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Ashton Coal Mine Project
Independent Environmental Audit
August 2010

Prepared for:
Ashton Coal Operations Pty Limited
Glennies Creek Road
Camberwell NSW 2330 Australia

Report by:
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EXECUTIVE SUMMARY

An independent environmental audit of the Ashton Coal Mine Project was conducted between the 9 and 10 August 2010 by Trevor Brown & Associates, to assess the status environmental compliance of the open cut and underground mine operations between August 2007 and August 2010 to satisfy the requirements of Minister's Conditions of Approval (MCoA) No. 8.8 and 8.9.

This Independent Environmental Audit report is based on discussions held with Ashton Coal Operations Limited (ACOL) personnel, a review of documentation, monitoring data, the Development Consent and Environment Protection Licence, and observations made during site inspections on 9 and 10 August 2010. Additional areas assessed were the comparison of site performance against predictions made in the EIS and the Subsidence Management Plan by review of environmental monitoring results, and environmental management on site.

All the required documentation for verification of compliance with the MCoA and other statutory approvals held by Ashton Coal Operations Pty Limited for the Ashton Coal Project, was provided to the auditor in an efficient manner and was adequate for verification of the status of the project operations with the relevant approvals.

The Environmental Management strategy and Environmental Management Plans and Procedures in place for the approved project provide a sound basis for protection of the surrounding environment and the community.

Non-compliances Identified during the Independent Environmental Audit were related to Environmental Management Plan review, blast overpressure, noise and dust deposition in the 2007-2010 period:

<table>
<tr><th colspan="3">Non-compliances Identified during the Independent Environmental Audit</th></tr>
<tr><td colspan="3">Environmental Management Plans (EMP)</td></tr>
<tr><td>MCoA 3.6</td><td>"Environmental management plans are to be reviewed, and updated as necessary, at least every 5 years or as otherwise directed by the Director-General, in consultation with the relevant government agencies. Plans shall reflect changing environmental circumstances and changes in technology or best-practice management procedures".</td><td>Six EMP's (i.e. Lighting, Soil Stripping, Spontaneous Combustion, Waste, Bushfire and Road and Rail Closure Management Plans) require review and revision.
ACP indicated that the six EMP's were to be reviewed and revised following the decision on the South East Open Cut EA, and the Bowmans Creek Diversion EA currently with the DoP for assessment. This extended time frame has been accepted by DoP. All other EMP's have been reviewed and revised as necessary in the last 5 years.</td></tr>
<tr><td>MCoA 6.1</td><td>The Applicant shall comply with the following ambient air quality standards / goals:
Table 3 Amenity Based Criteria for Dust Fallout
<table>
<tr><td>Pollutant</td><td>Averaging Period</td><td>Max total dust deposition</td></tr>
<tr><td>Deposited dust</td><td>Annual</td><td>4 g/m2/month</td></tr>
</table></td><td>Generally the dust levels were within the <4 g/m²/month criteria at the Camberwell residential sites.
Dust deposition monitoring exhibited increased levels during 2009-2010 affected by high winds and dust storms (August 2009) The following sites exceeded the criteria at August 2010: D5, D6, D7, D8, D13.</td></tr>
<tr><td>MCoA 6.22 and EPL L7.2</td><td>The Airblast overpressure level from blasting operations carried out in or on the premises must not exceed:
(a) 115 dB(Lin Peak) for more than 5% of the total number of blasts during each reporting period; and
(b) 120 dB (Lin Peak) at any time.
at any residence or other noise sensitive</td><td>The blast overpressure criteria of >115dBL was exceeded more than 5% of the time at both the St Clements Church and Camberwell village monitoring locations during the 2008-09 period.
The >120dBL criteria was exceeded once in June 2009 at both the Church and Camberwell Village locations.</td></tr>
</table>

<table>
<tr><td></td><td>receiver such as the St Clements Anglican Church and Camberwell Community Hall.</td><td>For the period September 2009 to August 2010 the >115dBL criteria exceeding 5% occurred at the Camberwell Village site. There were three exceedences of the >120dBL level recorded at Camberwell Village - one in in December 2009 and one in January 2010.</td></tr>
<tr><td>MCoA 6.34</td><td>Except as may be expressly provided by a DECCW licence, noise generated by the development must not exceed the limits specified in Table 5 below.
Table 5 Noise Limits (dB(A))
<table>
<tr><th>Location</th><th>Day</th><th>Evening</th><th>Night</th></tr>
<tr><td></td><td>LAeq (15 min)</td><td>LAeq (15min)</td><td>LAeq (15 min)</td></tr>
<tr><td>Any residence not owned by the Applicant or not subject to an agreement between the Applicant and he residence owner as to an alternate noise.</td><td>38</td><td>38</td><td>36</td></tr>
</table></td><td>The results of the noise monitoring between 2007 and 2010 generally demonstrate conformance of the noise emissions from the ACP operations with the predicted noise levels and the MCoA/EPL criteria. There were minor exceedences of the 38dB(A) criteria during the monitoring in Q1 and Q4 2007-08..</td></tr>
</table>

The management of the major environmental aspects of the Ashton Coal Project operations demonstrated that the project had been developed generally in accordance with the Environmental Impact Statement and subsequent documentation approved by the administering authorities, and generally complied with the requirements of the MCoA and other approvals granted to the project:

Air

Dust deposition monitoring exhibited an increase in levels during 2009-2010 affected by high winds and dust storms (August 2009) but generally the levels complied with the <4 g/m²/mth criteria at the Camberwell residential sites. The HVAS-TSP levels exceeded the cumulative rolling annual average of 90µg/m³ between September 2009 and August 2010. PM_{10} monitoring indicated compliance with the annual cumulative average criteria of 30µg/m³ and the 24hour average criteria of 150µg/m³ at the community sites except under high wind conditions from the northwest.

Surface Water Management

The ACP operations have not discharged water from the site during 2007-2010. Water quality monitoring conducted under the Site Water Management Plan is adequate to assess water quality management on the site and in the surrounding natural waterways. The water quality monitoring has demonstrated the water quality of Bowmans Creek, Glennies Creek and the Hunter River have not been affected by the ACP operations.

Groundwater

The results of groundwater monitoring and an analysis of trends compared to the impacts predicted for the current stage of mining in both the EIS studies and subsequent studies carried out have concluded that all groundwater-related impacts from underground mining during the review period were below the levels predicted in the EIS (2001), and in the SMP groundwater assessment (2006-2009).

The groundwater inflows have been well below the EIS predictions between 2007 and 2010.

Erosion and Sediment Control
The erosion and sediment controls established for the ACP project provide for collection of surface runoff waters with increased suspended solids to ponds established on site. The retention of the waters from the disturbed areas of the project site and retention and settlement of the suspended solids in the ponds provides protection of water quality of natural waterways around the mine operations.

Blast/Vibration
Exceedence of >5% of overpressure >115dBL occurred between 2007 and 2010 at St Clements Church and Camberwell Village and blast overpressure of >120dBL occurred on 3 occasions in the same period.

The MCoA/EPL criteria of <5% of blasts >2mm/s peak particle vibration (ppv), was not exceeded between 2007 and 2010.

Light
Management of light positioning has reduced light scatter from the mine operations and reduced the number of community complaints during 2007-2010 compared with the previous 3 year period.

Bushfire
The requirements in the Bushfire Management Plan have been implemented for the site and the Plan will be reviewed during 2010.

Noise
A report on Comparison of Actual Noise Levels against EIS Predictions was prepared by ACP and submitted to DECCW on 22 July 2009. Exceedence of the 38dBA noise criteria occurred during the 5year period - 2005 to 2009. The exceedence events were reported as non-compliances to the relevant administering authorities.
Submission of the report to DECCW on noise compliance satisfied the requirement of EPL condition U1.

Weed and Pest Control
Weed control is an ongoing program that is planned annually and proposed in the AEMR's. The management of weeds occurs in accordance with the requirements of the relevant legislation and weed / land management authorities.

Mine Subsidence
Monitoring of the surface areas above the longwall panels 1-4 has confirmed that in general the maximum subsidence movements detected to date were less than the subsidence predicted in the Subsidence Management Plan. Subsidence monitoring also showed that there had been negligible subsidence on the steep slopes of Glennies Creek. Visual inspection revealed that near complete subsidence occurred immediately after passage of the longwall. Cracks in land and the access road to Property 130 have been repaired satisfactorily to date.

Conclusion

In general the independent environmental audit findings for the Ashton Coal Project operations during the 2007 to 2010 period demonstrated compliance with the MCoA and conditions attached to other approvals granted for the project.

1.INTRODUCTION

1.1 Background

The Ashton Coal Project (ACP) is owned and operated by the Ashton Coal Operations Pty Ltd (ACOL). The ACP is situated 14 kilometres (km) northwest of Singleton in the Hunter Valley, NSW. Camberwell Village is located approximately 600 metres to the south east of the Ashton open cut mine and 1,500m east of the mine surface facilities.

The Main Northern Railway line forms the northern boundary of the site and the New England Highway is located to the south of the open cut and mine surface facilities. Glennies Creek Road is located along the south eastern boundary of the existing open cut operations. The Ashton underground mine is located north of the Hunter River, south of the New England Highway and west of Glennies Creek.

The Development Consent granted on 11 October 2002 for the Ashton Coal Project included in the Minister's Condition of Approval (MCoA) 8.8 – Independent Environmental Auditing, the requirement for an independent third party audit of compliance to be conducted 3 yearly:

> *"8.8 - One year after commencement of construction and every three years thereafter until five years after completion of mining in the DA area, or as otherwise directed by the Director-General, the Applicant shall conduct an environmental audit of the mining and infrastructure areas of the development in accordance with ISO 14010 - Guidelines and General Principles for Environmental Auditing, and ISO 14011- Procedures for Environmental Auditing (or the current versions), and in accordance with any specifications required by the Director-General. Copies of the report shall be submitted by the Applicant to the Director-General, SSC, DECCW, NoW, DII, RTA, MSB and the CCC within two weeks of the report's completion for comment".*

This independent environmental audit of the ACP was conducted on the 9 and 10 August 2010 by Trevor Brown, Principal Environmental Management Consultant of Trevor Brown & Associates, to assess the compliance status of the Ashton Coal Mine operations, in relation to the Consolidated Consent conditions as amended on 26 March 2010.

Department of Planning Website: www.planning.nsw.gov.au/assessingdev/notices.asp
DA Number: DA-3098-11-2001-i

Details: Notice of Modification - Consolidated Consent

- **Title: Modification to Ashton Coal Mine operations open cut coal mine**
- **Approved:** Development Consent granted by Minister of Planning, 11 October 2002; Notice of Modification, S75W of the EP&A Act 1979 granted 26 March 2010
- **Description:** Development of an open cut coal mine, underground coal mine and construction and operation of associated surface facilities, known as the Ashton Coal Project
- **Location:** Land described as Lot 101 DP 635131; Part Lot 11 DP 261916; Lot 3 DP 195598; Part Lot 70 DP 752499; Part Lot 701 DP 828294; Lot 1 DP 745486; Part Lot 1243 DP 1007536; Lot 1 DP 195598; Lot 59 DP 752499; Crown land including Crown Roads adjoining Lot 1 DP 745486; Lot 128 DP 752499 (Reserve No.89555); Travelling Stock Reserve No. 66768; Part Camberwell Temporary Common; Main Northern Railway corridor; Glennies Creek Rd reserve; New England Highway reserve; Parish of Vane.

1.2 Scope of Work

The independent environmental audit was conducted generally in accordance with the International Standards Organisation (ISO) 19011:2002 – Guidelines for Quality and/or Environmental Systems Auditing.

The scope of work for the independent environmental audit of the ACP included the following components as required under MCoA 8.9:

> *"a) assess compliance with the requirements of this consent, licences, and approvals;*
> *b) assess the development against the predictions made in the EIS and the predictions and commitments made in the documents listed in condition 1.2;*
> *c) assess the development against predictions made in SMPs required under condition 3.18.*
> *d) review the effectiveness of the environmental management of the mine, including any mitigation works*."

The audit also included:

- conduct of a site inspection and review of on-site documentation and monitoring data relevant to the independent environmental audit;
- discussions with ACP staff in relation to the MCoA conditions and status of the project; and
- preparation of an Independent Environmental Audit Report providing assessment of compliance against each consent condition.

The site inspection conducted during the course of the audit, included the following aspects of the mine operations:

- Open Cut Mine – including excavation of overburden and coal, truck haulage of coal and overburden, drill, water cart and a dozer in operation, Mine water lines;
- Workshop areas including hard stand, waste management, hydrocarbon management, water treatment system;
- Water management systems including dams and diversion channels;
- CHPP area - ROM stockpiles and hoppers in use, Breaker stations in use, tailings pipeline, process water dam, and stockpiled product coal;
- Underground mine surface activities/facilities – including ventilation bore, dewatering bore, above long wall face, Glennies Creek, Voluntary Conservation Area, workshops, waste management, hydrocarbon storage and service areas, water treatment system.
- Monitoring sites (dust deposition gauges, HVAS, TEOMs, noise and blast monitor sites);
- Meteorological station; and
- Rehabilitated areas.

1.3 Structure of the Audit Report

This Independent Environmental Audit report has been prepared for each MCoA and EPL condition in a tabulated form, with comment provided where required. The tabulated comments are attached as appendices for the MCoA and EPL, with discussion of the status of other approvals provided where relevant for the project:

Section 1 Introduction
Section 2 Description of Ashton Coal Project – August 2010
Section 3 Consents, Approvals and Licenses
Section 4 Environmental Management Strategy
Section 5 Environmental Management Plans
Section 6 Assessment against Predictions in the Environmental Impact Statement
Section 7 Assessment against Predictions in the Subsidence Management Plan
Section 8 Conclusions
Appendix A Ministers Conditions of Approval
Appendix B Environmental Protection Licence

1.4 Compliance Tables

The status of compliance of the ACOL Project with the conditions of approval, have been expressed in the audit tables, using the following terminology:

Compliant - Yes	Implies compliance with the intent and/or requirement of the approval condition.
Compliant - **NO**	The specific requirement of the consent condition was not met.
Not Triggered	The condition had not been activated because the activity had not yet commenced, or the condition is not currently triggered because of timing of the requirements (e.g. post mining requirements).
Not Applicable (N/A)	The condition is not actioned because of specific circumstance.
Noted	No specific auditable requirement applicable to the condition.

2. ASHTON COAL PROJECT – AUGUST 2010

The mining operations commenced at the ACP open cut mine in January 2004.

The development of the ACP mine operations is generally in accordance with the Development Application and subsequent documentation specified in MCoA 1.2 – *vis*:

"The Applicant shall carry out the development generally in accordance with the:

a) development application No.309-11-2001-I as amended by the document in subclause v);
b) EIS, 3 volumes, Nov 2001, prepared by HLA Enviro-sciences Pty Ltd and certified in accordance with Section 78A(8) of the Act;
c) Aboriginal Cultural Heritage Assessment, Jul 2001, prepared by the Upper Hunter Wonnarua Council and forwarded in a letter from WML received 12 Dec 2001;
d) conceptual design for upgrade works to Glennies Creek Road provided to SSC and PlanningNSW by WML, 10 Dec 2001;
e) information provided by WML, titled "Ashton Coal Project Meeting – Planning NSW, 4 Feb 2002;
f) 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 Planning NSW and other government agencies, 28 Feb 2002;
g) information relating to groundwater impacts provided by HLA-Enviro-sciences to Planning NSW, 14 Mar 2002;
h) additional information relating to subsidence impacts, groundwater agricultural, project justification and blasting impacts provided by HLA Enviro-sciences to Planning NSW, 28 Mar 2002;
i) additional water management information provided to DEC and other NSW Government agencies prepared by HLA Enviro-sciences Pty Ltd, dated 5 Apr;
j) fax from WML to Planning NSW dated 13 May 2002 relating to a meeting held on 7 May 2002;
k) letter from HLA Enviro-sciences to Planning NSW, 16 May 2002, relating to flora and fauna surveys and agricultural impacts;
l) description and proposed diversion option 2 provided by WML to PlanningNSW,17 May 2002; and
m) response to public submissions from HLA Enviro-sciences to Planning NSW, 31 May 2002;
n) additional information provided by WML regarding Northern Woodland Remnant, 31 May 2002.
o) additional information and letter provided by WML to Planning NSW regarding Salinity and Green Offsets for the Project, 20 Jun 2002;
p) revised Aboriginal Cultural Heritage Survey provided by HLA Enviro-sciences to Planning NSW, 24 Jun 2002;
q) letter from HLA-Enviro-sciences to Planning NSW, 2 Jul 2002 relating to Green Offsets report;
r) letter from HLA-Enviro-sciences to NPWS,3 July 2002 relating to Aboriginal cultural heritage;
s) additional information relating to Aboriginal cultural heritage from HLA Enviro-sciences to Planning NSW, 15 Jul 2002;
t) fax from WML to Planning NSW, 25 Jul 2002 relating to Aboriginal consultation;
u) letter from WML to Planning NSW, 12 Aug 2002 relating to a conservation area;
v) amendment to DA from WML to Planning NSW titled "Description of Alternate Mine Layout for Underground Mine (Option 4), 6 Sep 2002;
w) fax from WML to PlanningNSW,13 Sep 2002 relating to an internal coal haul road;
x) Submission Pursuant to Section 96(2) of the Environmental Planning and Assessment Act 1979, August 2004, prepared by Ashton Coal Operations Pty Limited;

y) Supplementary Air Quality Information, 9 Nov 2004, prepared by Holmes Air Sciences;
z) Documents titled Ashton Coal Tailings Pipeline – Application to Modify Development Consent and Statement of Environmental Effects, 2 Nov 2006 and prepared by Parsons Brinkerhoff;
aa) Document titled Development Consent Modification DA 309-11-2001-i MOD 4, Jul 2009, prepared by Wells Environmental Services;
ab) Document titled Second Response to Submissions – Ashton Coal Operations Ltd. (ACOL) – Longwall/Miniwall Panel No. 9, 24 Dec 2009; and
ac) the conditions of this consent."

The Ashton Coal Mine as described in the EIS (February 2001), SEE (April 2002), subsequent documentation and Modification to Consent granted on 26 March 2010, provide the physical boundaries of the project for this independent environmental audit.
The Ashton Coal Mine is located approximately 14km northwest of Singleton, Hunter Valley, NSW and includes the northeast open cut mine, the underground coal mine, coal preparation plant and other associated surface infrastructure.

The Ashton Coal Mine is permitted to produce 5.45 Mtpa of ROM coal (refer MCoA 2.7, 2010). All coal is transported by rail from the site to the Port of Newcastle for export or into the power stations via the Ravensworth rail unloading facility.

