

Notice of Modification

Section 75W of the *Environmental Planning & Assessment Act 1979*

As delegate of the Minister for Planning, the Planning Assessment Commission modifies the development consent referred to in Schedule 1, as set out in Schedule 2.

These conditions are required to:

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



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Sydney

20 June 2016

SCHEDULE 1

The development consent for the Ashton Coal Project (DA 309-11-2001-i)

SCHEDULE 2

1. Replace the paragraph headed "**Land**" in Schedule 1 with the following:

Land: See Appendix 1

2. Replace all words after the paragraph headed "**State Significant Development**" in Schedule 1 with the following:

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DEFINITIONS

Annual Review	The review required by condition 3 of Schedule 5
Applicant	Ashton Coal Operations Pty Limited, or its successors in title
Ashton Mine Complex	The operation of the development, either solely or in combination with the Ashton South East Open Cut Project
Ashton South East Open Cut Project	The development approved under MP 08_0182, as may be modified from time to time
BCA	Building Code of Australia
Biodiversity Offset Strategy	The conservation and enhancement program outlined in Table 9, described in the EA, and depicted conceptually in the figure in Appendix 7
Built features	Includes any building or work erected or constructed on land, and includes dwellings and infrastructure such as any formed road, street, path, walk, or driveway; any pipeline, water, sewer, telephone, gas or other service main
CCC	Community Consultative Committee
CHPP	Coal Handling and Preparation Plant
Conditions of this consent	Conditions contained in Schedules 2 to 5
Council	Singleton Shire Council
Day	The period from 7am to 6pm on Monday to Saturday, and 8am to 6pm on Sundays and Public Holidays
Department	Department of Planning & Environment
Development	The development as described in the MOD 5 application and EA, and to the extent not covered by these, the previous EIAs
DPI	Department of Primary Industries
DPI - Water	Department of Primary Industries – Water
DRE	Division of Resources and Energy, within the NSW Department of Industry
EA	Environmental Assessment titled <i>Ashton Coal South East Open Cut Project & Modification to the Existing ACP Consent – Environmental Assessment Report</i> (5 volumes), dated November 2009, including the Response to Submissions
EEC	Endangered ecological community, as defined under the <i>Threatened Species Conservation Act 1995</i>
Environmental consequences	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; etc
EPA	Environment Protection Authority, or its successor
EP&A Act	<i>Environmental Planning and Assessment Act 1979</i>
EP&A Regulation	<i>Environmental Planning and Assessment Regulation 2000</i>
EPL	Environment Protection Licence issued under the POEO Act
Evening	The period from 6pm to 10pm
Feasible	Feasible relates to engineering considerations and what is practical to build or carry out
First workings	Development of main headings, longwall gate roads, related cut throughs and the like
Incident	A set of circumstances that causes or threatens to cause material harm to the environment, and/or breaches or exceeds the limits or performance measures/criteria in this consent
Land	In general, the definition of land is consistent with the definition in the EP&A Act. However, in relation to the noise and air quality conditions in Schedules 3 and 4 of this consent it means the whole of a lot, or contiguous (or nearby) lots owned by the same landowner, in a current plan registered at the Land Titles Office at the date of this consent
Material harm to the environment	Harm to the environment is material if it involves actual or potential harm to the health or safety of human beings or to ecosystems that is not trivial
Mining operations	Includes all overburden removal; open cut and underground coal extraction; and processing, handling, storage and transportation of coal carried out on the site
Minister	Minister for Planning & Environment, or delegate
Mitigation	Activities associated with reducing the impacts of the development
MOD 5	Modification request DA 309-11-2001 MOD 5, duly lodged on 11 March 2009 and as described in the EA.
MSB	Mine Subsidence Board
Negligible	Small and unimportant, such as to be not worth considering

Night	The period from 10pm to 7am on Monday to Saturday, and 10pm to 8am on Sundays and Public Holidays
OEH	Office of Environment & Heritage
POEO Act	<i>Protection of the Environment Operations Act 1997</i>
Previous EIAs	The previous environmental impact statement and other environmental impact assessments for the development, as listed in Appendix 4
Privately-owned land	Land that is not owned by a public agency or a mining company (or its subsidiary)
Public infrastructure	Linear and related infrastructure that provides services to the general public, such as roads, railways, water supply, electricity, gas supply, drainage, sewerage, telephony, telecommunications etc
Reasonable	Reasonable relates to the application of judgement in arriving at a decision, taking into account: mitigation benefits, cost of mitigation versus benefits provided, community views and the nature and extent of potential improvements
Rehabilitation	The treatment or management of land disturbed by the development for the purpose of establishing a safe, stable and non-polluting environment
Response to Submissions	The Applicant's responses to issues raised in submissions, including those titled <i>Responses to NSW Planning Letter of 23 November 2009</i> , undated, <i>Response to Submissions</i> , dated June 2010, <i>Conceptual Alluvial Groundwater Management Strategy</i> , dated November 2010, and <i>Additional Information and Project Revisions</i> , dated January 2011
RMS	Roads and Maritime Services
ROM	Run-of-mine
Safe, serviceable & repairable	Safe means no danger to users who are present, serviceable means available for its intended use, and repairable means damaged components can be repaired economically
Second workings	Extraction of coal from longwall panels, mini-wall panels or pillar extraction
Secretary	Secretary of the Department, or any person authorised to act on their behalf
Site	The land referred to in Schedule 1, and listed in Appendix 1
Subsidence	The totality of subsidence effects, subsidence impacts and environmental consequences of subsidence impacts
Subsidence effects	Deformation of the ground mass due to mining, being all mining-induced ground movements, including both 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
Statement of Commitments	The Applicant's commitments in Appendix 3

SCHEDULE 2 ADMINISTRATIVE CONDITIONS

OBLIGATION TO MINIMISE HARM TO THE ENVIRONMENT

1. In addition to meeting the specific performance criteria established under this consent, Applicant must implement all reasonable and feasible measures to prevent and/or minimise any harm to the environment that may result from the construction, operation, or rehabilitation of the development.

TERMS OF CONSENT

2. The Applicant must:
 - (a) carry out the development generally in accordance with the EA, previous EIAs and the Development Layout Plans; and
 - (b) comply with the conditions of this consent and the Statement of Commitments.

Notes:

- *The Development Layout Plans are shown in Appendix 2.*
- *The Statement of Commitments is reproduced in Appendix 3.*
- *Previous EIAs for the development are listed in Appendix 4.*

3. If there is any inconsistency between the documents covered by condition 2(a) above then the most recent document shall prevail to the extent of the inconsistency.
4. The Applicant must comply with any reasonable requirement/s of the Secretary arising from the Department's assessment of:
 - (a) any reports, strategies, plans, programs, reviews, audits or correspondence that are submitted by the Applicant in accordance with this consent; and
 - (b) the implementation of any actions or measures contained in these documents.

LIMITS ON CONSENT

Mining Operations

5. The Applicant may carry out mining operations on the site until 26 February 2024, or a period of 12 years following recommencement of open cut mining operations (including overburden removal) at the Ashton Mine Complex, whichever is the longer.

Notes:

- *Under this consent, the Applicant is required to rehabilitate the site and perform additional undertakings to the satisfaction of both the Secretary and DRE. Consequently, this consent will continue to apply in all other respects other than the right to conduct mining operations until the rehabilitation of the site and these additional undertakings have been carried out satisfactorily.*
- *Re-handling/reshaping of previously emplaced overburden is not subject to this condition.*

Coal Production

6. The Applicant must not extract more than:
 - (a) 5.45 million tonnes of ROM coal from the development in a calendar year; and
 - (b) 8.6 million tonnes of ROM coal from the Ashton Mine Complex (in total) in a calendar year.

Coal Transport

7. The Applicant must:
 - (a) not transport coal from the site by road (except in an emergency situation and with the prior approval of the Secretary);
 - (b) not transport any coal to the Macquarie Generation coal conveyor by internal or public road; and
 - (c) restrict coal processing for the Ashton Mine Complex and transport to/from the CHPP to a maximum of:
 - 8.6 million tonnes of ROM coal per calendar year; and
 - 5 train movements per day, averaged over a calendar month.

Note: For the purposes of this condition, each train entering and exiting the site is classified as 2 train movements; and a day refers to the 24 hours from midnight to midnight the next day.

Hours of Operation

8. The Applicant must restrict surface construction works on the site to:
 - (a) day periods only, in the case of construction of gas wells; and
 - (b) day and evening periods only, in the case of all other construction activities.

The Applicant may undertake minor surface construction works outside of these hours in an emergency or where continuous operations are required (for example, raise boring), following the approval of the Secretary.

Note: Underground mining operations, ROM coal handling, CHPP operation, conveyor transport to and from the CHPP and train loading may be undertaken at any time.

Blasting

9. Unless the Secretary agrees otherwise, the Applicant must not carry out any blasting on the site for open cut mining operations.

STRUCTURAL ADEQUACY

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

Notes:

- *Under Part 4A of the EP&A Act, the Applicant is required to obtain construction and occupation certificates for the proposed building works;*
- *Part 8 of the EP&A Regulation sets out the requirements for the certification of the development;*
- *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 MSB's approval before constructing any improvements on the site.*

DEMOLITION

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

INFRASTRUCTURE

Protection of Public Infrastructure

12. Unless the Applicant and the applicable authority agree otherwise, the Applicant must:
 - (a) repair, or pay the full costs associated with repairing, any public infrastructure that is damaged by the development; and
 - (b) relocate, or pay the full costs associated with relocating, any public infrastructure that needs to be relocated as a result of the development,except where impacts to such works have otherwise been fully compensated through the compensation provisions of the *Mining Act 1992*.

Note: This condition does not apply to Lemington Road or Brunkers Lane, which have been separately addressed under condition 36 of Schedule 3.

OPERATION OF PLANT AND EQUIPMENT

13. The Applicant must ensure that all plant and equipment used at the site is:
 - (a) maintained in a proper and efficient condition; and
 - (b) operated in a proper and efficient manner.

RELATIONSHIP BETWEEN APPROVALS

14. Requirements, responsibilities or permissions under this development consent do not duplicate equivalent requirements, responsibilities or permissions under the project approval for the Ashton South East Open Cut Project (MP 08_0182).

Note: The similar form of conditions under project approval MP 08_0182 is intended to facilitate co-ordinated management of the Ashton Mine Complex, rather than to duplicate requirements, responsibilities or permissions under the two approvals.

SCHEDULE 3 ENVIRONMENTAL PERFORMANCE CONDITIONS

ACQUISITION ON REQUEST

Acquisition on Request

- Upon receiving a written request for acquisition from an owner of the land containing a residential receiver listed in Table 1, the Applicant must acquire the land in accordance with the procedures in conditions 7 and 8 of Schedule 4.

Table 1: Land Subject to Acquisition upon Request

Residential Receiver No.	Acquisition Basis
83	Air Quality
120	Air Quality
121	Air Quality
129	Air Quality and Noise
130	Air Quality and Noise
182	Noise
185	Noise
188	Noise

For the purposes of acquisition under this condition, parcels of land that are in close proximity and operated as a single agricultural enterprise should be included as part of the land to be acquired. Where the Applicant and the owner(s) cannot agree on whether non-contiguous parcels of land should be included, either party may refer the matter to the Secretary for resolution. The Secretary's decision as to the lands to be included for acquisition under the procedures in conditions 7 and 8 of Schedule 4 shall be final.

This condition only has effect following recommencement of open cut mining operations (including overburden removal) at the Ashton Mine Complex.

Note: To interpret the locations referred to in Table 1, see the applicable figures in Appendix 5.

NOISE

Noise Criteria

- Except for the noise-affected land in Table 1, the Applicant must ensure that the noise generated by the Ashton Mine Complex does not exceed the criteria in Table 2 at any residence on privately-owned land or on more than 25 per cent of any privately-owned land.

Table 2: Noise Criteria dB(A)

Location Receiver Number	Day	Evening	Night	
	(<i>L_{Aeq}</i> (15 min))	(<i>L_{Aeq}</i> (15 min))	(<i>L_{Aeq}</i> (15 min))	(<i>L_{A1}</i> (1 min))
18	46	46	42	51
23	43	43	40	51
34	42	42	39	51
35	41	41	39	51
111	35	35	35	51
114	45	45	38	51
117	42	42	36	51
151, the former St Clements Church	45 (<i>L_{Aeq}</i> (period), internal when in use and under all weather conditions)			
All other privately-owned land	35	35	35	45

Noise generated by the development is to be measured in accordance with the relevant requirements of the *NSW Industrial Noise Policy*. Appendix 8 sets out the requirements for evaluating compliance with these criteria.

This condition only has effect following recommencement of open cut mining operations (including overburden removal) at the Ashton Mine Complex. At all other times, condition 2 of Appendix 6 has effect in its place.

Note: To interpret the locations referred to in Table 2, see the applicable figure in Appendix 5.

Additional Noise Mitigation Measures

3. Upon receiving a written request from the owner of any residence on the land listed in Table 1 and/or at any residence where subsequent noise monitoring results shows the noise generated by the Ashton Mine Complex exceeds the noise criteria in Table 2 by 3-5 dB(A), the Applicant must implement additional reasonable and feasible noise mitigation measures (such as double glazing, insulation, and/or air conditioning) at the residence in consultation with the owner.

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

This condition only has effect following recommencement of open cut mining operations (including overburden removal) at the Ashton Mine Complex. At all other times, condition 3 of Appendix 6 has effect in its place.

Note: For this condition to apply, the exceedance of the criteria must be systemic.

Noise Acquisition Criteria

4. If the noise generated by the Ashton Mine Complex exceeds the criteria in Table 3 at any residence on privately-owned land or on more than 25 per cent of any privately-owned land (except for the noise-affected residential receivers in Table 1), then upon receiving a written request for acquisition from the owner, the Applicant must acquire the land in accordance with the procedures in conditions 7 and 8 of Schedule 4.

Table 3: Noise Acquisition Criteria dB(A) L_{Aeq} (15 min)

Location Receiver Number	Day	Evening	Night
18	51	50	47
23	49	49	43
34	49	49	43
35	49	49	43
111	49	49	47
114	49	49	47
117	49	49	43
All other privately-owned land	41	41	41

Noise generated by the development is to be measured in accordance with the relevant requirements of the *NSW Industrial Noise Policy*. Appendix 8 sets out the requirements for evaluating compliance with these criteria.

This condition only has effect following recommencement of open cut mining operations (including overburden removal) at the Ashton Mine Complex.

