improvement in biodiversity over time.

- Enhancement of biodiversity in offset areas should be equal to or greater than the loss in biodiversity from the impact site.
- Setting aside areas for biodiversity conservation without additional management or increased security is generally not sufficient to offset against the loss of biodiversity.
- Factors to consider include protection of existing biodiversity, time-lag effects, and the uncertainties and risks associated with actions such as revegetation.
- Offsets may include enhancing habitat, reconstructing habitat in strategic areas to link areas of conservation value, or increasing buffer zones around areas of conservation value.

7. Offsets must be enduring – they must offset the impact of the development for at least the period that the impact occurs.

All offsets must be secured by an appropriate legal mechanism. As impacts on biodiversity are likely to be permanent, the offset must also be permanent (secured by a conservation agreement or reservation and management for biodiversity). Wherever possible, offsets should be secured by a conservation agreement attached in perpetuity to the title of the land (eg. under s69 *National Parks & Wildlife Act 1974*). Where land is donated to a public authority or a private conservation organisation and managed as a biodiversity offset, it should be accompanied by resources for its management. If an appropriate legal mechanism to secure the offset is not possible, then the value of the offset will be reduced. Alternative mechanisms, such as land use planning zones, may be appropriate where they 44 Draft Lower Hunter Regional Conservation Plan complement conservation agreements. However, such mechanisms alone do not necessarily provide long-term security. The security of the management agreement will be factored into the value of the offset.

Consolidated version

8. Offsets should be agreed prior to the impact occurring.

Offsets should minimise ecological risks from time-lags. Offset negotiations and actions should occur prior to the approval of the impact. For example, prior to the grant of a development consent. Where the offset involves rehabilitation or revegetation works it may be necessary to conduct this work well in advance of the development.

9. Offsets must be quantifiable – the impacts and benefits must be reliably estimated.

Offsets should be based on quantitative assessment of the loss in biodiversity from the clearing or other development and the gain in biodiversity from the offset. The methodology for calculating the biodiversity loss and gain must be based on the best available science, be reliable and used for calculating both the loss from the development and the gain from the offset (Note that a state-wide computer based tool will be developed for Biobanking based on the tools developed for the *Native Vegetation Act 2003*). The best available information/data should be used when assessing impacts of biodiversity loss and gains from offsets. Offsets will be of greater value where they protect land with high conservation values, where management actions have greater benefits for biodiversity, where the offset areas are not isolated or fragmented, and the management for biodiversity is in perpetuity (eg. secured through a conservation agreement). Management actions must be deliverable and enforceable.

10. Offsets must be targeted – they must offset impacts on a like-for-like or better basis.

Offsets should be targeted according to biodiversity priorities in the area, based on conservation status of ecological communities, presence of threatened species or their habitat, connectivity, and potential to enhance condition from management actions. Only ecological communities that are equal or greater in conservation significance to the type of ecological community lost should be used for offsets. One type of environmental benefit cannot be traded for another. For example, biodiversity offsets may also result in improvements in water quality or salinity but these benefits do not reduce the biodiversity offset requirements. However at a regional level it maybe ecologically of greater benefit to consolidate offsets by linking high conservation values across the landscape. This may involve offsets, which are spatially removed from the offset, or compromise different vegetation communities.

11. Offsets must be located appropriately – they must offset the impact in the same region.

Wherever possible, offsets should be located in areas that have the same or similar ecological characteristics as the area affected by the development, in reasonable proximity to the region impacted.

12. Offsets must be supplementary – they must be beyond existing requirements and not already be funded under another scheme.

An offset used in the past for another project cannot be used again to offset a new project. Areas that have received incentive funds from another process cannot be used for offsets. Existing protected areas on private land cannot be used for offsets unless additional security or management actions are implemented. Areas already managed by the government, for example national parks, flora reserves, nature reserves, karst conservation areas and crown reserves, cannot be used as offsets. In some cases, new management works on public lands could be used as an offset.

13. Offsets and their actions must be enforceable – through development consent conditions, licence conditions, conservation agreements or a contract.

Offsets must be audited to ensure that the actions have been carried out, and monitored to determine that the actions are leading to positive biodiversity outcomes.

APPENDIX 10
INDEPENDENT DISPUTE RESOLUTION PROCESS