Open Cut Development
Initial construction activity commenced on site in September 2003 with coal production from the open cut mine in January 2004. The coal handling and preparation plant (CHPP) was commissioned in April 2004 and the first coal was railed from site in May 2004.

The open cut mine is located on the northern extremity of the project development area and is bounded by the Main Northern Railway, Glennies Creek Road and the New England Highway. The open cut mine comprises two pits:

- Arties Pit - parallel to the New England Highway; and
- Barrett Pit - located to the east of the Arties Pit.

Coal resource occurs in the lower section of the Foybrook formation that includes the Pikes Gully, Arties, Liddell and Barrett seams in the vicinity of the Camberwell anticline. The current open cut pit production has been approximately 2 Million tonnes (Mt) of Run-of-Mine (ROM) coal per year.

ACOL own and operate the open cut pit using backhoe-style excavators and trucks. Open cut mining operations are limited to between 7am to 10pm Monday to Saturday, and 8am to 10pm on Sunday and public holidays. Three water carts are used at ACP to manage dust generation from the haul roads.

Initial emplacement of overburden from the open cuts was to the east of the Barrett Pit. This overburden emplacement has been progressively rehabilitated in accordance with the approved Mining Operations Plan.

Since the approval of the initial Environmental Management Strategy, a Modification to Consent was approved to permit the Eastern Emplacement Area to be raised by 10 metres above the RL 125 approved in the original consent. Overburden was backfilled into the open cut mine void once the pit had progressed to the point where it was possible to continue mining and place the overburden behind the active mining face of the open cut.

The Eastern Emplacement Area has been rehabilitated in accordance with the Mining Operations Plan and the completed areas of overburden backfill into the open cut have also been contoured and pasture cover established.

The final void of the open cut mine will be utilised for the disposal of tailings and chitter from the CHPP, for the remaining life of the project.

Underground Mine Development

The underground mine is accessed via portals off the high-wall of a small box cut in the Arties Pit. The main mine headings are generally aligned beneath and adjacent to the New England Highway corridor, thereby minimising the impact of subsidence on the New England Highway road network. The underground workings are located to the south of the New England Highway.

The underground mine is a multi-seam operation to recover resource from the Pikes Gully, Upper Liddell, and the Lower Barrett seams of the Foybrook formation, in sequence. Coal is mined via long-wall extraction and the underground mine currently produces approximately 3.2Mtpa of ROM coal per year.

First Workings (mine headings and gate road development) commenced in December 2005, and coal extraction commenced in February 2007 from long-wall 1. The long-wall blocks are aligned parallel to the western boundary of the mine lease.

Subsidence Management Plan (SMP) approval has been received for Long-wall Panels 1 to 4 and Long-walls/Mini-walls 5 – 9 in the Pikes Gully seam. Extraction of the second seam, Upper Liddell is expected to commence in 2011.

Coal Preparation

Pit top facilities for coal preparation, stockpiling and train loading have been constructed within the mine lease area to the north of the New England Highway.

ACP Coal Handling & Preparation Plant

The Coal Handling and Preparation Plant (CHPP) is located in the north-western corner of the project development area and comprises:

- CHPP Module 1 (2004) - 400 tonne per hour (tph) dense medium cyclone plant with spirals, ROM coal and product coal stockpiling facilities, established to accommodate the ROM coal output from the open cut; and
- CHPP Module 2 (2006) - plant upgraded with a further 600tph module prior to the commencement of underground long-wall operations.

The CHPP operates 24 hours per day, seven days per week and produces high quality semi-soft coal for use in the steel manufacturing industry, and thermal coal for use in power generation.

Product coal from the CHPP is stockpiled for loading onto trains at a dedicated rail siding on the mine site and is transported to the Port of Newcastle for export to international markets, or to Hunter Valley power stations via the Ravensworth rail unloading facility.

Other Surface Facilities

The mine administration area and car parking, crib shed and bath house were established for the commencement of the open cut operations. Facilities were expanded with additional stores and bath house for the underground mine.

Aerial Photograph of the ACP operations area – August 2010

ACP Open pit

Rehabilitation on wast emplacements

3. CONSENT, APPROVALS, LICENCES

3.1 Minister's Conditions of Approval

The Development Consent under the *Environmental Planning and Assessment Act 1979* and the Minister's Conditions of Approval (MCoA) for the Ashton Coal Project (ACP), were granted on 11 October 2002, with subsequent Modifications to Consent:

Planning Approvals	Granted	Authority	Area	Expiry
DA 300-11-2001-i	11 Oct 2002	DoP	Schedule 1 of Development Consent	11 Oct 2023
DA 300-11-2001-i (M1) Modification to allow EPA to specify noise criteria	15 Oct 2003	DoP		11 Oct 2023
DA 300-11-2001-i (M2) Modification to permit 10m increase in height of EEA	27 Jan 2005	DoP		11 Oct 2023
DA 300-11-2001-i (M3) Modification for construction and operations of tailings pipelines between ACP mine ad former Ravensworth Mine	19 Feb 2007	DoP		11 Oct 2023
DA-300-11-2001-I (M4) Modification LW9	26 Mar 2010	DoP		11 Oct 2023
DA144/1993 Amendment for use of Ravensworth Void 4 – Tailings disposal	25 May 2007	SSC	-	NA
DA 488/2006 – Train fuelling facility	28 Nov 2006	SSC	Rail siding	28 Nov 2011

This Independent Environmental Audit reviewed the documentation in relation to the Consolidated Conditions of Consent dated 26 March 2010, for the ACP.

Where an authority other than Department of Planning had administrative responsibility for requirements of condition(s) or other approvals, the compliance status has been determined by reviewing correspondence and discussion with ACP environmental staff. Compliance of the ACP mining activities with the MCoA conditions is presented in Appendix A.

3.2 Environment Protection Licence

Environment Protection Licence (EPL) 11879 was granted to Ashton Coal Operations Pty Limited (ACOL) under section 55 of the *Protection of the Environment Operations Act* 1997 for the Ashton Coal Mine, on 14 March 2003. Notices of Variation to the EPL (listed on the DECCW website) were granted under section 58(5) of the *Protection of the Environment Operations Act* 1997:

Environment Protection Licence	Granted	Authority	Area	Expiry
EPL 11879 (open cut area and processing)	2 Sep 2003	EPA	ML 1533	Annual
EPL Variation (construction noise criteria)	10 Nov 2003	EPA		
EPL Variation (modified dust sampling)	28 Feb 2005	DECC		
EPL Variation (incorporation of underground mining)	17 Nov 2005	DECC		
EPL Variation (changes to groundwater monitoring)	20 Nov 2006	DECC		
EPL Variation (vibration criteria)	27 Dec 2007	DECC		
EPL Variation (EPL condition U1 - Licensee to provide a noise report and measures to ensure that noise generated by the mine is not in excess of the predicted levels or limits).	28 Apr 2009	DECC		
EPL Variation (increased tonnage of coal works)	17 Nov 2009	DECCW		

ACP obtained section 90 Permits under the National Parks and Wildlife Act for the collection of identified Aboriginal artefacts from areas of disturbance from mine activities:

Heritage Approvals	Granted	Authority	Expiry
S90 Permit No. 1591 (to collect Aboriginal artefacts north of New England Highway)	21 Jul 2003	DECCW (NWPS)	21 Jul 2008
S90 Permit No. 2783 (collection of Aboriginal artefacts EWA86)	28 Sep 2007		28 Sep 2009
S90 Permit (blanket Permit for collection of Aboriginal artefacts over the entire UG area above Longwalls 1-4).	December 2007		December 2017

ACP has Radiation Licenses (granted by the DECCW under the *Radiation Control Act*):

Radiation Licence	Granted	Authority	Expiry
Radiation Registration RR1281 9700 (CHPP dense medium)	2 May 2009	DECCW	1 May 2011
Radiation Registration12903 CPP Module 2 Thickner underflow)	17 Jan 2010	DECCW	16 Jan 2012
Radiation Registration 12905 (CHPP Module 1 Thickner underflow)	17 Jan 2010	DECCW	16 Jan 2012
Radiation Registration 12906 (CHPP Module 2 dense medium)	17 Jan 2010	DECCW	16 Jan 2012
Radiation Registration 21160 (CHPP combined Thickners tailings sump)	10 Dec 2009	DECCW	9 Dec 2011

Review of ACP compliance of the with the DECCW conditions is presented in Appendix B.

3.3 Mining Lease ML1528

Mining Lease (ML) No. 1533 was granted under the *Mining Act* 1992 on 26 February 2003, ML 1529 on 17 September 2003, and ML 11623 was granted on 5 November 2008.

A Mining Operations Plan (MOP) was prepared to include both the open cut and underground mining operations for the period 2007 to 2012 in accordance with DMR Guideline (Document 08060002.GUI) and addresses the requirements of the ML conditions for the ACP open cut and underground mines. The MOP outlines the mining operations, management procedures, environmental monitoring, rehabilitation, and references the Environmental Management Plans required by the MCoA.

Mining Tenements/Approvals	Granted	Authority	Expiry
EL 4918 (370ha) Renewal submitted	17 Sep 1999	DPI	21 May 2009
ML 1533 (883.4ha)	26 Feb 2003	DPI	26 Feb 2024
ML 1529 (128.7ha)	17 Sep 2003	DPI	11 Nov 2012
EL 5860 (272ha)	14 Mar 2004	DPI	17 Dec 2010
ML 1623 (26.17ha)	5 Nov 2008	DPI	30 Oct 2029
MOP for ACP open cut and underground operations (consolidated MOP 2007-2012)	1 Sep 2008	DPI	2012
Subsidence Management Plan (for LW1-4)	8 Mar 2007	DPI	Completion of LW1-4
Subsidence Management Plan (for LW/MW 5-8)	2 Jul 2009	DPI	Completion of LW/MW 5-8
Subsidence Management Plan (for LW/MW 9)	18 Jun 2010	DPI	Completion of LW/MW 9
Clause 88(1) Approval (safe operations, stability of workings and resource recovery long-wall mining)	28 Feb 2007	DPI	1 Jun 2011
S126 Approval (for emplacement of carbonaceous material in Ravensworth void 4)	17 Jan 2007	DPI	-

4. ENVIRONMENTAL MANAGEMENT STRATEGY (EMS)

MCoA 3.7 enabled Ashton to divide the preparation and submission of any Environmental Management Plans (EMPs) between open cut and underground mining operations.

An Environmental Management Strategy Phase 1 was approved by the Director-General on 28 May 2003 for the open cut operations and associated infrastructure. It addressed the environmental strategies to be adopted by ACOL for the whole of the project, and specifically addressing the EMPs required for the open cut mining.

The Environmental Management Strategy Phase 2 supplemented Phase 1, incorporating the underground mining activities and was approved by the Director-General on 2 November 2005.

The Environmental Management Strategy Phase 2 includes:

- statutory and other obligations required from authorities and other stakeholders, and key legislation and policies (Section 1 and 2);
- environmental aspects (Section 3);
- roles, responsibility, authority, accountability and reporting of ACP personnel in relation to environmental management (Section 4);

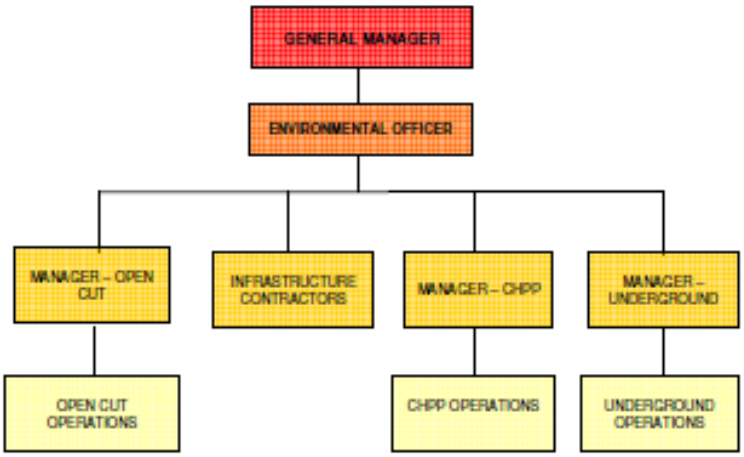


Chart 1 – Ashton Coal Project Environmental Organisation Structure

- environmental management and social objectives and performance outcomes for each key environmental element for which management plans are developed (Section 5);
- key environmental strategies (Section 7)
- cumulative environmental impacts and procedures for dealing with these at each stage of the development (Section 8);
- objectives and strategies to promote economic productivity within the area affected by mining (Section 9);
- conceptual project schedule (Section 10);
- procedures to ensure that all relevant approvals, management plans, and procedures are complied with by all staff and contractors (Section 12 and 13);
- processes for conflict resolution in relation to environmental management (Section 14).

The Environmental Management Strategy Phase 2 provides an adequate basis for the management of the surface and underground ACP activities, to protect the community and surrounding environmental values.

5. ENVIRONMENTAL MANAGEMENT PLANS

5.1 Air Quality Management Plan

ACP prepared the Air Quality Management in accordance with the requirements of MCoA 3.6 and submitted Version A for approval by Planning NSW, prior to the commencement of open cut pit mining operations in 2003. The Air Quality Management Plan has been revised and Version C dated 19 August 2006 addresses the requirements of the Modification to Consent granted for the project and addresses the requirements for the underground mine operations that commenced in December 2006.

The Air Quality Management Plan has been implemented by ACP for the surface and underground mine operations in accordance with the procedures and commitments in the Plan.

Operations are managed in response to real time weather data from the onsite meteorological station and results for air quality monitoring within Camberwell Village and surrounds.

Operational air quality controls include:

- No placement of overburden waste on high levels of emplacement areas when average wind speeds exceed 10 m/s from the northwest sector;
- Dumping, dozing, loading and haulage operations are managed to minimise dust generation and dispersion from the mine lease area; and
- Blasting is undertaken with consideration of meteorological conditions with blasts designed to prevent dust and other emissions exceeding air quality goals or causing dust nuisance effects off site.

5.1.1 Air Quality Monitoring

The requirements for dust monitoring are defined in MCoA 6.11 and 6.12(a), and EPL conditions P1.1 (Monitoring points), M2 (Requirement to monitor pollutants discharged), M7 (Requirement to monitor weather). The air quality monitoring program fulfils the requirements of the approvals and monitoring is undertaken in accordance with the Air Monitoring Program (as agreed with the NSW EPA) and the *Approved Methods for the Sampling and Analysis of Air Pollutants in NSW*.

To satisfy the requirements of the MCoA and EPL, ACOL utilises Hi-Vol air samplers to measure TSP and Tapered Element Oscillating Microbalances (TEOMs) to measure PM_{10}.

Location of PM_{10} Monitoring Stations	
Monitoring Station No.	**Location**
1	Camberwell Village North
2	Camberwell Village South
3	Property east of Camberwell Village
4	On-site – north of the Eastern Emplacement Area
7	On-site – at end of the rail siding
8	Camberwell Village East

Dust emissions from the Ashton Open Cut are monitored via a real-time environmental monitoring system with 6 monitoring locations around the ACP site. Mining operations are modified based on the monitoring results and observation to ensure compliance with EPL conditions.

Dust deposition is monitored around the ACP site and within the Camberwell Village. All dust gauges are sampled monthly for insoluble matter (g/m2/month) and ash (percent) in accordance with *Australian Standard 3580.10.1 1991 deposited Matter – Gravimetric methods for insoluble solids*. Dust deposition is measured and recorded on a monthly basis, and reported on a quarterly basis to assess compliance with the dust deposition goals:

- The total deposited level of dust is not to exceed 4 g/m2/month; and
- The maximum increase caused by ACP is not to exceed 2 g/m2/month. (This is calculated by the subtraction of the average background level of dust deposition derived from pre-operational measurements of dust deposition at each site).

High Volume Air Sampler (HVAS) TSP and PM_{10} samples are analysed in accordance with *Australian Standard 2724.3-1984 Particulate Matter –TSP-high volume air sampler*. Total Suspended Particulates (TSP) are monitored on a cycle of one day in six rotation. The cumulative goal of 90µg/m^3 includes the effects of existing background dust concentrations.

If the running average PM_{10} for the preceding 24hour period reaches 40µg/m^3 and the wind is from the northwest sector, the work being undertaken on the site will be assessed and appropriate measures introduced to reduce dust generation. If the 24-hour PM_{10} exceeds 50µg/m^3, all overburden operations at high levels of the overburden emplacement areas will be postponed until the environmental conditions improve.

Particulate Matter < PM_{10} is also continuously recorded on the real-time Tapered Element Oscillating Microbalances (TEOMs) monitoring system. Trends in PM_{10} concentrations are recorded at each TEOM station for:

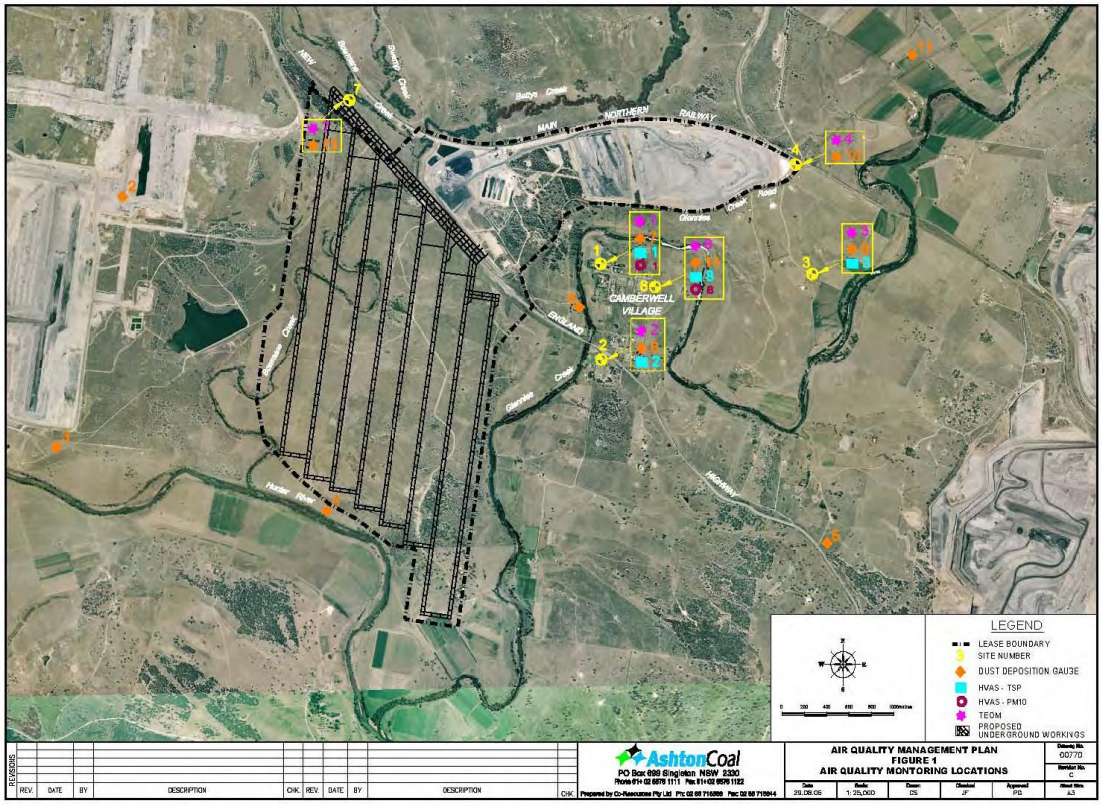
- Long term average PM_{10} - cumulative assessment incorporating the effect of all sources of dust. It provides trends over time enabling assessment against the annual mean goal of 30 µg/m^3 and assessment of seasonal variations;
- Short term average PM_{10} - cumulative assessment that incorporates the effect of all sources of dust and will address the acquisition criteria of 150µg/m^3; and
- Short term average PM_{10} – 24 hour average of 50µg/m^3 assesses the impact of the ACP operations alone. (This trend is assessed by measuring the PM_{10} concentration at Location 1 during those periods when the wind is emanating from the northwest sector and subtracting the level of incoming dust to ACP as measured by the lowest PM_{10} concentration from windward Locations 4 and 7.