Notes:

- *To interpret the locations referred to in Table 3, see the applicable figure in Appendix 5.*
- *For this condition to apply, the exceedance of the criteria must be systemic.*

Cumulative Noise Criteria

5. The Applicant must implement all reasonable and feasible measures to ensure that the noise generated by the Ashton Mine Complex combined with the noise generated by other mines in the vicinity does not exceed the criteria in Table 4 at any residence on privately-owned land or on more than 25 per cent of any privately-owned land (except for the noise-affected residential receivers in Table 1).

Table 4: Cumulative Noise Criteria dB(A) L_{Aeq} (period)

Location	Day	Evening	Night
Camberwell Village	55	45	40
All other privately-owned land	50	45	40

Cumulative noise is to be measured in accordance with the relevant requirements of the *NSW Industrial Noise Policy*. Appendix 8 sets out the requirements for evaluating compliance with these criteria.

For the purposes of this condition, 'reasonable and feasible avoidance and mitigation measures' includes, but is not limited to, the requirements in conditions 8 and 9 below to develop and implement a real-time noise management system that ensures effective operational responses to the risk of exceedance of the criteria.

This condition only has effect following recommencement of open cut mining operations (including overburden removal) at the Ashton Mine Complex.

Note: To interpret the locations referred to in Table 4, see the applicable figure in Appendix 5.

Cumulative Noise Acquisition Criteria

6. If the cumulative noise generated by the Ashton Mine Complex combined with the noise generated by other coal mines in the vicinity exceeds the criteria in Table 5 at any residence on privately-owned land or on more than 25 per cent of any privately-owned land (except for the noise-affected residential receivers in Table 1), then upon receiving a written request from the landowner, the Applicant must, together with the relevant mines, acquire the land on as equitable basis as possible, in accordance with the procedures in conditions 7 and 8 of Schedule 4.

Table 5: Cumulative Noise Acquisition Criteria dB(A) LA_{eq} (period)

Location	Day	Evening	Night
Camberwell Village	60	50	45
All other privately-owned land	55	50	45

Cumulative noise is to be measured in accordance with the relevant requirements of the *NSW Industrial Noise Policy*. Appendix 8 sets out the requirements for evaluating compliance with these criteria.

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

Rail Noise

7. The Applicant must seek to ensure that its rail spur is only accessed by locomotives that are approved to operate on the NSW rail network in accordance with noise limits in RailCorp's EPL (No. 12208) and ARTC's EPL (No. 3142), or otherwise approved by the EPA.

Operating Conditions

8. The Applicant must:
 - (a) implement best practice noise management, including all reasonable and feasible noise mitigation measures, to minimise the operational, low frequency and rail noise generated by the Ashton Mine Complex at all times, including during temperature inversions;
 - (b) operate a comprehensive noise management system 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 mitigation measures to ensure compliance with the relevant conditions of this consent;
 - (c) minimise the noise impacts of the development during meteorological conditions under which data is to be excluded for the purposes of assessing compliance with these conditions (see Appendix 8); and
 - (d) co-ordinate noise management at the Ashton Mine Complex with noise management at nearby coal mines to minimise the cumulative noise impacts of the mines, to the satisfaction of the Secretary.

Note: Condition 8(b) above only has effect following recommencement of open cut mining operations (including overburden removal) at the Ashton Mine Complex.

Noise Management Plan

9. The Applicant must prepare a Noise Management Plan for the Ashton Mine Complex to manage potential impacts of the development. This plan must:
 - (a) be prepared in consultation with the EPA, and be submitted to the Secretary for approval;
 - (b) describe the noise mitigation measures that would be implemented to ensure:
 - best practice noise management is being employed and is regularly:
 - benchmarked against contemporary industry standards; and
 - reviewed to ensure continual improvement; and
 - compliance with the noise criteria and operating conditions of this consent;
 - (c) describe the noise management system in detail;
 - (d) include a noise monitoring program that:
 - uses a combination of real-time and supplementary attended monitoring measures to evaluate the noise performance of the Ashton Mine Complex;

- includes a protocol for determining exceedances of the relevant conditions of this consent;
 - evaluates and reports on the effectiveness of the noise management system and the best practice noise management measures;
 - includes sufficient random audit of operational responses to the real-time noise management system to determine the ongoing effectiveness of these responses in maintaining compliance with all relevant noise criteria and the requirements of condition 8 above; and
 - includes a mechanism for publication of the results of these audits and for an independent annual review of these results, including any recommendations for improvement in performance and
- (e) includes a protocol that has been prepared in consultation with the owners of nearby mines to minimise the cumulative noise impacts of the mines.

The Applicant must implement the approved management plan as approved from time to time by the Secretary.

AIR QUALITY & GREENHOUSE GAS

Odour

10. The Applicant must ensure that no offensive odours are emitted from the site, as defined under the POEO Act, unless otherwise authorised by an EPL.

Greenhouse Gas Emissions

11. The Applicant must implement all reasonable and feasible measures to minimise the release of greenhouse gas emissions from the site to the satisfaction of the Secretary.

Note: This condition does not extend to Scope 3 emissions, as defined in the National Greenhouse Energy Reporting Guidelines.

Air Quality Criteria

12. Except for the land listed as air quality impacted in Table 1 (whilst condition 1 has effect), the Applicant must ensure that all reasonable and feasible avoidance and mitigation measures are employed so that the Ashton Mine Complex does not cause or contribute to exceedance of the criteria listed in Table 6 at any residence on privately-owned land or on more than 25 percent of any privately-owned land.

Table 6: Air Quality Criteria

Pollutant	Averaging Period	Criterion^d	
Particulate matter < 10 µm (PM ₁₀)	Annual	^a 30 µg/m ³	
Particulate matter < 10 µm (PM ₁₀)	24 hour	^a 50 µg/m ³	
Total suspended particulates (TSP)	Annual	^a 90 µg/m ³	
^c Deposited dust	Annual	^b 2 g/m ² /month	^a 4 g/m ² /month

Notes to Table 6:

^a Total impact (ie incremental increase in concentrations due to the Ashton Mine Complex plus background concentrations due to all other sources);

^b Incremental impact (ie incremental increase in concentrations due to the Ashton Mine Complex 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.

^d Excludes extraordinary events such as bushfires, prescribed burning, dust storms, sea fog, fire incidents or any other activity which has been endorsed by EPA and then agreed to by the Secretary.

For the purposes of this condition, 'reasonable and feasible avoidance and mitigation measures' include, but are not limited to, the requirements in conditions 16 and 17 to develop and implement a real-time air quality management system that ensures effective operational responses to the risks of exceedance of the criteria.

Additional Air Quality Mitigation Measures

13. Upon receiving a written request from the owner of any residences on any privately-owned land where subsequent air quality monitoring shows the dust generated by the Ashton Mine Complex exceeds the air quality limits in Table 6, the Applicant must implement additional reasonable and feasible dust

mitigation measures (such as a first-flush roof system, internal or external air filters and/or air conditioning) at the residence in consultation with the owner.

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

Note: For this condition to apply, the exceedance of the criteria must be systemic.

Exceedances at Occupied Residences on Mine-owned Land

14. The Applicant must ensure that particulate matter emissions generated by the Ashton Mine Complex do not exceed the criteria listed in Table 6, at any occupied residence on any mine-owned land (including land owned by adjacent mines) unless:
 - (a) the tenant, and landowner (where owned by a mine other than the Applicant), has been notified of health risks in accordance with the notification requirements under Schedule 4 of this consent;
 - (b) the tenant of 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;
 - (c) 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 a mine other than the Applicant);
 - (d) particulate matter air quality monitoring is undertaken to inform the tenant and landowner (where owned by a mine other than the Applicant) of potential health risks; and
 - (e) the monitoring data is provided 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 Secretary.

Air Quality Acquisition Criteria

15. If particulate matter emissions generated by the Ashton Mine Complex cause or contribute to exceedance of the cumulative criteria, in Table 7 at any residence on privately-owned land, or on more than 25 percent of any privately-owned land, then upon receiving a written request for acquisition from the landowner, the Applicant must acquire the land in accordance with the procedures in conditions 7 to 8 of Schedule 4.

Table 7: Air quality acquisition criteria

Pollutant	Averaging Period	Criterion^d	
Particulate matter < 10 µm (PM ₁₀)	Annual	^a 30 µg/m ³	
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	
Total suspended particulates (TSP)	Annual	^a 90 µg/m ³	
^c Deposited dust	Annual	^b 2 g/m ² /month	^a 4 g/m ² /month

Notes to Table 7:

^a Total impact (ie incremental increase in concentrations due to the Ashton Mine Complex plus background concentrations due to all other sources);

^b Incremental impact (ie incremental increase in concentrations due to the Ashton Mine Complex 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*.

^d Excludes extraordinary events such as bushfires, prescribed burning, dust storms, sea fog, fire incidents or any other activity which has been endorsed by EPA and then agreed to by the Secretary.

Operating Conditions

16. The Applicant must:
 - (a) implement best practice air quality management, including all reasonable and feasible measures to minimise off-site odour, fume and dust emissions generated by the Ashton Mine Complex, including those generated by any spontaneous combustion.
 - (b) minimise the surface disturbance of the site;
 - (c) minimise any off-site air pollution generated by the Ashton Mine Complex;
 - (d) ensure that the:

- the conveyor is enclosed on at least 3 sides including the side facing Camberwell village, and on all 4 sides where the conveyor crosses Glennies Creek and the New England Highway, prior to the commencement of conveyor operations; and
 - the bund along the northern boundary is constructed and revegetated as quickly as is practicable;
- (e) ensure that the ROM hopper operates water sprays during all dumping of coal;
- (f) operate a comprehensive air quality management system 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 the implementation of both proactive and reactive mitigation measures to ensure compliance with the relevant conditions of this consent;
- (g) manage PM_{2.5} levels in accordance with any requirements of an EPL;
- (h) minimise the air quality impacts of the development during adverse meteorological conditions and extraordinary events (see note d under Table 7);
- (i) minimise the air quality impacts of the development during meteorological conditions when winds blow from the southerly direction (160-220 degrees), particularly when PM10 levels are elevated, or likely to be elevated;
- (j) co-ordinate the air quality management on site with the air quality management at nearby mines to minimise the cumulative air quality impacts of the mines,
- to the satisfaction of the Secretary.

Note: Condition 16(d), (f) and (i) above only have effect following recommencement of open cut mining operations (including overburden removal) at the Ashton Mine Complex.

Air Quality and Greenhouse Gas Management Plan

17. The Applicant must prepare an Air Quality and Greenhouse Gas Management Plan for the Ashton Mine Complex to manage potential impacts of the development. This plan must:
- (a) be prepared in consultation with the EPA, and be submitted to the Secretary for approval;
 - (b) describe the measures that would be implemented to ensure:
 - best practice air quality management is:
 - being employed;
 - regularly benchmarked against contemporary industry standards; and
 - regularly reviewed to ensure continual improvement; and
 - compliance with the air quality criteria and operating conditions of this consent;
 - (c) describe the air quality management system in detail;
 - (d) include an air quality monitoring program that:
 - uses a combination of real-time monitors and supplementary monitors to evaluate the performance of the Ashton Mine Complex;
 - includes a protocol for determining any exceedances of the relevant conditions in this consent;
 - evaluates and reports on the effectiveness of the air quality management system and the best practice air quality management measures;
 - includes sufficient random audit of operational responses to the real-time air quality management system to determine the ongoing effectiveness of these responses in maintaining the Ashton Mine Complex within the relevant criteria in this Schedule and the requirements of condition 16 above;
 - includes a mechanism for publication of the results of these audits and for an independent annual review of these results, including any recommendations for improvement in performance; and
 - (e) include a protocol that has been prepared in consultation with the owners of nearby mines to minimise the cumulative air quality impacts of all mines.

The Applicant must implement the approved management plan as approved from time to time by the Secretary.

METEOROLOGICAL MONITORING

18. For the life of the development, the Applicant must ensure that there is a meteorological station in the vicinity of the site that:
- (a) complies with the requirements in the *Approved Methods for Sampling of Air Pollutants in New South Wales* guideline; and
 - (b) is capable of continuous real-time measurement of temperature lapse rate in accordance with the *NSW Industrial Noise Policy*, or as otherwise approved by the EPA.

SOIL AND WATER

Water Licences

19. The Applicant must obtain all necessary water licences for the development under the *Water Act 1912* or the *Water Management Act 2000*.

Water Supply

20. The Applicant must ensure that it has sufficient water for all stages of the development, and if necessary, adjust the scale of mining operations to match its available water supply, to the satisfaction of the Secretary.

Compensatory Water Supply

21. The Applicant must provide compensatory water supply to any landowner of privately-owned land whose water entitlements are adversely and directly impacted (other than an impact that is negligible) as a result of the development, in consultation with DPI Water, and to the satisfaction of the Secretary.

The compensatory water supply measures must provide an alternative long-term supply of water that is equivalent to the loss attributed to the development. Equivalent water supply should be provided (at least on an interim basis) within 24 hours of the loss being identified.

If the Applicant and the landowner cannot agree on the measures to be implemented, or there is a dispute about the implementation of these measures, then either party may refer the matter to the Secretary for resolution.

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

Surface Water Discharges

22. The Applicant must ensure that any surface water discharges from the site comply with the:
- (a) discharge limits (both volume and quality) set for the development in any EPL; or
 - (b) relevant provisions of the POEO Act or *Protection of the Environment Operations (Hunter River Salinity Trading Scheme) Regulation 2002*.

Bowmans Creek Setbacks and Diversions

23. The Applicant must:
- (a) design underground workings to ensure that longwall mining voids are no closer than 40 metres from any point vertically beneath the high bank of Bowmans Creek (except those sections of channel made redundant by the Eastern and Western Diversions);
 - (b) construct, manage and maintain the Eastern and Western Diversions to the satisfaction of the Secretary;
 - (c) submit an as-executed report to the Secretary and DPI Water, certified by a practising engineer, confirming that the Eastern and Western Diversions are sufficiently hydraulically and geomorphologically stable, within 6 months of completing construction of the diversions;
 - (d) prepare a Bowmans Creek Diversion Management Plan for the proposed creek diversions in the underground mining area, which must:
 - be submitted to the Secretary for approval;
 - be consistent with any related requirements in future Extraction Plan(s); and
 - include:
 - a vision statement for the creek relocations;
 - an assessment of the surface water and groundwater quality, ecological, hydrological and geomorphic baseline conditions within the creek;
 - detailed design specifications for the creek relocations;
 - a construction program for the creek relocations, describing how the work would be staged, and integrated with mining operations;
 - a revegetation program for the relocated creeks using a range of suitable native species;
 - water quality, ecological, hydrological and geomorphic performance and completion criteria for the creek relocations based on the assessment of baseline conditions; and
 - a program to monitor and maintain surface water and groundwater quality, ecological, hydrological and geomorphic stability of the creek diversions.

