

Development Consent

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

I, the Minister Assisting the Minister for Infrastructure and Planning (Planning Administration), approve the Development Application referred to in schedule 1, subject to the conditions in schedules 3 to 6.

These conditions are required to:

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

SIGNED

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

Sydney

4 February 2004

File No: S02/02197

Blue type represents 2004 modification

Red type represents May 2005 modification

Green represents January 2006 modification

Pink represents April 2006 Modification

Orange represents October 2006 Modification

Violet represents January 2007 Modification

Brown represents June 2009 Modification

Lime represents August 2009 Modification

Blue with yellow background represents February 2011 Modification

Taupe represents December 2012 Modification

SCHEDULE 1

Development Application: DA 305-7-2003

Applicant Wambo Coal Pty Limited;

Consent Authority: Minister for Infrastructure and Planning;

Land: See Appendix 1;

Proposed Development: The development of open cut and underground mining operations at the Wambo coal mine, which includes:

- continued development of open cut and underground mining operations within existing Wambo Coal Pty Limited (WCPL) mining and coal leases and into new mining lease application area;
- selective auger mining of the Whybrow, Redbank Creek, Wambo and Whynot seams up to 200 m beyond the open cut limits within WCPL owned land;
- continued placement of waste rock and coarse rejects within mine waste rock emplacements;
- continued placement of tailings within open cut voids and capping with waste rock and coarse rejects;
- an extension to the existing Wollemi Underground Mine Box Cut (within the limits of the development open cut mining area)

to provide direct access for three underground longwall panels in the Whybrow Seam;

- longwall mining of the Wambo Seam via the open cut highwall;
- construction of a portal and drift access to facilitate longwall mining of the Arrowfield and Bowfield Seams;
- an upgrade of the existing Coal Handling and Preparation Plant (CHPP) to facilitate increased coal production;
- development of a water control structure across North Wambo Creek at the north-western limit of the open cut operation, and a channel to allow the passage of flows to the lower reaches of North Wambo Creek around the open cut development;
- degazettal and physical closure of Pinegrove Road;
- development of new access roads and internal haul roads;
- relocation of the existing explosives magazine and construction of additional hydrocarbon storage facilities;
- relocation of the administration area and site offices;
- extraction of up to 14.7 million tonnes of run-of-mine (ROM) coal a year;
- operation of the mine 24 hours a day, 7 days a week;
- continued haulage of coal by road from Wambo Coal Mine to Mt Thorley Coal Loader prior to the commissioning of the Wambo "Rail and Train Loading Infrastructure" (which is the subject of a separate development application: DA 177-8-2004); and
- haulage of coal by the Wambo "Rail and Train Loading Infrastructure".

State Significant Development:

The proposal is classified as State significant development, under section 76A(7) of the *Environmental Planning & Assessment Act 1979*, because it involves coal-mining related development that requires a new mining lease under section 63 of the *Mining Act 1992*.

Integrated Development:

The proposal is classified as integrated development, under section 91 of the *Environmental Planning & Assessment Act 1979*, because it requires additional approvals under the:

- *Protection of the Environment Operations Act 1997*;
- *National Parks & Wildlife Act 1974*;
- *Water Act 1912*;
- *Fisheries Management Act 1994*;
- *Heritage Act 1977*;
- *Roads Act 1993*; and
- *Mine Subsidence Compensation Act 1961*.

Designated Development:

The proposal is classified as designated development, under section 77A of the *Environmental Planning & Assessment Act 1979*, because it is for a coal mine that would "produce or process more than 500 tonnes of coal a day", and consequently meets the criteria for designated development in schedule 3 of the *Environmental Planning & Assessment Regulation 2000*.

BCA Classification:

Class 5:	Office upgrade
Class 9b:	Bathhouse
Class 10a:	Car park
	Heavy vehicle wash station
	Gas drainage bores
	De-watering bores
Class 10b:	Coal conveyor

Note:

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

SCHEDULE 2 DEFINITIONS

Annual Review	The review required by Condition 5 of Schedule 6
Applicant	Wambo Coal Pty Limited
BCA	Building Code of Australia
Bore	Any bore or well or excavation or other work connected or proposed to be connected with sources of sub-surface water, and used or proposed to be used or capable of being used to obtain supplies of such water whether the water flows naturally at all times or has to be raised whether wholly or at times by pumping or other artificial means
CCC	Community Consultative Committee
Council	Singleton Shire Council
DA	Development Application
Day	Day is defined as the period from 7am to 6pm on Monday to Saturday, and 8am to 6pm on Sundays and Public Holidays
Department	Department of Planning and Infrastructure
Director General	Director-General of the Department, or nominee
DRE	Division of Resources and Energy within the Department of Trade and Investment, Regional Infrastructure and Services
DSC	Dams Safety Committee
EIS	Environmental Impact Statement
Environmental consequences	The environmental consequences of subsidence impacts, including: damage to infrastructure, buildings and residential dwellings; loss of surface flows to the subsurface; loss of standing pools; adverse water quality impacts; development of iron bacterial mats; cliff falls; rock falls; damage to Aboriginal heritage sites; impacts on aquatic ecology; ponding
EPA	Environment Protection Authority
EP&A Act	<i>Environmental Planning and Assessment Act 1979</i>
EP&A Regulation	<i>Environmental Planning and Assessment Regulation 2000</i>
Evening	Evening is defined as the period from 6pm to 10pm
Executive Director Mineral Resources	Executive Director Mineral Resources within DRE, or equivalent position
First Workings	Underground workings which establish access to the coal resource area
GTA	General Term of Approval
Land	Land means the whole of a lot in a current plan registered at the Land Titles Office at the date of this consent
Material harm to the environment	Actual or potential harm to the health or safety of human beings or to ecosystems that is not trivial
Mining operations	Includes the removal of overburden and extraction, processing, handling, storage and transportation of coal at the Wambo Mining Complex
Minister	Minister for Planning and Infrastructure, or delegate
MOP	Mining Operations Plan
MSB	Mine Subsidence Board
Night	Night is defined as the period from 10pm to 7am on Monday to Saturday, and 10pm to 8am on Sundays and Public Holidays
NOW	NSW Office of Water
OEH	Office of Environment and Heritage
Offset Strategy	The revegetation and enhancement program described in the EIS for the Wambo Development Project, dated July 2003
PCA	Principal Certifying Authority appointed under Section 109E of the Act
POEO Act	<i>Protection of the Environment Operations Act 1997</i>
Privately-owned land	Land excluding land owned by a mining company, where: <ul style="list-style-type: none"> • A private agreement does not exist between the Applicant and the land owner; and • There are no land acquisition provisions requiring the Applicant to purchase the land upon request from the land owner.
Rehabilitation	The treatment or management of land disturbed by the development for the purpose of establishing a safe, stable and non-polluting environment, including the remediation of impacts
ROM Coal	Run-of-mine coal
RMS	Roads and Maritime Services
SEE	Statement of Environmental Effects
Safe, serviceable & repairable	Safe means no danger to users who are present, serviceable means available for its intended use, and repairable means damaged components can be repaired economically
Southern Area	See Figure HA-5 in Appendix HA of Volume 4 of the EIS for the Wambo Development Project

Site	Land to which the DA applies (see schedule 1 and Appendix 1)
Subsidence effects	Deformation of the ground mass due to mining, including all mining-induced ground movements, such as vertical and horizontal displacement, tilt, strain and curvature
Subsidence impacts	Physical changes to the ground and its surface caused by subsidence effects, including tensile and shear cracking of the rock mass, localised buckling of strata caused by valley closure and upsidence and surface depressions or troughs
Vacant land	Vacant land is defined as the whole of the lot in a current plan registered at the Land Titles Office that does not have a dwelling situated on the lot and is permitted to have a dwelling on that lot at the date of this consent.
Wambo Mining Complex	The development approved under this consent, together with the development approved under the consent for the Wambo rail and coal loading infrastructure (177-8-2004) considered collectively

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SCHEDULE 3 ADMINISTRATIVE CONDITIONS

Obligation to Minimise Harm to the Environment

1. The Applicant shall implement all practicable measures to prevent and/or minimise any harm to the environment that may result from the construction, operation, or rehabilitation of the development.

Terms of Approval

2. The Applicant shall carry out the development generally in accordance with the:
 - (a) DA 305-7-2003;
 - (b) EIS titled *Wambo Development Project*, volumes 1-5, dated July 2003, and prepared by Resource Strategies Pty. Ltd.;
 - (c) letter from Holmes Air Sciences to the Department, dated 3 September 2003, and titled *Wambo Development Project - Response Air Quality Assessment*;
 - (d) letter from Wambo Coal Pty. Ltd. to the Department, dated 24 October 2003, and titled *Wambo Development Project – Development Application Amendment (DA 305-7-2003-i)*;
 - (e) Statement of Environmental Effects titled *Wambo Development project – Wambo Seam Underground Mine Modification*, dated January 2005, and prepared by Wambo Coal Pty Ltd;
 - (f) document titled *Wambo Development Project – Modification of DA 305-7-2003-I*, dated 24 October 2005;
 - (g) document titled *Wambo Development Project – Modification of DA 305-7-2003-I*; dated 23 January 2006;
 - (h) document titled *Wambo Development Project – Modification of DA 305-7-2003-I*; dated 27 July 2006;
 - (i) document titled *Wambo Coal Mine Modification Statement of Environmental Effects*; dated September 2006;
 - (j) document titled *Wambo Coal Mine Statement of Environmental Effects on Proposed Modification*, dated March 2009;
 - (k) document titled *Wambo Coal Mine Modification Statement of Environmental Effects*, dated June 2009 and the response to submissions dated July 2009;
 - (l) the modification application DA 305-7-2003 MOD 9 and accompanying letter prepared by Wambo Coal Pty Ltd;
 - (m) the modification application DA 305-7-2003 MOD 11 and accompanying documents titled *Wambo Montrose Water Storage Modification Environmental Assessment* dated June 2012 and *Wambo Montrose Water Storage Modification Response to Submissions* dated 4 September 2012; and
 - (n) conditions of this consent.
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 Applicant shall comply with any reasonable requirement/s of the Director-General arising from the Department's assessment of:
 - (a) any reports, plans or correspondence that are submitted in accordance with this consent; and
 - (b) the implementation of any actions or measures contained in these reports, plans or correspondence.

Deferred Commencement

5. This consent shall only commence when the Applicant has surrendered all previous development consents for the Wambo coal mine, excluding DA No. 108/91 issued by Singleton Shire Council, to the satisfaction of the Director-General.

Limits on Approval

6. The Applicant may carry out mining operations at the Wambo Mining Complex until 1 March 2025.

Note: Under this consent, the Applicant is required to rehabilitate the site and carry out additional undertakings to the satisfaction of both the Director-General and the Executive Director Mineral Resources. Consequently, this consent will continue to apply in all other respects other than the right to conduct mining operations until the rehabilitation of the site and those additional undertakings have been carried out satisfactorily.

7. The Applicant shall not extract more than 14.7 million tonnes of ROM coal a year from the development.

Staged Submission of any Strategy, Plan or Program

- 7A. With the approval of the Director-General, the Applicant may:
- submit any strategy, plan or program required by this consent on a progressive basis; and
 - combine any strategy, plan or program required by this consent with any similar strategy, plan or program required under DA 177-8-2004.

Notes:

- While any strategy, plan or program may be submitted on a progressive basis, the Applicant will need to ensure that the existing operations on site are covered by suitable strategies, plans or programs at all times; and*
- If the submission of any strategy, plan or program is to be staged, then the relevant strategy, plan or program must clearly describe the specific stage to which the strategy, plan or program applies, the relationship of this stage to any future stages, and the trigger for updating the strategy, plan or program.*

Structural Adequacy

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

Notes:

- Under Part 4A of the EP&A Act, the Applicant is required to obtain construction and occupation certificates for the proposed building works.*
- Part 8 of the EP&A Regulation sets out the requirements for the certification of development.*
- The development is located in the Patrick Plains Mine Subsidence District. Under section 15 of the Mine Subsidence Compensation Act 1961, the Applicant is required to obtain the Mine Subsidence Board's approval before constructing or relocating any improvements on the site.*

Demolition

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

Operation of Plant and Equipment

10. The Applicant shall ensure that all plant and equipment used at the site, or to transport coal off-site, are:
- maintained in a proper and efficient condition; and
 - operated in a proper and efficient manner.