5.1.2 Reporting

The results and analysis of all air monitoring are included in the Annual Environmental Management Report (AEMR).

A daily log of weather and observed dust conditions is kept by the Environmental Officer. This environmental log details prevailing weather conditions, the observations made on site and the required actions implemented.

Location of Dust Deposition Gauges	
Monitoring Station No.	**Location**
2	Ravensworth property west of open cut
3	Ashton property near Hunter River
4	Ashton property near Hunter River
5	New England Highway SE of Camberwell Village
6	St Clements Church
7	TEOM site 1 - Camberwell Village (closest to the mine)
8	TEOM site 2- Camberwell Village
9	TEOM site 3 - Camberwell Village
10	TEOM site 4 – on ACP site
11	NE of Emplacement Area on Glennies Creek Road
13	TEOM site 7 – on-site (country end of turnout)
14	TEOM site 8 - Camberwell Village



5.1.3 Dust Monitoring Summary

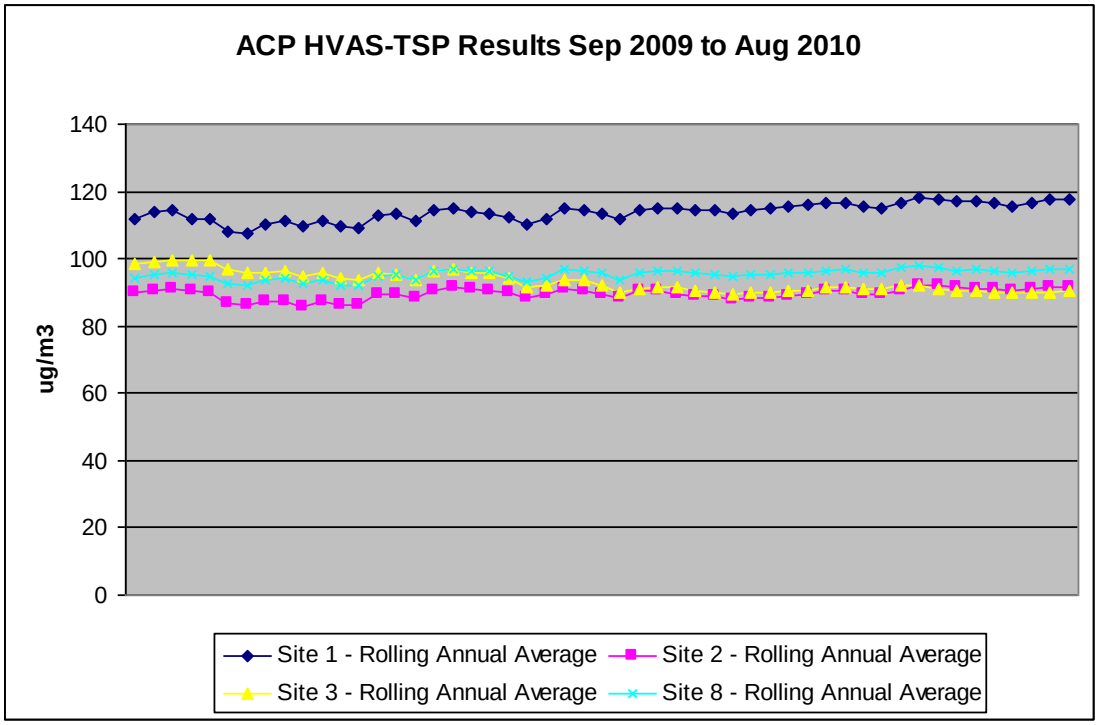
2007-2010 TEOM PM10 data indicated compliance with the cumulative annual average criteria of 30µg/m³ and the cumulative 24hour average criteria of 150µg/m³ at all 4 Community sites (1, 2, 3 and 8).

The 24hour Average ACP Contribution of 50µg/m³ was exceeded at:

- Site 8 - 1 July 2008 (58 µg/m^3);
- Site 1 - 20 August 2008 (54 µg/m^3);
- Site 1 - 15 September 2008 (53 µg/m^3). The real-time trends demonstrated that the exceedence of criteria was directly related to strong winds and a dust storm which presented towards the end of the mine operations shift (approx. 9pm). Prior to the dust storm coming through the area PM_{10} levels were within criteria.
- Site 1 and Site 8 - 31 October 2008 - Site 1 (55 µg/m^3) and Site 8 (62 µg/m^3);
- Site 1 - 25 August 2009 (53µg/m³). Heavy winds experienced from 2am onwards on the 25th with a dust storm following shortly after at 3am. It is noted that the Ashton Coal Open Cut operations were shut down t the time of the event (The effects of the dust storm were recorded at all TEOMs till approximately 11am).
- No exceedence of the 24hour Average ACP Contribution of 50µg/m³ occurred during 2009-2010.

For the period 2007-2010 HVAS results show an increase in cumulative TSP levels in Camberwell Village. Cumulative rolling annual average criteria of 90µg/m³ for the audit period:

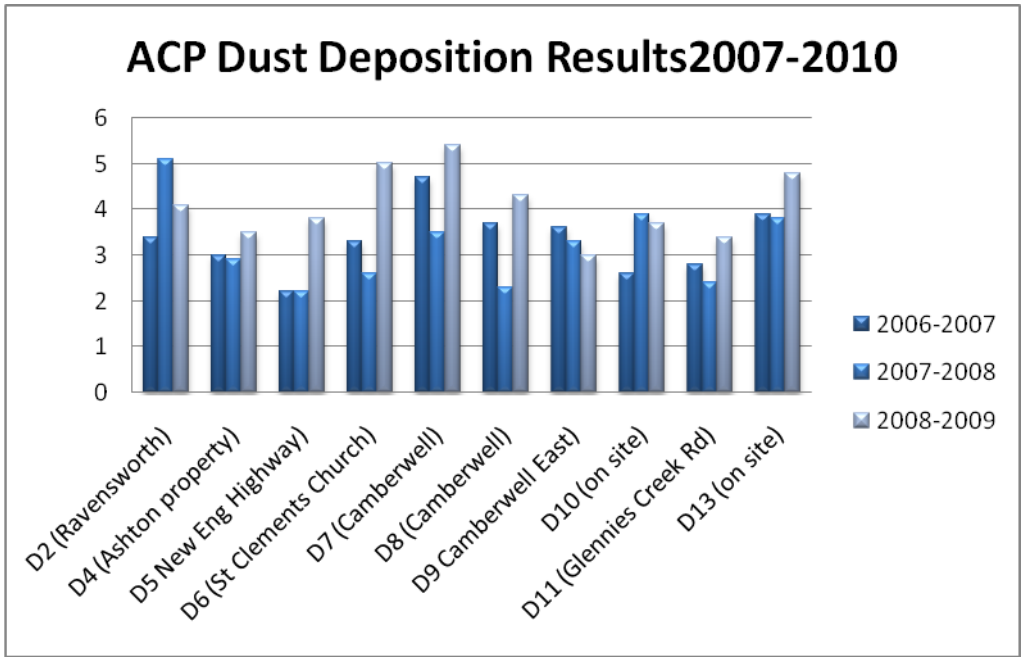
- 2007-2008: Site 1 (92µg/m³).
- 2008-2009: Site 1 (111µg/m³), Site 3 (99µg/m³) and Site 8 (94µg/m³).
- 2009-July 2010: Site 1 (108µg/m³), and Site 8 (90µg/m³).



The annual average insoluble solids for each dust deposition gauge during the 2007–2010 period were generally less than the criteria of 4.0 g/m²/month with the exception of:

- 2007-2008: Dust gauge D2 (annual average = 5.1g/m²/month) located close to a neighbouring mine operation and due to the progression of their pit, now lies within the 4g/m^2/month impact zone identified in their environmental impact assessment.
- 2008-2009: Gauges D2, D6, D7 and D8 exceeded the annual average of 4g/m²/month during high wind and dust storm events that resulted in ACP modifying mine site operations to reduce dust dispersion.
- 2008-2009: Gauge D13 is an on-site gauge and affected by the mine operations.
- 2009-June 2010: Locations D5, D6, D7, D8 and D13 exhibited dust deposition results above the annual average of 4g/m²/month during the period 11/08/2009 to 10/09/2009 due to two separate dust storm events, and these events resulted in ACP shutting down all mine site operations on the 21 August and 29 August 2009.

Dust Gauge No.	**Annual Average g/m²/month**				**Annual Average g/m²/month**
	2006-2007	2007-2008	2008-2009	2009-Jun 2010	EIS Background
D2 (Ravensworth)	3.4	**5.1**	**4.1**	3.5	3.5
D4 (Ashton property)	3.0	2.9	3.5	3.6	1.6
D5 New Eng Highway)	2.2	2.2	3.8	**4.1**	2.0
D6 (St Clements Church)	3.3	2.6	**5.0**	**5.9**	-
D7 (Camberwell)	4.7	3.5	**5.4**	**5.9**	-
D8 (Camberwell)	3.7	2.3	**4.3**	**4.1**	-
D9 Camberwell East)	3.6	3.3	3.0	2.8	-
D10 (on site)	2.6	3.9	3.7	3.8	-
D11 (Glennies Creek Rd)	2.8	2.4	3.4	3.7	-
D13 (on site)	3.9	3.8	**4.8**	**4.2**	-
D14 Camberwell)	2.4	2.2	2.6	2.6	-



PM_{10} monitoring indicated compliance with the annual cumulative average criteria of 30µg/m³ and the 24hour average criteria of 150µg/m³ in Camberwell.
The HVAS-TSP results are consistently higher than the 90µg/m³ criteria for all four sites during 2009 and 2010.
Dust deposition monitoring exhibited increased levels during 2009-2010 affected by high winds and dust storms (August 2009) but generally the dust levels were within the <4 g/m²/month criteria at the Camberwell residential sites.

5.2 Erosion and Sediment Management

All runoff from disturbed areas is collected in a series of sedimentation and settling dams established in accordance with the Erosion and Sediment Control Management Plan (ESCP). Monitoring indicates that these dams have been working effectively in controlling sediment flow.

Gypsum and Floc Blocks have been used in drains where there is a high potential for sediment movement during heavy rainfall events. The Gypsum works by dropping the sediment out of entrainment in the overland water flow.

Major runoff storage dams are located in the following areas:

- north-west side of the CHPP (Process Water Dam and Settling Dam);
- eastern side of the Eastern Emplacement Area (Dam 5/6); and

In addition, there are a number of small surface runoff water dams that intercept runoff before it leaves the site. These dams also contain sediment control devices in the form of hay bales, silt fences, etc where required.

Visual inspections of the erosion and sediment control structures are undertaken on a regular basis

5.3 Surface Water Management

Ashton Coal has an approved Site Water Management Pan. Controls have been put in place in accordance with this plan to control potential causes of water pollution. These controls are considered to have been adequate for the reporting period.

ACP has a nil discharge regime and as a result there have been no discharges of contaminated or saline water to the environment. All contaminated or saline water is captured in the Site Water Management System and used for dust suppression and coal processing on the site. Water quality is measured at 14 locations off-site on the streams in the area.

5.3.1 Surface Water Monitoring

The water monitoring locations are detailed in **Figure 5** as well as the following table:

Monitoring Station	Water Source	Location
SM1	Bettys Creek	Glendell land upstream of Ashton
SM2	Bettys Creek	Upstream of confluence with Bowmans Creek
SM3	Bowman Creek	Water pool at the NE corner of the ML
SM4	Bowman Creek	Water pool just downstream of New England Highway
SM5	Bowman Creek	Halfway down Ashton property
SM6	Bowman Creek	Upstream of the confluence with the Hunter River
SM7	Glennies Creek	Upstream of the Ashton Mine
SM8	Glennies Creek	Halfway down the Ashton property
SM9	Hunter River	Upstream with the confluence with Bowman Creek
SM10	Hunter River	Downstream of the confluence with Bowman Creek
SM11	Glennies Creek	Upstream with the confluence with the Hunter River
SM12	Hunter River	Downstream of the confluence with Glennies Creek
SM13	Hunter River	Upstream with the confluence with Glennies Creek, midway between Bowman Creek and Glennies Creek
SM14	Hunter River	Directly upstream of the confluence with Glennies Creek

5.3.2 Monthly Water Quality Monitoring Results

All monthly water samples are collected and analysed for pH, Electrical Conductivity (EC), Total Dissolved Solids (TDS), Total Suspended Solids (TSS) Total Hardness (CaCO3), and Oil and Grease (O & G).

Parameter	Comments
pH	Weekly and monthly water quality monitoring in Bowmans Creek, Glennies Creek and the Hunter River indicate that pH levels were consistently within the range of 7.1 - 8.5 throughout the 2007-2010 period.
Electrical Conductivity (EC)	Bowmans Creek - EC levels in Bowmans Creek fluctuated between 463µS/cm and 1980µS/cm. During the dry spell in January and early February 2009, Bowmans Creek ceased to flow and saline groundwater inflows (>10,000µS/cm) became the dominant water source for the pool at SM4 increasing EC levels. Glennies Creek – EC levels in (SM7, SM8 and SM11) remained consistently low. All three sites trended together throughout the period indicating no impacts from Ashton Coal Operations. Hunter River – EC levels (SM9, SM10, SM12, SM13 and SM14) generally showed similar EC trends throughout the period. SM12 (located downstream of the confluence with Glennies Creek) was affected by the lower EC levels of Glennies Creek under low flow conditions during January and February 2009.
Total Suspended Solids (TSS)	Weekly and monthly TSS results demonstrated levels of TSS within the water quality criteria for the majority of the 2007-2010 period. On the 18th March 2009 a high TSS result of 300mg/L at SM4 was recorded. The increased TSS appeared to be due to algae and organic matter present in the sample. No other sites recorded the high TSS level.

The actual environmental impacts of the ACP operations on surface water quality are generally within the background levels and the prediction in the EIS that there would be no adverse impacts on surface water quality from the ACP mining operations.

The surface water monitoring has demonstrated that the water quality of Bowmans Creek, Glennies Creek and the Hunter River have not been affected by the ACP operations.

5.4 Groundwater

As required by Consent Condition 9.2 (d), a groundwater report has been prepared annually by an independent expert.

The groundwater analysis over the 2007-09 reporting period shows:

- Apart from the impact observed along the Glennies Creek area during the development of longwall (LW) LW1 (that these impacts were within EIS predictions), no mining impacts have been observed in the Glennies Creek, Bowmans Creek and Hunter river alluvium. (it is noted that these impacts were within EIS predictions)
- Large drawdown responses in the Pikes Gully and Permian overburden units have continued to be observed in the immediate LW1-4 mining area. Piezometers located in the barrier between LW1 and Glennies Creek did not show any additional responses to underground mining.
- Total groundwater inflows to the underground mine (1.8 to 7.4 L/s) have been below inflow rates predicted in the EIS at this stage of mining (i.e. 13.5 to 15 L/s);
- Seepage inflows to the underground mine from Glennies Creek alluvium (0.8 to 1.7 L/s) have been below the EIS predictions at this stage of mining (i.e. 2.8 to 3 L/s). (The reduced EC of the seepage is believed due to a component of seepage from Glennies Creek alluvium in the total seepage inflows. The average rate of seepage from the Glennies Creek alluvium calculated was under 2 L/s, less than the rate of 2.8 L/s predicted in the EIS).
- Seepage into the underground mine from the eastern rib of the heading closest to Glennies Creek (TG1A) has been isolated from other inflows and continues to be monitored separately. The seepage has an average EC of approx 1800 µS/cm, compared with typical ECs of 5000-8000 µS/cm for groundwater in the Permian coal seams.
- Large drawdown responses have been observed in a restricted area local to longwalls 1 and 2, in the Pikes Gully seam and to a lesser extent in the overlying coal measures. Drawdown in the alluvium has been limited to the small area between the mine and Glennies Creek. The magnitude of drawdown to date (1m at WML120B) is less than the 1.3m drawdown predicted for this location in the EIS.
- No mining related drawdown has been observed in either Hunter River or Bowmans Creek alluvium, or in Glennies Creek alluvium east of Glennies Creek.
- The groundwater model used for the EIS studies has been modified to allow better definition of subsidence related impacts of underground mining. The model was run to calibrate against observed impacts from open cut mining and underground mining from the Pikes Gully seam up to April 2008. Predicted groundwater level impacts showed good calibration with observed drawdown in the large network of monitoring bores, which are distributed across the project area and in all the main hydrogeological units and model layers.

The results of groundwater monitoring and an analysis of trends compared to the impacts predicted for the current stage of mining in both the EIS studies and subsequent studies carried out, have concluded that all groundwater-related impacts from underground mining during the review period were below the levels predicted in the EIS (2001), and in the longwall 1-4 SMP groundwater assessment (2006).

5.5 Blast Management

Due to the proximity of the Main Northern Railway, Glennies Creek Road and the village of Camberwell to the mining operations area, the Blasting and Vibration Management Plan (BVMP) along with a complex series of controls have been established to ensure that blasts conform to the criteria defined in the Development Consent and the EPL. Blasting times are limited to 9am to 5pm Monday to Saturday inclusive by the Development Consent. During the reporting period no blasts were conducted on Sundays or Public Holidays.

Blasting activities are monitored as detailed in Blast and Vibration Management Plan. Procedures are in place to ensure that ground vibration and air overpressure are within licence conditions. A vibration prediction tool is also utilised to ensure all blasts are designed to produce vibration below MCoA 6.23 and EPL condition L7.3. To ensure that ground vibration does not exceed criteria at receptor locations, the Maximum Instantaneous Charge (MIC) is calculated for each blast at the design stage. Procedures are also in place to ensure that sufficient depth of crushed stemming material is also placed in the collar of each blast hole to minimise the effects of air blast (air overpressure).