The Applicant must implement the approved management plan as approved from time to time by the Secretary.

Note: The diversions are shown on the relevant figure in Appendix 2.

Tailings Pipelines

24. The Applicant must ensure that the alarm system for the tailings pipelines is effectively maintained and operational and the emergency response procedures for the pipelines are maintained at all times during operation of the pipelines.

Water Management Performance Measures

25. The Applicant must comply with the performance measures in Table 8 to the satisfaction of the Secretary.

Table 8: Water Management Performance Measures

Feature	Performance Measure
Water Management – General	<ul style="list-style-type: none"> • Maximise water sharing with the other mines in the region • Minimise the use of clean water on site
Construction and operation of infrastructure	<ul style="list-style-type: none"> • Design, install and maintain erosion and sediment controls generally in accordance with the series <i>Managing Urban Stormwater: Soils and Construction</i> including Volume 1, Volume 2A – <i>Installation of Services</i> and Volume 2C – <i>Unsealed Roads</i> • Design, install and maintain all new infrastructure within 40 m of watercourses generally in accordance with the <i>Guidelines for Controlled Activities on Waterfront Land</i> (DPI 2007), or its latest version • Design, install and maintain creek crossings generally in accordance with the <i>Policy and Guidelines for Fish Friendly Waterway Crossings</i> (NSW Fisheries, 2003) and <i>Why Do Fish Need To Cross The Road? Fish Passage Requirements for Waterway Crossings</i> (NSW Fisheries 2003), or their latest versions
Mine Sediment Dams	<ul style="list-style-type: none"> • Design, install and maintain the dams generally in accordance with the series <i>Managing Urban Stormwater: Soils and Construction – Volume 1 and Volume 2E Mines and Quarries</i>
Clean water diversion & storage infrastructure	<ul style="list-style-type: none"> • Design, install and maintain the clean water system to capture and convey the 100 year ARI flood • Maximise as far as reasonable and feasible the diversion of clean water around disturbed areas on site
Mine water storages	<ul style="list-style-type: none"> • New mine water storage infrastructure is designed to store a 100 year ARI 72 hour storm event • New on-site storages (including tailings dams, mine infrastructure dams, groundwater storage and treatment dams) are suitably lined to comply with a permeability standard of $< 1 \times 10^{-9}$ m/s
Tailings, acid forming and potentially acid forming materials	<ul style="list-style-type: none"> • New in-pit or void emplacement, encapsulation or capping to prevent the migration of pollutants beyond the pit shell • Adequate freeboard within the pit void to minimise the risk of discharge to surface waters
Chemical and hydrocarbon storage	<ul style="list-style-type: none"> • Chemical and hydrocarbon products to be stored in bunded areas in accordance with the relevant Australian Standards
Bowmans Creek Diversion	<ul style="list-style-type: none"> • In accordance with the condition 23 above
Aquatic and riparian ecosystems, including Bowmans Creek	<ul style="list-style-type: none"> • Maintain or improve baseline channel stability • Develop site-specific in-stream water quality objectives in accordance with ANZECC 2000 and <i>Using the ANZECC Guidelines and Water Quality Objectives in NSW</i> procedures (DECC 2006), or its latest version

Water Management Plan

26. The Applicant must prepare a Water Management Plan for the Ashton Mine Complex to manage potential impacts of the development. This plan must:

- (a) be prepared in consultation with OEH, EPA, DRE and Council, and be endorsed by DPI Water and then submitted to the Secretary for approval;
- (b) include detailed performance criteria and describe measures to ensure that the Applicant complies with the Water Management Performance Measures (see Table 8);
- (c) include a Site Water Balance, which must:
 - include details of:
 - sources and security of water supply;
 - water use on site;
 - water management on site;
 - any off-site water transfers; and
 - investigate and implement all reasonable and feasible measures to minimise water use by the Ashton Mine Complex;
- (d) include an Erosion and Sediment Control Plan, which must:
 - identify activities that could cause soil erosion, generate sediment or affect flooding;
 - describe measures to minimise soil erosion and the potential for the transport of sediment to downstream waters, and manage flood risk;
 - describe the location, function, and capacity of erosion and sediment control structures and flood management structures; and
 - describe what measures would be implemented to maintain the structures over time;
- (e) include a Surface Water Management Plan, which must include:
 - detailed baseline data on surface water flows and quality in creeks and other waterbodies that could potentially be affected by the development;
 - surface water and stream health impact assessment criteria including trigger levels for investigating any potentially adverse surface water impacts (for existing creeks and reinstated/rehabilitated creeks);
 - a program to monitor and assess:
 - surface water flows and quality;
 - impacts on water users;
 - stream health; and
 - channel stability;
- (f) include a Groundwater Management Plan, which must include:
 - detailed baseline data of groundwater levels, yield and quality in the region, particularly for privately-owned groundwater bores that could be affected by the development;
 - groundwater impact assessment criteria including trigger levels for investigating any potentially adverse groundwater impacts;
 - a program to monitor and assess:
 - groundwater inflows to the mining operations;
 - impacts on regional aquifers;
 - impacts on the groundwater supply of potentially affected landowners;
 - impacts on the Bowmans Creek, Glennies Creek and Hunter River alluvial aquifers; and
 - impacts on groundwater dependent ecosystems and riparian vegetation;
- (g) include a Surface and Ground Water Response Plan, which must include:
 - a response protocol for any exceedances of the surface water and groundwater assessment criteria, including provisions for independent investigation by a suitably qualified hydrogeologist whose appointment has been approved by the Secretary;
 - measures to offset the loss of any baseflow to watercourses caused by the development;
 - measures to compensate landowners of privately-owned land whose water supply is adversely affected by the development; and
 - measures to mitigate and/or offset any adverse impacts on groundwater dependent ecosystems or riparian vegetation.

The Applicant must implement the approved management plan as approved from time to time by the Secretary.

BIODIVERSITY

Biodiversity Offsets

27. The Applicant must implement the biodiversity offset strategy as outlined in Table 9 and as generally described in the EA (and shown conceptually in Appendix 7), to the satisfaction of the Secretary.

Table 9: Biodiversity offset strategy

Area	Offset Type	Minimum Size (hectares)
Southern Conservation Area	Existing vegetation and vegetation to be established	190
Bowmans Creek Riparian Area	Riparian and woodland vegetation	60
North East Open Cut	Woodland vegetation to be established	100

Area	Offset Type	Minimum Size (hectares)
Rehabilitation Area		
Total		350

Biodiversity Management Plan

28. The Applicant must prepare a Biodiversity Management Plan for the Ashton Mine Complex to manage potential impacts of the development. This plan must:
- be prepared in consultation with OEH and Council, and be submitted to the Secretary for approval;
 - describe how the implementation of the offset strategy would be integrated with the overall rehabilitation of the site (see below);
 - include:
 - a description of the short, medium, and long term measures that would be implemented to:
 - implement the offset strategy; and
 - manage the remnant vegetation and habitat on the site and in the offset areas;
 - detailed performance and completion criteria for implementation of the offset strategy;
 - a detailed description of the measures that would be implemented over the next 3 years, including the procedures to be implemented for:
 - implementing revegetation and regeneration within the disturbance areas and offset areas, including establishment of canopy, sub-canopy (if relevant), understorey and ground strata;
 - maximising salvage and beneficial use of resources in areas that are to be impacted, including vegetative, soil and cultural heritage resources;
 - protecting vegetation and soil outside the disturbance areas;
 - rehabilitating creeks and drainage lines on the site (both inside and outside the disturbance areas), to minimise net loss of stream length and aquatic habitat;
 - managing salinity;
 - conserving and reusing topsoil;
 - undertaking pre-clearance surveys;
 - managing impacts on fauna;
 - landscaping the site and along public roads to minimise visual and lighting impacts, particularly along the New England Highway;
 - collecting and propagating seed;
 - salvaging and reusing material from the site for habitat enhancement;
 - salvaging, transplanting and/or propagating threatened flora and native grassland;
 - controlling weeds and feral pests;
 - managing grazing and agriculture on site and in the offset areas;
 - controlling access; and
 - bushfire management;
 - a program to monitor the effectiveness of these measures, and progress against the performance and completion criteria;
 - a description of the potential risks to successful revegetation, and a description of the contingency measures that would be implemented to mitigate these risks; and
 - details of who would be responsible for monitoring, reviewing, and implementing the plan.

The Applicant must implement the approved management plan as approved from time to time by the Secretary.

SUBSIDENCE

Performance Measures

29. The Applicant must ensure that underground mining does not cause any exceedance of the performance measures in Table 10.

Table 10: Subsidence Performance Measures

Water	
Bowmans Creek	No greater subsidence impact or environmental consequences than predicted in the EA and the previous EIAs
Bowmans Creek – Eastern and Western Diversions	Hydraulically and geomorphologically stable
Bowmans Creek alluvial aquifer	No greater subsidence impact or environmental consequences than predicted in the EA and the previous EIAs
Biodiversity	
Threatened species, populations, habitat or ecological communities	Negligible impact

Aboriginal Heritage Features	
Waterhole Site	Negligible impact
Other Aboriginal heritage sites	No greater subsidence impact or environmental consequences than approved under a permit issued under section 90 of the <i>National Parks and Wildlife Act 1974</i>
Built Features	
New England Highway, including the bridge over Bowmans Creek	Always safe and serviceable. Damage that does not affect safety or serviceability must be fully repairable, and must be fully repaired.
Lemington Road and Brunkers Lane	In accordance with recommendations of the report prepared under condition 36
Other built features, including other public infrastructure	Always safe. Serviceability should be maintained wherever practicable. Loss of serviceability must be fully compensated. Damage must be fully repaired or replaced, or else fully compensated.
Public Safety	
Public safety	No additional risk due to mining

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.*
- *The requirements of this condition only apply to the impacts and consequences of mining operations undertaken following the date of approval of Modification 6 to this consent on 24 December 2010.*
- *Requirements regarding "safe" or "serviceable" do not prevent preventative or mitigatory actions being taken prior to or during mining in order to achieve or maintain these outcomes.*
- *Compensation required under this condition includes any compensation payable under the Mine Subsidence Compensation Act 1961 and/or the Mining Act 1992.*

30. Any dispute between the Applicant and the owner of any built feature over the interpretation, application or implementation of the performance measures in Table 10 is to be settled by the Secretary, following consultation with the MSB and DRE. Any decision by the Secretary shall be final and not subject to further dispute resolution under this consent.

First Workings

31. 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 long-term 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.

Extraction Plan

32. The Applicant must prepare an Extraction Plan for all second workings on site. This plan must:
- be prepared a team of suitably qualified and experienced persons whose appointment has been endorsed by the Secretary;
 - be approved by the Secretary;
 - include detailed plans of the proposed second workings and any associated surface development;
 - include detailed performance indicators for each of the performance measures in Table 10;
 - provide revised predictions of the conventional and non-conventional subsidence effects, subsidence impacts and environmental consequences of the proposed second workings, incorporating any relevant information obtained since this consent, that specifically addresses the incremental and cumulative subsidence effects and impacts of multi-seam mining;
 - describe the measures that would be implemented to ensure compliance with the performance measures in Table 10, and remediate any predicted subsidence impacts and/or environmental consequences;
 - include the following, which have been prepared in consultation with DRE:
 - a coal resource recovery plan that demonstrates effective recovery of the available resource;
 - a subsidence monitoring program to:
 - provide data to assist in the management of the risks associated with subsidence;
 - validate the subsidence predictions; and
 - analyse the relationship between the subsidence effects and impacts under the Extraction Plan and any ensuing environmental consequences;

- a Built Features Management Plan, which has been prepared in consultation with the owners of such features, to manage the potential impacts and consequences of subsidence on any built features;
 - a Public Safety Management Plan to ensure public safety in the underground mining area; and
 - a revised Rehabilitation Management Plan;
- (h) include a:
- Water Management Plan, which has been prepared in consultation with EPA and DPI Water, to manage the potential impacts and consequences of subsidence on surface water and groundwater resources, flooding and existing and proposed creek diversions, 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;
 - a program to manage and monitor impacts on groundwater bores on privately-owned land;
 - Biodiversity Management Plan, which has been prepared in consultation with OEHL, to manage the potential impacts and consequences of subsidence on biodiversity, and which includes:
 - a program of works to ensure that overall terrestrial and aquatic biodiversity values are the same or better than existing in Bowmans Creek prior to longwall mining;
 - measures to manage potential impacts and/or environmental consequences of the proposed second workings on aquatic and terrestrial flora and fauna;
 - Land Management Plan, which has been prepared in consultation with relevant landowners, to manage the potential impacts and consequences of subsidence on land in general;
 - Heritage Management Plan, which has been prepared in consultation with OEHL and relevant stakeholders for Aboriginal heritage, to manage the potential impacts and consequences of subsidence on heritage sites or values;
- (i) include Trigger Action Response Plans, or equivalent, to address potential subsidence impacts and environmental consequences that may result from mining subsidence;
- (j) include a contingency plan that expressly provides for adaptive management where monitoring indicates that there has been an exceedance of any performance measures in Table 10, or where any such exceedance appears likely; and
- (k) include a program to collect sufficient baseline data for future Extraction Plans.

Note: A Subsidence Management Plan approved by DRE or an Extraction Plan approved by the Secretary, prior to the date of approval of MOD 5, is taken to satisfy the requirements of this condition.

The Applicant must implement the approved management plans as approved from time to time by the Secretary.

Payment of Reasonable Costs

33. The Applicant must pay all reasonable costs incurred by the Department to engage suitably qualified, experienced and independent persons (if required) to review the adequacy of any aspect of the Extraction Plan.