Section 94 Contribution

11. Before carrying out any development, or as agreed otherwise by Council, the Applicant shall pay Council \$60,000 in accordance with Council's Section 94 Contribution Plan.

Community Enhancement Contribution

12. Before carrying out any development, or as agreed otherwise by Council, the Applicant shall pay Council \$15,000 for the enhancement of community infrastructure or services in the Warkworth/Jerry's Plains area.

SCHEDULE 4 SPECIFIC ENVIRONMENTAL CONDITIONS

ACQUISITION UPON REQUEST

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

2 – Lambkin	23A & B - Kannar
13C - Skinner	31A,B,C & D - Fisher
19A & B – Kelly	51 – Hawkes
22 – Henderson	56 - Haynes

Table 1: Land subject to acquisition upon request

Note: For more information on the numbering and identification of properties used in this consent, see Attachment 1 of the EIS for the Wambo Development Project.

AIR QUALITY

Odour

- The Applicant shall ensure that no offensive odours, as defined under the POEO Act, are emitted from the Wambo Mining Complex.

Greenhouse Gas Emissions

- The Applicant shall implement all reasonable and feasible measures to minimise the release of greenhouse gas emissions from the Wambo Mining Complex to the satisfaction of the Director-General.

Air Quality Criteria

- Except for the air quality affected land in Table 1, the Applicant shall ensure that all reasonable and feasible avoidance and mitigation measures are employed so that particulate matter emissions generated by the Wambo Mining Complex do not exceed the criteria listed in Tables 2, 3 and 4 at any residence on privately owned land, or on more than 25 percent of any privately owned land.

Table 2: Long term impact assessment criteria for particulate matter

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

Table 3: Short term impact assessment criterion for particulate matter

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

Table 4: Long term impact assessment criteria for deposited dust

Pollutant	Averaging period	Maximum increase ² in deposited dust level	Maximum total ¹ deposited dust level
^c Deposited dust	Annual	^b 2 g/m ² /month	^a 4 g/m ² /month

Notes to Tables 2-4

^a Total impact (i.e. incremental increase in concentrations due to the development plus background concentrations due to all other sources);

^b Incremental impact (i.e. incremental increase in concentrations due to the development on its own);

^c Deposited dust is to be assessed as insoluble solids as defined by Standards Australia, AS/NZS 3580.10.1:2003: Methods for Sampling and Analysis of Ambient Air - Determination of Particulate Matter - Deposited Matter - Gravimetric Method; and

^d Excludes extraordinary events such as bushfires, prescribed burning, dust storms, sea fog, fire incidents or any other activity agreed by the Director-General.

Air Quality Acquisition Criteria

5. If particulate matter emissions generated by the Wambo Mining Complex exceed the criteria in Tables 5, 6, and 7 at any residence on privately-owned land, or on more than 25 percent of any privately owned land, then upon written request for acquisition from the landowner, the Applicant shall acquire the land in accordance with the procedures in conditions 9 - 11 of schedule 5.

Table 5: Long term land acquisition criteria for particulate matter

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

Table 6: Short term land acquisition criteria for particulate matter

Pollutant	Averaging period	^{da} Criterion
Particulate matter < 10 µm (PM ₁₀)	24 hour	^a 150 µg/m ³
Particulate matter < 10 µm (PM ₁₀)	24 hour	^b 50 µg/m ³

Table 7: Long term land acquisition criteria for deposited dust

Pollutant	Averaging period	Maximum increase² in deposited dust level	Maximum total¹ deposited dust level
^c Deposited dust	Annual	^b 2 g/m ² /month	^a 4 g/m ² /month

Notes to Tables 5-7

^a Total impact (i.e. incremental increase in concentrations due to the development plus background concentrations due to all other sources);

^b Incremental impact (i.e. incremental increase in concentrations due to the development on its own);

^c Deposited dust is to be assessed as insoluble solids as defined by Standards Australia, AS/NZS 3580.10.1:2003: Methods for Sampling and Analysis of Ambient Air - Determination of Particulate Matter - Deposited Matter - Gravimetric Method; and

^d Excludes extraordinary events such as bushfires, prescribed burning, dust storms, sea fog, fire incidents or any other activity agreed by the Director-General.

Mine-owned Land

- 5A. The Applicant shall ensure that particulate matter emissions generated by the Wambo Mining Complex do not exceed the criteria listed in Tables 2, 3 and 4 at any occupied residence on any mine-owned land (including land owned by adjacent mines) unless:
- the tenant and landowner has been notified of health risks in accordance with the notification requirements under schedule 5 of this consent;
 - the tenant on land owned by the Applicant can terminate their tenancy agreement without penalty, subject to giving reasonable notice, and the Applicant uses its best endeavours to provide assistance with relocation and sourcing of alternative accommodation;
 - air mitigation measures (such as air filters, a first flush roof water drainage system and/or air conditioning) are installed at the residence, if requested by the tenant and landowner (where owned by another mine other than the Applicant);
 - particulate matter air quality monitoring is undertaken to inform the tenant and landowner of potential health risks; and
 - monitoring data is presented to the tenant in an appropriate format, for a medical practitioner to assist the tenant in making an informed decision on the health risks associated with occupying the property,
- to the satisfaction of the Director-General.

Air Quality Operating Conditions

- 5B. The Applicant shall:

- (a) implement best management practice to minimise the off-site odour, fume and dust emissions from the Wambo Mining Complex, including best practice coal loading and profiling and other measures to minimise dust emissions from coal transportation by rail;
 - (b) operate a comprehensive air quality management system at the Wambo Mining Complex that uses a combination of predictive meteorological forecasting, predictive and real time air dispersion modelling and real-time air quality monitoring data to guide the day to day planning of mining operations and implementation of both proactive and reactive air quality mitigation measures to ensure compliance with the relevant conditions of this consent;
 - (c) manage PM2.5 levels in accordance with any requirements of any EPL;
 - (d) minimise the air quality impacts of the Wambo Mining Complex during adverse meteorological conditions and extraordinary events (see note d above under Tables 5-7);
 - (e) minimise any visible off-site air pollution;
 - (f) minimise the surface disturbance of the site generated by the Wambo Mining Complex; and
 - (g) co-ordinate air quality management at the Wambo Mining Complex with the air quality management at nearby mines (HVO South, HVO North and Mount Thorley Warkworth mines) to minimise the cumulative air quality impacts of these mines and the Wambo Mining Complex,
- to the satisfaction of the Director-General.

Air Quality and Greenhouse Gas Management Plan

- 5C. The Applicant shall prepare and implement a detailed Air Quality & Greenhouse Gas Management Plan for the Wambo Mining Complex to the satisfaction of the Director-General. This plan must:
- (a) be prepared in consultation with the EPA, and submitted to the Director-General for approval by the end of June 2013;
 - (b) describe the measures that would be implemented to ensure:
 - best management practice is being employed;
 - the air quality impacts of the Wambo Mining Complex are minimised during adverse meteorological conditions and extraordinary events; and
 - compliance with the relevant conditions of this consent.
 - (c) describe the proposed air quality management system;
 - (d) include a risk/response matrix to codify mine operational responses to varying levels of risk resulting from weather conditions and specific mining activities;
 - (e) include commitments to provide summary reports and specific briefings at CCC meetings on issues arising from air quality monitoring;
 - (f) 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;
 - includes monitoring of occupied development-related residences and residences on air quality-affected land listed in Table 1, subject to the agreement of the tenant;
 - evaluates and reports on the effectiveness of the air quality management system; and
 - includes a protocol for determining any exceedances of the relevant conditions in this consent; and
 - (g) include a protocol that has been prepared in consultation with the owners of nearby mines (HVO South, HVO North and Mount Thorley Warkworth mines) to minimise the cumulative air quality impacts of these mines and the Wambo Mining Complex.

¹NOISE

Noise Impact Assessment Criteria

6. The Applicant shall ensure that the noise generated by the Wambo Mining Complex does not exceed the noise impact assessment criteria presented in Table 9.

Day <i>L_{Aeq}(15 minute)</i>	Evening/Night <i>L_{Aeq}(15 minute)</i>	Night <i>L_{A1}(1 minute)</i>	Land Number
35	41	50	94 – Curlewis
			3 – Birrell
			4B – Circosta
			15B - McGowen/Caslick
			16 – Cooper
			23C – Kannar
			25 – Fenwick

¹ Incorporates EPA GTAs

Day <i>L_{Aeq}(15 minute)</i>	Evening/Night <i>L_{Aeq}(15 minute)</i>	Night <i>L_{A1}(1 minute)</i>	Land Number
35	40	50	28A & B – Garland 33 - Thelander/O'Neill 39 – Northcote 40 – Muller 254A – Algie
35	39	50	5 – Strachan 6 - Merrick 7 - Maizey 37 - Lawry 48 - Ponder
35	38	50	1 - Brosi 17 - Carter 18 - Denney 38 - Williams 49 - Oliver 63 - Abrocuff 75 - Barnes 91 - Bailey
35	37	50	27 - Birralelee 43 - Carmody 137 - Woodruff 163 - Rodger/Williams 246 - Bailey
35	36	50	13B - Skinner 178 - Smith 188 - Fuller 262A, B & C - Moses
35	35	50	All other residential or sensitive receptors, excluding the receptors listed in condition 1 above

Table 9: Noise impact assessment criteria dB(A))

Notes:

- Noise generated by the Wambo Mining Complex 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 Wambo Mining Complex exceeds the criteria in Table 10, the Applicant shall, upon receiving a written request for acquisition from the landowner, acquire the land in accordance with the procedures in conditions 9-11 of schedule 5.

Day/Evening/Night <i>L_{Aeq}(15 minute)</i>	Property
43	94 - Curlewis 23C – Kannar 254A - Algie
40	All other residential or sensitive receptor, excluding the receptors listed in condition 1 above

Table 10: Land acquisition criteria dB(A)

Note: Noise generated by the Wambo Mining Complex is to be measured in accordance with the notes presented below Table 9 above.

Operating Conditions

- The Applicant shall:
 - implement best management practice to minimise the operational, low frequency and traffic noise of the Wambo Mining Complex;
 - operate a comprehensive noise management system for the Wambo Mining Complex that uses a combination of predictive meteorological forecasting and real-time noise monitoring

- data to guide the day to day planning of mining operations and the implementation of both proactive and reactive noise mitigation measures to ensure compliance with the relevant conditions of this consent;
- (c) maintain the effectiveness of noise suppression equipment (if fitted) on plant at all times and ensure defective plant is not used operationally until fully repaired;
 - (d) ensure that noise attenuated plant (if used) is deployed preferentially in locations relevant to sensitive receivers;
 - (e) minimise the noise impacts of the Wambo Mining Complex during meteorological conditions when the noise limits in this consent do not apply;
 - (f) co-ordinate the noise management for the Wambo Mining Complex with the noise management at nearby mines (including HVO South, HVO North and Mt Thorley Warkworth mines) to minimise the cumulative noise impacts of these mines and the Wambo Mining Complex,
- to the satisfaction of the Director-General.

Noise Management Plan

9. The Applicant shall prepare and implement a Noise Management Plan for the Wambo Mining Complex to the satisfaction of the Director-General. This plan must:
 - (a) be prepared in consultation with the EPA, and submitted to the Director-General for approval by the end of June 2013;
 - (b) describe the measures that would be implemented to ensure:
 - best management practice is being employed;
 - the noise impacts of the Wambo Mining Complex are minimised during meteorological conditions when the noise limits in this consent do not apply; and
 - compliance with the relevant conditions of this consent;
 - (c) describe the proposed noise management system in detail;
 - (d) include a monitoring program that:
 - uses a combination of real-time and supplementary attended monitoring measures to evaluate the performance of the Wambo Mining Complex;
 - adequately supports the proactive and reactive noise management system for the Wambo Mining Complex;
 - includes a protocol for determining exceedances of the relevant conditions in this consent;
 - evaluates and reports on the effectiveness of the noise management system for the Wambo Mining Complex;
 - provides for the annual validation of the noise model for the Wambo Mining Complex; and
 - (e) include a protocol that has been prepared in consultation with the owners of nearby mines (including HVO South, HVO North and Mount Thorley Warkworth mines) to minimise the cumulative noise impacts of these mines and the Wambo Mining Complex.