A Blasting Environmental Checklist is completed prior to each blast to ensure that meteorological conditions are appropriate for the blast to occur. There are also checklists for Community Notification and Notification of the Common Management Committee when the common requires closing.

The Road and Rail Closure Management Plan (RRCMP) also requires the closure of Glennies Creek Road or the New England Highway if any part of the road comes within the 500m zone of exclusion that is required to be established around each blast. If any blast is within 200m of the Main Northern Railway, ACOL seek possession of the railway for the duration of the blast. This ensures that no rail traffic enters the zone of exclusion within the blast period.

The residents of Camberwell Village and all occupiers of buildings within two kilometres of blasting locations are provided advance notice of planned blasting events on the Ashton website (www.ashtoncoal.com.au) and, excepting where they have requested to be removed from the contact list, contact is made by telephone at least one hour prior to each blast event.

At the end of the 2007-2010 reporting period vibration results were within the 2mm/s criteria. The blast overpressure criteria of >115dBL was exceeded more than 5% of the time at both the St Clements Church and Camberwell village monitoring locations during the 2007-2009 period and 120dBL criteria was also exceeded at both monitoring locations. During September 2009 to August 2010 the 115dBL criteria was compliant, with two occasions when a level >120dBL was exceeded at Camberwell Village:

	Monitoring Location	No. > 115dBL	No. >120 dBL	Vibration
2009-10	Total No. Blasts	123	123	123
	Site 1 -Camberwell Village	6 (4.88%)	2 (1.63%)	No exceedences of >2mm/s
	Total No. Blasts	123	123	123
	Site 2 – St Clements Church	0	0	1 incidents > 2mm/s (0.18%)
2008-09	Total No. Blasts	132	132	170
	Site 1 -Camberwell Village	10 (5.8%)	1 (132dBL)	No exceedences of >2mm/s
	Total No. Blasts	120	120	171
	Site 2 – St Clements Church	9 (5.2%)	1 (135dBL)	3 incidents > 2mm/s (1.8%)
2007-08	Total No. of blasts	140	140	159
	Site 1 -Camberwell Village	2 (1.3%)	0	5 incidents > 2mm/s (3.1%)
	Total No. Blasts	131	131	157
	Site 2 - St Clements Church	5 (3.1%)	0	Nil > 2mm/s (0%)

5.5.1 Long-term Blasting Trends

Compliance with the 5% criteria for overpressure and vibration has significantly improved over the past 6 years of operation. Electronic detonation has allowed the continued decrease in blast vibration results at both the St Clements Church and Camberwell Village monitors.

The increase in overpressure results above 115dBL is primarily due to a number of surface shots being fired and the close proximity of blasting to Camberwell Village during 2007-2010.

5.6 Noise Management

The Noise Management Plan for phase 2 of Ashton Coal's mining operations approved by the Department of Planning has a set of proactive and reactive mitigation measures identified to assist in reducing the noise impact from ACP on neighbouring residences.

Noise emissions are controlled by the installation of sound reduction equipment on plant and equipment, and by the establishment of environmental noise bunds at strategic locations around the site. Attended compliance monitoring is conducted 3 monthly within Camberwell Village.

5.6.1 Noise attenuation

A number of the open cut equipment (i.e. bulldozers, trucks and loaders) had noise attenuation fitted to reduce noise nuisance to Camberwell Village. Surface mine activities are conducted where practicable behind an environmental bund established to reduce the visual and noise impact of the mining equipment on Camberwell Village, and the breaker station for Module 2 of the CHPP had a sound enclosure designed to reduce impacts on Camberwell Village.

Major noise mitigation measures implemented during the 2008-2009 period include:

- A review of the noise model was conducted to reassess the acquisition and management zones for the operations. Modelling was also undertaken to assess the relocation of equipment to the southern portion of the pit.
- There are also a number of standard operational controls undertaken to reduce the noise impact on the Village of Camberwell, these are;
    - During inversion and NW wind conditions (noise enhancing conditions) machinery is removed from the southern exposed faces and relocated to the northern boundary or lower levels within the pit.
    - When achievable after 6pm in the evening under NW winds, machinery is removed from the southern exposed faces and relocated to the northern boundary or lower levels within the pit.
- In addition to these standard practices a number of specific operational changes were made during the reporting period in response to either complaints or identified noise issues.

Ten noise complaints were received during 2008-2009 period related to vehicle (trucks) and equipment operation at the mine. ACP responded to each complaint with modification of operations or relocation of works to reduce the potential for noise emissions to the sensitive receivers. Noise reduction also occurred following general inspections of the mine site works and Camberwell Village area by mine personnel (General Manager, Environmental Officer).

During the quarterly noise surveys meteorological conditions were reported and noise levels above the EPL criteria and EIS predictions were recorded between 2005 and 2009 with reference to inversion strengths and wind speed and direction in the report "*Comparison of Actual Noise Levels against EIS Predictions"* prepared by ACP to satisfy the EPL condition U1.

Throughout the project, control measures in the EIS have been implemented and are incorporated into the Noise Management Plan. Regular review of noise monitoring results against operational scenarios and modelling of existing operations and future operational scenarios have also been undertaken and specific noise control measures and adjustment of mine plans have been undertaken to ensure consistency with the EIS predictions.

The results of the noise monitoring between 2007 and 2010 generally demonstrate conformance of the noise emissions from the ACP operations with the predicted noise levels and the MCoA/EPL criteria. There were occasional exceedences of the 38dB(A) criteria during the 2007-2010 period:

ACP Noise Measurements – 2007-2010											
	2007-2008				**2008-2009**				**2009-2010**		
Location	**Q1**	**Q2**	**Q3**	**Q4**	**Q1**	**Q2**	**Q3**	**Q4**	**Q1**	**Q2**	**Q3**
Richards	<38	<38	<38	<38	<38	<38	<38	<38	<38	<38	<38
Stapleton	40	<38	<38	<38	<38	**42**[1]	<38	**40**[1]	<38	<38	<38
Clarke	<38	<38	<38	40	<38	<38	<38	<38	<38	<38	<38
Horadam	<38	<38	<38	<38	<38	<38	<38	<38	<38	<38	<38
Moss	<38	<38	<38	<38	<38	<38	<38	<38	<38	<38	<38

[1] At the time of the exceedence wind speed was greater than 3m/s and/or a temperature inversion of greater than 3ºC/100m was in place. Under these weather conditions the Development Consent and EPL noise criteria do not apply.

Noise monitoring between 2007 and 2010 has generally complied with the EIS predictions and indicate that noise emissions attributable to the ACP operations have been below the 38db(A) criteria.

5.7 Light Management

Lighting is managed on site through the Lighting Management Plan (LMP) approved by DIPNR on 23 December 2004.

Standards applicable to ACP and considered in the preparation of the LMP for lighting emissions from the mine operations are:

- AS 4282 (INT) 1995 – Control of the Obtrusive Effects of Outdoor Lighting
- AS/NZS 1680.2.4-1997/Amdt 1-1998; Interior Lighting – Industrial tasks and processes;
- AS/NZS 2293.1:1989; Emergency evacuation lighting for buildings – System design and installation;
- AS/NZS 2293.2-1995/Amdt 1-1998; Emergency evacuation lighting for buildings – Inspection and Maintenance;
- AS/NZS 1158.1.1.1997; Road Lighting, Introduction.

The objectives and performance outcomes contained in the Environmental Management Strategy (EMS) have been included in the LMP for the ACP:

Objectives	***Performance Outcomes***
• Permanent and temporary lighting installations designed to avoid as far as practicable the spillage of light towards offsite roads, residences and other potential viewing locations. • Haul roads for mobile equipment positioned	• Sufficient lighting is provided on site to ensure that safety is not compromised. • External lighting complies with AS4282 (INT) 1995 • The safety of external traffic on nearby roads is not affected by light sources on

to reduce potential for lighting emission from site. • Use of vegetation screens to minimise the impact of light spillage in the direction of roads, residences or other viewing locations. • Total night time glow from the mine is minimised. • Develop procedures to record and, quickly and effectively respond to any complaints in respect to lighting.	site. • Nearby residents of non mine-owned properties are not unduly impacted by light emissions from site. • Respond quickly and effectively to complaints. • The effectiveness of lighting emission controls is reported in the AEMR.

The major sources of light emissions from the mine operations are:

- Fixed lighting to illuminate the areas around the CHPP and open cut workshop;
- Mobile lighting plants to illuminate the open cut works, overburden emplacement, tailings disposal area and some maintenance operations; and
- Lighting equipped on mobile plant.

5.7.1 Site Layout

The layout of the ACP open cut operations and the positioning of fixed operational equipment has occurred to reduce potential lighting impacts from the project:

- Eastern Environmental Bund was developed to shield Camberwell Village from potential impact of lights from trucks and dozers that may be operating on the Eastern Emplacement Area;
- ACP administration facilities are positioned below the visual line of site from Glennies Creek Road;
- All trains are loaded with the lights from the locomotives directed away from Camberwell village and do not directly impact any public roads; and
- Arboreal screens will be positioned in strategic locations to diffuse light emanating from the site.

5.7.2 Visual Screens

Environmental bunds are to be constructed at the following locations:

- Adjacent to the ACP infrastructure area, north of the New England Highway;
- Parallel to Glennies Creek Road, along the north western boundary; and
- Along the eastern end of the western emplacement and parallel to the New England Highway, north of the western emplacement.

The location of the environmental bunds is shown in Figure 4.4 of the EIS, whilst the conceptual shape and planting layout for the bunds is detailed in Figure 1 of the ACP Landscape and Revegetation Management Plan.

The environmental bunds shield site activities from residents of Camberwell village and the public roads. The bunds were constructed during the initial phase of mine development. The bunds are vegetated with a mixture of over-storey and under-storey species.

5.7.3 Monitoring

Regular inspections are undertaken by mine supervisors on the light sources to manage light scatter and implementation of mitigation measures.

5.7.4 Complaint Handling

Any complaints regarding lighting on the ACP site are directed to the Environmental Officer and responded to within 24 hours. The complaints are investigated and actions undertaken to address the complaint may include alternatives, such as the use of lower wattage lighting, re-direction of lighting or shielding.

Mobile lighting plants have been the only source of lighting complaints (particularly from works on the Eastern Emplacement Area) during the 2006 to 2010 period, with four complaints received in September 2006 and one complaint in May 2007 and one complaint in

September 2008. Positioning of lighting plants to reduce off-site impacts is included in ACP inductions to ensure employees and contractors are aware of potential impacts to ACP neighbours.

5.7.5 Reporting

Lighting inspections are undertaken by the mine supervisors and reported to the Environmental Officer. As required on the conditions of consent, the effectiveness of lighting controls will be reported in the Annual Environmental Management Report (AEMR).

Management of light positioning has reduced light scatter from the mine operations and reduced the number of community complaints during the 2007-2010 period.

5.8 Bushfire

A Bushfire Management Plan (BMP) has been developed and implemented on site. This BMP required that a risk assessment be undertaken in consultation with the Singleton Rural Fire Service to develop risk reduction measures. The risk assessment was completed prior to the commencement of the 2003 / 2004 fire season and all agreed actions have been implemented.

The Bushfire Management Plan for the ACP is being revised in consultation with the Rural Fire Service.

Legislation and standards considered in the preparation of the BMP were:

- *Rural Fires Act, 1997;*
- *Rural Fires Regulation 2002*;
- Australian Standard 1851.1-1995 *Maintenance of Fire Protection Equipment*;
- *Planning for Bushfire Protection, 2001*; and
- Australian Standard 1019-2000 - *Internal combustion engines – spark emission control devices*.

The objectives and performance outcomes of the BMP as described in the EMS are:

Objectives	Performance Outcomes
• Activities on the site are managed to minimise the risk of outbreak of fire. • Hazard mitigation measures are in place to contain an outbreak of fire. • Trained personnel, water tankers and fire-fighting equipment is available on site to suppress localised fires. • Arrangements are in place to liaise with and support the RFS should an outbreak of fire occur within the DA area. • Any outbreak of fire is investigated to identify causal factors and ensure that appropriate mitigation measures are instigated to prevent similar events from occurring in the future. • An annual report on fire management activities is submitted to the Upper Hunter Rural Fire Service, Community Safety Officer.	• Perimeter fire trails are constructed and maintained to ensure access under all reasonable weather conditions. • Perimeter fire trails will have a minimum trafficable width of 4 metres. • Water tankers and other appropriate firefighting equipment are available on site. • All personnel on site receive training in basic fire fighting and are capable of providing a first response capability. • Continuing communication and liaison with RFS. • Fire incident investigations are completed and appropriate actions implemented. • Annual reporting on fire management activities to the RFS.

The ACP Fire Officer (Environmental Officer) regularly monitors the condition of bushfire protection measures on ACP land. Bushfire management activities have been reported to

the Upper Hunter Area RFS and consultation with the RFS is undertaken when the Plan is revised. The ACP Fire Officer also conducts regular inspections of the ACP area to:

- Ensure accessibility of roads and tracks on the ACP site, having due regard for safety considerations due to mining and surface constraints;
- Assess conditions of fire breaks;
- Confirm accessibility to surface water supplies (creeks, dams, hydrants);
- Ensure accessibility to water tankers for transport of water and fire fighting; and
- Maintaining a register of fire training of ACP employees.

The BMP is reviewed after the bushfire season and amended if required, to ensure the effectiveness of bush fire management.

There were no outbreaks of bushfire on the project lands during 2007-2010.

The requirements in the BMP have been implemented on site. Review and revision of the BMP will occur following development approval for the South East Open Cut project.

5.9 Weed Management

The Weed Management Plan (WMP) Revision A 19 August 2006 describes the presence and extent of noxious and environmental weeds across ACP lease areas and has control programs for weeds, that were prepared in consultation with local Council weeds officers, Rural lands Protection Board (RLPB) officers and local landholders. The plan also covers weed infestation in rehabilitated areas, treatment of topsoil materials and maintenance requirements.

The objectives for the Weed Management Plan are incorporated into the Environmental Management Strategy for ACP as part of the Landscape and Revegetation Management and Land Management Plans:

- Improving the quality of existing vegetation by the control of weeds, planting and allow natural revegetation by managing grazing; and
- Improving habitat for fauna by improving connectivity between remnants, rehabilitating mined areas and the control of feral animals.

Control and management of weed species is based on:

- *Noxious Weeds Act 1993*;
- DMR - Guidelines to Mining, Rehabilitation & Environmental Management Process, 1998;
- DMR – Best Practice & Reference Documents 1998;
- NSW DPI – Agriculture Agfacts & Agnotes; and
- Upper Hunter County Council Noxious Weed Management Plans (African Boxthorn; Blackberry; Paterson's Curse; Prickly Pear (*Opuntia species);* Prickly Pear (*Cylindropuntia species*); and Sweet Briar. (Management requirements of these plants have been reflected in the control strategies contained in the ACP noxious and environmental weed control list).

5.9.1 Management Actions

All noxious weed management is undertaken in direct consultation with the Rural Lands Protection Board, Singleton Council and Upper Hunter Weeds Authority, and in accordance with the *Noxious Weeds Acts 1993*.

To ensure weed control in the mining lease areas are compliant with the MCoA the following actions or strategies have been implemented:

- A list of noxious weed species that occur on site has been prepared as required under the *Noxious Weeds Act 1993*;
- Mapping of the noxious and environmental weed species, their abundance and distribution on the Ashton Site;

- Limiting clearance and maintenance of existing groundcover for as long as possible prior to mining;
- Restricting vehicular and stock access to areas of heavy weed infestation;
- Rehabilitation of disturbed areas as soon as practical;
- Weed infestation is included on the checklists used for the regular site inspections by ACP so control occurs around the mine site especially within rehabilitation areas and conservation zones;
- Control strategies and methodologies to manage noxious weed species include; stipulation of preferred timing of works, control methods, priorities for work and constraints to suggested methodologies.

5.9.2 Monitoring Actions and Reporting

The progress of weed management is reported in the AEMR with a summary of the weed control work undertaken; proposed works program for the following year; amendments to control methodologies; and updates on the infestation of new weed species.

Weed works conducted during 2007-2010 focused on control of:

- Green Cestrum, a Class 3 noxious weed throughout all ACOL land holdings.
- African Boxthorn, a Class 4 noxious weed - across the Ashton Property and Conservation Area.
- *Galinea pubescens*, an environmental weed on stockpile areas.
- St John's Wort, a Class 4 noxious weed - throughout all ACOL land holdings.
- Creeping Pear

Weed control is an ongoing program that is planned annually and proposed in the AEMR's. The management of weeds occurs in accordance with the requirements of the relevant legislation and weed / land management authorities.

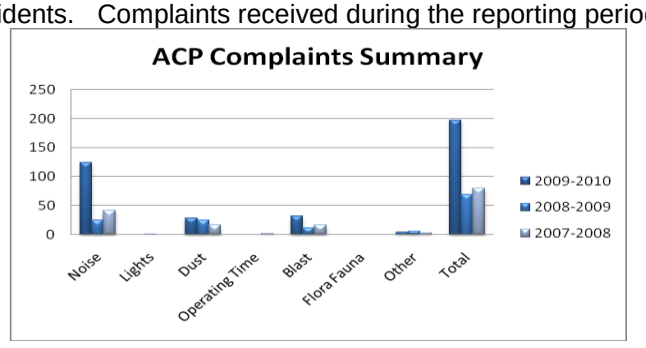
5.10 Community Relations

5.10.1 Environmental Complaints

Complaints were received directly to Ashton Coal and also received through the Department of Environment, Climate Change and Water (DECCW).

The trend of complaints shows a decrease over the past 12 months, it is noted that of the total number of complaints received, 83-85% are from two (2) complainants and 73% were from one resident. ACOL have approached the complainants in relation to acquisition in accordance with the MCoA, or the opportunity to establish an agreement, but there has been no progress to the date of this audit.

ACP response to complaints received (particularly in relation to noise and dust) included reducing the impact of noise from the Open Cut operations by restricting dumping to lower portions of the northern dumps after 6:00pm, and on several occasions, open cut operations were shutdown to reduce both dust and noise impacts on Camberwell. These operational changes were both proactive following inspections from ACOL staff and reactive following complaints from residents. Complaints received during the reporting period were as follows:



5.10.2 Community Liaison

On top of the community newsletters and Community Consultative Committee meetings Ashton Coal has committed to a community program that provides a budget for undertaking activities that aim to reduce the impact of mining on the residents of Camberwell. Feedback from previous surveys has indicated that dust impacts are the major concern of residents in Camberwell Village. Continuing from the work completed in the previous year Ashton conducted water tank cleaning on household water tanks for all residents in Camberwell who wished to receive the offer. This involved cleaning the sludge layer that builds up on the bottom of all tanks from plant matter and dust. Rainwater tank guidelines suggest that all tanks regardless of the area should be cleaned on a regular basis, generally every two years. Ashton also installed a number of filters on water tanks to provide cleaner and clearer drinking water.