HERITAGE

Heritage Management Plan

34. The Applicant must prepare a Heritage Management Plan for the Ashton Mine Complex to manage the potential impacts of the development. This plan must:
- (a) be prepared by suitably qualified and experienced persons whose appointment has been endorsed by the Secretary;
 - (b) be prepared in consultation with OEHL, Council, the Aboriginal Community, local historical organisations and relevant landowners, and be submitted to the Secretary for approval;
 - (c) include the following for the management of Aboriginal cultural heritage on the site:
 - an archaeological salvage program for the development disturbance area, which includes additional sub-surface testing of the more significant sites and landform units;
 - a description of the measures that would be implemented for:
 - the protection, monitoring and management of Aboriginal sites outside the development disturbance area and within the Southern Conservation Area;
 - maintaining and managing access for Aboriginal sites by the Aboriginal community;
 - managing the discovery of any human remains or previously unidentified Aboriginal objects that have conservation significance during the development;
 - ongoing consultation and involvement of the Aboriginal communities in the conservation and management of Aboriginal cultural heritage; and

- heritage inductions for construction personnel (including procedures for keeping records of inductions); and
- (d) include the following for the management of historic heritage:
 - a description of the measures that would be implemented for:
 - managing the discovery of human remains or previously unidentified heritage items during the development; and
 - heritage inductions for construction personnel (including procedures for keeping records of inductions).

The Applicant must implement the approved management plan as approved from time to time by the Secretary.

TRANSPORT

Monitoring of Coal Transport

35. The Applicant must keep accurate records of the:
- (a) amount of coal transported from the site (on a monthly basis); and
 - (b) date and time of each train movement generated by the Ashton Mine Complex.

Lemington Road Alignment

36. The Applicant must, together with the owner of the Ravensworth Operations Project, if directed by the Secretary, commission and implement additional reports following extraction of each seam that the Applicant is permitted to extract. Each such additional report must review the impacts of previous subsidence on Lemington Road/Brunkers Lane, review existing measures to monitor and manage subsidence impacts, and recommend appropriate monitoring and management measures to address subsidence impacts (including any continuing need to realign Lemington Road), to the satisfaction of the Secretary.

The Applicant must fund 50% of the costs of reports prepared under this condition and must implement the recommendations of such reports, to the satisfaction of the Secretary.

Any dispute over the interpretation or implementation of reports prepared under this condition shall be determined by the Secretary, whose decision shall be final.

Notes:

- *Stacked or offset panel alignments for the Upper Liddell, Upper Lower Liddell and Lower Barrett seams are shown in the plans in Appendix 2.*
- *The owner of the Ravensworth Operations Project will be expected to fund the other 50% of report costs and to have similar responsibilities regarding implementation.*

37. The Applicant must be responsible for implementing controls to ensure road traffic safety (including monitoring, maintenance and repairs of subsidence impacts) during any longwall extraction which may cause subsidence impacts to Brunkers Lane/Lemington Road.

Note: This responsibility for implementing controls exists notwithstanding that funding of these controls may come from other parties, such as the owner of the Ravensworth Operations Project or the MSB.

VISUAL

Visual Amenity and Lighting

38. The Applicant must:
- (a) implement all reasonable and feasible measures to mitigate visual and off-site lighting impacts of the development;
 - (b) ensure no unshielded outdoor lights shine above the horizontal;
 - (c) ensure that all external lighting associated with the development complies with Australian Standard AS4282 (INT) 1997 – Control of Obtrusive Effects of Outdoor Lighting or its latest version;
- to the satisfaction of the Secretary.

WASTE

39. The Applicant must:
- (a) minimise and monitor the waste generated by the development;
 - (b) ensure that the waste generated by the development is appropriately stored, handled and disposed of;
 - (c) manage on-site sewage treatment and disposal in accordance with the requirements of Council; and
 - (d) report on waste management and minimisation in the Annual Review,
- to the satisfaction of the Secretary.

BUSHFIRE MANAGEMENT

40. The Applicant must:
- ensure that the Ashton Mine Complex is suitably equipped to respond to fires on site; and
 - assist the Rural Fire Service and emergency services as much as possible if there is a fire in the vicinity of the site.

REHABILITATION

Rehabilitation Objectives

41. The Applicant must rehabilitate the site in a manner that is consistent with the rehabilitation objectives in the EA and Table 11, to the satisfaction of DRE.

Table 11: Rehabilitation Objectives

Feature	Objective
DA Area	Safe, stable & non-polluting
Final Void	Safe, stable & non-polluting Minimise the size and depth of the final void as far as is reasonable and feasible. Minimise the drainage catchment of the final void as far as is reasonable and feasible. Negligible high wall instability risk.
Surface infrastructure	To be decommissioned and removed, unless DRE agrees otherwise.
Sections of Bowmans Creek within the underground mining area (except those sections of channel made redundant by diversion)	Restore pre-mining surface flow and pool holding capacity as soon as reasonably practicable. Hydraulically and geomorphologically stable, with riparian vegetation that is the same or better than existed prior to mining.
Bowmans Creek – Eastern and Western Diversions	Hydraulically and geomorphologically stable, with riparian vegetation that is the same or better than existing in the adjacent channel prior to mining.
Land to be restored or maintained for agricultural purposes	Restored and maintained to the same or higher land capability and agricultural suitability than prior to mining.
Other land affected by the development	Restore ecosystem function, including maintaining or establishing self-sustaining ecosystems comprised of: <ul style="list-style-type: none"> local native plant species (unless DRE agrees otherwise); and a landform consistent with the surrounding environment.
Built features affected by subsidence	Repair to pre-mining condition or equivalent unless: <ul style="list-style-type: none"> the owner agrees otherwise; or the damage is fully restored, repaired or compensated under the <i>Mine Subsidence Compensation Act 1961</i>.
Community	Ensure public safety. Minimise the adverse socio-economic effects associated with mine closure.

Notes:

- These rehabilitation objectives apply to all subsidence impacts and environmental consequences caused by mining undertaken following the date of approval of Modification 6 to this consent on 24 December 2010; and to all surface infrastructure that forms part of the development, whether constructed prior to or following the approval of Modification 6.*
 - Rehabilitation of subsidence impacts and environmental consequences caused by mining which took place prior to the approval of Modification 6 may be subject to the requirements of other approvals (eg under a mining lease or an Subsidence Management Plan approval) or the Applicant's commitments.*
42. The Applicant must carry out rehabilitation progressively, that is, as soon as reasonably practicable following disturbance, to the satisfaction of DRE.

Rehabilitation Management Plan

43. The Applicant must prepare a Rehabilitation Management Plan for the Ashton Mine Complex to the satisfaction of DRE to manage potential impacts of the development. This plan must:
- be prepared in consultation with the Department, OEH, EPA, DPI Water, Council and the CCC;

- (b) be prepared in accordance with any relevant DRE guideline, and be consistent with the rehabilitation objectives in Table 11 and in the EA and the previous EIAs;
- (c) build, to the maximum extent practicable, on the other management plans required under this consent; and
- (d) address all aspects of rehabilitation and mine closure, including final land use assessment, rehabilitation objectives, domain objectives, completion criteria and rehabilitation monitoring, and include:
 - an evaluation of end land use options for the final void; and
 - a life of mine tailings management strategy, including an environmental risk assessment demonstrating that the emplacements can be designed, managed and rehabilitated appropriately.

The Applicant must implement the approved management plan as approved from time to time by DRE.

Note: The plan should build on the conceptual final land use and offset strategy depicted in Appendix 7.

SCHEDULE 4 ADDITIONAL PROCEDURES

NOTIFICATION OF LANDOWNERS

1. Prior to entering into any tenancy agreement for any land owned by the Applicant that is predicted to experience exceedances of the noise criteria in condition 2 of Schedule 3 or the dust criteria in condition 12 of Schedule 3, the Applicant must:
 - (a) advise the prospective tenants of the potential health and amenity impacts associated with living on the land and give them a copy of the NSW Health fact sheet entitled "Mine Dust and You" (as may be updated from time to time); and
 - (b) advise the prospective tenants of the rights they would have under this consent, to the satisfaction of the Secretary.
2. Within 2 weeks of obtaining monitoring results showing:
 - (a) an exceedance of any relevant criterion in Schedule 3, the Applicant must notify the affected landowner and/or tenants in writing of the exceedance, and provide regular monitoring results to each of these parties until the development is again complying with the relevant criterion; and
 - (b) an exceedance of any relevant criterion in condition 12 of Schedule 3, the Applicant must send a copy of the NSW Health fact sheet entitled "Mine Dust and You" (as may be updated from time to time) to the affected landowners and/or existing tenants of the land (including the tenants of mine-owned land).

INDEPENDENT REVIEW

3. If an owner of privately-owned land considers the development to be exceeding any relevant criteria in Schedule 3, then he/she may ask the Secretary in writing for an independent review of the impacts of the development on his/her land.
4. If the Secretary is not satisfied that an independent review is warranted, the Secretary will notify the landowner in writing of that decision, and the reasons for that decision, within 60 days of the request for a review.

If the Secretary is satisfied that an independent review is warranted, then within 2 months of the Secretary's decision, the Applicant must:

- (a) commission a suitably qualified, experienced and independent person, whose appointment has been approved by the Secretary, to:
 - (i) consult with the landowner to determine his/her concerns;
 - (ii) conduct monitoring to determine whether the development is complying with the relevant criteria; and
 - (iii) if the development is not complying with these criteria then:
 - determine if the more than one mine is responsible for the exceedance, and if so the relative share of each mine towards the impact on the land;
 - identify the measures that could be implemented to ensure compliance with the relevant criteria; and
 - (b) give the Secretary and landowner a copy of the independent review.
5. If the independent review determines that the development is complying with the relevant criteria, then the Applicant may discontinue the independent review with the approval of the Secretary.
- If the independent review determines that the development is not complying with the relevant criteria, and that the development is primarily responsible for this non-compliance, then the Applicant must:
- (a) implement all reasonable and feasible mitigation measures, in consultation with the landowner and appointed independent person, and conduct further monitoring until the development complies with the relevant criteria; or
 - (b) secure a written agreement with the landowner to allow exceedances of the relevant criteria, to the satisfaction of the Secretary.

If the independent review determines that the development is not complying with the relevant acquisition criteria, and that the development is primarily responsible for this non-compliance, then upon receiving a written request from the landowner, the Applicant must acquire all or part of the landowner's land in accordance with the procedures in conditions 7 to 8 below.

6. If the independent review determines that the relevant criteria are being exceeded, but that more than one mine is responsible for this non-compliance, then together with the relevant mine/s, the Applicant must:
 - (a) implement all reasonable and feasible mitigation measures, in consultation with the landowner and appointed independent person, and conduct further monitoring until there is compliance with the relevant criteria; or

- (b) secure a written agreement with the landowner and other relevant mines to allow exceedances of the relevant criteria, to the satisfaction of the Secretary.

If the independent review determines that the development is not complying with the relevant acquisition criteria, but that more than one mine is responsible for this non-compliance, then upon receiving a written request from the landowner, the Applicant must acquire all or part of the landowner's land on as equitable a basis as possible with the relevant mine/s, in accordance with the procedures in conditions 7 to 8 below.

LAND ACQUISITION

7. Within 3 months of receiving a written request from a landowner with acquisition rights, the Applicant must make a binding written offer to the landowner based on:
- (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, or the current market value of properties that are of an equivalent standard to the landowner's existing dwelling (including associated facilities such as a pool) in the Singleton or Muswellbrook local government areas (whichever is greater), 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, but excluding any improvements that have resulted from the implementation of the additional mitigation measures required under conditions 3 and/or 13 of Schedule 3;
 - (b) the reasonable costs associated with:
 - relocating within the Singleton or Muswellbrook local government areas, or to any other local government area determined by the Secretary; and
 - obtaining legal advice and expert advice for determining the acquisition price of the land, and the terms upon which it is to be acquired; and
 - (c) reasonable compensation for any loss attributable to disturbance and severance, if any, caused by the land acquisition process, if any;
 - (d) reasonable compensation for any special value of the land to the person on the date of acquisition, if any; and
 - (e) solatium, if any.

For the purposes of this consent, the terms 'market value', 'disturbance', 'severance', 'special value' and 'solatium' are to be construed in the same way as those terms are defined in *the Land Acquisition (Just Terms Compensation) Act 1991*, and as interpreted by the judiciary with the same limitations applied.

For the purposes of this consent the term 'landowner' is to be construed in the same way as the term 'owner' as defined in the *Land Acquisition (Just Terms Compensation) Act 1991*, and as interpreted by the judiciary.

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

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

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

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

However, if either party disputes the independent valuer's determination, then within 14 days of receiving the independent valuer's report, they may refer the matter to an independent arbiter agreed to by the parties. If the parties cannot agree on an independent arbiter, the matter must be referred to the Secretary to appoint an independent arbiter from the NSW Bar Association approved list or arbitrators.

The independent arbitrator's costs must be borne by the Applicant, and the Applicant must compensate the landowner for any reasonable costs incurred by the landowner as a result of the matter being referred to arbitration, including any reasonable costs incurred by the landowner in obtaining legal and expert advice or representation for the purposes of arbitration.

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

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

8. The Applicant must pay all reasonable costs associated with the land acquisition process described in condition 7 above, including the costs associated with obtaining Council approval for any plan of subdivision (where permissible), and registration of this plan at the Office of the Registrar-General.
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SCHEDULE 5 ENVIRONMENTAL MANAGEMENT, REPORTING AND AUDITING

ENVIRONMENTAL MANAGEMENT

Environmental Management Strategy

1. The Applicant must prepare an Environmental Management Strategy for the Ashton Mine Complex. The strategy must:
 - (a) be prepared in consultation with Community Consultative Committee (CCC);
 - (b) be submitted to the Secretary for approval;
 - (c) provide the strategic framework for environmental management of the development;
 - (d) identify the statutory approvals that apply to the development;
 - (e) describe the role, responsibility, authority and accountability of all key personnel involved in the environmental management of the development;
 - (f) describe the procedures that would be implemented to:
 - keep the local community and relevant agencies informed about the operation and environmental performance of the development;
 - receive, handle, respond to, and record complaints;
 - resolve any disputes that may arise during the course of the development;
 - respond to any non-compliance;
 - respond to emergencies; and
 - (g) include:
 - copies of any strategies, plans and programs approved under the conditions of this consent; and
 - a clear plan depicting all the monitoring to be carried out in relation to the development.

The Applicant must implement the approved strategy as approved from time to time by the Secretary.

Management Plan Requirements

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

Note: The Secretary may waive some of these requirements if they are unnecessary or unwarranted for particular management plans.

Preparation of Management Plans etc

3. The Applicant must submit all management plans required under Schedule 3 (with the exception of Extraction Plans required under condition 32 of Schedule 3) for approval by the Secretary at least 3 months prior to commencement of open cut mining operations (including overburden removal) at the Ashton Mine Complex.