²METEOROLOGICAL MONITORING

10. The Applicant shall establish a permanent meteorological station at a location approved by the EPA, and to the satisfaction of the Director-General, to monitor the parameters specified in Table 11, using the specified units of measure, averaging period, frequency, and sampling method in the table.

<i>Parameter</i>	<i>Units of measure</i>	<i>Averaging period</i>	<i>Frequency</i>	<i>Sampling method¹</i>
<i>Lapse rate</i>	<i>°C/100m</i>	<i>1 hour</i>	<i>Continuous</i>	<i>Note²</i>
<i>Rainfall</i>	<i>mm/hr</i>	<i>1 hour</i>	<i>Continuous</i>	<i>AM-4</i>
<i>Sigma Theta @ 10 m</i>	<i>°</i>	<i>1 hour</i>	<i>Continuous</i>	<i>AM-2</i>
<i>Siting</i>	<i>-</i>	<i>-</i>	<i>-</i>	<i>AM-1</i>
<i>Temperature @ 10 m</i>	<i>K</i>	<i>1 hour</i>	<i>Continuous</i>	<i>AM-4</i>
<i>Temperature @ 2 m</i>	<i>K</i>	<i>1 hour</i>	<i>Continuous</i>	<i>AM-4</i>
<i>Total Solar Radiation @ 10m</i>	<i>W/m²</i>	<i>1 hour</i>	<i>Continuous</i>	<i>AM-4</i>
<i>Wind Direction @ 10 m</i>	<i>°</i>	<i>1 hour</i>	<i>Continuous</i>	<i>AM-2</i>
<i>Wind Speed @ 10 m</i>	<i>m/s</i>	<i>1 hour</i>	<i>Continuous</i>	<i>AM-2</i>

Table 11: Meteorological monitoring

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

² The Applicant shall calculate lapse rate from measurements made at 2m and 10m.

² Incorporates EPA GTA

³BLASTING & VIBRATION

Airblast Overpressure Limits

11. The Applicant shall ensure that the airblast overpressure level from blasting at the **Wambo Mining Complex** does not exceed the criteria in Table 12 at any residence on privately-owned land with the exception of property 13C (Skinner) (see condition 20 below).

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

Table 12: Airblast overpressure impact assessment criteria

Ground Vibration Impact Assessment Criteria

12. The Applicant shall ensure that the ground vibration level from blasting at the **Wambo Mining Complex** does not exceed the criteria in Table 13 at any residence on privately-owned land with the exception of property 13C (Skinner) (see condition 20 below).

Peak particle velocity (mm/s)	Allowable exceedance
5	5% of the total number of blasts over a period of 12 months
10	0%

Table 13: Ground vibration impact assessment criteria

Blasting Hours

13. The Applicant shall only carry out blasting at the **Wambo Mining Complex** between 9 am and 5 pm Monday to Saturday inclusive. No blasting is allowed on Sundays, public holidays or any other time without the written approval of EPA.

Blasting Frequency

- 13A. The Applicant may carry out a maximum of:
- (a) 3 blasts a day, unless an additional blast is required following a blast misfire; and
 - (b) 15 blasts a week,
- for all operations at the **Wambo Mining 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, or blasts required to ensure the safety of the mine or its workers.

Note: For the purposes of this condition, a blast refers to a single blast event, which may involve a number of individual blasts fired in quick succession in a discrete area of the mine.

Public Notice

14. During the life of the **Wambo Mining Complex**, the Applicant shall:
- (a) operate a Blasting Hotline, or alternate system agreed to by the Director-General, to enable the public to get up-to-date information on blasting operations at the **Wambo Mining Complex**; and
 - (a) notify the occupants of any land within 2 km of the site about this hotline or system on an annual basis.

Property Inspection

15. Before carrying out any blasting, the Applicant shall advise all landowners within 2 km of the site that they are entitled to a property inspection.

³ Incorporates EPA GTA

16. If the Applicant receives a written request for a property inspection from any landowner within 2 km of the site, the Applicant shall:
- (a) within 28 days of receiving the request, commission a suitably qualified 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 this property inspection report within 14 days of receiving the report.

Cumulative Impacts

17. The Applicant shall undertake all reasonable steps to co-ordinate blasting at the Wambo Mining Complex with the blasting at surrounding mines – such as Bulga, Mount Thorley, Warkworth, and Hunter Valley Operations – to minimise the cumulative impacts of blasting in the region.

Operating Conditions

18. During mining operations at the Wambo Mining Complex, the Applicant shall:
- (a) implement best management practice to:
 - protect the safety of people and livestock in the surrounding area;
 - protect public or private infrastructure/property in the surrounding area from any damage; and
 - minimise the dust and fume emissions of any blasting;
 - (b) minimise the frequency and duration of any road closures, and avoid road closures during peak traffic periods;
 - (c) co-ordinate the timing of blasting at the Wambo Mining Complex with the timing of blasting at nearby mines (including HVO South, HVO North and Mt Thorley Warkworth mines) to minimise the cumulative blasting impacts of these mines and the Wambo Mining Complex; and
 - (d) operate a suitable system to enable the public to get up-to-date information on the proposed blasting schedule at the Wambo Mining Complex, to the satisfaction of the Director-General.
19. The Applicant shall not undertake blasting within 500 metres of:
- (a) any public road without the approval of the appropriate road authority; or
 - (b) any land outside the site that is not owned by the Applicant, unless:
 - the Applicant has a written agreement with the relevant landowner to allow blasting to be carried out closer to the land, and the Applicant has advised the Department in writing of the terms of this agreement, or
 - the Applicant has:
 - demonstrated to the satisfaction of the Director-General that the blasting can be carried out closer to the land without compromising the safety of the people or livestock on the land, or damaging the buildings and/or structures on the land; and
 - updated the Blast Management Plan to include the specific measures that would be implemented while blasting is being carried out within 500 metres of the land.

Blast Management Plan

20. The Applicant shall prepare and implement a Blast Management Plan for the Wambo Mining Complex to the satisfaction of the Director-General. This plan must:
- (a) be submitted to the Director-General for approval by the end of June 2013;
 - (b) propose and justify any alternative ground vibration limits for any public infrastructure in the vicinity of the Wambo Mining Complex;
 - (c) describe the measures that would be implemented to ensure:
 - best management practice is being employed;
 - compliance with the relevant conditions of this consent;
 - (d) include a road closure management plan for blasting within 500 metres of a public road, that has been prepared in consultation with the RMS and Council;
 - (e) include measures to minimise, mitigate, and if necessary remediate the blasting impacts on property 13C (Skinner);
 - (f) address the requirements of conditions 63 – 68 of schedule 4;
 - (g) include a monitoring program for evaluating the performance of the Wambo Mining Complex, including:
 - compliance with the applicable criteria; and
 - minimising the fume emissions from the Wambo Mining Complex; and

- (h) include a protocol that has been prepared in consultation with the owners of nearby mines (including HVO South, HVO North and Mt Thorley Warkworth mines) to minimise the cumulative blasting impacts of these mines and the Wambo Mining Complex.
- 20A. The Applicant shall not carry out more than 1 blast a day within 500 metres of Wallaby Scrub Road or the Golden Highway.

Property Investigations

21. If any landowner within a 2 km radius of the site claims that his/her property has been damaged as a result of blasting at the development, the Applicant shall:
- within 28 days of receiving this claim in writing, commission a suitably qualified person whose appointment has been approved by the Director-General to investigate the claim; and
 - give the landowner a copy of the property investigation report within 14 days of receiving the report.

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

If the Applicant 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 2).

SUBSIDENCE

Performance Measures – Natural and Heritage Features, etc

22. The Applicant shall ensure that the development does not cause any exceedances of the performance measures in Table 14A, to the satisfaction of the Director-General.

Table 14A: Subsidence Impact Performance Measures

Water	
Wollombi Brook	Negligible impact. Controlled release of excess site water only in accordance with EPL requirements
Biodiversity	
Wollemi National Park	Nil impact.
Warkworth Sands Woodland Community	Minor cracking and ponding of the land surface or other impact. Negligible environmental consequences
White Box, Yellow Box, Blakely's Red Gum Woodland/Grassy White Box Woodland Community	Minor cracking and ponding of the land surface or other impact. Negligible environmental consequences
Heritage	
Wambo Homestead Complex	Negligible impact on heritage values, unless approval has been granted by the Heritage Branch and/or the Minister

Notes:

- The Applicant will be required to define more detailed performance indicators for each of these performance measures in the various management plans that are required under this consent (see condition 22C below).
- The requirements of this condition only apply to the impacts and consequences of mining operations undertaken following the date of approval of modification 9.

Performance Measures – Built Features

- 22A. The Applicant shall ensure that the development does not cause any exceedances of the performance measures in Table 14B, to the satisfaction of the Director-General of DRE.

Table 14B: Subsidence Impact Performance Measures

Built Features	
All built features	Always safe. Serviceability should be maintained wherever practicable. Loss of serviceability must be fully compensated. Damage must be fully repairable, and must be fully

	repaired or else replaced or fully compensated.
Public Safety	
Public Safety	No additional risk

Notes:

- 1) The Applicant will be required to define more detailed performance indicators for each of these performance measures in Built Features Management Plans or Public Safety Management Plan (see condition 22C below).
- 2) The requirements of this condition only apply to the impacts and consequences of mining operations undertaken following the date of modification 9.
- 3) Requirements regarding safety or serviceability do not prevent preventative or mitigatory actions being taken prior to or during mining in order to achieve or maintain these outcomes.
- 4) Compensation required under this condition includes any compensation payable under the Mine Subsidence Compensation Act 1961 and/or the Mining Act 1992.

22B. Any dispute between the Applicant and the owner of any built feature over the interpretation, application or implementation of the performance measures in Table 14B is to be settled by the Director-General of DRE. The Director-General of DRE may seek the advice of the MSB on the matter. Any decision by the Director-General of DRE shall be final and not subject to further dispute resolution under this consent.

Extraction Plan

22C. The Applicant shall prepare and implement an Extraction Plan for the second workings within each seam to be mined to the satisfaction of the Director-General. Each Extraction Plan must:

- (a) be prepared by a team of suitably qualified and experienced persons whose appointment has been endorsed by the Director-General;
- (b) be approved by the Director-General before the Applicant carries out any of the second workings covered by the plan;
- (c) include detailed plans of the proposed first and second workings and any associated surface development;
- (d) include detailed performance indicators for each of the performance measures in Tables 14A and 14B;
- (e) provide revised predictions of the potential subsidence effects, subsidence impacts and environmental consequences of the proposed second workings, incorporating any relevant information obtained since this consent;
- (f) describe the measures that would be implemented to ensure compliance with the performance measures in Tables 14A and 14B, and manage or remediate any impacts and/or environmental consequences;
- (g) include the following to the satisfaction of DRE:
 - a coal resource recovery plan that demonstrates effective recovery of the available resource;
 - a subsidence monitoring program to:
 - provide data to assist with the management of the risks associated with subsidence;
 - validate the subsidence predictions; and
 - analyse the relationship between the subsidence effects and impacts under the plan and any ensuing environmental consequences;
 - a Built Features Management Plan to manage the potential subsidence impacts and/or environmental consequences of the proposed second workings, and which:
 - addresses in appropriate detail all items of public infrastructure and all classes of other built features; and
 - has been prepared following appropriate consultation with the owner/s of potentially affected feature/s;
 - a Public Safety Management Plan to ensure public safety in the mining area; and
 - appropriate revisions to the Rehabilitation Management Plan required under condition 40A; and
- (h) include a:
 - Water Management Plan, which has been prepared in consultation with EPA and NOW, which provides for the management of the potential impacts and/or environmental consequences of the proposed second workings on surface water resources, groundwater resources and flooding, and which includes:
 - surface and groundwater impact assessment criteria, including trigger levels for investigating any potentially adverse impacts on water resources or water quality;
 - a program to monitor and report groundwater inflows to underground workings; and
 - a program to manage and monitor impacts on groundwater bores on privately-owned land;
 - Biodiversity Management Plan, which has been prepared in consultation with the OEH, which provides for the management of the potential impacts and/or environmental consequences of the proposed second workings on flora and fauna;

- Land Management Plan, which has been prepared in consultation with any affected public authorities, to manage the potential impacts and/or environmental consequences of the proposed second workings on land in general;
- Heritage Management Plan, which has been prepared in consultation with OEH and relevant stakeholders for Aboriginal and non-Aboriginal heritage, to manage the potential environmental consequences of the proposed second workings on heritage sites or values; and

(i) include a program to collect sufficient baseline data for future Extraction Plans.