CCC meetings have been conducted quarterly between 2007-2010 and CCC members were provided with information on the project as well as updates on environmental monitoring and any future projects

CCC Meetings – Summary of matters discussed 2008-2010	
30th September 2008	Environmental monitoring, operations overview, South East Open Cut (SEOC) presentation, section 94 contribution, DPI - Minerals overview.
2nd December 2008	Environmental monitoring, operations overview, SEOC status report, section 94 contribution.
24th March 2009	Environmental monitoring, project update, section 94 contribution, SEOC status report, Camberwell Village SEOC vision consultation
10th June 2009	Environmental monitoring, operations overview, rehabilitation report, section 94 contribution.
28 September 2009	Environmental monitoring, project update,
8 December 2009	Environmental monitoring and Southeast Open Cut Project and existing open cut remediation strategy
16 March 2010	Environmental monitoring and Southeast Open Cut Project
15 June 2010	Overview of current operation and update on Southeast Open Cut Project

The CCC has been actively involved with questions on blast fume, stone dusting, water restrictions, rehabilitation, dust generation during blasts and the projects for the S94 contribution funds.

It was agreed that the S94 funds would be used to erect entrance signs to Camberwell Village in line with the signage proposed by Singleton Council. The location of the signage has been chosen and Ashton are working with Singleton Shire Council to gain the relevant approvals to allow construction to begin.

ACOL has also committed funds to the St Clements diocese to provide funding for structural repairs to St Clements Church that will include the attaching of the roof to the walls to improve the structural integrity of the building.

Newsletters have been distributed to the local community detailing progress of ACP operations at including Open Cut and Underground updates including rehabilitation, Rehabilitation summary and Southeast Open Cut Project proposal, St Clements Church donations, CCC vacant positions and proposed Southeast Open Cut Project progress.

5.10.3 Community Notification Procedures

All residents within Camberwell Village are notified of any significant change in activities on the ACP site through the Ashton Community Newsletter. Dust monitoring results are made

publicly available on the internet on a monthly basis. The Community Consultative Committee (CCC) is provided with a summary of air quality monitoring at each CCC meeting.

5.10.4 Notification to Residential Tenants of Potential Impacts of Mining Operations

The procedure to address potential dust impacts on residential tenants at mine-owned residences and at residences where an agreement has been reached between ACP and the landholder to satisfy the requirements of MCoA 6.10(f) are contained in Appendix 2 of the Air Quality Management Plan. The procedure provides the requirements that ensure:

- all existing tenants of identified properties are advised in writing if potential increase in particulate levels above of the criteria in Condition 6.1 are likely to occur during the mine operation. Information is also provided to potentially impacted residents on the results of any available research relating to the health effects of fine particulates;
- all potential tenants are provided with similar advice to the above in writing, of any increase in fine particulate matter likely to occur at the subject location, prior to signing a residential tenancy agreement to occupy the residence;
- the advice provided to current and future tenants is based on current knowledge from the ambient air quality monitoring, dispersion modelling results and air quality criteria;
- a mechanism for providing current air quality monitoring data, dispersion modelling results and air quality criteria to the residents of those affected residences is available.

5.10.5 Notification of Road Closures

The Road and Rail Closure Management Plan (RRCMP) requires the closure of Glennies Creek Road or the New England Highway if any part of the road comes within the 500m zone of exclusion that is required to be established around each blast.

Residents of Camberwell Village and all occupiers of buildings within two kilometres of blasting locations are provided advance notice of planned blasting events on the Ashton website (www.ashtoncoal.com.au) and, excepting where they have requested to be removed from the contact list, they are contacted by telephone at least one hour prior to each blasting event. Recent notifications are listed in Table 5.10.

Table 5.10: Road Closures Notifications

Date	Approx. Time	Road
1/7/2010	12:00pm	Glennies Creek Road
7/6/2010	4:00pm	Glennies Creek Road
18/5/2010	12:30pm	Glennies Creek Road
13/5/2010	12:30pm	Glennies Creek Road
29/4/2010	12:00pm	Glennies Creek Road
20/4/2010	12:30pm	Glennies Creek Road
16/4/2010	4:00pm	Glennies Creek Road
9/4/2010	12:00pm	Glennies Creek Road
9/3/2010	9:00am	Glennies Creek Road
4/3/2010	12:00pm	New England Highway
2/3/2010	12:00pm	Glennies Creek Road
26/2/2010	12:00pm	Glennies Creek Road
18/2/2010	12:00pm	Glennies Creek Road
4/2/2010	12:00 pm	Glennies Creek Road
1/2/2010	9:00 am	Glennies Creek Road
30/1/2010	9:30 am	Glennies Creek Road
27/1/2010	12:00 pm	Glennies Creek Road
12/1/2010	12:30 pm	Glennies Creek Road
6/1/2010	12:00 pm	Glennies Creek Road

5.11 Rehabilitation

5.11.1 Open Cut

A total of 37ha were rehabilitated during the reporting period. This included 15ha of native tree seed for woodland vegetation establishment and 22ha of pasture. Organic growth medium (OGM) was spread across all rehabilitation areas at 100t/ha following the preliminary results of the 2007 trial. Maintenance works totalling 2.5ha were also conducted on areas of the rehabilitation that have not shown high enough groundcover or suffered heavy weed infestation.

The different processes used during the reporting period are as follow:

- Woodland Rehabilitation – a total of 15ha of the Eastern Emplacement Area (EEA) was rehabilitated as woodland. This was achieved through direct seeding. All 15ha were situated on the gently undulating top of the EEA.
- Overburden was deep ripped followed by application of OGM at 100t/ha. A cover crop of rye corn was included in the seed mix to provide an initial stabilisation of the soil. Erection of stag trees, establishment of rock piles and scattering of woody debris to improve habitat value.
- Pasture Rehabilitation – a total of 22ha of pasture was seeded. Pasture seed was applied at 70kg/ha with fertiliser at 200 kg/ha. OGM was applied to all areas at 100t/ha.
- Maintenance Works – a total of 2.5ha of existing rehabilitation was re worked due to low establishment of desired species. Maintenance works involved applying OGM at approximately 100t/ha followed by seeding of tree and shrub or pasture species. Pasture seed included 200kg/ha of fertiliser.
- Tubestock Planting – approximately 2500 mixed eucalypt and acacia species were planted across Ashton Coal property during the reporting period.

The rehabilitation summaries in the AEMR's indicate that rehabilitation of the areas disturbed by open cut mining and waste emplacement associated with the open cut operations (that will be complete by the end of 2010) has achieved the programs proposed by ACP. The waste emplacement areas were observed during the site inspections to have well established pasture and native vegetation on the finished contoured slopes and the surface of the completed emplacement areas. The estimated rehabilitated area for 2009-2010 was 119ha with 70ha of pasture and grasses and 43 ha of native woodland and habitat. The confirmed surveyed areas of completed revegetation will be reported in the AEMR.

6.0 ASSESSMENT OF ENVIRONMENTAL PERFORMANCE AGAINST PREDICTIONS MADE IN THE EIS

6.1 Air Quality

The EIS modeled the potential air quality impacts of the ACP mine operations. Modeling identified Year 4 (i.e. 2007) as the worst case scenario for dust emission due to the disturbed area of the open cut and exposed surfaces of the overburden emplacement areas. The dust levels of year 7 (i.e. 2010) were reducing as the rehabilitation of the emplacement areas increased and depth/exposed area of the open cut mine reduced with backfilling and the underground mining increased.
The air quality patterns predicted in the EIS for the ACP operations, with the proposed operational controls in place, have been achieved by ACP for the 2007-2010 period as demonstrated by the dust deposition, PM10 and TSP concentrations reported from the air quality monitoring program.

The annual average monitoring data for 2008-2010 are shown in Table 6.1 and demonstrate compliance for the air quality results except for the TSP at Site 1.

Table 6.1: Annual Air Quality Results Summary (August 2007 and July 2010)

Monitoring location	Dust Deposition ($g/m^2/mth$)	Annual Average PM10 ($\mu g/m^3$)		Annual Average TSP ($\mu g/m^3$)	
	Results	EIS	Results	EIS	Results
Site 1 -Camberwell	Annual Average 2008 - 3.48 2009 - 4.7 2010 - 5.29	50	Annual Average 2008 - 25 2009 - 29 2010 - 25	90	Annual Average 2008 - 93 2009 - 111 2010 -108
Site 2 Camberwell SW	Annual Average 2008 -2.34 2009 - 3.94 2010 - 3.79	50	Annual Average 2008 – 19 2009 - 20 2101 - 17	90	Annual Average 2008 - 72 2009 - 89 2010 - 85
Site 3 Camberwell East	Annual Average 2008 - 3.28 2009 - 2.99 2010 - 2.7	50	Annual Average 2008 - 23 2009 - 26 2010 - 22	90	Annual Average 2008 - 89 2009 - 99 2010 - 86
Site 8 Camberwell East	Annual Average 2008 - 2.17 2009 - 2.55 2010 - 2.57	50	Annual Average 2008 - 24 2009 - 25 2010 - 25	90	Annual Average 2008 - 78 2009 - 94 2010 - 90
MCoA 6.1	$<4g/m^2/mth$	$<30\mu g/m^3$		$<90\mu g/m^3$	

The ACP operational performance is consistent with the predictions in the EIS with compliance for the Annual Average for dust deposition for PM_{10} at all sites. TSP was exceeded consistently at Site 1 meteorological station at Camberwell Village (the closest monitoring location to the mine activities and at sites 3 an8 for 2009.

6.2 Noise

The noise predictions in the EIS indicated that noise levels would exceed residential criteria for some residences in the vicinity of the ACP operations, under some operational scenarios, meteorological conditions and development stages of the mine (particularly the open cut and overburden emplacement activities). The worst case day/evening noise levels predicted for the operations of the CHPP/train loading/open cut pit mining/overburden emplacement on eastern dump were:

Table 6.2 Noise Criteria for ACP							
Monitoring Location	EIS Predicted Noise Level (dBA)			Project Specific Goal (dBA)	Predicted Exceedence of Project Specific Goal (dBA)		
	Neutral	Inversion >3°C/100m	Wind >3m/s		Neutral	Inversion >3°C/100m	Wind >3m/s
1	30	38	43	36	0	2	7
2	34	37	38	38	0	0	0
3	33	38	41	38	0	0	3
4	29	39	43	38	0	0	5
5	30	38	41	38	0	0	3

The quarterly noise monitoring reports by Spectrum Acoustics indicated four exceedences of the EIS predicted levels and MCoA/EPL criteria for the period 2007 to 2010 at residences not owned by ACOL – three at the Stapleton residence and one at the Clarke residence (refer to section 5.6 Noise Management). However noise complaints are received from Stapleton residence only (83-85% of the noise complaints received). ACOL have approached the complainants in relation to acquisition in accordance with the MCoA, or the opportunity to establish an agreement, but there has been no progress to the date of this audit.

6.3 Blast and Vibration

The EIS outlined blast design restrictions predicted to reduce blast overpressure and vibration to meet the ANZECC blasting guideline levels during the ACP mining operations. The Maximum Instantaneous Charge (MIC) weights indicated would achieve vibration levels of <2mm/sec at the nearest residences and not exceed 18mm/sec along the rail line.

Table 6.3: Summary of Blast Monitoring						
	2007-2008		2008-2009		2009-July 2010 (note not full yr)	
	Vibration	Overpressure	Vibration	Overpressure	Vibration	Overpressure
St Clements Church Station 1						
Total Results	157	131	171	120	123	123
>2mm/s	0		3		1	
%>2mm/s	0%		1.8%		0.8%	
>5mm/s	0		0		0	
>115dBL		5		9		6
%>115dBL		3.1%		**5.2%**		4.9%
>120dBL		0		**1**		**2**
Camberwell Village Station 2						
Total Results	159	140	170	132	123	123
>2mm/s	5		5		5	
%>2mm/s	3.1%		2.9%		4.0%	
>5mm/s	0		0		0	
>115dBL		2		10		9
%>115dBL		1.3%		**5.8%**		**7.3%**
>120dBL		0		**1**		0

The MCoA/EPL criteria of <5% of blasts >2mm/s peak particle vibration (ppv), was not exceeded between 2007 and 2010. Exceedence of >5% of overpressure >115dBL occurred during the August 2007 and August 2010 period (refer to Table 6.3 Summary of Blast Monitoring) and blast overpressure of >120bDL occurred on three occasions in the same period. The blast overpressure and vibration levels have reduced between 2007 and 2010 as the open cut operations have progressed west and the open cut has become deeper.

The majority of the ACP blasts (over 420 monitored events between August 2007 and August 2010) have complied with the MCoA/EPL criteria. Property assessments by an independent engineering consultant have generally not identified structural damage attributable to the ACP mine blasts, however on one occasion in June 2009 the engineer could not directly discount or attribute damage to a blast so ACP arranged for repairs to the properties.

6.4 Surface Water

The EIS predicted that there would be no adverse impacts on surface water quality from the ACP mining operations as there would be no discharge of water from the site.
Background monitoring of Bowman Creek, Glennies Creek and the Hunter River provided ranges for the waterways prior to the commencement of ACP operations:

Table 6.4 ACP Surface Water Monitoring Results – Range and(Mean)

	Bowman Creek		Glennies Creek		Hunter River	
	Background	**2007-2010**	**Background**	**2007-2010**	**Background**	**2007-2010**
pH	7.6-8.1	6.9-8.4 (7.9)	7.1-8.1	7.2 – 8.2 (7.8)	7.9-8.6	7.6 – 8.5 (8.1)
EC	251-2330	421 – 2220 (915)	242-712	239 -1120 (541)	343-913	404 – 1290 (790)
TDS	230-1750	286 – 1440 (526)	149-460	125 -934 (375)	266-556	212 – 672 (422)
TSS	2-438	2 -160 (19)	2-110		2-158	

Bowmans Creek exhibited some elevated EC and TDS levels that were the result of the low flow in the Creek resulting from prolonged drought conditions in the Hunter Region. The EC and TDS levels reduced following rainfall events indicating that the changes in water quality were due to weather conditions rather than ACP operations (there was no release of surface water from the ACP site during 2007-2010).

The monitoring of the ACP operations on surface water quality of the surrounding waterways have demonstrated that the water quality is generally within the background levels presented in the EIS. The predictions in the EIS indicated that there would be no adverse impacts on surface water quality from the ACP mining operations.

6.5 Groundwater Quality

The EIS described the groundwater regime and indicated that groundwater salinities could range from 5,000 to 16,000µS/cm from the coal bearing seams.
Background groundwater monitoring conducted by ACP during the period prior to commencement of mining demonstrated background pH values of 6.8 to 8.18 and EC values ranged from 1,040 to 10,800µS/cm. The groundwater quality is assessed annually and reported in the Groundwater Management Report prepared by Aquaterra (Appendix 2 to the AEMR) and the results have demonstrated that the groundwater quality is generally as predicted in the EIS.

Groundwater monitoring results between 2007 to 2010 have generally demonstrated quality as predicted in the EIS.

6.5 Groundwater Inflow

Overall groundwater inflow into the underground mine workings was predicted in the EIS to be 5 litres/second (l/s), with seepage from Glennies Creek alluvium predicted to be in the range of 2-3 l/s. The EIS also predicted that the mining would lower the groundwater levels in the surrounding and overlying coal measures (EIS, Appendix H, HLA-Envirosciences).

In the 2007-2010 period total groundwater inflows to the underground mine (1.8 to 7.4 L/s) were below inflow rates predicted in the EIS for this stage of mining (i.e. Year 7 - 9.1L/s). Seepage inflows to the underground mine from Glennies Creek alluvium (0.8 to 1.7 L/s) were also below the EIS predictions for this stage of mining (2.8 to 3 L/s).

Net groundwater inflows to the underground mine over the 2008-2009 review period were determined from the mine water balance, to have reached a peak of 7.14 L/s (on 7 January

2009), averaging 4.6 L/s. The inflow rate predicted in the EIS for this stage of underground mining was between 13.5 L/s and 16 L/s. Inflows have therefore been well below the EIS predictions.

Measurements of total seepage inflows from the Glennies Creek alluvium during the review period have continued to decrease, ranging from 1.7 to 0.8 L/s, with an average inflow rate for the 2008-2009 year of 1.4 L/s. The average seepage rate into the underground mine predicted in the EIS for this stage of mining was 4 L/s. Hence seepage inflows from Glennies Creek alluvium have been well below the rates predicted in the EIS.

No seepage inflows from Bowmans Creek alluvium or Hunter River alluvium have been detected.

The groundwater inflows have been well below the EIS predictions between 2007 and 2010.

6.6 Visual Impacts

The EIS indicated that greatest visual impact of the project would be from the New England Highway southbound from Bowmans Creek to the ridge before Camberwell. The eastern emplacement was to be constructed as a visual screen to the mining operations with the vegetation along Glennies Creek Road lessening the view for the residents of Camberwell and motorists on the New England Highway.
The Glennies Creek Road environmental bund was constructed to conceal views of the mining operations from users of the Road. The bund was vegetated with grass cover and tube stock planted to soften the visual impact of the bund.

The CHPP is the major structure on the ACP site that is visually apparent from the New England Highway and has been painted to blend in with the surrounding pastoral landscape.

The visual impact of the ACP operations is generally as described in the EIS with the surface facilities being visible from the New England Highway. The visual impact of the ACP operations from Camberwell and Glennies Creek Road is adequately screened by the vegetated eastern emplacement area.

7.0 ASSESSMENT AGAINST PREDICTIONS IN THE SMP

The Subsidence Management Plan (SMP) for Longwalls 1-4 and Longwalls/Miniwalls 5-9 have been approved by DPI-Minerals (now DII). The SMP's outline the underground mining methods, underground mine layout, predicted subsidence, management and mitigation measures, monitoring, and reporting that apply to the specific grouping of longwalls.