Prior to approval of management plans required under Schedule 3 (with the exception of Extraction Plans required under condition 32 of Schedule 3), all existing management plans, monitoring programs, strategies, programs, protocols, etc approved as at the date of approval of Modification 5 shall continue to have full force and effect, and may be revised under the requirements of condition 6

below as if subject to the conditions of this consent that applied prior to the approval of Modification 5, or otherwise with the approval of the Secretary.

Relationships between Management Plans

4. The Water, Biodiversity and Heritage Management Plans required by conditions 26, 28 and 34 of Schedule 3, respectively, are to be prepared in respect of all parts of the development that are not covered by an Extraction Plan, whether approved under condition 32 of Schedule 3 or otherwise approved as at the date of approval of MOD 5. In particular, the Water, Biodiversity and Heritage Management Plans should address all areas subject to existing or proposed surface disturbance associated with the development.

Updating and Staging Submission of Strategies, Plans and Programs

5. The Applicant must regularly review the strategies, plans and programs required under this consent and ensure that these documents are updated to incorporate measures to improve the environmental performance of the development and reflect current best practice in the mining industry. To facilitate these updates, the Applicant may at any time submit revised strategies, plans or programs for the approval of the Secretary. With the agreement of the Secretary, the Applicant may also submit any strategy, plan or program required by this consent on a staged basis.

With the agreement of the Secretary, the Applicant may prepare a revision or stage of any strategy, plan or program required under this consent, without undertaking consultation with all parties nominated under the applicable condition in this consent.

Notes:

- *While any strategy, plan or program may be submitted on a staged basis, the Applicant must ensure that the existing operations on site are covered by suitable strategies, plans or programs at all times.*
- *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.*

Revision of Strategies, Plans and Programs

6. Within 3 months of:
 - (a) submission of an incident report under condition 8 below;
 - (b) submission of an annual review under condition 10 below;
 - (c) submission of an audit under condition 11 below; and
 - (d) any modification to the conditions of this consent (with the exception of MOD 5);the Applicant must review, and if necessary revise, the strategies, plans, and programs required under this consent to the satisfaction of the Secretary.

The Applicant must publish on its website any revised document resulting from these reviews within 30 days of the Secretary's approval of the document.

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

Community Consultative Committee

7. The Applicant must establish a CCC for the development to the satisfaction of the Secretary. This CCC must:
 - (a) be operated in general accordance with the *Guidelines for Establishing and operating Community Consultative Committees for Mining Projects* (Department of Planning, 2007, or its latest version), and
 - (b) include the following provisions in its terms of reference:
 - (i) the CCC must be provided with all strategies, plans, reviews and incident reports generated during the life of the development;
 - (ii) the CCC may not be bound by confidentiality provisions in relation to these documents;
 - (iii) the CCC can, from time to time, make recommendations to the Secretary, Minister and all relevant agencies; and
 - (iv) the CCC can, from time to time, request representatives from government agencies to attend meetings as required.

The members of the CCC must be paid if they so request by the Applicant at the rate for sitting fees set out in the NSW Premier and Cabinet document, *Guidelines for NSW Board and Committee Members: Appointments and Remuneration*.

Notes:

- *The CCC is an advisory committee. The Department and other relevant agencies are responsible for ensuring that the Applicant complies with this consent.*

- *In accordance with the guideline, the Committee must include an independent chair and appropriate representation from the Applicant, Council, recognised environmental groups and the local community.*
- *In establishing the CCC, the Department will accept the continued representation from existing CCC members. The CCC may be combined with any similar CCC for the Ashton Mine Complex.*

REPORTING

Incident Reporting

8. The Applicant must notify, at the earliest opportunity, the Secretary 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 Ashton Mine Complex, the Applicant must notify the Secretary 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 must provide the Secretary and any relevant agencies with a detailed report on the incident, and any such further reports as may be requested.

Regular Reporting

9. The Applicant must provide regular reporting on the environmental performance of the development on its website, in accordance with the reporting arrangements in any approved plans of the conditions of this consent.

Annual Review

10. By the end of March each year (or other such timing as agreed by the Secretary), the Applicant must review the environmental performance of the development to the satisfaction of the Secretary. This review must:
 - (a) describe the works (including any rehabilitation) that were carried during the previous calendar year, and the works that are proposed to be carried out over the current calendar year;
 - (b) 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;
 - monitoring results of previous years; and
 - relevant predictions in the EA and the previous EIAs;
 - (c) identify any non-compliance over the last year, and describe what actions were (or are being) taken to ensure compliance;
 - (d) identify any trends in the monitoring data over the life of the development;
 - (e) identify any discrepancies between the predicted and actual impacts of the development, and analyse the potential cause of any significant discrepancies; and
 - (f) describe what measures will be implemented over the next year to improve the environmental performance of the development.

INDEPENDENT ENVIRONMENTAL AUDIT

11. One year after the commencement of construction of the development, and every 3 years thereafter, unless the Secretary directs otherwise, the Applicant must commission and pay the full cost of an Independent Environmental Audit of the development. This audit must:
 - (a) be conducted by a suitably qualified, experienced and independent team of experts whose appointment has been endorsed by the Secretary;
 - (b) include consultation with the relevant agencies;
 - (c) assess the environmental performance of the development and whether it is complying with the relevant requirements in this consent and any relevant EPL or Mining Lease (including any assessment, plan or program required under these approvals);
 - (d) review the adequacy of any approved strategies, plans or programs required under these approvals; and, if appropriate
 - (e) recommend measures or actions to improve the environmental performance of the development, and/or any strategy, plan or program required under these approvals.

Notes:

- *This audit team must be led by a suitably qualified auditor and include experts in any fields specified by the Secretary.*
- *The audits should be coordinated with similar auditing requirements for the Ashton South East Open Cut Project.*

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

ACCESS TO INFORMATION

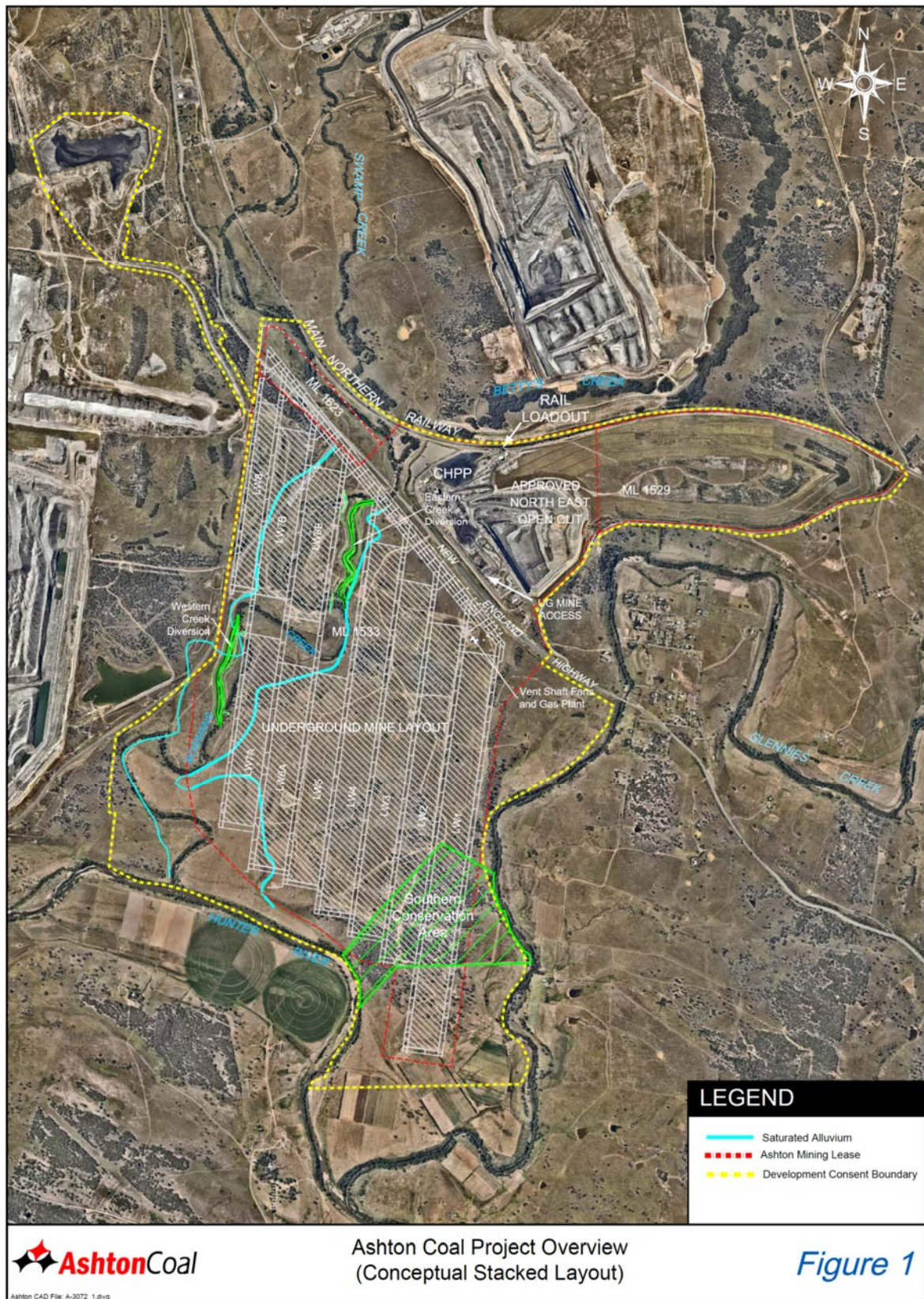
13. The Applicant must:

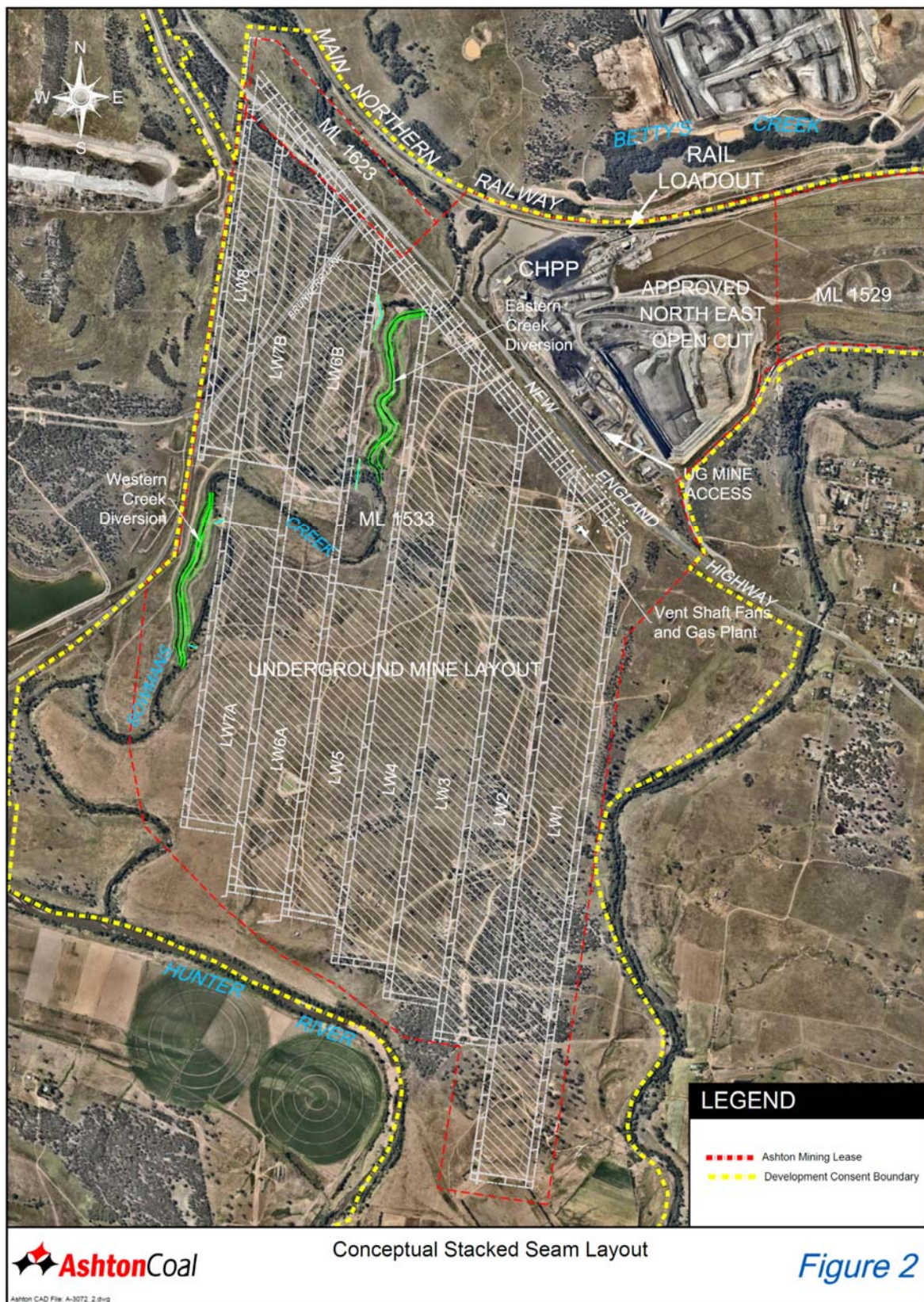
- (a) make copies of the following publicly available on its website:
- the documents listed in condition 2(a);
 - all current statutory approvals for the development;
 - approved strategies, plans and programs required under the conditions of this consent;
 - a comprehensive summary of the monitoring results of the development, including model performance results which have been reported in accordance with the various plans and programs approved under the conditions of this consent;
 - a complaints register, which is to be updated on a monthly basis;
 - minutes of CCC meetings;
 - the annual reviews over the life of the development;
 - any independent environmental audit, and the Applicant's response to the recommendations in any audit;
 - any other matter required by the Secretary; and
- keep this information up to date by ensuring that all management plans, monitoring results and reports are available on the Applicant's website within 30 days of their completion.
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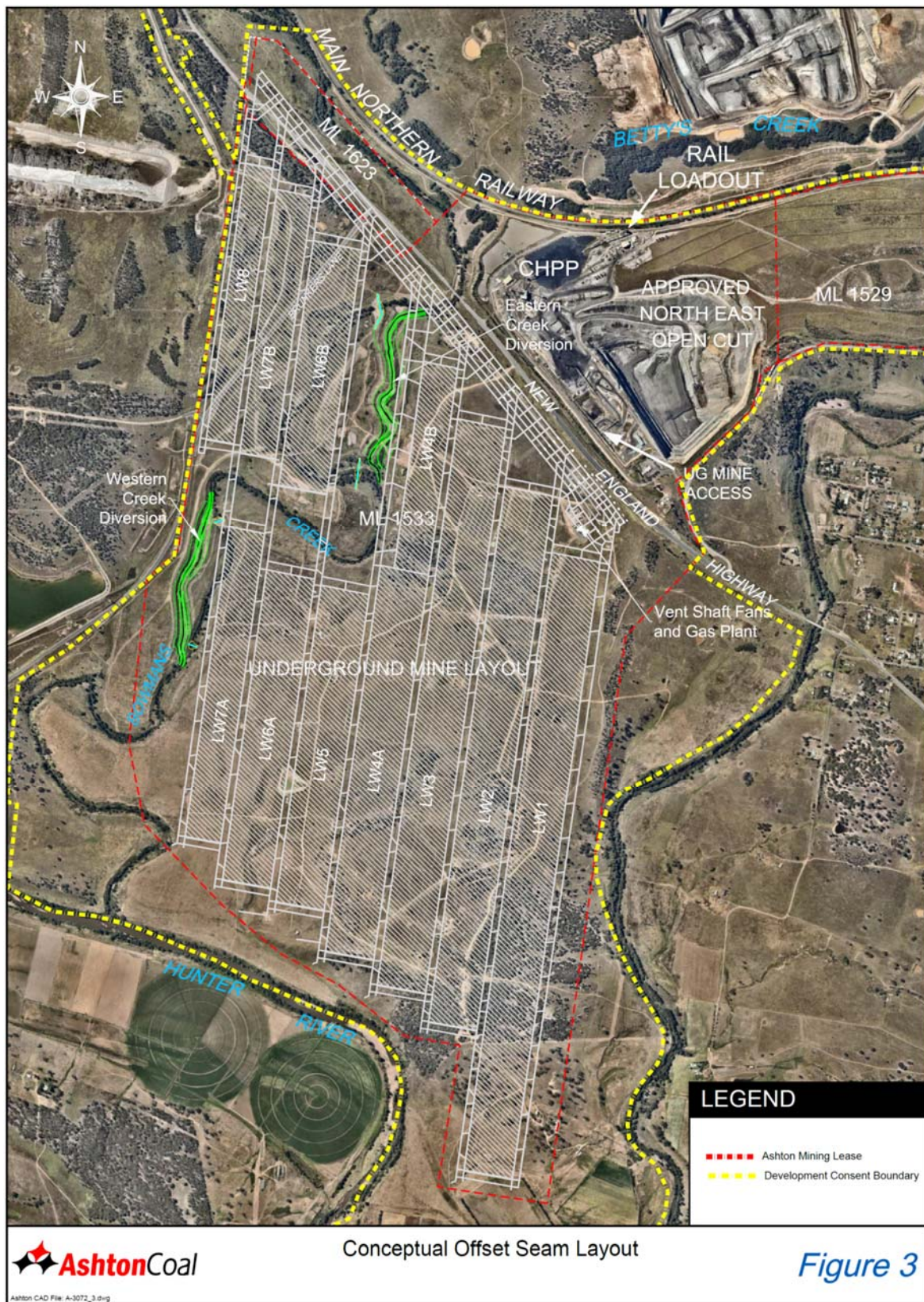
APPENDIX 1 SCHEDULE OF LAND