Notes:

- 1) An SMP approved by DRE prior to 30 July 2011 is taken to satisfy the requirements of this condition.
- 2) Management plans prepared under condition 22C(h) should address all potential impacts of proposed underground coal extraction on the relevant features. Other similar management plans required under this consent (eg under conditions 30 - 35 and 44 - 48) are not required to duplicate these plans or to otherwise address the impacts associated with underground coal extraction.

22D. The Applicant shall ensure that the management plans required under condition 22C(h) above include:

- (a) an assessment of the potential environmental consequences of the Extraction Plan, incorporating any relevant information that has been obtained since this consent;
- (b) a detailed description of the measures that would be implemented to remediate predicted impacts; and
- (c) a contingency plan that expressly provides for adaptive management.

First Workings

22E. The Applicant may carry out first workings within the underground mining area, other than in accordance with an approved extraction plan, provided that DRE is satisfied that the first workings are designed to remain stable and non-subsiding in the long term, except insofar as they may be impacted by approved second workings.

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

Payment of Reasonable Costs

22F. The Applicant shall pay all reasonable costs incurred by the Department to engage independent experts to review the adequacy of any aspect of an Extraction Plan.

REJECTS EMPLACEMENT STRATEGY

22G. Within 6 months of this consent commencing, the Applicant shall prepare a Life of Mine Rejects Emplacement Strategy for the development, to the satisfaction of the Director-General of DRE.

⁴SURFACE & GROUND WATER

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

Pollution of Waters

23. Except as may be expressly provided by a EPA licence, the Applicant shall comply with section 120 of the *Protection of the Environment Operations Act 1997* during the carrying out of the development.

Discharge Limits

24. Except as may be expressly provided by a EPA licence or the *Protection of the Environment Operations (Hunter River Salinity Trading Scheme) Regulation 2002*, the Applicant shall:

- (a) not discharge more than 250 ML/day from the licenced discharge point/s at the development;
- (b) ensure that the discharges from any licenced discharge point comply with the limits in Table 15:

⁴ Incorporates EPA GTA

Pollutant	Units of measure	100 percentile concentration limit
pH	pH	6.5 to 9.5
Total suspended solids	mg/litre	120

Table 15: Discharge Limits

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

Site Water Balance

25. ⁵Each year, the Applicant shall:
- review the site water balance for the development against the predictions in the EIS;
 - re-calculate the site water balance for the development;
 - assess current and forecast compliance with the rules of the Hunter River Salinity Trading Scheme; and
 - report the results in the **Annual Review**.

North Wambo Creek Diversion

26. The Applicant shall design, construct, maintain, and rehabilitate the temporary North Wambo Creek Bypass, the temporary North Wambo Creek Pipeline, and the North Wambo Creek Diversion in consultation with DRE, **NOW** and to the satisfaction of the Director-General.

Note: The Department accepts that the Applicant is not required to "rehabilitate" the temporary North Wambo Creek Bypass.

27. Within one month of completing the construction of the temporary North Wambo Creek Bypass, the temporary North Wambo Creek Pipeline, and the North Wambo Creek Diversion, the Applicant shall submit an as-executed report, certified by a practising registered engineer, to the Director-General.
28. Prior to destroying the original creek line by open cut mining, the Applicant shall demonstrate that the relevant stage of the North Wambo Creek Diversion is operating successfully from a hydrological and biological point of view to the satisfaction of DRE and the Director-General.

Note: This condition does not apply to the temporary North Wambo Creek Bypass.

Chitter Dump Dam

- 28A. The Applicant shall design and construct the Chitter Dump Dam in consultation with United Collieries Pty Ltd, and to the satisfaction of the DSC and DRE. The design of the dam must be accompanied by a detailed assessment of the potential operational and environmental risks associated with the dam, particularly in relation to potential subsidence-related impacts.

South Wambo Dam

- 28B. The Applicant shall design and construct the South Wambo Dam to the satisfaction of the DSC and DRE. The design of the dam must be accompanied by a detailed assessment of the potential operational and environmental risks associated with the dam, particularly in relation to potential subsidence-related impacts.

Monitoring

29. The Applicant shall:
- measure:
 - the volume of water discharged from the site;
 - water use on the site;
 - dam and water structure storage levels,
 - water transfers across the site; and
 - water transfers between the site and surrounding mines;
 - monitor the quality of the surface water:
 - discharged from the licenced discharge point/s at the development; and

⁵ These calculations must exclude the clean water system, including any sediment control structures, and any dams in the mine lease area which fall under the Maximum Harvestable Right Dam Capacity; include any dams that are licensable under Section 205 of the Water Act 1912, and water harvested from any non-harvestable rights dam on the mine lease area; address balances of inflows, licenced water extractions, and transfers of water from the site to other sites; include an accounting system for water budgets; and include a salt budget.

- upstream and downstream of the development;
- (c) monitor flows in the Wollombi Brook; and North Wambo, South Wambo, and Stony Creeks;
- (d) monitor the volume and quality of water inflows from each separate source to the underground and open cut workings; and
- (e) monitor regional ground water levels and quality in the alluvial and overburden aquifers during the development and at least 10 years after mining; and
- (f) periodically assess groundwater pressure response in the coal measures; to the satisfaction of EPA, NOW and the Director-General.

Site Water Management Plan

30. Before carrying out any development, the Applicant shall prepare a Site Water Management Plan for the development in consultation with DRE and NOW, and to the satisfaction of the Director-General. This plan must include:

- (a) the predicted site water balance;
- (b) the North Wambo Creek Diversion Plan;
- (c) an Erosion and Sediment Control Plan;
- (d) a Surface Water Monitoring Program;
- (e) a Ground Water Monitoring Program;
- (f) a Surface and Ground Water Response Plan; and
- (g) a strategy for the decommissioning water management structures on the site.

By the end of October 2009, the Applicant shall revise the Site Water Management Plan in consultation with DRE, EPA and NOW, and to the satisfaction of the Director-General.

Note: The North Wambo Creek Diversion Plan must also be prepared in consultation with NSW Fisheries.

31. The North Wambo Creek Diversion Plan shall include:

- (a) the detailed design and specifications of the creek diversion, including the flow control bund, cut off wall, and channel;
- (b) a revegetation program for the channel using a range of suitable native riparian and floodplain species;
- (c) the detailed design of the system that would return intercepted ground water to the alluvial aquifer downstream of the open cut;
- (d) a construction program for the creek diversion, describing how the work would be staged, and progressively integrated with the mining operations and the mine waste emplacement drainage system;
- (e) water quality, ecological and geomorphic performance criteria for the creek diversion;
- (f) a program to monitor water quality, ecological, and geomorphic integrity of the creek diversion; and
- (g) a program to inspect and maintain the creek diversion and revegetation works during the development.

Note: The Applicant may prepare and submit the North Wambo Diversion Plan on a progressive basis to reflect the relevant stages of the proposed diversion.

32. The Erosion and Sediment Control Plan shall:

- (a) be consistent with the requirements of the Department of Housing's *Managing Urban Stormwater: Soils and Construction* manual;
- (b) identify activities that could cause soil erosion and generate sediment;
- (c) describe the location, function, and capacity of erosion and sediment control structures; and
- (d) describe measures to minimise soil erosion and the potential for the migration of sediments to downstream waters.

33. ⁶The Surface Water Monitoring Program shall include:

- (a) detailed baseline data on surface water flows and quality in the Wollombi Brook, and North Wambo, South Wambo, and Stony Creeks;
- (b) surface water impact assessment criteria;
- (c) a program to monitor surface water flows and quality in the Wollombi Brook; and North Wambo, South Wambo, and Stony Creeks;
- (d) a program to monitor bank and bed stability in North Wambo, South Wambo, and Stony Creeks;
- (e) a program to monitor the quantity and quality of the vegetation in the riparian zones adjacent to North Wambo, South Wambo, and Stony Creeks; and
- (f) a program to monitor the effectiveness of the Erosion and Sediment Control Plan.

⁶ Incorporates EPA GTA

34. The Ground Water Monitoring Program shall include:
- (a) detailed baseline data on ground water levels and quality, based on statistical analysis, to benchmark the pre-mining natural variation in groundwater levels and quality;
 - (b) ground water impact assessment criteria;
 - (c) a program to monitor the volume and quality of ground water seeping into the open cut and underground mining workings;
 - (d) a program to monitor regional ground water levels and quality in the alluvial and overburden aquifers; and
 - (e) a program to investigate and monitor potential water loss from the Chitter Dump Dam and South Wambo Dam, and Montrose East Dam, including potential migration of stored water toward Wollombi Brook.
35. The Surface and Ground Water Response Plan shall include:
- (a) measures to mitigate any adverse impacts on existing water supply bores or wells;
 - (b) measures to mitigate the loss of surface water flows in the surface water streams or channel on the site;
 - (c) deleted;
 - (d) measures to mitigate the long term direct hydraulic connection between the backfilled open cut and the North Wambo Creek alluvium if the potential for an downstream adverse impact is detected;
 - (e) measures to address the decrease in throughflow rates caused by the development within the Wollombi Brook alluvium downstream of the open cut;
 - (f) measures to address any reduction in the stability or ecological quality of the North Wambo Creek Diversion below the established performance criteria;
 - (g) trigger levels for the relinquishment of water extraction rights to compensate for surface and groundwater losses from streams, channels or alluvials to open cut and underground mining workings;
 - (h) the procedures that would be followed if any unforeseen impacts are detected during the development; and
 - (i) response times for undertaking the above measures.

Surface & Sub-surface Investigation Program

36. Deleted

Independent Audit

37. Prior to seeking approval from the Department for each extraction plan, unless the Director-General directs otherwise, the Applicant shall commission a suitably qualified person, whose appointment has been approved by the Director-General, to conduct an independent audit of the subsidence, surface water, and ground water impacts of the development. This audit shall:
- (a) review the monitoring data for the development;
 - (b) identify any trends in the monitoring data;
 - (c) examine the subsidence, surface water, and ground water impacts of the development;
 - (d) compare these impacts against the relevant impact assessment criteria and predictions in the EIS; and, if necessary;
 - (e) recommend measures to reduce, mitigate, or remediate these impacts.
38. If the independent audit determines that the subsidence, surface water, and/or ground water impacts resulting from the underground mining operations are greater than those predicted in the EIS, the Applicant shall:
- (a) assess the significance of these impacts;
 - (b) investigate measures to minimise these impacts, including modifying subsequent mine plans; and
 - (c) describe what measures would be implemented to reduce, minimise, mitigate or remediate these impacts in the future;
- to the satisfaction of the Director-General.

Final Void Strategy

39. At the end of Year 7 of the development, or as directed otherwise by the Director-General, the Applicant shall prepare a Final Void Management Plan for the development, in consultation with the DRE, the Director-General and Council, and to the satisfaction of the Director-General. This Plan must:
- (a) investigate options for the future use of the final void;
 - (b) re-assess the potential groundwater impacts of the development; and
 - (c) describe what actions and measures would be implemented to:
 - minimise any potential adverse impacts associated with the final void; and
 - manage, and monitor the potential impacts of, the final void over time.

FAUNA & FLORA

Offset Strategy

40. Within the limits of current technology and best practice flora and fauna management, as determined by the Director-General in consultation with the Hunter Coalfield Flora & Fauna Advisory Committee (when established), the Applicant shall implement:
- the offset strategy summarised in Table 16; and
 - any subsequent revisions to the offset strategy, prepared in consultation with the Hunter Coalfield Flora & Fauna Advisory Committee (when established), and approved in writing by the Director-General;
- to the satisfaction of the Director-General.