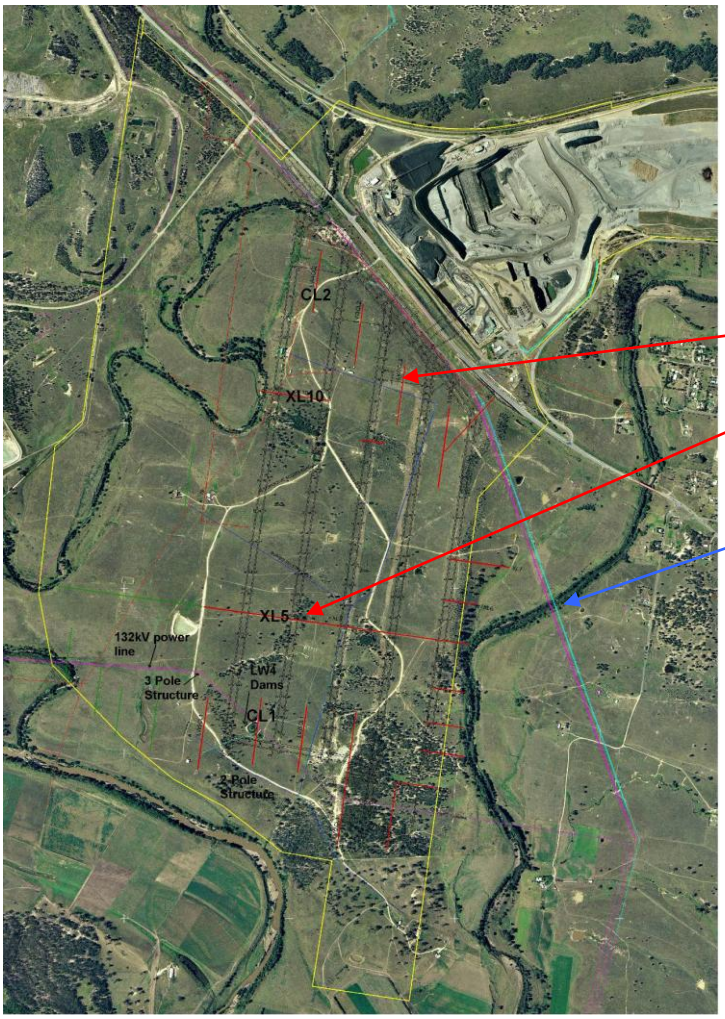
Development of first workings for the ACP underground mine commenced in 2005 with secondary extraction of Longwall (LW) 1 commencing in February 2007 following approval of the SMP for secondary extraction of LW 1 to 4 of the Pikes Gully Seam.

The Pikes Gully Seam section mined along the length of Longwalls 1 to 4 at the Ashton Underground Mine is approximately 2.4m high. The seam dips to the southwest at a grade of up to 1 in 10. The overburden ranges in thickness from 35m at the end of Longwall 1 to 130m at the start of Longwall 4. The final extraction void is nominally 216m with chain pillars 25m rib-rib at 100m cut-through centres.

Longwall operation commenced in February 2007 with Longwall 3 completed in March 2009 and Longwall 4 completed in October 2009. Longwall 5 was commenced in late 2009 and will be completed in 2010.

7.1 Subsidence Monitoring Program

Subsidence monitoring has been conducted using:



- Two longitudinal subsidence lines over the start and finish of each longwall panel (red vertical lines);
- Cross lines along the Tailgate side of the panel extending downslope to Glennies Creek (red horizontal lines); and
- A diagonal line extending from the corner of the longwall panels towards the New England Highway (blue line).

Subsidence assessment (Maunsells 31 October 2008) predicted maximum subsidence for full-width longwall panels would not exceed 1.6m, with low levels of subsidence (maximum values of 0.35m) associated with the mini-walls. Measured vertical subsidence for longwall panels1-4 was within the range predicted by SCT (2006).

Bowmans Creek and areas of saturated alluvium were predicted to experience only very low levels of subsidence (up to a maximum of 350mm in the centre of the mini-wall panels). At the date of this audit no mining under Bowmans Creek had occurred. The low level of subsidence in these areas significantly reduces the likelihood of major consequences to the environment

Ashton Coal has monitored the subsidence movement on the surface during the extraction of Longwalls using longitudinal subsidence lines over the start and finish of each panel and a main cross line extending over all panels. Several other subsidence lines have been used to monitor the slope leading down to Glennies Creek, closure across the New England Highway, and subsidence across a dyke (refer to monitoring locations map).

Subsidence Monitoring Results for Longwalls 1-4 (mining completed 15 October 2009)					
	Max. Predictions	Max. Subsidence Measured			
Longwall 1 North end		Centre Line (CL) 2		Cross Line (XL) 8	
Subsidence (mm)	1800	1528		1500	
Tilt (mm/m)	244	100		103	
Horizontal movement (mm)	>500	476		500	
Tensile Strain (mm/m)	73	40		15	
Compressive Strain (mm/m)	98	28		27	
Longwall 1 - remainder		CL1		XL5	
Subsidence (mm)	1700	1318		1436	
Tilt (mm/m)	141	60		75	
Horizontal movement (mm)	300-500	480		503	
Tensile Strain (mm/m)	42	49		17	
Compressive Strain (mm/m)	56	23		24	
Longwall 2		CL1	CL2	XL5	
Subsidence (mm)	1600	1296	1513	1266	
Tilt (mm/m)	102	40	82	78	
Horizontal movement (mm)	300-500	440	298	390	
Tensile Strain (mm/m)	30	17	16	11	
Compressive Strain (mm/m)	41	16	32	28	
Longwall 3		CL1	CL2	XL5	
Subsidence (mm)	1600	1420	1354	1429	
Tilt (mm/m)	78	41	48	97	
Horizontal movement (mm)	300-500	463	345	394	
Tensile Strain (mm/m)	23	10	17	22	
Compressive Strain (mm/m)	31	7	18	24	
Longwall 4		CL1	CL2	XL5	XL10
Subsidence (mm)	1600	1397	1194	1546	1263
Tilt (mm/m)	78	36	40	53	33
Horizontal movement (mm)	300-500	230	560	360	258
Tensile Strain (mm/m)	23	10	18	9	6
Compressive Strain (mm/m)	31	9	67	9	10

Additional monitoring is undertaken of fixed stations on a 132kV power line crossing the longwall panels near the start of Longwall 1. Subsidence information is reported to DII (Minerals), Energy Australia, and an adjacent landowner.

The Subsidence Monitoring Program required daily subsidence monitoring results. Reporting of subsidence data and management occurred weekly to DPI (DII) as required by the approved SMP.

The end of Longwall 4 – End of Panel Summary Report was completed for submission to DII on 12 May 2010. The report concluded that:

> *"In general, the maximum subsidence movements detected were less than those predicted. There is no indication of any significant lateral movement of the steep slope adjacent Glennies Creek or of the New England Highway cutting. Horizontal movement had no predicted value as XL10 was installed post mining of Longwall 3. When horizontal movement is compared to previous longwall panels generally speaking it was less than those predicted values."*

7.2 Subsidence Monitoring Reports

Consultation outlined in the SMP, with RTA, Energy Australia, Telstra, Powertel, DWE, and the owners of Property 130 were conducted in accordance with MCoA 3.29 requirements.

Environmental Management Plans were reviewed and revised as relevant to meet the requirements of the SMP.

The Subsidence Monitoring Program approved by DPI (DII) required daily subsidence monitoring measurements and observations and a weekly Subsidence Management Status Report to be submitted to DII. Reporting on subsidence and management is also provided in the AEMR's. End-of-Panel reporting has occurred following the completion of mining for each Longwall.

7.3 Subsidence Impacts

The SMP predicted that there would be negligible impact on roads, buildings, power lines, fences, dams, and agricultural use of the land. Monitoring and visual inspections to date has shown that these predictions are being met for the areas above the Longwalls.

Subsidence Management Processes were implemented in accordance with SMP Section 8.

It was observed during the audit inspection that surface subsidence cracks that developed along each edge of the Longwall panels had been rehabilitated by ripping the surface to reduce surface water ingress. The cracks in the surface of the Voluntary Conservation Area above the start of Longwall 1 had been rehabilitated with careful surface ripping to ensure that there was minimal disturbance to the vegetation in the areas along the Longwall alignment.

Initial caving above Longwall 3 and 4 was consistent with predicted subsidence behaviour.

A diversion was put in place prior to cracking in the Access Road to Property 130 occuring and remained in place during the impact period until the road was repaired.

A buried Telstra cable that overlies Longwall 3 goaf area was subsided but remained in service for the duration of Longwall 3 mining.

Measured vertical subsidence was within the range predicted by SCT (2006) for LW1-4. Horizontal movements of up to 500mm were observed.
SCT (February 2008) noted that the subsidence monitoring results from LW1 provided a good indication of the subsidence behaviour that could be expected over future longwall panels at

Ashton. In addition to the subsidence behaviour being within the maximum predicted bounds, there did not appear to be any significant far-field horizontal movements involving mass movement of the overburden strata. No indications of horizontal movements with capacity to impact the New England Highway were observed.

It was also noted that based on the results from the start of LW1, that dynamic bridging of the overburden strata at the start of the panel was significantly greater than is typical for the Southern, Hunter and Western Coalfields. Subsidence movements of less than 50mm were observed when the effective panel width (measured from the longwall face and the back rib of the goaf) to overburden ratio (W/D Ratio) was more than 1.0. Subsidence of at least several hundred millimetres was expected when the W/D Ratio increased above approximately 0.7 for this level of extraction thickness.

Cracks through the Voluntary Conservation Area above Longwall 1 were rehabilitated using a small excavator and skid steer loader. Cracked areas in open fields were remediated using a D6 dozer with ripping tines.

Initial caving over the start of Longwall 4 was typical of the caving behaviour observed elsewhere in the region and consistent with predicted subsidence behaviour.

Small farm dams in areas of shallow cover were dewatered before the longwall passed beneath and following subsequent rain events were observed to refill and hold water. The dam above Longwall 4 had cracking in the wall however the dam still holds water.

The 11kV power lines and Telstra buried cables were not disturbed by undermining or repair work of Longwall 4 subsidence cracks.

7.4 Conclusion

Subsidence monitoring has shown that there has been negligible subsidence impact on the steep slopes of Glennies Creek. Visual inspection revealed that near complete subsidence occurred immediately after passage of the longwall. The monitoring records indicated that subsidence was within the levels predicted in the SMP.

In general, the results of the subsidence monitoring above the Longwall panels have exhibited maximum subsidence movements less than that predicted in the SMP.

8. CONCLUSIONS

The Independent Environmental Audit conducted on the 9 and 10 August 2010 of the Aston Coal Project operations demonstrated that the project has been developed generally in accordance with the Environmental Impact Statement (2001) and subsequent supporting documentation submitted to the administering authorities for approval.

The operations have generally exhibited compliance with the Minister's Conditions of Approval for the 3 year period September 2007 and August 2010.

Extraction of coal from the northeast open cut will be complete by the end of 2010 and the underground mining of coal resource will continue in accordance with progressive approvals of the proposed long-wall subsidence management plans.

APPENDICES

APPENDIX A Minister's Conditions of Consent (MCoA)

Appendix B Environment Protection Licence

Red type represents 15 October 2003 modification
Blue type represents 27 January 2005 modification
Green type represents 19 February 2007 modification
Purple type represents 26 March 2010 modification

MCoA	Condition	Documentation	Compliance	Comments
1.	**GENERAL**			
	Obligation to Minimise Harm to the Environment			
1.1	There is an obligation on the Applicant to prevent and minimise harm to the environment throughout the life of the project. This requires that all practicable measures are to be taken to prevent and minimise harm that may result from the construction, operation and, where relevant, commissioning of the development.			Noted
	Scope of Development			
1.2	The Applicant shall carry out the development generally in accordance with the: a) development application No.309-11-2001-I as amended by the document in subclause v); b) EIS, 3 volumes, dated Nov 2001, prepared by HLA Enviro-sciences Pty Ltd and certified in accordance with Section 78A(8) of the Act; c) Aboriginal Cultural Heritage Assessment dated July 2001, prepared by the Upper Hunter Wonnarua Council and forwarded in a letter from WML received 12 DECCW 2001; d) conceptual design for upgrade works to Glennies Creek Road provided to SSC and Planning NSW by WML dated 10 DECCW 2001; e) information provided to Planning NSW by WML on 4 Feb 2002, titled "Ashton Coal Project Meeting – Planning NSW"; f) 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 Planning NSW and other government agencies, dated 28 Feb 2002; g) information relating to groundwater impacts provided by HLA Enviro-sciences to Planning NSW dated 14 Mar 2002; h) additional information relating to subsidence, groundwater, agricultural, project justification and blasting impacts provided by HLA Enviro-sciences to Planning NSW dated 28 Mar 2002; i) additional water management information provided to DECCW and other NSW Government agencies prepared by HLA Enviro-sciences Pty Ltd, dated 5 April 2002; j) fax from WML to Planning NSW dated 13 May 2002 relating to a meeting	•EIS, Nov 2001, HLA Enviro-sciences •Aboriginal Cultural Heritage Assessment - Jul 2001, WML, 12 Dec 2001; •Flora and fauna surveys, diversion of Bowmans Creek, water quality, groundwater, air quality and Aboriginal cultural heritage, HLA Enviro-sciences, 28 Feb 2002; •Aboriginal cultural heritage survey, HLA Enviro-sciences, 24 Jun 2002; •Ashton Coal Tailings Pipeline – Application to Modify Development Consent and Statement of Environmental Effects, Parsons Binkerhoff,2 Nov 2006; •Development Consent Modification DA 309-11-2001-I MOD 4, Jul 2009 Wells Environmental Services; •Second Response to Submission – Ashton Coal Operations Ltd (ACOL) –	Yes	Noted. The ACP development has occurred generally in accordance with the documentation listed in MCoA 1.2. The requirements within the various documents have been addressed in the ongoing mine planning for the ACP and specific requirements picked up in the Environmental Management Plans prepared and revised for the project operation.

MCoA	Condition	Documentation	Compliance	Comments
	held on 7 May 2002; k) letter from HLA Enviro-sciences to Planning NSW dated 16 May 2002, relating to flora and fauna surveys and agricultural impacts; l) description and proposed diversion option 2 provided by WML to Planning NSW dated 17 May 2002; and m) response to public submissions from HLA Enviro-sciences to Planning NSW dated 31 May 2002; n) additional information provided by WML regarding Northern Woodland Remnant dated 31 May 2002. o) additional information and letter provided by WML to Planning NSW regarding Salinity and Green Offsets for the Project dated 20 Jun 2002; p) revised Aboriginal cultural heritage survey provided by HLA Enviro-sciences to Planning NSW dated 24 June 2002; q) letter from HLA-Enviro-sciences to Planning NSW dated 2 Jul 2002 relating to Green Offsets report; r) letter from HLA-Envirosciences to NPWS dated 3 July 2002 relating to Aboriginal cultural heritage; s) additional information relating to Aboriginal cultural heritage from HLA Enviro-sciences to Planning NSW dated 15 Jul 2002; t) fax from WML to Planning NSW dated 25 Jul 2002 relating to Aboriginal consultation; u) letter from WML to Planning NSW dated 12 Aug 2002 relating to a conservation area; v) amendment to DA from WML to Planning NSW titled "Description of Alternate Mine Layout for Underground Mine (Option 4) dated 6 Sep 2002; w) fax from WML to Planning NSW dated 13 Sep 2002 relating to an internal coal haul road; x) Submission Pursuant to Section 96(2) of the Environmental Planning and Assessment Act 1979, dated August 2004, prepared by Ashton Coal Operations Pty Limited; y) Supplementary Air Quality Information, dated 9 Nov 2004, prepared by Holmes Air Sciences; z) Documents titled *Ashton Coal Tailings Pipeline – Application to Modify Development Consent* and *Statement of Environmental Effects, dated 2 Nov 2006* and prepared by Parsons Binkerhoff; and aa) Document titled *Development Consent Modification DA 309-11-2001-I MOD 4* dated July 2009 prepared by Wells Environmental Services; ab) Document titled Second Response to Submission – Ashton Coal Operations Ltd (ACOL) – Longwall/Miniwall Panel No.9 dated 24	Longwall/Miniwall Panel No.9 dated 24 Dec 2009		

MCoA	Condition	Documentation	Compliance	Comments
	December 2009; and ac) conditions of this consent.			
1.3	If there is any inconsistency between the above documents, the latter document shall prevail over the former to the extent of the inconsistency. However the conditions of this consent shall prevail over all other documents to the extent of any inconsistency.			Noted
	Provision of Documents			
1.4	Where practicable, the Applicant shall provide all draft documents and reports required to be submitted to the D-G under this consent in an appropriate electronic format. Approved versions of documents are to be provided as a hard copy. Provision of documents and reports to other parties, as required under this consent, shall be in a format acceptable to those parties and shall aim to minimise resource consumption.			Noted
1.5	Nothing in this consent prevents the Applicant from combining reporting requirements under this consent with identical or similar reporting requirements for submission to another relevant party. Reporting requirements shall only be combined with the prior agreement of the D-G of Planning and the D-G (or equivalent) of the other relevant party, if reporting to that party is to be modified.			Noted
1.6	The Applicant shall make the following documents available to the public upon request at the mine site and SSC, and shall post all documents on the internet, within 14 days of approval of the documents by the Director-General or relevant agency: a) this consent; b) any licences or approvals for the mine obtained from Government agencies; c) the Mining Operations Plan; and d) all documents required under this consent, including the environmental management strategy, environmental management plans, AEMR's, SMPs, and Independent Audits.		Yes	Copies of the development consent, licenses, approvals for the mine obtained from Government agencies, Mining Operations Plan; and documents required under this MCoA, including the environmental management strategy, environmental management plans, AEMR's, SMPs are available to the public on the project website – **www.ashtoncoal.com.au/environment**
	Statutory Requirements			
1.7	The Applicant shall ensure that all licences, permits and approvals for the development are obtained and kept up-to-date as required.		Yes	Ashton Coal has all current licenses and approvals required for the coal mine project.
	Dispute Resolution			
1.8	In the event that a dispute arises between the Applicant and Council or the Applicant and a public authority other than the Department, in relation to a specification or requirement applicable under this consent, the matter shall be referred by either party to the Director-General, or if not resolved, to the			Noted