Land described as: Lot 1 DP 195598; Lot 3 DP 195598; Part Lot 11 DP 261916; Part Lot 31 DP 585169; Lot 101 DP 635131; Lot 1 DP 745486; Lot 59 DP 752499; Lot 128 DP 752499; Lot 1 DP 1048686; Lot 1 DP 1056200; Lot 2 DP 1056200; Part Lot 70 DP 1107703; Lot 1 DP 1114623; Part Lot 2 DP 1114623; Lot 3 DP 1114623; Part Lot 7300 DP 1121685; Part Lot 2 DP 1193186; Part Lot 3 1193186; Main Northern Railway; Glennies Creek Rd; Brunkers Lane / Lemington Road; New England Highway.

APPENDIX 2 DEVELOPMENT LAYOUT PLANS







APPENDIX 3 STATEMENT OF COMMITMENTS

MOD 6

Item	Description
1.	Mining
1.1	All mining will be undertaken within the approved mining lease.
1.2	The final extraction design of each subsequent seam below the Pikes Gully seam, including whether longwall panels are stacked or offset, will be subject to the results of impact monitoring and subsidence from the preceding seam and would be detailed in an Extraction Plan.
2.	General
2.1	Subsidence troughs will be reshaped and fill will be used where practicable to create a free-draining landform. This approach is expected to reduce the potential for surface pooling and inflow into the mine.
2.2	The diversion channels will be constructed in accordance with detailed civil and landscape design plans generally consistent with EA Plan Sets 2 and 3.
2.3	A geosynthetic clay liner will be placed under the low flow section of the diversion channels to minimise loss of baseflow from the constructed channels and to preserve surface flows in the diverted creek.
2.4	All workers involved in the construction of the diversion channels and block banks will receive site specific induction that includes requirements for good environmental management, including management of noise and dust; erosion and sediment; Aboriginal heritage; hazardous materials; and waste.
3.	Subsidence Monitoring and Mitigation
3.1	Mine plans will be reviewed in response to actual subsidence and geotechnical behaviour associated with mining in the deeper seams based on monitoring experience, expert interpretation, and other advice.
3.2	The Southern limits of LW5, LW6 and LW7 will be offset at least 200m from the Hunter River alluvium.
3.3	Subsidence will be monitored and managed in accordance with approved Extraction Plans (or equivalent), the development of which will be informed by: <ul style="list-style-type: none"> Subsidence monitoring over LW1-4 in the lower seams, as each seam is mined, to allow more accurate predictions of subsidence parameters above LW5-8. An End of Panel Report for each longwall panel with a focus on subsidence.. Consultation with the owner(s)/operator(s) of the Ravensworth Underground Mine on a seam by seam basis.
3.4	Subsidence and groundwater experts will be used to assess the western longwall (LW8) to ensure concurrent operation of the RUM and ACOL underground mines can be undertaken safely.
3.5	With the exception of Brunkers Lane as a public road: <ul style="list-style-type: none"> Existing surface infrastructure will be maintained to be safe, serviceable and repairable manner unless the owner agrees otherwise in writing. Damage to existing third party-owned infrastructure due to the ACOL induced subsidence will be mitigated or remediated.
4.	Groundwater
4.1	The current ACP groundwater monitoring network will be maintained and expanded to enable monitoring of water extracted from the mine workings as the lower seams are developed and mined.
4.2	Additional (nested) groundwater monitoring bores will be installed in the alluvium and Pikes Gully

Item	Description
	<p>overburden at the following locations:</p> <ul style="list-style-type: none"> • Southwest of LW6A. • On the eastern side of LW6B near the downstream end of the Eastern Diversion. • On the eastern side of LW6B near the upstream end of the Eastern Diversion. <p>These monitoring points will be monitored monthly as part of the routine monitoring and weekly at the time that mining occurs in the Pikes Gully seam immediately below in order to monitor groundwater drainage from the alluvium.</p>
4.3	The volume of water extracted from the mine workings will be monitored for the life of mine.
4.4	The volume and quality of individual sources of groundwater inflows, will be monitored where separation of sources is possible.
4.5	The existing ACP Groundwater Trigger Action Response Plan will be reviewed and extended to include monitoring of the lower seam inflows as they are mined.
5.	Surface Water
5.1	Water level monitoring will be undertaken in two pools immediately above LW6B as part of the routine monthly monitoring program and used to guide construction of block banks to their final level. While mining is occurring in LW6B, water levels will be monitored weekly.
5.2	The existing ACP surface water quality monitoring program will be reviewed and updated where required.
5.3	Setting back all secondary workings by at least 40m (in a horizontal direction) to the high bank of Bowmans Creek in its diverted function form.
6.	Water Licensing
6.1	Hold appropriate and adequate water entitlements to account for water from all sources impacted by underground operations on an annual basis.
6.2	Returning flows to Bowmans Creek whenever the rules of the Water Sharing Plan for Jerrys Management Zone prohibit the taking of water, including provisions for returning flows post-mine closure. Returned flows will be of an equal or better quality than the receiving waters.
6.3	Retaining or retiring an equivalent licensed entitlement to account for the long-term annual water based impacts, post-mine closure.
6.4	The provision of an ongoing financial contribution to cover the cost associated with returning flows to Bowmans Creek, post-mine closure, when baseflow impacts to Bowmans Creek are not permitted under the rules of the relevant water sharing plan.
7.	Geomorphology
7.1	<p>The bed and bank of the diverted creek will be surveyed:</p> <ul style="list-style-type: none"> • Six months, one year and two years after completing construction of the diversion channels. • At five yearly intervals, or immediately after a flood with a peak flow greater than 150m³/s (about 5 years ARI), at existing cross sections in the retained sections of the existing creek. For purposes of this commitment, flow will be determined from the Office of Water gauging station. • At five yearly intervals, or immediately after a flood event with a peak flow greater than 150m³/s (about 5 years ARI), at ten new cross section locations and along the thalweg of each diversion channel. The cross section locations will be established to be representative of the various geomorphic forms within the diverted channels.
7.2	<p>At the same time as cross sectional and longitudinal (thalweg) surveys, bed samples will be collected from four locations in each diversion channel (two pools and two riffles).</p> <p>Samples will also be collected from eight comparable representative sites in the remaining functional sections of the creek for statistical comparison.</p> <p>If there is a variation of more than 20% in the statistics of the data from the diversions compared</p>

Item	Description
	to the existing channel, ACOL will commission an appropriately qualified geomorphologist to investigate the causes and recommend any remedial actions.
8.	Construction of Diversion Channels
8.1	The diversion channels will be constructed during daylight hours: <ul style="list-style-type: none"> • 7am-6pm Monday to Saturday. • 8am-6pm Sundays and Public Holidays.
8.2	Erosion and sediment controls for the construction works will generally be consistent with: <ul style="list-style-type: none"> • The existing ACP Erosion and Sediment Control Management Plan. • Detailed diversion engineering design drawings (C045 – C047). • <i>Managing Urban Stormwater: Soils and Construction – Volume 2E Mines and Quarries (DECC 2008, or its latest version).</i>
8.3	Topsoil will be separately stockpiled within designated stockpile areas and used for rehabilitating disturbed areas, post construction, where required.
8.4	During and immediately after mining of the Pikes Gully seam, groundwater monitoring together with visual monitoring of stream flows and pools within Bowmans Creek (as diverted) will be undertaken. If there is any indication that significant drainage of the alluvium is occurring, or there is loss of stream flow, due to cracking, the full height block banks will be constructed immediately.
8.5	Noise and dust associated with construction activities will be minimised and managed consistent with existing ACP Noise and Dust Management Plans, including: <ul style="list-style-type: none"> • Monitoring against existing noise and dust impact assessment criteria at nearby sensitive receivers. • Minimising areas to be disturbed. • Using water trucks to suppress dust on all active haul roads and stockpile areas, where required. • Revegetating disturbed areas following completion of earthworks.
8.6	Appropriate signage will be installed on the New England Highway and at relevant public access points for the duration of construction activities.
8.7	A construction traffic management plan will be prepared and implemented to manage construction traffic interaction with the New England Highway, to the satisfaction of the RTA.
8.8	Detailed channel construction works will be carried out in consultation with appropriately qualified and experienced technical specialists.
9.	Rehabilitation and Land Management
9.1	Subsidence troughs will be rehabilitated to provide a free draining surface.
9.2	Landscape restoration will generally be consistent with the: <ul style="list-style-type: none"> • The Rehabilitation Strategy described in the Response to Submissions Report. • Conceptual landscape design drawings presented in the EA. • Existing ACP Landscape and Revegetation Management Plan. • Existing ACP weed management protocols.
9.3	Flood damage to the constructed channels will be remediated to restore hydraulic and geomorphic function.
9.4	Stock proof fencing (at least 5 m from the alignment of any riparian trees) will be installed along both sides of the functioning diverted creek for its full length between the New England Highway and the Hunter River.

Item	Description
9.5	Stock watering troughs will be installed at strategic locations on pasture areas adjacent to the creek in the post-mine landscape, where required.
10.	Riparian and Aquatic Habitat
10.1	The existing ACP Flora and Fauna Management Plan will be updated where necessary to be consistent with the vegetation and habitat management objectives for the diverted and rehabilitated creek.
10.2	Habitat trees in close proximity to construction activities will be clearly marked and protected.
10.3	Fish passage will be maintained in the diverted creek sections under at least moderate flow conditions.
10.4	Resting pools will be included within the diverted creek sections.
10.5	Large woody debris will be used to restore aquatic habitat.
10.6	<p>The loss of up to 1.8ha of riparian and aquatic habitat will be replaced with 15.7ha of combined aquatic and riparian habitat.</p> <p>An additional 58.7ha of mixed riparian woodland and grassy floodplain woodland will be established on the adjacent floodplain to further improve terrestrial habitat.</p>
10.7	The collection of River Red Gum seeds will be conducted under the appropriate licence or certificate, as required under the <i>Threatened Species Conservation Act 1995</i> .
11.	Aboriginal Heritage
11.1	All workers involved in construction will be given a site induction that includes awareness of the location of aboriginal heritage sites in the area, prohibition on entering identified sites and procedures to be followed in the event of any Aboriginal artefacts be detected during construction work.
11.2	Should any Aboriginal artefacts be detected during construction, work in that location will cease immediately and the finds will be reported to the Environmental Manager, at which time the existing ACP Archaeology and Cultural Heritage Management Plan protocols will be implemented. Work will not recommence in the area until instructed to do so by the Environmental Manager.
11.3	<p>There will be no construction within 70m of the Waterhole Site grinding grooves and appropriate controls will be implemented to protect this site from inadvertent construction activity impacts, including:</p> <ul style="list-style-type: none"> • Clear fencing of the site to form a boundary between contractors and the outer perimeter of the site. • Inclusion of a work method statement (WMS) that outlines the responsibilities of contractors in order to ensure that the site is not impacted and which outlines the repercussions of not adhering to the WMS (e.g. fines administered by OEH). • Inclusion of a cultural awareness component in the general induction of contractors working on the project.
11.4	The management for sites and areas of potential Aboriginal heritage impacted by the proposed diversions will be developed in consultation with the registered Aboriginal Stakeholders, and approved through the Extraction Plan process.
11.5	The oral history of the area will be recorded through consultation with relevant Aboriginal stakeholders, local landowners and other sources as appropriate to inform mitigation measures during construction.
11.6	The existing ACP Archaeology and Cultural Heritage Management Plan will be reviewed and updated where required, in consultation with Aboriginal stakeholders, to include management of Aboriginal heritage within the Bowmans Creek diversion disturbance area.