Area	Size
Remnant Woodland Enhancement Area A	424 ha
Remnant Woodland Enhancement Area B	454 ha
Remnant Woodland Enhancement Area C	211 ha
Open Cut Woodland Revegetation	1,570ha
Remnant Woodland Enhancement Area D	46 ha
Remnant Woodland Enhancement Area D Extension	2 ha
Remnant Woodland Enhancement Area for the Wambo Coal Terminal	As shown in Appendix 4
Other Areas	As identified under Condition 47(b)

Table 16: Broad Targets for Offset Strategy

Notes:

- The areas specified in table 16 are shown in Appendix 4.
- The Director-General shall form the Hunter Coalfield Flora & Fauna Advisory Committee to:
 - provide on-going advice on the Flora and Fauna Management Plan; and
 - monitor and review the performance of the implementation of the Remnant Woodland Enhancement Program.
- The area of Open Cut Woodland Revegetation in Table 16 is based on the establishment of 50% woodland within the mixed woodland/pasture areas shown in the EIS, and with the agreement of the Director-General, may vary depending on the shape of the final landform and the approved mine closure plan.

Conservation Agreement

41. By the end of November 2013, unless otherwise agreed by the Director-General, the Applicant shall:
- enter into a conservation agreement/s pursuant to section 69B of the *National Parks and Wildlife Act 1974* covering all offset areas listed in Table 16 (see condition 40) and which records the Applicant's obligations under the conditions of this consent in relation to the management of these areas, and register the agreement/s pursuant to section 69F of the *National Parks and Wildlife Act 1974*; or
 - where OEH has advised in writing that it is of the view that any such offset area or part of such an area should not be subject to a conservation agreement for a period of time, then the Applicant shall by the same date cause to be registered against the land title(s) of the area/s a public positive covenant and/or restriction on the use of the land, in favour of the Director-General, requiring the Applicant to implement and observe all obligations under the conditions of this consent in relation to the management of these areas.

The conservation agreement or the public positive covenant and/or restriction on the use of land, as the case may be, shall remain in force in perpetuity in relation to the area.

Offset Conservation

- 41A. The Applicant shall not undertake any mining operations (except approved underground mining operations) or other activities within the offset areas listed in Table 16, other than:
- activities under an approved Biodiversity Management Plan, Flora & Fauna Management Plan or Heritage Management Plan;
 - environmental management, environmental monitoring or other monitoring required under this consent or under an approved management plan or monitoring program; and
 - rehabilitation activities under an approved Extraction Plan.

Hunter Coalfield Flora & Fauna Advisory Committee Contribution

42. The Applicant shall contribute a reasonable amount, up to \$20,000, each year towards the operation of the Hunter Coalfield Flora & Fauna Advisory Committee (when established).

Strategic Study Contribution

43. If, during the development, the Department commissions a strategic study into the regional vegetation corridor stretching from the Wollemi National park to the Barrington Tops National Park, then the Applicant shall contribute a reasonable amount, up to \$20,000, towards the completion of this study.

Flora & Fauna Management Plan

44. Before carrying out any development, the Applicant shall prepare a Flora and Fauna Management Plan for the development, in consultation with the Hunter Coalfield Flora and Fauna Advisory Committee (when established), and to the satisfaction of the Director-General. This plan must include:
- (a) a Vegetation Clearance Protocol;
 - (b) a Threatened Species Management Protocol;
 - (c) a Remnant Woodland Enhancement Program;
 - (d) a Flora and Fauna Monitoring Program;
 - (e) strategies to manage any subsidence impacts in the Remnant Woodland Enhancement Areas;
 - (f) strategies to avoid clearing of Warkworth Sands Endangered Ecological Community and minimise the extent of clearing in other ecological communities for gas drainage infrastructure in the Remnant Woodland Enhancement Areas, to the satisfaction of the Director General;
 - (g) strategies for the minimisation of impacts of exploration activity in the Remnant Woodland Enhancement Areas; and
 - (h) a description of who would be responsible for monitoring, reviewing, and implementing the plan.
- By the end of March 2013, the applicant shall revise the Flora and Fauna Management Plan for the development to the satisfaction of the Director-General.
45. The Vegetation Clearance Protocol shall include:
- (a) the delineation of areas of remnant vegetation to be cleared;
 - (b) progressive clearing;
 - (c) pre-clearance surveys;
 - (d) identification of fauna management strategies;
 - (e) collection of seed from the local area;
 - (f) salvage and reuse of material from the site; and
 - (g) control of weeds during clearing activities.
46. The key components of the Threatened Species Management Protocol shall include:
- (a) observations/surveys for threatened species (facilitated by the vegetation clearance surveys and Flora and Fauna Monitoring Program);
 - (b) consultation with regulatory authorities; and
 - (c) threatened species management strategies and reporting.
47. The Remnant Woodland Enhancement Program shall include:
- (a) a habitat assessment of all areas listed in Table 16, to obtain additional information on existing habitat resources and characteristics of each area;
 - (b) investigation of other areas to be included in the Program, including the *Acacia anuera* Community (Community 15) and the Southern Area;
 - (c) appropriate enhancement strategies to be implemented based on the habitat assessment including:
 - the fencing of remnants to exclude livestock;
 - control measures to minimise the occurrence of weeds;
 - control measures to minimise the occurrence of feral pests;
 - limiting vehicular traffic;
 - selective planting of native vegetation; and
 - the provision of roosting/nesting resources for fauna.
48. The Flora and Fauna Monitoring Program shall include:
- (a) a program to monitor revegetation of disturbance areas including:
 - visual monitoring to determine the need for maintenance and/or contingency measures; and

- monitoring of the quality of rehabilitation using Ecosystem Function Analysis (or a similar systems based approach) through the assessment of landscape function, vegetation dynamics and habitat complexity; and
- (b) a program to monitor the effectiveness of offset strategy in accordance with the description in Table 17.

Monitoring Component	Monitoring Description
<i>Flora</i>	<i>A number of permanent flora survey quadrats (of varying sizes to survey tree, shrubs and ground cover) should be established in woodland enhancement areas to obtain quantitative data on plant species diversity and abundance.</i>
<i>Habitat Complexity</i>	<i>Habitat complexity should be monitored using a number of permanent transects established within woodland enhancement areas. Habitat complexity parameters such as canopy cover, shrub cover, ground vegetation cover, the amount of litter, fallen logs and rocks should be surveyed.</i>
<i>Terrestrial Fauna</i>	<i>Terrestrial fauna surveys should be conducted to monitor the usage of enhancement areas by vertebrate fauna. Monitoring may include fauna species diversity and abundance or, alternatively, the use of indicator species to measure the effectiveness of enhancement measures.</i>
<i>Aquatic Fauna</i>	<i>Freshwater macro-invertebrate monitoring, including an assessment of SIGNAL A values and water quality (e.g. temperature, pH, and salinity).</i>
<i>Specific Enhancement Initiatives</i>	<i>Monitoring of specific enhancement initiatives (e.g. the provision of nesting/roosting boxes, weed control or feral animal control).</i>

Table 17: Flora & Fauna Monitoring Program

Annual Review

49. The Applicant shall:
- review the performance of the Flora and Fauna Management Plan annually, in consultation with the Hunter Coalfield Flora & Fauna Advisory Committee (when established); and
 - revise the document as necessary to take into account any recommendations from the annual review.

Independent Audit

50. Within 5 years of the date of this consent, and every 5 years thereafter, unless the Director-General directs otherwise, the Applicant shall commission, and pay the full cost of, an Independent Audit of the offset strategy. This audit must:
- be conducted by a suitably qualified, experienced, and independent person whose appointment has been endorsed by the Director-General;
 - assess the performance of the offset strategy;
 - review the adequacy of the Flora & Fauna Management Plan; and, if necessary,
 - recommend actions or measures to improve the performance of the offset strategy, and the adequacy of the Flora & Fauna Management Plan.

⁷ABORIGINAL CULTURAL HERITAGE

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

Conservation Agreement

51. Within 12 months of the commencement of this consent, the Applicant shall develop a conservation agreement (as part of the Deed of Agreement with the Minister referred to in condition 41 above) for the management of Aboriginal cultural heritage in Remnant Woodland Enhancement Area A in consultation with the Aboriginal Communities and OEH.

⁷ Incorporates EPA GTAs

Salvage

52. Before making application for section 90 consents under *the National Parks & Wildlife Act 1974*, the Applicant shall develop a targeted, strategic salvage program for the development in consultation with OEH and the Aboriginal communities.
53. Before the commencement of salvage operations, the Applicant shall ensure that a keeping place is established to house objects recovered from the salvage program.
54. The Applicant shall house the objects recovered during the salvage program in the keeping place established for the purpose.

Further Investigations

55. The Applicant shall:
 - (a) investigate the cultural significance of the corridors A – Southern and B – Middle (see map in appendix 3) in consultation with the Aboriginal Communities;
 - (b) examine the possible pathways between Remnant Woodland Enhancement Area A (which includes the camp ground associated with the bora) and Wollemi National Park to the east; and
 - (c) investigate the feasibility of reserving from future mining operations, those areas identified as being of cultural significance to the Aboriginal Communities in consultation with OEH.

Trust Fund Contribution

56. Before carrying out the development, or as agreed otherwise by the Director-General, the Applicant shall contribute \$50,000 to the Hunter Aboriginal Cultural Heritage Trust Fund for further investigations into Aboriginal cultural heritage, as defined by the Trust Deed.

Aboriginal Cultural Heritage Management

- 56A. The Applicant shall continue to consult with and involve all the registered local Aboriginal representatives in the ongoing management of the Aboriginal Cultural Heritage values at the Wambo Mining Complex. Evidence of this consultation must be collated and provided to the Director-General on request.
- 56B. In the event that surface disturbance reveals a new Aboriginal object(s) at the Wambo Mining Complex, all work shall halt in the immediate area to prevent any further impacts to the object(s). The Applicant shall contact a suitably qualified archaeologist and the registered Aboriginal representatives to determine the significance of the object(s) and to develop an appropriate management strategy. The management strategy shall be developed in accordance with the *National Parks and Wildlife Act 1974*. Management may include avoiding impact, additional investigations and/or submission of an Aboriginal Heritage Impact Permit application. The Applicant shall register the site in the Aboriginal Heritage Information Management System (AHIMS) (managed by the OEH). The management outcome for the site shall be included in the information provided to the AHIMS.
- 56C. In the event that surface disturbance reveals human remains at the Wambo Mining Complex, all works shall halt in the immediate area to prevent any further impacts to the remains. The Applicant shall immediately notify Police. No further work shall be undertaken until Police provide written authorisation. If the remains are Aboriginal, the Applicant shall also notify the OEH and the registered Aboriginal representatives. In the case of Aboriginal remains, no further work shall be undertaken until Police and the OEH provide written authorisation.
- 56D. The Applicant must prepare and implement an Aboriginal Cultural Education Program in consultation with the registered Aboriginal representatives for the induction of all personnel and contractors involved in construction at the Wambo Mining Complex. The Applicant shall keep a register of personnel and contractors that have been inducted according to the program.

⁸WAMBO HOMESTEAD COMPLEX

Section 60 Approval

57. An application under section 60 of the Heritage Act must be submitted to and approved by the Heritage Council prior to the commencement of any development on land within the State Heritage Register listing boundary for the Wambo Homestead Complex. In this regard a mine management

⁸ Incorporates NSW Heritage Council GTA

plan shall be required to accompany the application which demonstrates that the proposed underground mining shall not have adverse heritage impacts on the WHC due to land subsidence.