MCoA	Condition	Documentation	Compliance	Comments
	Minister, whose determination of the dispute shall be final and binding on all parties. For the purpose of this condition, "public authority" has the same meaning as provided under section 4 of the Act.			
	Compliance			
1.9	The Applicant shall ensure that employees, contractors and sub-contractors are aware of, and comply with, the conditions of this consent relevant to their respective activities.	• Aboriginal Archaeological Management Induction • Waste Awareness and Recycling Program • Environmental Refresher Training	Yes	An Induction training program for Ashton employees and contractors on environmental management forms part of the overall Induction Program. The environmental components are presented by an ACP Environmental Officer.
1.10	At least two weeks prior to each of the events listed from a) to b) below, an independent person(s) or organisation(s), approved by the D-G, shall certify in writing to the satisfaction of the D-G, that the Applicant has complied with all conditions of this consent applicable prior to that event. Where an event is to be undertaken in stages, the Applicant may, subject to the agreement of the D-G, stage the submission of compliance certification consistent with the staging of activities relating to that event: a) commencement of construction; and b) commencement of mining operations.	• Pre-Construction Independent Certification Report, Pacrim, Sep 2003 • Pre-Operations Independent Certification Report, Pacrim, 2004	Yes	Pacrim prepared Certification Reports to satisfy this MCoA 1.10 in 2003 and 2004.
1.11	Notwithstanding condition 1.10 of this consent, the Director-General may require an update report on compliance with all, or any part, of the conditions of this consent. Any such update shall meet the requirements of the D-G and be submitted within such period as the D-G may agree.	• AEMR 2006-2007 s.1.4 • AEMR 2007-2008 s.1.4 • AEMR 2008-2009 s.1.4	Not triggered	Compliance with the MCoA has been assessed annually by an independent audit team (Hansen Bailey) and the findings reported in the AEMR's.
1.12	The Applicant shall meet the reasonable requirements of the D-G in respect of the implementation of any measure necessary to ensure compliance with the conditions of this consent, and general consistency with the documents listed under condition 1.2 of this consent. The D-G may direct that such a measure be implemented in response to the information contained within any report, plan, correspondence or other document submitted in accordance with the conditions of this consent, within such time as the D-G may agree.		Not triggered	Noted
1.13	Any compliance report or compliance update required under condition 1.10 or 1.11 of this consent shall be made available for public inspection on request.	• AEMR 2006-2007 s.1.4 • AEMR 2007-2008 s.1.4 • AEMR 2008-2009 s.1.4	Yes	ACP have an annual independent compliance report prepared for the project and the report is appended to the AEMR'
1.14	If at any time, the D-G is made aware of the occurrence of any environmental impacts from the proposal that pose serious environmental and/or amenity concerns, due to the failure of environmental measures required by the Conditions of Consent to ameliorate the impacts, the Director-General may order the Applicant to cease the activities causing those impacts until those		Not triggered	Noted

MCoA	Condition	Documentation	Compliance	Comments
	concerns have been addressed to the satisfaction of the Director-General.			
	Period of Approval/Project Commencement			
1.15	This consent provides approval for mining for a period of 21 years from the date of granting of a mining lease pursuant to this consent.	• Mining Lease 1533	Yes	Noted. Mining Lease 1533 is current until 26 February 2024.
1.16	Date of commencement of construction and Mining Operations is to be notified in writing to the Director-General, and SSC, at least two weeks prior to commencement of construction and Mining Operations respectively.	• Letter to D-G SSC re Commencement of Construction 2003 • Letter to D-G and SCC re commencement of Mining Operations, 2004	Yes	
	Security Deposits and Bonds			
1.17	Security deposits and bonds will be paid as required by DII - Minerals under mining lease approval conditions.	• Letter from DPI-Mineral, re MLA 310 , 5 Nov 2008	Yes	$204,750 Security Deposit lodged with DII for ML 1623 as calculated and detailed in the letter from DPI dated 5 November 2008.
	Prohibition of Works			
1.18	The Applicant shall not construct any diversion of Bowmans Creek as proposed in the EIS.		Yes	No diversion of Bowman Creek has occurred to August 2010.
1.19	The Applicant shall not construct any private haul road from the site to the Macquarie Generation coal conveyor as proposed in the EIS.		Yes	No haul road has been constructed to the Macquarie Generation conveyor.
1.20	The Applicant shall prepare revisions of any strategies, plans or programs required under this consent if directed to do so by the D-G. Such revisions shall be prepared to the satisfaction of, and within a timeframe approved by the Director-General.		Yes	Note (refer to MCoA 3.2 for Management Plan revision).
2.	**MINE MANAGEMENT**			
	Mine Management Plan, Operations and Methods			
2.1	No mining undertaken in accordance with this consent shall occur until the Applicant has submitted and had accepted by the DII - Minerals, a Mining Operations Plan (MOP) in accordance with current guidelines issued by DII - Minerals.	• Mining Operations Plan 2007-2012, dated March 2008	Yes	Mining Operations Plan for ML 1526 and ML 1533 has been prepared and approved by DPI-Minerals for the Ashton Coal Mine project, for the period 2007 to 2012.
2.2	The MOP shall: a) be prepared in accordance with DII - Minerals Guidelines for the Preparation of Mining Operations Plans (Document 08060002.GUI or its most recent equivalent); b) demonstrate consistency with the conditions of this consent and any other statutory approvals; c) demonstrate consistency with the Environmental Management Strategy and	• Ashton Coal MOP for the North East Open Cut and CHPP, 2004. • Ashton Coal Glennies Creek Environmental Bund MOP Amendment and Management Plan 2005.	Yes	a)The Ashton Coal Mining Operations Plan (MOP) has been developed in accordance with "Guidelines and Format for Preparation of a Mining Operation Plan" published by the NSW Department of Primary Industries – Mineral Resources (DPI) (January 2006). b)-f) consistency with the MCoA, other statutory approvals, Environmental Management Strategy and Environmental

MCoA	Condition	Documentation	Compliance	Comments
	Environmental Management Plans for the project site; d) provide the basis for implementing mining operations, environmental management, and ongoing monitoring; e) include a mine rehabilitation and Land Use Management Plan; and f) identify a schedule of proposed mine development for the period covered by the plan and include: (i) the area proposed to be impacted by mining activity and resource recovery mining methods and remediation measures; (ii) areas of environmental, heritage or archaeological sensitivity and mechanisms for appropriately minimising impact; (iii) water management, and (iv) proposals to appropriately minimise surface impacts.	• Ashton Coal MOP for the Ashton Underground Mine 2006. • Ashton Coal Mine - Mining Operations Plan 2007 to 2012, dated Mar 2008		Management Plans for the project site, and the basis for implementing mining operations, environmental management, and ongoing monitoring is covered for all the mining related activities undertaken within the ML except for tailings disposal activities undertaken within the Ravensworth Void 4 area. (The tailings disposal activities are covered in a separate Tailings Emplacement Operations Plan approved by DII). e) Section 4 of the MOP addresses Rehabilitation Activities and section 5 described Final Rehabilitation land use. f) the proposed mine development schedule and environmental management is described in sections 3 Proposed Mining Activities and section 7 Environmental Management Controls
2.3	In preparing the MOP, the Applicant shall consult with affected service authorities and make arrangements satisfactory to those authorities for the protection or relocation of those services.		Yes	Power and telecommunications authorities were consulted in relation to services that cross the ACP ML and may be affected by mining activities. Three timber power poles were replaced with concrete poles prior to underground mining commencing to ensure stability of the power line.
2.4	A copy of the MOP, excluding commercial in confidence information, shall be forwarded to SSC and the Director-General within 14 days of acceptance by DII -Minerals.		Yes	A copy of the MOP 2007-2012 was provided to the Director-General and the SSC following approval of the MOP by DPI-Mineral in 2008.
2.5	At least two years prior to the cessation of mining operations the Applicant shall investigate, determine and report, taking account of the potential community benefits, on a final strategy for the future use of the mine site, weirs, dams and any other infrastructure in consultation with the Department, and SSC and for approval of DII - Minerals and the Director-General		Not yet activated	Noted
2.5A	The Applicant shall submit a detailed design and management plan to the DII-Minerals. The Applicant shall not place overburden on the eastern emplacement area above RL 125 metres until the DII-Minerals has approved the plan.	• Eastern Emplacement Management Plan, 1 Feb 2005 • Letter re Approval of EEMP by DII, 28 Feb 2005	Yes	The Eastern Emplacement Management Plan was prepared by ACP and submitted to DII-Minerals prior to increasing the height of the emplacement area above RL 125m.
2.5B	Prior to placing overburden on the eastern emplacement area above RL 125 metres, the Applicant shall revise the Mine Operations Plan (MOP) for the development to the satisfaction of the DII-Minerals. The revised MOP shall: a) demonstrate consistency with the commitments made in documents listed in condition 1.2 and compliance with conditions of this consent; and b) include a schedule for the rehabilitation of the eastern emplacement area.	• Ashton Coal MOP for the Ashton Underground Mine 2006. • Ashton Coal Mine - Mining Operations Plan 2007 to 2012, dated Mar 2008	Yes	Mining Operations Plan for the period 2007 to 2012 was prepared to include the eastern emplacement area and approved by DPI-Minerals for the Ashton Coal Mine project.
	Tailings Emplacement Operation Plan			

MCoA	Condition	Documentation	Compliance	Comments
2.5C	Prior to commissioning pipelines for offsite emplacement of tailings the Applicant shall: a) develop a Tailings Emplacement Operation Plan (TEOP) to the satisfaction of DII. The TEOP shall become an annexure to the Ashton Coal MOP and shall include details of the proposed stabilisation and revegetation of all soil disturbance areas and other detail as described in *Ashton Coal Tailings Pipeline - Application to Modify Development Consent* and *Statement of Environmental Effects*, dated 2 November 2006 and prepared by Parsons Brinkerhoff; and b) provide a revised security deposit calculation for rehabilitation to the DII based on the amended MOP.	• Tailing Operations Plan, 16 May 2007 • Letter from DPI re Approval of TEOP, 21 May 2007 • DA 144/1993 Use of Ravensworth Void No. 4, Singleton Shire Council, 25 May 2007	Yes	The tailings disposal activities are covered in a separate Tailings Emplacement Operations Plan approved by DPI-Minerals on 21 May 2007. Singleton Shire Council approved the TEOP on 25 May 2007 for the placement of tailings in Ravensworth Void No.4.
	Spontaneous Combustion			
2.6	The Applicant shall prepare, prior to the commencement of Mining Operations, a Spontaneous Combustion Management Plan to the satisfaction of DII - Minerals.	• Spontaneous Combustion Management Plan. Version A, 12 Jan 2004	Yes	The Spontaneous Combustion Management Plan was prepared and approved by Planning NSW in January 2004. The Plan is to be reviewed and revised if necessary when the South East Open Cut consent is granted.
	Limit on Production/Hours of Operation			
2.7	Annual production of coal from the ACP shall not exceed 5.45 Mtpa of ROM coal.		Yes	The annual production rates of ROM coal for 2008-2009 was 5.33Mt and 2009-2010 5.2Mt.
2.8	Hours of operation at the development shall be as follows: Open cut mining 7am-10pm Monday to Saturday, and 8am-10pm Sunday Underground Mining, Train loading, and CHPP operation 24 hrs, 7 days Blasting 9am-5pm Monday to Saturday.		Yes	Hours of operation for the ACP are: Open cut mining 7am-10pm Monday to Saturday, and 8am-10pm Sunday; Underground Mining, Train loading, and CHPP operation 24 hrs, 7 days; and Blasting 9am-5pm Monday to Saturday. Recent blasting notifications confirming compliance with MCoA 2.8 have been:

Blasting Notifications	
24/6/2010 : 12.30pm	Mine Blast
19/6/2010 : 12:00pm	Mine Blast
17/6/2010 : 12:30pm	Mine Blast
11/6/2010 : 12:30pm	Mine Blast Lower Barrett
9/6/2010 : 12:30pm	Mine Blast Upper Barrett
7/6/2010 : 4:00pm	Mine Blast
3/6/2010 : 12:30pm	Mine Blast Upper Barrett

MCoA	Condition	Documentation	Compliance	Comments
3.	**LAND AND SITE ENVIRONMENTAL MANAGEMENT**			
	Appointment of Environmental Officer			
3.1	The Applicant shall employ a suitably experienced Environmental Officer(s) for the duration of activities undertaken under this consent whose appointment is to receive prior approval by the Director-General. The Officer(s) shall: a) be responsible for the preparation of the environmental management plans; b) be responsible for considering and advising on matters specified in the conditions of this consent and compliance with such matters; c) be responsible for receiving and responding to complaints in accordance with condition 10.3; d) facilitate an environmental induction and training program for all persons involved in any activities undertaken under this consent; and e) have the authority to require reasonable steps to be taken to avoid or minimize unintended or adverse environmental impacts and failing the effectiveness of such steps, to stop work immediately if an adverse impact on the environment is likely to occur.	• Environmental Management Strategy – Phase 2 Underground Mining Operations, Appendix A, Version B, 19 Aug 2005	Yes	The role of the Environmental officer employed by ACOL for the ACP includes responsibility for the preparation of the environmental management plans; advising on matters specified in the conditions of this consent and compliance; receipt and response to complaints; facilitation of an environmental induction and training program for all employees and contractors; and has the authority to require reasonable steps to be taken to avoid or minimize unintended or adverse environmental impacts including to stop work if an adverse impact on the environment is likely to occur.
3.2	The Applicant shall notify the Director-General, DII-Minerals, DECCW, RTA, MSB, DII-Fisheries, SSC, and the CCC of the name and contact details of the Environmental Officer(s) upon appointment and any changes to that appointment.	• Notification to DoP re Appointment of Environmental Officer to ACP, 24 Oct 2006	Yes	Notification of the relevant authorities (i.e. DoP, DII-Minerals, DECCW, SSC, CCC) occurred for the appointment of Lisa Richards as Environmental Manager for ACP on 24 Oct 2006.
	Environmental Management Strategies and Plans			
3.3	The Applicant shall prepare an Environmental Management Strategy providing a strategic context for the environmental management plans (refer condition 3.6). The Environmental Management Strategy shall be prepared following consultation with the DECCW, DII-Minerals, SSC, DII-Fisheries, RTA, MSB, DII-Agriculture, and the Department, to the satisfaction of the D-G. The strategy shall be provided to the D-G no later than two weeks before the first environmental management plan under condition 3.6 is submitted.	• Environmental Management Strategy – Phase 1 Ashton Coal Mine operations, 2003 • Letter from DoP re Approval of Phase 1 EMS, 28 May 2003 • Environmental Management Strategy – Phase 2 Underground Mining Operations, Version B, 19 Aug 2005 • Letter from DoP re Approval of Phase 2 EMS,2 Nov 2005	Yes	MCoA 3.7 enabled Ashton to divide the preparation and submission of any Environmental Management Plans (EMPs) between open cut and underground mining operations. Phase 1 of the Environmental Management Strategy was approved by the Director-General on 28 May 2003 and addressed the environmental strategies to be adopted by ACOL for the whole of the project, and specifically addressing the EMPs required for the open cut mining phase. Phase 2 of the Environmental Management Strategy was approved by the Director-General on 2 November 2005. This Phase 2 EMS supplements the original EMS for the underground mining.
3.4	The Environmental Management Strategy shall include, but not be limited to: a) statutory and other obligations which the Applicant is required to fulfill	• Environmental Management Strategy – Phase 2	Yes	(a) Section 1 of the EMS lists the MCoA statutory obligations

MCoA	Condition	Documentation	Compliance	Comments
	during construction and mining, including all approvals and consultations and agreements required from authorities and other stakeholders, and key legislation and policies; b) definition of the role, responsibility, authority, accountability and reporting of personnel relevant to environmental management, including the Environmental Officer(s); c) overall environmental management objectives and performance outcomes, for construction, mining and decommissioning of the mine, for each of the key environmental elements for which management plans are required under this consent; d) overall environmental and social objectives for the project, and a strategy for the restoration and management of the environmental and social values affected by mining operations within the context of those objectives; e) identification of cumulative environmental impacts and procedures for dealing with these at each stage of the development; f) overall objectives and strategies to promote economic productivity within the area affected by mining; g) procedures to ensure that all relevant approvals, management plans, and procedures are complied with by all staff and contractors; h) processes for conflict resolution in relation to the environmental management of the project; i) a conceptual project schedule indicating when key activities would be undertaken and proposed timeframes and proposed timeframes for submission and approval of Environmental Management Plans; and j) documentation of the results of consultations undertaken in the development of the Environmental Management Strategy.	Underground Mining Operations, Version B, 19 Aug 2005		for the ACP; (b)Section 4 presents the personnel environmental responsibilities (c)Section 5 addresses ecological and community objectives of the EMS; (d)Section 7 presents the environmental strategies to be applied to the ACP; (e)Section 8 addresses cumulative impact management; (f)Section 9 addresses strategies to promote economic activity in the areas affected by the mining; (g)Section 12 addresses compliance management for all relevant approvals, management plans, and procedures are complied with by all staff and contractors; (h)Section 14.2 addresses conflict resolution; (i)Section 10 provides a conceptual project schedule for ACP; (j)Appendix A lists the authorizations, reports and approvals for the development of the EMS and requirements for consultation and notification of relevant authorities.
3.5	The Applicant shall make copies of the Environmental Management Strategy available to NOW, DECCW, DII-Minerals, SSC, DII-Fisheries, RTA, MSB, DII-Agriculture, and the Department, and the CCC within fourteen days of approval by the Director-General.	• Environmental Management Strategy Version B, 19 Aug 2006 • Letters to DoP, NOW, DECCW, DII-Minerals, SSC, DII-Fisheries, RTA, MSB, DII-Agriculture, and CCC re EMS, 18 Aug 2006	Yes	The Environmental Management Strategy Phase 2 covering the open cut operations and the underground mining was approved on 19 Aug 2006 and a copy of the Phase 2 EMS provided to each of the relevant authorities listed in MCoA 3.6.
3.6	The Applicant shall prepare the following environmental management plans, which may also form part of the Mining Operations Plan: a) Subsidence Management Plan (refer condition 3.18) b) Archaeology and Cultural Heritage Management Plan (refer condition 3.36) c) Flora and Fauna Management Plan (refer condition 3.46)		Yes	ACP prepared the Environmental Management Plans (EMP) listed in MCoA 3.6: Subsidence Management Plan, Version D, 31 Oct 2008 Archaeology and Cultural Heritage Management Plan VB, 19 Aug 2006