Item	Description
12.	Environmental Management Systems and Plans
12.1	The existing ACP Environmental Management Strategy: <i>Phase 2 Underground Mining Operations</i> will be reviewed and updated where required to include management, mitigation and monitoring objectives for the creek diversion.
13.	Environmental Monitoring and Reporting
13.1	Environmental monitoring will be carried out generally as described in the EA for the creek diversion.
13.2	An Annual Environmental Management Report (AEMR) will be prepared and forwarded to relevant government departments, including DoP. The AEMR will include a summary of all monitoring undertaken during the year, including a discussion of any exceedances and responses taken to ameliorate these exceedances.
13.3	Completion criteria for the creek diversion, including a monitoring regime and reference sites will be formalised in a Rehabilitation Management Plan prepared in consultation with relevant government authorities.

MOD 7

Item	Action
	Mining
1a	Monitoring of the open cut pit highwall will continue to be carried out to ensure the continued safe operation of Glennies Creek Road adjacent to the pit highwall.
1b	Open cut recovery of the Hebden Seam and backfilling of the extracted area will be carried out in strips as described in the EA to ensure the integrity and stability of the pit highwall is maintained.
1c	The management measures described in existing approved ACOL environmental management plans will continue to be implemented.
	Air Quality
2a	Site disturbance will be minimised as far as practicable.
2b	Vehicle access will be restricted to designated site access routes.
2c	A water cart will be used to suppress dust on access tracks and on well pad disturbance areas, where required.
2d	Disturbed areas not required for ongoing operations will be promptly rehabilitated.
2e	Mine related dust emissions will be monitored and managed to within acceptable criteria using real-time monitoring.
2f	Gas drainage infrastructure will be developed to capture gas from the underground mine prior to requiring gas drainage from the ULD Seam.
	Noise
3a	Mine related noise emissions will be monitored and managed to within acceptable criteria using real-time noise monitors.
3b	Blasting in the open cut pit will be designed and managed to ensure blast overpressure and vibration levels at surrounding sensitive receiver locations are within acceptable criteria.
	Aboriginal heritage
4a	Locations of gas drainage well pads and access tracks will be developed to avoid known Aboriginal heritage sites, wherever practicable.

Item	Action
4b	Locations of gas drainage well pads and access tracks will be surveyed in conjunction with Aboriginal community stakeholders for Aboriginal artefacts prior to disturbance and: <ul style="list-style-type: none"> Where additional significant Aboriginal artefact sites are identified the well pad or access track will be relocated to avoid impacting the Aboriginal site. Where impact to Aboriginal artefacts cannot be avoided these will either be salvaged or relocated in conjunction with Aboriginal community stakeholders in accordance with the conditions of an Aboriginal Heritage Impact Permit.
4c	Site inductions will include identification of Aboriginal heritage exclusion areas and actions to be undertaken where additional Aboriginal artefacts are identified, in accordance with ACOL's existing Aboriginal heritage management protocols.
	Macquarie Generation
5a	Prior to developing any of the gas drainage wells proposed to be located on Macquarie Generation-owned land ACOL will finalise these access arrangements with Macquarie Generation.
5b	Each of the gas drainage wells will be adequately secured to prevent any adverse interaction between the development and use of the gas drainage wells with any other proposed use of the land.
	Flora and fauna
6a	Locations of gas drainage well pads and access tracks will be developed to avoid clearing native vegetation.
6b	Ground disturbance will be minimised as far as practicable.
6c	Site inductions will include identification of native vegetation exclusion areas and designated site access routes.
	Water
7a	Gas drainage well pads will be located to avoid impacts to surface drainage lines, wherever practicable.
7b	Self-bunded fuel tanks and chemical spill kits will be implemented at active gas drainage well pads.
7c	The frequency of monitoring groundwater levels in monitoring bores surrounding the open cut pit will be increased to monthly for the duration of the extraction of coal from the Hebden Seam.
	Soils and Erosion Control
8a	Industry standard sediment control measures will be implemented prior to ground disturbance, including use of clean water diversions, where required.
8b	Long-term stockpiles will be stabilised with jute mesh or grass cover.
8c	Clean water diversions will be implemented around gas drainage well pads.
	Visual
9a	The potential for visual screening of gas drainage wells on Macquarie Generation-owned land will be investigated to minimise the visual intrusion of the wells.
9b	The use of low profile well head covers to secure well heads following the active use of the gas drainage wells on Macquarie Generation-owned land will be investigated to minimise the visual intrusion of the wells.
	Waste
10a	Construction waste will be recycled or disposed of in accordance with the existing ACOL approved Waste Management Plan.

MOD 9

Item	Action
1	Aboriginal Heritage
1a	Locations of the infrastructure, access track and sediment dam have been designed to avoid known Aboriginal heritage sites, wherever practicable.
1b	Infrastructure locations have been surveyed for Aboriginal artefacts prior to disturbance. Where Aboriginal artefacts are identified these will either be salvaged or relocated in accordance with the conditions of AHIP 1131017.
1c	A perimeter barricade will be placed around known objects located in proximity to the proposed works to avoid unintentional impacts during construction and operation.
1d	Site Inductions will include identification of Aboriginal heritage exclusion areas and actions to be undertaken where additional Aboriginal artefacts are identified, in accordance with ACOL's existing Aboriginal heritage management protocols.
2	Noise
2a	A temporary noise barrier (e.g. site sheds or shipping container) will be installed east of the site during pilot hole and drop hole drilling.
2b	Noise monitoring will be undertaken during construction to ensure compliance with the relevant criteria.
3	Air Quality
3a	A water cart will be used to suppress dust on access tracks and on disturbed areas, where required.
3b	Disturbed areas not required for ongoing operations will be promptly rehabilitated.
4	Terrestrial Ecology
4a	Ground disturbance will be minimised as far as practicable.
4b	Site access will be restricted to existing and proposed access tracks.
4c	Site Inductions will include identification of designated site access routes and correct driving behaviour.
5	Soils, Erosion Control and Surface Water
5a	Industry standard sediment control measures will be implemented prior to ground disturbance.
5b	Clean water diversions will be implemented around the site.
5c	An appropriately sized sediment dam will be constructed to capture surface water runoff from disturbed areas.
5d	Disturbed areas will be revegetated as soon as possible.
6	Traffic
6a	Vehicle access, for construction and operation of this project, will be restricted to designated site access routes. ACOL and construction employee access to "Dairy Lane" will be restricted to left in and left out, where required.
6b	Temporary "trucks turning" signs will be installed on the New England Highway in both directions, 200 to 300m in advance of the intersection, during construction.
7	Visuals
7a	Screening vegetation will be used to limit visual exposure to the northwest and south.
7b	The colour of the ventilation fan infrastructure will be selected so as to be visually recessive with the surrounding landscape.

Item	Action
8	Waste
8a	Construction waste will be recycled or disposed of in accordance with the existing ACOL approved Waste Management Plan.

MOD 10

Item	Action
1	Noise
1a	A temporary noise barrier will be used to minimise drill noise while ever gas bore construction activities are in close proximity to Property 130.
1b	Noise monitoring will be conducted at the boundary of Property 130 during gas bore construction in proximity to the property boundary.
2	Air Quality
2a	Site disturbance will be minimised as far as practicably possible, including limiting vegetation clearing and soil disturbance and minimising the number and size of soil stockpiles.
2b	A water cart will be used to suppress dust on access tracks and on disturbance areas, particularly during dry and windy conditions.
2c	Disturbed areas not required for ongoing operations will be promptly rehabilitated.
2d	Vehicle speeds on unsealed tracks will be restricted to a level that minimises dust generation. Vehicle movements (such as delivery and movement of materials) will be coordinated to avoid unnecessary trips on unsealed access tracks.
2e	When a mobile gas plant is used on Macquarie Generation owned land or within 100 m of Property 130, Air sampling near non-ACOL owned land work areas will be implemented to measure methane levels.
3	Greenhouse Gas
3a	Drained gas will be flared wherever practicably possible.
3b	Use of mobile flares in conjunction with use of the mobile gas plant will be investigated.
3c	Economically viable alternative uses of drained gas will be investigated.
4	Aboriginal Heritage
4a	Aboriginal heritage sites will be avoided as far as practicably possible. Where Aboriginal heritage sites can not be avoided, potentially impacted objects will either be salvaged or relocated in accordance with an approved AHIP, ACOL's ACHMP and in consultation with Aboriginal community stakeholders.
4b	A perimeter barricade will be placed around known objects located in proximity to the proposed works to avoid unintentional impacts during construction and operation.
4c	Site inductions will include identification of Aboriginal heritage exclusion areas and actions to be undertaken where additional Aboriginal objects are identified, in accordance with ACOL's existing Aboriginal heritage management protocols.
5	Riparian and Terrestrial Ecology
5a	Ecologically sensitive areas will be avoided as far as practicably possible.
5b	Ground disturbance will be minimised as far as practicably possible.
5c	The location of pipe laying and excavation will be assisted by a qualified ecologist including walking over of suitable habitat areas for target species immediately preceding construction.
5d	Areas containing EEC species will be avoided as far as practicably possible, provided the safety of underground mine workers is not compromised. Where avoidance is not possible, areas to be disturbed will be selected to avoid clearing trees as far as practically possible.
6	Traffic
6a	The "Dairy Lane" property access intersection will be used as a 'right in' intersection for south bound vehicles accessing the site when other approved ACP development is occurring with approved traffic controls. In the event these traffic controls do not exist, the 'dairy lane' intersection will be operated as a 'left in left out' only.
6b	Temporary "trucks turning" signs will be installed on the New England Highway in advance of site access intersections during construction.
6c	Heavy vehicle use of the "Dairy Lane" intersection during school bus pick-up / drop-off and milk tanker access times will be minimised as far as practically possible.
7	Visuals
7a	Visual screening will be used to reduce the visibility of gas bores on Macquarie Generation

	owned land to the Brunkers Lane / realigned Lemington Road and New England Highway as far as practically possible.
7b	Gas flares will be finished with visually recessive colours where possible.
8	Soils and Erosion Control, Surface Water and Groundwater
8a	Industry standard sediment control measures will be implemented prior to ground disturbance.
8b	Clean water diversions will be implemented around the gas drainage plant site.
8c	Disturbed areas will be revegetated as soon as possible.
8d	Gas bores will be drilled by a licenced driller and in accordance with bore construction guidelines, where relevant, including sealing off alluvial aquifer zones.
9	Waste
9a	Construction waste will be recycled or disposed of in accordance with the existing ACOL approved Waste Management Plan.
10	Macquarie Generation
10a	Visual screening will be used to reduce the visibility of gas bores on Macquarie Generation owned land to the Brunkers Lane / realigned Lemington Road and New England Highway as far as practically possible.
10b	Monitoring for methane will be undertaken during free-venting in close proximity to Macquarie Generation work areas (including the Void 5 ash dam).
10c	Continue regular Ashton / Macquarie Generation interaction meetings as appropriate.
10d	Continue to consult about future gas supply / use options
11	Property 130
11a	Access to property 130 will be maintained through all stages of the project through the ROW access track or the alternative access track.
11b	Gas bores will be set-back a minimum of 12 m (from the edge of the pad) from the centre of the ROW access tracks.
11c	Gas bores will be set-back a minimum of 50 m from the Property 130 boundary.
11d	Monitoring of methane and odours will be undertaken during free-venting within 100 m of the Property 130 boundary.
11e	Heavy vehicle use of the "Dairy Lane" intersection during school bus pick-up / drop-off and milk tanker access times will be minimised as far as practically possible.

APPENDIX 4

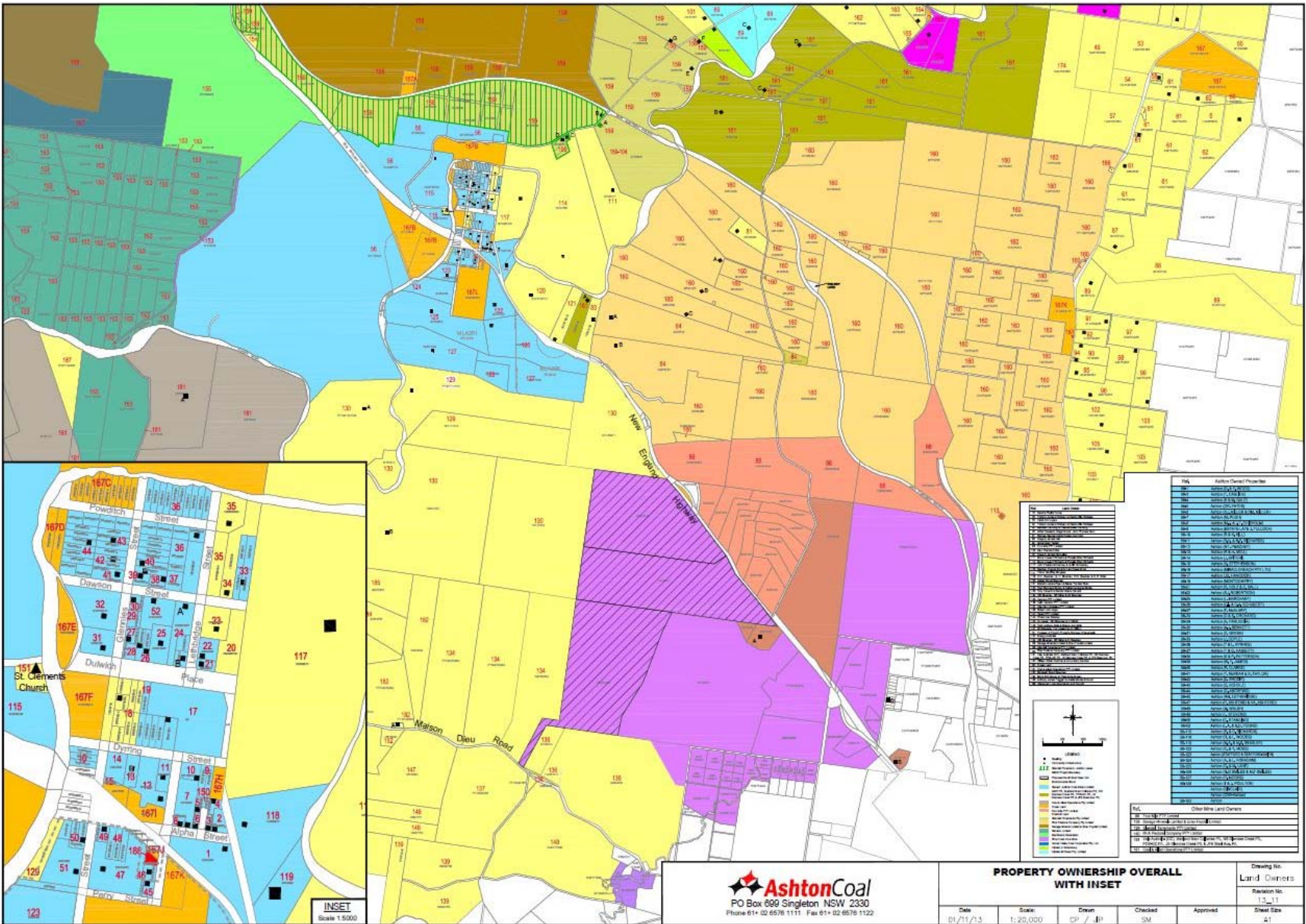
PREVIOUS ENVIRONMENTAL IMPACT ASSESSMENTS