Conservation Measures

58. Within 12 months of the commencement of this consent, the Applicant shall prepare a conservation management plan for the Wambo Homestead Complex in accordance with Heritage Office guidelines for the consideration of the Heritage Council of NSW.
59. The conservation policies and an interpretation strategy contained in the conservation management plan are to be implemented in accordance with a timetable to be contained in the a conservation management plan.
60. A suitably qualified and experienced consultant is to be engaged by the applicant to record an oral history of the Wambo Homestead Complex having regard to the strong associations of members of the local community with the site.
61. In circumstances where safe access to the Wambo Homestead Complex is able to be provided, opportunities are to be offered to the local community to visit the site during and after its conservation.
62. Prior to the commencement of mining operations, and then at yearly intervals prior to the approved structural engineer's inspections, a photographic record is to be prepared of all elevations of all structures within the Wambo Homestead Complex. The photographs are to be of archival quality in accordance with the Heritage Office guidelines, *How to Prepare Archival Records of Heritage Items 1994*, and *Guidelines for Photographic Recording of Heritage Items, 1994*. **The photographic record is to be lodged with NSW Heritage Office, and a copy is to be submitted to the Department and the Council.**

Blasting

63. Ground vibration and air blast levels are to be monitored and recorded at a blast monitoring station to be established within the Wambo Homestead Complex for each blast within 2 km of the Wambo Homestead Complex.
64. A suitably qualified and experienced structural engineer, with expertise in vibration and blast monitoring is to be appointed to examine all monitoring records from the Wambo Homestead Complex blast monitoring station. The appointment of the structural engineer is to be approved in writing by the Director of the NSW Heritage Office.
65. Ground vibration and air blast levels experienced at the Wambo Homestead Complex blast monitoring station are not to exceed the structural damage assessment criteria prescribed by *Australian Standard AS 2187.2-1993 (or its latest version) "Explosives – Storage Transport and Use" for Sensitive and Heritage Structures* to prevent damage to the heritage items.
66. The approved structural engineer is to report to the Applicant on the monitoring results each month for blasting within 2 km of the Wambo Homestead Complex and 6 monthly for the remainder of the open cut mining operation and make recommendations to ensure the conservation and prevention of damage to the significant heritage structures. Copies of these reports are to be forwarded to the NSW Heritage Office.
67. The approved structural engineer is to inspect the Wambo Homestead Complex structures annually and as soon as practical, but no later than 3 days after blasting monitoring which exceeds the structural damage assessment criteria prescribed by AS 2187.2-1993 **(or its latest version)**. During the period between blasting monitoring being recorded which exceeds the criteria in AS 2187.2-1993 **(or its latest version)** and the engineer's inspection, ground vibration from blasting is to be limited to a level which will prevent further blasting damage. The structural engineer is to advise the applicant and the NSW Heritage Office of any action required to repair the damage.
68. The approved structural engineer is to make an assessment of whether blasting within 2km of the Wambo Homestead Complex is to cease or be managed in order to stabilise or repair the damage, and so advise the applicant and the Director of the NSW Heritage Office. If blasting has been required to cease, it is not to resume until the damage has been stabilised or repaired, and the written approval for resumption has been issued by the Director of the NSW Heritage Office.

Rehabilitation

69. Following the cessation of the use of the coal haulage road which traverses the Wambo Homestead Complex property, the land is to be returned to its former condition (pre1999) and the half palisade

fence on the southern alignment of the mounting yard, which was removed, is to be reinstated as required by the approval of the Heritage Council for the construction of the road on 12 February 1999.

Movable Heritage Items

70. The Applicant shall liaise with the Power House Museum and Museums and Galleries Foundation regarding the significance of movable heritage which shall be displaced by the proposed open cut mining and suitable repositories for the conservation and storage of any significant items.

TRAFFIC & TRANSPORT

New Access Intersection

Note: The Applicant requires RMS approval under the Roads Act 1993 for the new intersection.

71. ⁹The Applicant shall design and construct the proposed new access intersection with the Golden Highway to the satisfaction of the RMS.

¹⁰Road Closure

Note: The Applicant requires Council approval under the Roads Act 1993 prior to closing Pinegrove Road.

72. Prior to closing Pinegrove Road, the Applicant shall prepare and implement a Road Closure Management Plan in consultation with the affected landowners, and to the satisfaction of Council. This plan must describe the alternate access arrangements for any affected landowners.

Parking

73. The Applicant shall provide sufficient parking on-site for all mine-related traffic to the satisfaction of the Director-General.

Coal Haulage

74. The Applicant shall not transport more than 3 million tonnes of product coal a year from the site until a rail coal loader is commissioned in the vicinity of the site.

Note: The Applicant has submitted a separate development application to the Minister for the Wambo "Rail and Train Loading Infrastructure" (DA 306-7-2003).

75. The Applicant shall cease all coal haulage on public roads as soon as a rail coal loader is commissioned in the vicinity of the site, except in an emergency, and as agreed by the Director-General in consultation with Council.
76. If no rail loader is commissioned in the vicinity of the site within 2 years of the commencement of this consent, the Applicant shall submit a report to the Director-General outlining the alternatives to road haulage, and describing the proposed arrangements for transporting coal from the site.
77. The Applicant shall ensure that all loaded coal haulage vehicles entering or leaving the site are covered.
78. The Applicant shall pay Council 0.5 cents for each tonne of product coal hauled along Council roads to the Mount Thorley Coal Loader, in accordance with Council's Section 94 Contribution Plan.

Note: This contribution is subject to indexation by the Implicit Price Deflator, as published by the Australian Bureau of Statistics.

Monitoring

79. The Applicant shall:
- (a) keep records of the
 - amount of coal transported from the site each year; and
 - number of coal haulage truck movements generated each day by the development; and
 - (b) include these records in the **Annual Review**.

⁹ Incorporates RMS GTA

¹⁰ Incorporates Council GTA

Traffic Management Plan

80. The Applicant shall prepare and implement a Traffic Management Plan in consultation with Council, and to the satisfaction of the **RMS** for the proposed blasting activities that require the temporary periodic closure of the Golden Highway. This plan shall ensure that adequate warning is given to road users prior to blasting, and that follow up inspections are made to ensure that public roads are safe and clear of debris.

VISUAL IMPACT

Visual Amenity

81. The Applicant shall implement measures to mitigate visual impacts including:
- (a) design and construction of development infrastructure in a manner that minimises visual contrasts; and
 - (b) progressive rehabilitation of mine waste rock emplacements (particularly outer batters), including partial rehabilitation of temporarily inactive areas.
82. The Applicant shall investigate and where feasible implement the following measures at locations assessed in the EIS as having a high potential visual impact:
- (a) implement landscaping works in consultation with affected rural residents (see Condition 83); and/or
 - (b) place and maintain visual screens between development infrastructure and the viewing location.
83. If a landowner of any dwelling assessed in the EIS as having a high potential visual impact requests the Applicant in writing to investigate ways to minimise the visual impact of the development on his/her dwelling, the Applicant shall:
- (a) **within 28 days** of receiving this request, commission a suitably qualified person whose appointment has been approved by the Director-General, to investigate ways to minimise the visual impacts of the development on the landowner's dwelling; and
 - (b) give the landowner a copy of the visual impact mitigation report within 14 days of receiving this report.

If both parties agree on the measures that should be implemented to minimise the visual impact of the development, then the Applicant shall implement these measures to the satisfaction of the Director-General.

If the Applicant and the landowner disagree on the measures that should be implemented to minimise the visual impact of the development, 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 2).

Overburden Dumps

84. The Applicant shall construct the overburden emplacements generally in accordance with the EIS, and to the satisfaction of **DRE**.

Lighting Emissions

85. The Applicant shall take all practicable measures to mitigate off-site lighting impacts from the development.
86. **Unless otherwise agreed to by the Director-General, all external lighting associated with the development shall comply with *Australian Standard AS4282 (INT) 1995 – Control of Obtrusive Effects of Outdoor Lighting*.**

GREENHOUSE GAS

87. **For the life of the development, the Applicant shall:**
- (a) **monitor the greenhouse gas emissions generated by the development;**
 - (b) **investigate ways to reduce greenhouse gas emissions generated by the development; and**
 - (c) **report on greenhouse gas monitoring and abatement measures in the **Annual Review**, to the satisfaction of the Director-General.**

WASTE MINIMISATION

88. For the life of the development, the Applicant shall:
- (a) monitor the amount of waste generated by the development;
 - (b) investigate ways to minimise waste generated by the development;
 - (c) implement reasonable and feasible measures to minimise waste generated by the development; and
 - (d) report on waste management and minimisation in the **Annual Review**, to the satisfaction of the Director-General.

HAZARDS MANAGEMENT

Spontaneous Combustion

89. The Applicant shall:
- (a) take the necessary measures to prevent, as far as is practical, spontaneous combustion on the site; and
 - (b) manage any spontaneous combustion on-site to the satisfaction of **DRE**.

Dangerous Goods

90. The Applicant shall ensure that the storage, handling, and transport of:
- (a) dangerous goods is done in accordance with the relevant *Australian Standards*, particularly *AS1940* and *AS1596*, and the *Dangerous Goods Code*; and
 - (b) explosives are managed in accordance with the requirements of **DRE**.
91. Before carrying out any development, the Applicant shall update the Safety Management System covering all operations on the site, including the safe storage of ammonium nitrate, to the satisfaction of the Director-General.

BUSHFIRE MANAGEMENT

92. The Applicant shall:
- (a) ensure that the development is suitably equipped to respond to any fires on-site; and
 - (b) assist the Rural Fire Service and emergency services as much as possible if there is a fire on-site during the development.
93. Before carrying out any development, the Applicant shall prepare a Bushfire Management Plan for the site, to the satisfaction of Council and the Rural Fire Service.

REHABILITATION

Rehabilitation Objectives

94. The Applicant shall rehabilitate the Wambo Mining Complex to the satisfaction of the Executive Director Mineral Resources. The rehabilitation must be generally in accordance with the proposed rehabilitation strategy described by the documents listed in Condition 2 of Schedule 3 and the objectives in Table 18.

Table 18: Rehabilitation Objectives

Area/Doman	Rehabilitation Objectives
Mine site (as a whole), including the final void	Safe, stable & non-polluting
Surface infrastructure	To be decommissioned and removed, unless the Executive Director Mineral Resources agrees otherwise
Community	Ensure public safety Minimise the adverse socio-economic effects associated with mine closure

Operating Conditions

- 94A. The Applicant shall:
- (a) develop a detailed soil management protocol that identifies procedures for:

- comprehensive soil surveys prior to soil stripping;
 - assessment of top-soil and sub-soil suitability for mine rehabilitation; and
 - annual soil balances to manage soil handling including direct resspreading and stockpiling;
- (b) maximise the salvage of suitable top-soils and sub-soils and biodiversity habitat components such as bush rocks, tree hollows and fallen timber for rehabilitation of disturbed areas within Wambo Mining Complex and for enhancement of biodiversity offset areas;
- (c) ensure that coal reject or any potentially acid forming interburden materials must not be emplaced at elevations within the pit shell or out of pit emplacement areas where they may promote acid or sulphate species generation and migration beyond the pit shell or out of pit emplacement areas; and
- (d) ensure that no dirty water can drain from an out of pit emplacement area to any offsite watercourse or to any land beyond the lease boundary.

Progressive Rehabilitation

- 94B. The Applicant shall rehabilitate the Wambo Mining Complex progressively, that is, as soon as reasonably practicable following disturbance. All reasonable and feasible measures must be taken to minimise the total area exposed for dust generation at any time. Interim rehabilitation strategies shall be employed when areas prone to dust generation cannot yet be permanently rehabilitated.

Note: It is accepted that some parts of the site that are progressively rehabilitated may be subject to further disturbance at some later stage of the project.

Rehabilitation Management Plan

- 94C. The Applicant shall prepare and implement a Rehabilitation Management Plan for the Wambo Mining Complex to the satisfaction of the Executive Director Mineral Resources. This plan must:
- (a) be prepared in consultation with the Department, NOW, OEH, Council and the CCC;
 - (b) be submitted to the Executive Director Mineral Resources by the end of June 2013;
 - (c) be prepared in accordance with any relevant DRE guideline;
 - (d) describe how the rehabilitation of the site would be integrated with the implementation the biodiversity offset strategy;
 - (e) include detailed performance and completion criteria for evaluating the performance of the rehabilitation of the site, and triggering remedial action (if necessary);
 - (f) describe the measures that would be implemented to ensure compliance with the relevant conditions of this consent, and address all aspects of rehabilitation including mine closure, final landform, and final land use;
 - (g) include interim rehabilitation where necessary to minimise the area exposed for dust generation;
 - (h) include a program to monitor, independently audit and report on the effectiveness of the measures, and progress against the detailed performance and completion criteria; and
 - (i) build to the maximum extent practicable on the other management plans required under this consent.

MINE EXIT STRATEGY

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

SCHEDULE 5
ADDITIONAL PROCEDURES FOR AIR QUALITY & NOISE MANAGEMENT

Notify Landowners

1. If the air dispersion and/or noise model predictions in the documents listed in condition 2 of schedule 3 identify that the air pollution and/or noise generated by the development are likely to be greater than the air quality and/or noise impact assessment criteria in conditions 2 and 6 of schedule 4, then the Applicant shall notify the relevant landowners and/or existing or future tenants (including tenants of mine-owned properties) accordingly before it carries out any development.
2. If the results of the air quality and/or noise monitoring required in schedule 4 identify that the air pollution and/or noise generated by the development are greater than the air quality and/or noise impact assessment criteria in schedule 4, then the Applicant shall notify the relevant landowners and/or existing or future tenants (including tenants of mine-owned properties) **as soon as practicable after identifying the exceedance**.
3. Before carrying out any development, the Applicant shall develop a procedure in consultation with EPA and NSW Health and approved by the Director-General, for notifying landowners and tenants referred to in condition 1. This procedure must ensure that:
 - (a) all existing and future tenants are advised in writing about:
 - air quality impacts likely to occur at the residence during the operational life of the mine; and
 - likely health and amenity impacts associated with exposure to particulate matter;
 - (b) the written advice in (a) is based on current air quality monitoring data, dispersion modelling results, research and literature; and
 - (c) there is an ongoing process for providing current air quality monitoring data, dispersion modelling results, research and literature to the tenants.

Independent Review

4. If a landowner considers the development to be exceeding the air quality and/or noise impact assessment criteria listed in schedule 4 at his/her dwelling, or at any proposed dwelling on his/her vacant land, then he/she may ask the Applicant for an independent review of the air pollution and/or noise impacts of the development on his/her dwelling, or proposed dwelling.

If the Director-General is satisfied that an independent review is warranted, the Applicant shall:

- (a) consult with the landowner to determine his/her concerns; and
- (b) commission a suitably qualified person – whose appointment has been approved by the Director-General – to conduct air quality and/or noise monitoring at the relevant dwelling to determine whether the development is complying with the relevant impact assessment criteria, and identify the source(s) and scale of any air quality and/or noise impact at the dwelling, and the development's contribution to this impact.

Within 14 days of receiving the results of this independent review, the Applicant shall give a copy of these results to the Director-General and landowner.

5. If the independent review (referred to in condition 4) determines that the development is complying with the relevant impact assessment criteria listed in schedule 4 at the dwelling, then the Applicant may discontinue the independent review with the approval of the Director-General.
6. If the independent review (referred to in condition 4) determines that the development is not complying with the relevant impact assessment criteria listed in schedule 4 at the dwelling, and that the development is primarily responsible for this non-compliance, then the Applicant shall:
 - (a) take all practicable measures, in consultation with the landowner, to ensure that the development complies with the relevant impact assessment criteria; and conduct further air quality and/or noise monitoring at the dwelling to determine whether these measures ensure compliance; or
 - (b) secure a written agreement with the landowner to allow exceedances of the air quality and/or noise impact assessment criteria listed in schedule 4.

If the additional monitoring referred to above subsequently determines that the development is complying with the relevant impact assessment criteria listed in schedule 4 at the dwelling, then the Applicant may discontinue the independent review with the approval of the Director-General.

If the measures referred to in (a) do not ensure compliance with the air quality and/or noise land acquisition criteria listed in schedule 4 at the dwelling, and the Applicant cannot secure a written agreement with the landowner to allow exceedances of the air quality and/or noise impact assessment criteria listed in schedule 4, then the Applicant shall, upon receiving a written request

from the landowner, acquire all or part of the landowner's land in accordance with the procedures in conditions 9-11 below.

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

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

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

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

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

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

Land Acquisition

9. Within 6 months of receiving a written request from the landowner, the Applicant shall pay the landowner:
- (a) the current market value of the landowner's interest in the land at the date of this written request, as if the land was unaffected by the development the subject of the DA, having regard to the:
 - existing and permissible use of the land, in accordance with the applicable planning instruments at the date of the written request; and
 - presence of improvements on the land and/or any approved building or structure which has been physically commenced at the date of the landowner's written request, and is due to be completed subsequent to that date;
 - (b) the reasonable costs associated with:
 - relocating within the Singleton local government area, or to any other local government area determined by the Director-General;
 - 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 within 6 months of receiving this written request, the Applicant and landowner cannot agree on the acquisition price of the land, and/or the terms upon which the land is to be acquired, then either party may refer the matter to the Director-General for resolution.

Upon receiving such a request, the Director-General shall request the **President of the NSW Division of the Australian Property Institute** 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.

If either party disputes the independent valuer's determination, then the independent valuer must refer the matter back to the Director-General.

Upon receiving such a referral, the Director-General shall appoint a panel to determine a fair and reasonable acquisition price for the land, and/or the terms upon which the land is to be acquired, comprising the:

- (i) appointed independent valuer,
- (ii) Director-General or nominee, and
- (iii) President of the Law Society of NSW or nominee.

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

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

10. The Applicant shall bear the costs of any valuation or survey assessment requested by the independent valuer, panel, or the Director-General and the costs of determination referred to in Condition 9.
11. If the Applicant and landowner agree that only part of the land should be acquired, then the Applicant shall pay all reasonable costs associated with obtaining Council approval for any plan of subdivision, and registration of the plan at the Office of the Registrar-General.

**SCHEDULE 6
ENVIRONMENTAL MANAGEMENT, MONITORING, AUDITING & REPORTING**

ENVIRONMENTAL MANAGEMENT STRATEGY

1. Before carrying out any development, the Applicant shall prepare and implement an Environmental Management Strategy for the development to the satisfaction of the Director-General. This strategy must:
 - (a) provide the strategic context for environmental management of the development;
 - (b) identify the statutory requirements that apply to the development;
 - (c) describe in general how the environmental performance of the development would be monitored and managed during the development;
 - (d) describe the procedures that would be implemented to:
 - keep the local community and relevant agencies informed about the operation and environmental performance of the development;
 - receive, handle, respond to, and record complaints;
 - resolve any disputes that may arise during the course of the development;
 - respond to any non-compliance;
 - manage cumulative impacts; and
 - respond to emergencies; and
 - (e) describe the role, responsibility, authority, and accountability of all the key personnel involved in environmental management of the development.
2. Within 14 days of the Director-General's approval, the Applicant shall:
 - (a) send copies of the approved strategy to the relevant agencies, Council, and the CCC; and
 - (b) ensure the approved strategy is publicly available during the development.

Adaptive Management

3. The Applicant must assess and manage project-related risks to ensure that there are no exceedances of the criteria and/or performance measures in schedule 4. Any exceedance of these criteria and/or performance measures constitutes a breach of this consent and may be subject to penalty or offence provisions under the EP&A Act or EP&A Regulation.

Where any exceedance of these criteria and/or performance measures has occurred, the Applicant must, at the earliest opportunity:

- (a) take all reasonable and feasible steps to ensure that the exceedance ceases and does not recur;
- (b) consider all reasonable and feasible options for remediation (where relevant) and submit a report to the Department describing those options and any preferred remediation measures or other course of action; and
- (c) implement remediation measures as directed by the Director-General, to the satisfaction of the Director-General.

Management Plan Requirements

4. The Applicant shall ensure that the management plans required under this consent are prepared in accordance with any relevant guidelines, and include:
 - (a) detailed baseline data;
 - (b) a description of:
 - the relevant statutory requirements (including any relevant consent, 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 Wambo Mining Complex;
 - 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 Wambo Mining Complex 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

5. By the end of March each year, the Applicant shall submit an annual review of the environmental performance of the development to the satisfaction of the Director-General. This review must:
- describe the development (including any rehabilitation) that was carried out in the previous calendar year, and the development that is proposed to be carried out over the current calendar year;
 - include a comprehensive review of the monitoring results and complaints records of the development over the previous calendar year, which includes a comparison of these results against:
 - the relevant statutory requirements, limits or performance measures/criteria;
 - the monitoring results of previous years; and
 - the relevant predictions in the EIS;
 - identify any non-compliance over the previous calendar year, and describe what actions were (or are being) taken to ensure compliance;
 - identify any trends in the monitoring data over the life of the development;
 - identify any discrepancies between the predicted and actual impacts of the development, and analyse the potential cause of any significant discrepancies; and
 - describe what measures will be implemented over the current calendar year to improve the environmental performance of the development.

REVISION OF STRATEGIES, PLANS AND PROGRAMS

6. Within 3 months of:
- the submission of an annual review under Condition 5 above;
 - the submission of an audit report under Condition 7 below;
 - the submission of an incident report under Condition 10 below; or
 - any modification to the conditions of this consent, (unless the conditions require otherwise),
- the Applicant shall review, and if necessary revise, the strategies, plans, and programs required under this consent to the satisfaction of the Director-General.

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

INDEPENDENT ENVIRONMENTAL AUDIT

7. Every 3 years, unless the Director-General directs otherwise, the Applicant shall commission and pay the full cost of an Independent Environmental Audit of the development. This audit must:
- be conducted by a suitably qualified, experienced and independent team of experts whose appointment has been endorsed by the Director-General;
 - include consultation with the relevant agencies;
 - assess the environmental performance of the development and assess whether it is complying with the requirements in this consent and any relevant EPL or Mining Lease (including any assessment, plan or program required under these consents/approvals);
 - review the adequacy of strategies, plans or programs required under the abovementioned consents/approvals; and
 - recommend appropriate measures or actions to improve the environmental performance of the development, and/or any assessment, plan or program required under the abovementioned consents.

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

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

COMMUNITY CONSULTATIVE COMMITTEE

8. Before carrying out any development, the Applicant shall establish a new Community Consultative Committee to oversee the environmental performance of the development. This committee shall:
- be comprised of:
 - 2 representatives from the Applicant, including the person responsible for environmental management at the mine;
 - 1 representative from Council; and
 - at least 3 representatives from the local community,

- whose appointment has been approved by the Director-General in consultation with the Council;
 - (b) be chaired by the representative from Council or by a third party as approved by the Director-General;
 - (c) meet at least twice a year; and
 - (d) review and provide advice on the environmental performance of the development, including any construction or environmental management plans, monitoring results, audit reports, or complaints.
9. The Applicant shall, at its own expense:
- (a) ensure that 2 of its representatives attend the Committee's meetings;
 - (b) provide the Committee with regular information on the environmental performance and management of the development;
 - (c) provide meeting facilities for the Committee;
 - (d) arrange site inspections for the Committee, if necessary;
 - (e) take minutes of the Committee's meetings;
 - (f) make these minutes available to the public for inspection within 14 days of the Committee meeting, or as agreed to by the Committee;
 - (g) respond to any advice or recommendations the Committee may have in relation to the environmental management or performance of the development;
 - (h) forward a copy of the minutes of each Committee meeting, and any responses to the Committee's recommendations to the Director-General within a month of the Committee meeting.

REPORTING

Incident Reporting

10. The Applicant shall notify at the earliest opportunity, the Director-General and any other relevant agencies of any incident that has caused, or threatens to cause, material harm to the environment. For any other incident associated with the project, the Applicant shall notify the Director-General and any other relevant agencies as soon as practicable after the Applicant becomes aware of the incident. Within 7 days of the date of the incident, the Applicant shall provide the Director-General and any relevant agencies with a detailed report on the incident, and such further reports as may be requested.

Regular Reporting

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

ACCESS TO INFORMATION

12. From the end of June 2011, the Applicant shall:
- (a) make copies of the following publicly available on its website:
 - the documents referred to in Condition 2 of Schedule 3;
 - all current statutory consents for the development;
 - all approved strategies, plans and programs required under the conditions of this consent;
 - a comprehensive summary of the monitoring results of the development, reported in accordance with the specifications in any conditions of this consent, or any approved plans and programs;
 - a complaints register, updated on a monthly basis;
 - minutes of CCC meetings;
 - the annual reviews of the development;
 - any independent environmental audit of the development, and the Applicant'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.