- Development application No.309-11-2001-I and supporting information, including:
 - the Environmental Impact Statement, 3 volumes, dated November 2001, prepared by HLA Enviro-sciences Pty Ltd;
 - Aboriginal Cultural Heritage Assessment dated July 2001, prepared by the Upper Hunter Wonnarua Council and forwarded in a letter from White Mining Limited (WML) received 12 December 2001;
 - conceptual design for upgrade works to Glennies Creek Road provided to Council and the Department by WML dated 10 December 2001;
 - information provided to the Department by WML on 4 February 2002, titled “Ashton Coal Project Meeting – PlanningNSW”;
 - additional information relating to flora and fauna surveys, the diversion of Bowmans Creek, water quality, groundwater, air quality and Aboriginal cultural heritage provided by HLA Enviro-sciences to the Department and other government agencies, dated 28 February 2002;
 - information relating to groundwater impacts provided by HLA-Envirosciences to the Department dated 14 March 2002;
 - additional information relating to subsidence impacts, groundwater impacts, agricultural impacts, project justification and blasting impacts provided by HLA Enviro-sciences to the Department dated 28 March 2002;
 - additional water management information provided to OEH and other NSW Government agencies prepared by HLA Envirosciences Pty Ltd, dated 5 April;
 - fax from WML to the Department dated 13 May 2002 relating to a meeting held on 7 May 2002;
 - letter from HLA Envirosciences to the Department dated 16 May 2002, relating to flora and fauna surveys and agricultural impacts;
 - description and proposed diversion option 2 provided by WML to the Department dated 17 May 2002;
 - response to public submissions from HLA Envirosciences to the Department dated 31 May 2002;
 - additional information provided by WML regarding Northern Woodland Remnant dated 31 May 2002;
 - additional information and letter provided by WML to the Department regarding Salinity and Green Offsets for the Project dated 20 June 2002;
 - revised Aboriginal cultural heritage survey provided by HLA Enviro-sciences to the Department dated 24 June 2002;
 - letter from HLA-Envirosciences to the Department dated 2 July 2002 relating to Green Offsets report;
 - letter from HLA-Envirosciences to NPWS (OEH) dated 3 July 2002 relating to Aboriginal cultural heritage;
 - additional information relating to Aboriginal cultural heritage from HLA-Envirosciences to the Department dated 15 July 2002;
 - fax from WML to the Department dated 25 July 2002 relating to Aboriginal consultation;
 - letter from WML to the Department dated 12 August 2002 relating to a conservation area;
 - amendment to DA from WML to the Department titled “Description of Alternate Mine Layout for Underground Mine (Option 4) dated 6 September 2002;
 - fax from WML to the Department dated 13 September 2002 relating to an internal coal haul road;
- MOD-1 (approved 15 October 2003): modification application and accompanying environmental assessment, titled *Submission Pursuant to Section 96(2) of the EP&A Act (1979) to Raise the Height of the Eastern Emplacement Area* – dated August 2004, prepared by Ashton Coal Operations Pty Limited;
- MOD-2 (approved 27 January 2005): modification application and accompanying environmental assessment, dated August 2004 prepared by Ashton Coal Operations Pty Limited, including the:
 - Supplementary Air Quality Information, dated 9 November 2004, prepared by Holmes Air Sciences;
- MOD-3 (approved 19 February 2007): modification application and accompanying environmental assessment, titled *Ashton Coal Tailings Pipeline – Application to Modify Development Consent and Statement of Environmental Effects*, dated 2 November 2006 and prepared by Parsons Brinkerhoff;
- MOD-4 (approved 26 March 2010): modification application and accompanying environmental assessment, titled *Development Consent Modification DA 309-11-2001-i MOD 4* dated July 2009, prepared by Wells Environmental Services, including the:
 - document titled *Second Response to Submissions – Ashton Coal Operations Ltd. (ACOL) – Longwall/Miniwall Panel No. 9* dated 24 December 2009;
- MOD-6 (approved 24 December 2010): modification application and accompanying environmental assessment, titled *Ashton Coal Bowmans Creek Diversion Environmental Assessment* dated 3 December 2009, prepared by Evans & Peck, including the:
 - document titled *Ashton Coal Bowmans Creek Diversion Response to Submissions*, prepared by Wells Environmental Services, dated May 2010; and

- document titled *Ashton Coal Bowmans Creek Diversion Statement of Commitments*, dated December 2010.
- MOD-7 (approved 15 June 2011): modification application and accompanying environmental assessment, titled *Environmental Assessment for the Modification of DA 309-11-2001-i (MOD 7) comprising underground mine interim gas drainage open cut Hebden seam recovery Condition 3.14 (Schedule 2) amendment*, dated February 2011, prepared by Wells Environmental Services, including the:
 - document titled *Response to Issues – development consent modification application for the Ashton coal mine - DA 309-11-2001-i MOD 7*, dated 29 April and 3 May 2011, prepared by Ashton Coal Operations Pty Ltd;
- MOD-8 (approved 28 February 2012): modification application and accompanying environmental assessment, titled *Modification Application to Ashton Coal Project DA 30-9-11-2001 MOD 8*, dated 2 December 2011 prepared by Ashton Coal Operations Pty Limited, including the:
 - document titled *Aboriginal Archaeological Assessment, Development of Gas Drainage Boreholes in areas of Potential Archaeological Deposits*, dated December 2011, prepared by Insite Heritage Pty Ltd;
- MOD-9 (approved 5 June 2012): modification application and accompanying environmental assessment titled, *Environmental Assessment for the Modification of DA 309-11-2001-i (MOD 9) Comprising Upcast Ventilation Shaft, Fans and Mine Service Infrastructure*, dated February 2012, prepared by Wells Environmental Services, including the:
 - Document titles *Response to Submissions*, dated 16 April 2012, prepared by Ashton Coal Operations Pty Limited; and
- MOD-10 (approved 12 December 2012): modification application and accompanying environmental assessment, titled *Environmental Assessment for the Modification of DA 309-11-2001-i (MOD 10) Comprising Central Gas Drainage Plant and Associated Surface Infrastructure*, dated 2 August 2012 prepared by Wells Environmental Services.

APPENDIX 5

RECEIVER LOCATION PLANS



APPENDIX 6 ALTERNATE NOISE CONDITIONS

NOISE

Application

- Conditions 2 to 3 below have effect during times when open cut mining operations are not being undertaken at the Ashton Mine Complex, in the opinion of the Secretary.

Noise Criteria

- Except for the noise-affected land in Table 1 of Schedule 3, the Applicant must ensure that the noise generated by the development does not exceed the criteria in Table 1 at any residence on privately-owned land or on more than 25 per cent of any privately-owned land.

Table 1: Noise Criteria dB(A)

Receiver No.	Receiver	Day (L_{Aeq} (15min))	Evening (L_{Aeq} (15min))	Night (L_{Aeq} (15min))	Night (L_{A1} (1 min))
-	All privately-owned land	38	38	36	46

Noise generated by the development is to be measured in accordance with the relevant requirements of the *NSW Industrial Noise Policy*. Appendix 8 sets out the requirements for evaluating compliance with these criteria.

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

Additional Noise Mitigation Measures

- Upon receiving a written request from the owner of any residence on any privately-owned land where subsequent operational noise monitoring shows the noise generated by the development exceeds the noise limits in Table 2, the Applicant must implement additional reasonable and feasible noise mitigation measures (such as double glazing, insulation, and/or air conditioning) at the residence in consultation with the owner.

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

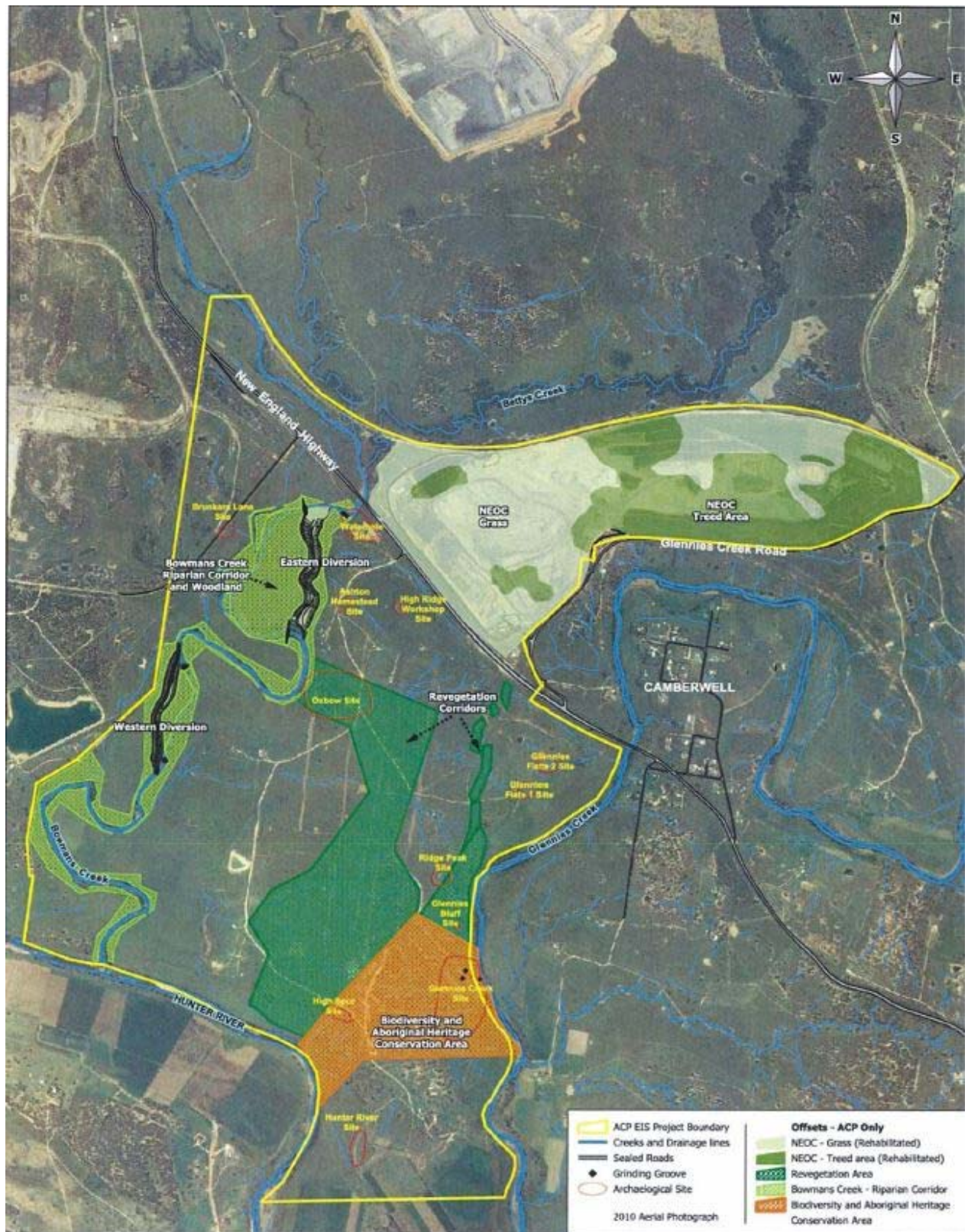
Table 2: Additional Noise Mitigation Criteria dB(A) L_{Aeq} (15min)

Receiver No.	Receiver	Day (L_{Aeq} (15min))	Evening (L_{Aeq} (15min))	Night (L_{Aeq} (15min))
-	All privately-owned land	38	38	38

Notes:

- Noise generated by the development is to be measured in accordance with the relevant requirements of the *NSW Industrial Noise Policy*. Appendix 8 sets out the requirements for evaluating compliance with these criteria.
- For this condition to apply, the exceedance of the criteria must be systemic.

APPENDIX 7 REHABILITATION PLAN AND BIODIVERSITY OFFSET STRATEGY



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Monday, 6 June 2011 By: JPB

Ashton Coal Project
Conceptual Biodiversity Offset
and Rehabilitation Strategy

APPENDIX 8 NOISE COMPLIANCE ASSESSMENT

Compliance Monitoring

1. Attended monitoring is to be used to evaluate compliance with the relevant conditions of this approval.
2. Data collected for the purposes of determining compliance with the relevant conditions of this approval is to be excluded under the following meteorological conditions:
 - a) during periods of rain or hail;
 - b) average wind speed at microphone height exceeds 5 m/s;
 - c) wind speeds greater than 3 m/s measures at 10 m above ground level; and
 - d) temperature inversion conditions greater than 3°C/100m.
3. Unless otherwise agreed with the Secretary, this monitoring is to be carried out in accordance with the relevant requirements relating for reviewing performance set out in the NSW Industrial Noise Policy (as amended from time to time), in particular the requirements relating to:
 - a) monitoring locations for the collection of representative noise data;
 - b) equipment used to collect noise data, and conformity with Australian Standards relevant to such equipment; and
 - c) modifications to noise data collected, including for the exclusion of extraneous noise and/or penalties for modifying factors apart from adjustments for duration.
4. To the extent that there is any inconsistency between the Industrial Noise Policy and the requirements set out in this Appendix, the Appendix prevails to the extent of the inconsistency.

Determination of Meteorological Conditions

5. Except for wind speed at microphone height, the data to be used for determining meteorological conditions shall be that recorded by the meteorological station located in the vicinity of the site (as required by condition 18 of Schedule 3).