Online Communication of Operational Responses and Noise and Air Quality Monitoring

13. The Applicant shall, by the end of June 2013:
- (a) make the following information for the Wambo Mining Complex publicly available on its website, on a daily basis and in a clearly understandable form:
 - daily weather forecasts for the coming week;
 - proposed operational responses to these weather forecasts;

- real-time noise and air quality monitoring data (subject to any necessary caveats); and
 - any operational responses that were taken in response to the noise and air quality monitoring data, and
- (b) make provision on its website for the provision of on-line and/or email comments by members of the community regarding this information, to the satisfaction of the Director-General.

APPENDIX 1 SCHEDULE OF LAND

Freehold Land

DESCRIPTION	
Lot 79 DP753792	Lot 181 DP823775
Lot 57 DP753817	Lot 177 DP823775
Lot 160 DP753817	Lot 118 DP753792
Lot 18 DP753817	Lot 95 DP753792
Lot 71 DP753817	Lot 2 DP709722
Lot 161 DP753817	Por 131 DP753792
Lot 49 DP753792	Lot 2 DP616303
Lot 50 DP753792	Lot 1 DP720705
Lot 51 DP753792	Lot 2 DP720705
Lot 52 DP753792	Lot 3 DP720705
Lot 58 DP753792	Lot 4 DP720705
Lot 66 DP753792	Lot 45 DP753792
Lot 67 DP753792	Lot 46 DP753792
Lot 62 DP753792	Lot 4 DP542226
Lot 63 DP753792	Lot 5 DP542226
Lot 64 DP753792	Lot 1 DP241316
Lot C DP33149	Lot 7 DP3030
Lot 22 DP753817	Lot 23 DP3030
Lot A DP33149	Lot 92 DP755267
Lot 79 DP753821	Lot 109 DP753792
Lot 19 DP3030	Lot 110 DP753792
Lot 129 DP755267	Lot 111 DP753792
Lot 22 DP755267	Lot 112 DP753792
Lot 1 DP616303	Lot 103 DP753792
Lot 100 DP753792	Lot 104 DP753792
Lot 101 DP753792	Lot 82 DP548749
Lot 38 DP753792	Lot 83 DP548749
Lot 39 DP753792	Lot 1 DP110084
Lot 60 DP753792	Lot 2 DP110084
Lot 61 DP753792	Lot B DP33149
Lot 1 DP709722	Lot 113 DP753817
Lot 55 DP753792	Lot 2 DP617852

Crown Land Descriptions

Crown lands have been identified and numbered on the attached plan (PD003). Council controlled roads have been identified using geographical names where possible. Council and Crown roads and sections of Wollombi Brook with no real property identifier have their location described relative to adjoining lots.

Crown Land

1. Lot 170 DP 823775
2. Lot 208 DP 753817

Travelling Stock and Camping Reserve No. 5294

3. Lot 175 DP 823775

Council Roads

4. Wambo Mine Road
5. Road within Lot 1 DP 616303

6. Pine Grove Road
7. Road bounded by Lots 7,19 & 23 DP 3030, Lots 22 & 129 DP755267, Lot 83 DP548749 and Lot 1 DP 110084

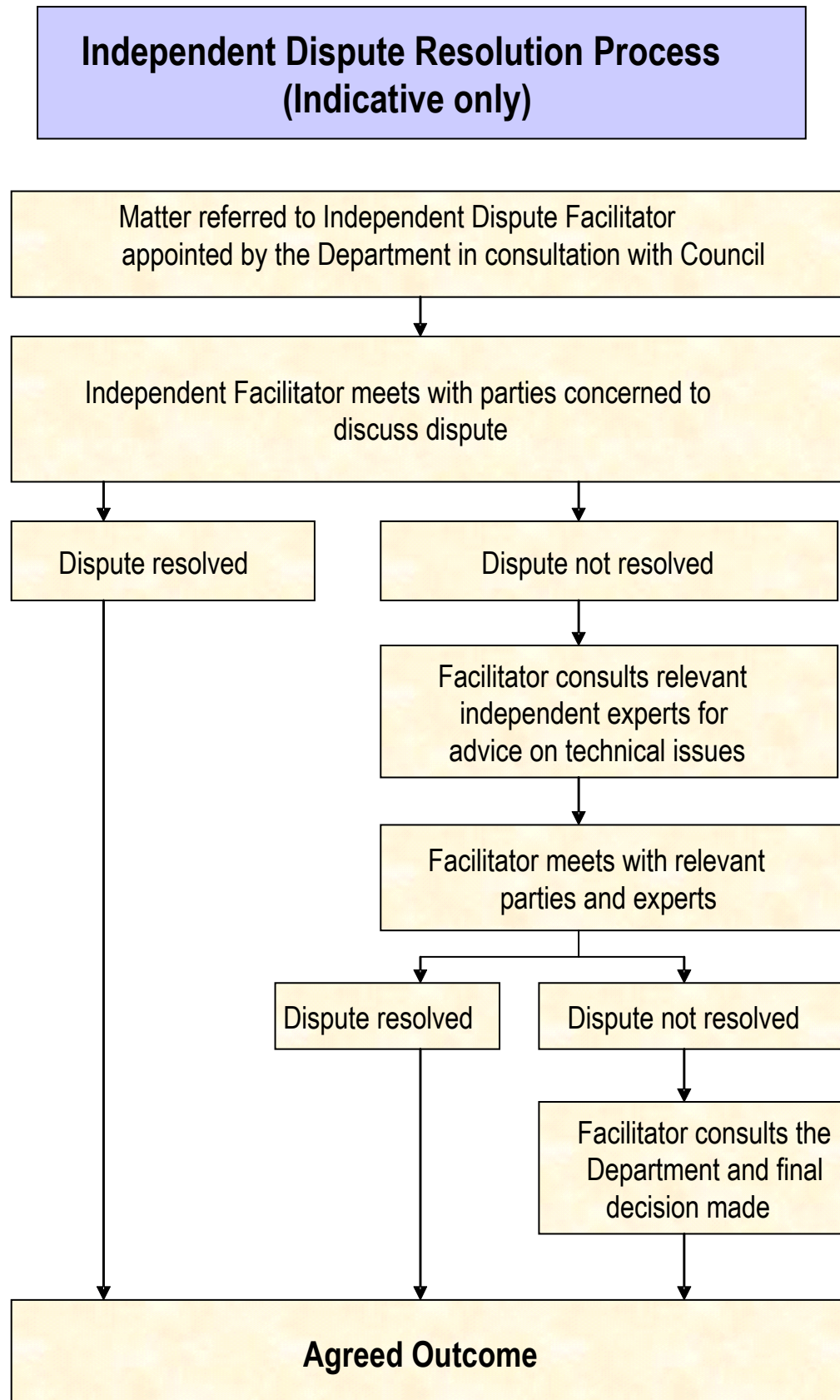
Crown Roads

8. Bounded by Lots 92 & 129 DP 755267
9. Bounded by Lots 4 & 5 DP 542226, Lots 2 & 3 DP720705 and Lot 2 DP 616303
10. Bounded by Lots 38, 55, 61, 100, 101, 149 DP 753792, Lot 2 DP617852 and Lot 1 DP 616303
11. Within Lot 2 DP617852
12. Bounded by Lots 175, 177, 181 DP 823775
13. Bounded by Lot 177 DP 823775, 60, 62-64, 95, 118 DP 753792, Lot 2 DP617852
14. Bounded by Lots 170, 177 DP 823775, 49-51, 58, 118 DP 753792
15. Bounded by Lots 170 DP 823775, 49, 50, 52, 79 DP 753792, 18, 160, 161 DP753817
16. Bounded by Lots A & B DP 33149, 22, 66, 67, 71 DP 753817
17. Adjoining to the East and North Lot 79 DP753821

Wollombi Brook

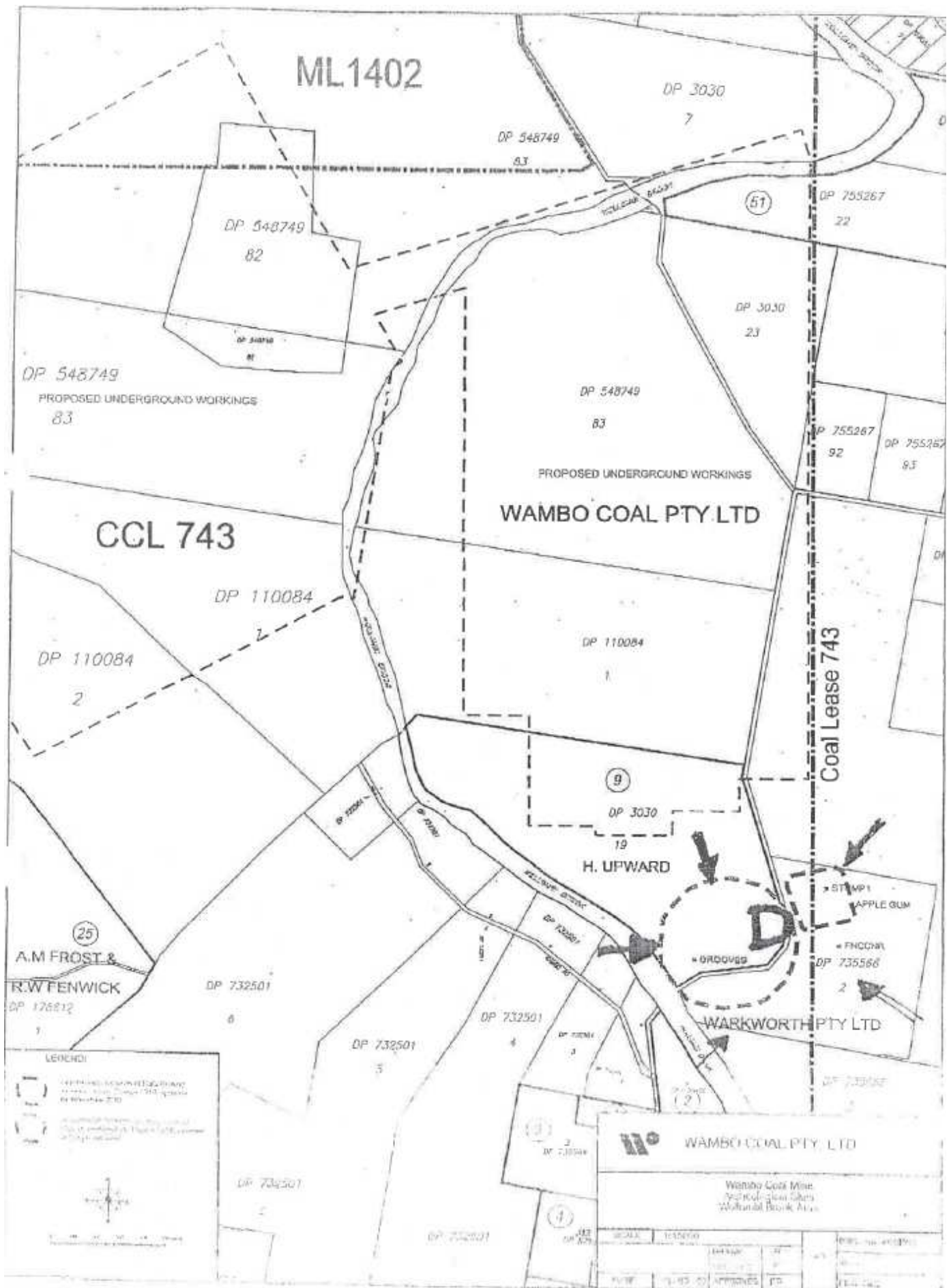
18. Bounded by Lots 22 DP 755267, Lot 83 DP 548749, Lot 1 DP 110084, Lot 1 DP 241316, Lot 7 DP 3030

**APPENDIX 2
INDEPENDENT DISPUTE RESOLUTION PROCESS**



APPENDIX 3
MAP FOR ABORIGINAL CULTURAL HERITAGE INVESTIGATIONS
(See Condition 55)





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