MCoA	Condition	Documentation	Compliance	Comments
	d) Erosion and Sediment Control Plan (refer condition 3.50) e) Soil Stripping Management Plan (refer condition 3.51) f) Landscape & Revegetation Management Plan (refer condition 3.55) g) Final Void Management Plan (refer to condition 3.56) h) Bushfire Management Plan (refer condition 3.57) i) Land Management Plan (refer condition 3.58) j) Site Water Management Plan and Groundwater Management Plan (refer condition 4.24) k) Waste Management Plan (refer condition 5.3) l) Construction Air Quality Management Plan (refer condition 6.10) m) Operations Air Quality Management Plan (refer condition 6.10) n) Blasting/Vibration Management Plan (refer condition 6.26) o) Road Closure Management Plan (refer to condition 6.27) p) Construction Noise Management Plan (refer condition 6.42) q) Noise Management Plan (refer condition 6.43) r) Lighting Management Plan (refer condition 6.56) Environmental management plans are to be reviewed, and updated as necessary, at least every 5 years or as otherwise directed by the Director-General, in consultation with the relevant government agencies. Plans shall reflect changing environmental circumstances and changes in technology or best-practice management procedures.			Flora and Fauna Management Plan V.B, 28 Aug 2006 Erosion and Sediment Control Plan, V.B, 28 Aug 2006 Soil Stripping Management Plan, V.A, 15 Jan 2003 Landscape & Revegetation Management Plan, V.C, 26 Apr 2006 Bushfire Management Plan, V.B, 9 Mar 2005 Land Management Plan, V.B 26 Apr 2006 Site Water Management Plan Version C, 19 August 2006 Groundwater Management Plan, Version G 2007 Waste Management Plan, 4 Sep 2003 Operations Air Quality Management Plan, V.C, 28 Aug 2006 Blasting/Vibration Management Plan, V.C 28 Aug 2006 Rail and Road Closure Management Plan, V.A 12 Jan 2004 Noise Management Plan, V.C 28 Aug 2006 Lighting Management Plan, 23 Dec 2003 The EMP's have been reviewed and where necessary revised prior to the commencement of the underground mining in 2007, except for the Bushfire, Lighting, Road and Rail Closure, Soil Stripping, Spontaneous Combustion and Waste Management Plans that will be reviewed and revised when the development consent has been granted by DoP for the South East Open Cut Project and Bowmans Creek.
3.7	The Applicant may, subject to written approval of the Director-General, divide the preparation and submission of any environmental management plans required under this consent, listed in condition 3.6, between open cut and underground mining operations. Any intention to divide environmental management plans shall be declared and approved in the Environmental Management Strategy (condition 3.3).	• Letter from D-G re Approval to Divide Open Cut and Underground Mine Operations EMP's and EMS, 2003	Yes	MCoA 3.7 enabled Ashton to divide the Environmental Management Plans (EMPs) between open cut and underground mining operations. Phase 2 of the EMS for underground mine operations supplements the Phase 1 EMS for the open cut operations and was approved by the D-G on 2 November 2005. EMPs for the underground mining activities were reviewed and revised as necessary in 2006 and 2007.
3.8	The Applicant shall make copies of the environmental management plans in condition 3.6 above available to the relevant government agencies, SSC and the CCC, within 14 days of approval.		Yes	Copies of each Environmental Management Plan listed in MCoA 3.6, have been provided to the relevant government agencies, SSC and CCC, following approval by the D-G,
	Subsidence Management			
	General			
3.9	The Applicant shall design underground mining operations to ensure no direct	• Groundwater Management	Yes	The Groundwater Management Reports prepared for the ACP

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	hydraulic connection between the Bowmans Creek alluvium and the underground workings can occur through subsidence cracking. In order to achieve this criteria the Applicant shall assess levels of uncertainty in all subsidence predictions, and provide adequate contingency in underground mine design to ensure sufficient sound rock is maintained to provide an aquaclude between the Bowmans Creek alluvium, and the underground mine goaf.	Report, Peter Dundon & Associates, 14 Feb 2008 • Groundwater Management Report, Aquaterra, 3 Dec 2008 • Groundwater Management Report, Aquatyerra, 30 Oct 2009		provide comment and assessment of the groundwater quality, Bowman Creek alluvium and drawdown and recharge effects in the areas of underground mining. The results have demonstrated that *"No mining related drawdown has been observed in either Hunter River or Bowmans Creek alluvium..."*
3.10	The Applicant shall make every reasonable effort to ensure that any member of the public entering an area affected by subsidence in the mining area is made aware of any danger caused by the surface subsidence, including impacts on roads.		Yes	The ACP underground mining area and access roads have signage to notify any public entering the area that the area may be affected by subsidence from underground mining.
3.11	The Applicant shall monitor and remediate any mine subsidence related impact including cracking, slumping, and erosion and provide stabilising structures in any areas that have significant risk of destabilisation occurring as a result of longwall panel mining, to the satisfaction of the Department and in consultation with DECCW and DII - Fisheries.		Yes	Surface subsidence cracks that developed along the edge of the longwall panels were observed to have been rehabilitated by ripping the surface to reduce surface water ingress. Cracks in the surface of the Voluntary Conservation Area above the start of Longwall 1 had been rehabilitated with careful surface ripping to ensure that there was no disturbance to the vegetation in the areas along the longwall alignment.
3.12	The Applicant shall maintain an access road from the New England Highway to property No. 130 (refer EIS Volume 3, Figure 3.13). Any realignment of the existing access road shall be designed and constructed by the Applicant in consultation with the owner of property No. 130, Council, DII - Minerals, the local Aboriginal community, and DECCW, and to the satisfaction of the Director-General. The Applicant shall submit design and plans for any realignment to the Director-General for approval one month prior to commencement of construction of the realignment. The Applicant shall have prepared and registered by the Land Titles Office a right of way over any realignment of the access road in favour of the landowner of property No.130. The Applicant shall be responsible for rehabilitation and revegetation of any disused sections of the access road after realignment.		Yes	The access road from the New England Highway to property No. 130 was repaired where minor cracking occurred from subsidence and has been maintained by ACP in good condition to provide continued access for the owner of the property 130.
3.13	At least nine (9) months prior to the extraction of coal from Longwall Panel 1, as defined in the EIS, by long-wall mining or other mining methods requiring approval under Section 138 of the Coal Mines Regulation Act 1982, the Applicant shall advise the landowner of property No. 130 of the Applicant's plans for future mining activities and the specific impacts (based on best available information) affecting each property.		Yes	Consultation with the landowner of property 130 has continued to ensure the landowner is informed of the ongoing mining activities that may affect the land.
3.14	At least one month prior to the commencement of the following activities, the Applicant shall notify the owner of property No. 130 (refer EIS Volume 3, Figure 3.13) in writing of the proposed activity and any potential impacts due		Not triggered	No mining activity has occurred under property 130. A stone band in the Pikes Gully seam under this property has resulted in revising the longwall design so as not to mine under the

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	to that activity: a) construction of development headings (first workings) under the property; and, b) lodgement of an application in accordance with Section 138 of the *Coal Mine Regulation Act, 1982* to longwall mine under the property.			property.
3.15	The Applicant shall monitor the condition of watercourses above longwall panels in the mining area, during mining and continue monitoring until completion of post mining rehabilitation to the satisfaction of DII - Fisheries, to identify any impacts on aquatic habitats or fish passage, and implement appropriate actions if and when adverse impacts occur.	• AEMR 2006-2007 s.3.7 • AEMR 2007-2008 s.3.7 • AEMR 2008-2009 s.3.7	Yes	
3.16	No tunnelling or mining shall occur directly underneath the piers or abutments of Bowmans Creek Bridge. The RTA must approve access tunnel layouts in the vicinity of the Bridge.		Yes	No underground mining had occurred directly underneath the piers or abutments of Bowman Creek Bridge at the date of this audit.
3.17	The angle of draw for the mine subsidence after removal of the coal is to be kept outside of the New England Highway Road Reserve.		Yes	The underground mine planning ensures that the angle of draw for the mine subsidence after removal of the coal is not within the New England Highway Road Reserve.
	Subsidence Environmental Management Plan			
3.18	Prior to carrying out any underground mining operations that could cause subsidence the Applicant shall prepare a Subsidence Management Plan (SMP) which must: (a)include a mine plan of the relevant area; (b)include a minimum of 2 years of baseline data, collected at appropriate frequency and scale; (c)Integrate ongoing management of previously mined areas; (d)Identify and assess the significance of all natural features located within 600m of the edge of secondary extraction; (e)Include a clear description of subsidence effects, subsidence impacts and environmental consequences; (f)Include management, monitoring and contingency plans for all significant manmade and natural features which may experience subsidence effects, impacts and environmental consequences; (g)propose limits on subsidence impacts and environmental consequences to be applied within the relevant area; (h)be prepared in consultation with NoW, DII, Singleton Council and DoP; (i)be publically advertised when submitted for approval; (j)be approved by the D-G of DII prior to carrying out any underground mining operations that could cause subsidence in the relevant area; (k)be otherwise prepared in accordance with any guidelines for SMP's	• Subsidence Management Plan, Version C, 31 Oct 2008 • Approval of Subsidence Management Plan, DPI-Minerals, 8 Mar 2007 • Letter from DoP re Approval of Subsidence Management Plan, 13 Mar 2007	Yes	(a) SMP Figure 1; (b) sections 3, 5 to 10 of SMP; (c) section 1.5 Site Conditions (d) section2 of the SMP Surface and Subsurface Features (e) section 4 of the SMP Subsidence Impacts (f) section 4 of the SMP Subsidence Impacts (g) section 3.5 Subsidence Predictions (h) section 7.2.2 and 7.3 Consultation Methodology Government Agencies (i) section 7 Community Consultation (j) the SMP was approved by DPI-Minerals on 8 Mar 2007 (k) the SMP was prepared in accordance with *Guidelines for Applications for Subsidence Management Approvals* (Department of Mineral Resources, 2003); (l) the SMP requirements for monitoring and reporting have been implemented with results reported in the AEMR's

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	developed by the Department and/or DII; and (l)be implemented, following approval, to the satisfaction of the D-G of DII.			
3.18A	The Applicant shall ensure that the change point from longwall to miniwall mining for Longwall/Miniwall 9 within the Pikes Gully seam shall be located at a minimum horizontal distance of 50m from the boundary of the Bowmans Creel alluvium.		Not triggerd	Noted
	Subsidence Monitoring			
3.19	The Applicant shall undertake a detailed and ongoing monitoring program of subsidence resulting from mining to the satisfaction of the Director-General and the DII - Minerals and in consultation with NOW, DECCW, DII - Fisheries and according to the recommendations of any independent expert review [refer to Conditions 8.3-8.7]. The monitoring program shall extend from commencement of construction throughout the life of the mine and for a period of at least five years after the completion of mining, or other such period as determined by the D-G NOW, DECCW, DII - Fisheries and DII - Minerals. Monitoring shall be supported by visual as well as technical records. Monitoring shall include, but not be limited to, the following: a) monitoring of all relevant subsidence parameters including vertical subsidence and ground strain; b) results of detailed inspections of underground workings and coal seams noting any changes in roof or floor conditions, or any water inflows which may indicate the presence of geological features such as faults, dykes or joints; c) records of surface geological mapping or subsurface investigation which may indicate the presence of geological structures, and assessment of any possible correlation between surface features and features in underground workings at seam level; d) monitoring of the propagation and extent of subsidence-induced cracking including: (i) plotting exact location, depth, and characteristics of surface cracks; and, (ii) monitoring the extent of cracking connecting surface cracks to the collapsed goaf area; e) regular monitoring of all water inflows to the underground mine including location and flowrate of inflows. Water quality analysis should be conducted if a significant change in water flow or discolouration is observed at any time to identify the possible source of the water; f) monitoring of groundwater levels and quality; g) a survey of affected stream channel systems, including monitoring of rainfall, surface water flows, water ponding, and water quality; h) monitoring of Bowmans Creek as required by condition 3.20;	▪ Subsidence Management Plan Oct 2008 ▪ Subsidence Management Report, Maunsells AECOM, 31 Oct 2008 ▪ Groundwater Management Report, Peter Dundon & Associates, 14 Feb 2008 ▪ Groundwater Management Report, Aquaterra, 3 Dec 2008 ▪ Groundwater Management Report, Aquaterra, 30 Oct 2009 ▪ AEMR 2006-2007 ▪ AEMR 2007-2008 ▪ AEMR 2008-2009	Yes	(a) Subsidence monitoring is conducted using: ▪Two longitudinal subsidence lines over the start and finish of the each longwall panel; ▪Cross lines along the Tailgate side of the panel extending downslope to Glennies Creek; and ▪A diagonal line extending from the corner of longwall panel towards the New England Highway; (b) and (c) results of geology and mapping of underground mine workings is provided to DII-Minerals in the reporting under the MOP and SMP; (d) the monitoring of subsidence is reported under the MOP and SMP with all information and data reported in the End of Panel Reports prepared for DII-Minerals. (e) and (f) the annual Groundwater Management Reports prepared by Aquaterra provide a summary of groundwater inflow rates and groundwater quality; (g) monitoring of surface waterway systems, rainfall ponding and water quality is conducted under the Site Water Management Plan and reported in the AEMR's; (h) The impact of subsidence on Bowman Creek is closely monitored, with flora and fauna monitoring programs to identify any significant changes to the aquatic habitat. Baseline monitoring will continue until the commencement of longwall operations under Bowman Creek, when specific monitoring events will be triggered for each pass under the creek. Monitoring will then continue post-mining for at least five years. (i) to (m) monitoring of surface water runoff and erosion, cultural heritage sites, land use, vegetation and terrestrial

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	i) monitoring of changes to surface water run-off and erosion; j) monitoring of cultural heritage sites; k) monitoring of impacts to agricultural land; l) monitoring of impact of subsidence on existing vegetation and terrestrial and aquatic ecosystems; m) monitoring and evaluation of subsidence management and remediation techniques identified in the SMP; and n) a comparison of predicted subsidence impacts with actual impacts, and updating of predicted impacts for future longwalls and long-term impacts, particularly on groundwater systems and salinity.			and aquatic ecosystems and remediation of subsidence affected areas is conducted and reported in the AEMR's and SMP reporting requirements; (n) subsidence monitoring and comparison with predicted impacts is undertaken and reported in accordance with the approved SMP requirements.
3.20	The Applicant is to conduct a detailed Stream Monitoring Program on Bowmans Creek developed in consultation with NOW and DII - Fisheries. This monitoring is to commence at commencement of construction, or as otherwise directed by the D-G, and is to be supported with visual records as well as technical records. The River monitoring program shall include, but not be limited to: a) a detailed benchmark survey of the affected length of Bowmans Creek, and the reaches from the nearest upstream bedrock control point from the effective zero point of subsidence to the nearest downstream control point from the effective zero point of subsidence (usually measured by the 20 mm limit of subsidence). This survey is to be completed at least one year prior to mining affecting the stream channel system, or as otherwise directed; b) pre-mining assessment including: (i) identification of stable bedrock control points along the affected reach, and the nature and extent of bedrock control points. (ii) identification of stable cross sectional survey control points along the affected reach. (iii) identification of chain pillar survey control points to establish the change in vertical reduced levels and bed gradient change. (iv) identification of stable control monitoring points to establish bed load transport through the affected reach. (v) assessment of the extent of existing pool-riffle sequences, rock bar and cobble chute pools and bed gradient steepening through riffle sequences. (vi) assessment of bank stability provision by existing vegetation galleries along the affected reach of Bowmans Creek. (vii) the extent, floristics and structure of any existing wetlands or standing pools along the length of the affected reach of Bowmans Creek. (viii) existing water quality and exchange/discharge rates of local	• Groundwater Management Report, Peter Dundon & Associates, 14 Feb 2008 • Groundwater Management Report, Aquaterra, 3 Dec 2008 • Groundwater Management Report, Aquaterra, 30 Oct 2009	Yes Ongoing	The sampling methods adopted for the Bowmans Creek monitoring are based on existing methods being utilised for monitoring long-term aquatic ecological change. The program has been designed to follow the National River Process and Management Program River Bio-assessment Manual methods (NRPMP 1994) as adapted for the National River Health Program (now referred to as the AusRivAS method (Turak et al 1999). The AusRivAS protocol provides for selection of sampling locations and recommends that, wherever possible, two habitats (riffles and edges) be sampled at each site. The monitoring program design for includes the following features: • Sampling the aquatic macro invertebrate fauna of a minimum of three creek pools in each creek twice a year (in Spring and Autumn) using the AusRivAS sampling, sorting and identification protocols. • Estimation of fish occurrence by a combination of bait-trapping, dip netting and observation, with all captured fish identified in-situ and immediately released. • Depth profiles of basic water quality parameters: Temperature, Electrical Conductivity (salinity), water acidity (pH), Dissolved Oxygen and Turbidity, at each site during each sampling run. • Recording of changes in creek riparian condition and of aquatic plant distribution within the study areas at each sampling time. (a) and (b) Aquatic ecological monitoring was undertaken during the reporting period. Monitoring conducted during

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	groundwaters (both alluvial and underlying bedrock) to Bowmans Creek; and, (ix) monitoring to benchmark fish, macroinvertebrates and aquatic habitat; water velocities and flow rates; and current geomorphological design and stability of the creek. c) immediate post-mining monitoring (at least twice in the period within one year of each longwall pass under Bowmans Creek), including: (i) extent of change in level and gradient from each control point identified in the pre-mining survey. (ii) extent of change in cross section between each survey control point identified in the pre-mining survey. (iii) change in pool-riffle sequence, depth and width of pools, location of breakout points for flood waters from the subsided troughs overlying each extracted longwall panel. (iv) change in stream power relations through each chain pillar and chute/riffle sequence along the extent of the affected stream. (v) obstruction to fish passage through reverse gradient slopes on the down-stream face of each subsidence trough. (vi) cumulative changes in stream power and tractive stress along the affected reach. (vii) impacts on existing vegetation communities along Bowmans Creek from subsidence or other impacts, and potential impacted areas from potential breakout points along the channel (such as the southern length of subsidence overlying longwall panels 5, 6 and 7 beyond the incised meander of Bowmans Creek); and (viii) monitoring to assess impacts to fish, fish passage, macroinvertebrates and aquatic habitat; water velocities and flow rates; and geomorphological design and stability of the creek. d) long term monitoring on a bi-annual basis extending for at least five years after longwall mining has been completed under Bowmans Creek; (i) changes in bed gradients, control point locations, pool/riffle locations and chute depths and energies along the affected reach of the creek. (ii) changes in bedload transport rates, bed material sorting/imbrication, bedrock control exposure and energy relations in the affected reach of the creek. (iii) drainage of local groundwaters into and water quality changes in each pool of Bowmans Creek, including an assessment of pool maintenance periods during dry periods resulting from discharge of local groundwaters into Bowmans Creek. (iv) vegetation community changes along the length of the affected channel.			the period builds on sampling studies conducted in 2006 and 2007 and the initial benchmarking conducted during the EIS phase in 2001. Monitoring was conducted in Spring and Autumn 2007, 2008. 2009 and 2010 (c) Noted (d) Noted

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	(v) long term changes in biological communities within the affected reach of the creek; and (vi) monitoring to assess impacts to fish, fish passage, macroinvertebrates and aquatic habitat; water velocities and flow rates; and geomorphological design and stability of the creek.			
3.21	A detailed survey of the New England Highway road corridor is to be undertaken. Permanent monitoring stations must be installed as part of the initial survey. The initial survey is to be undertaken jointly with the RTA.	• AEMR 2008-2009 s. 3.16 • AEMR 2007-2008 s. 3.16	Yes	The New England Highway pre-mining monitoring of the infrastructure included: ○Survey of pavement edges and centreline; ○Precondition surveys (photographic documentation of pre-mining pavement condition); ○Survey of the Road Reserve; ○Survey and assessment of drainage infrastructure; ○Installation of survey marks; ○Visual inspection of fill embankment; and ○Precondition survey and photographic records of current bridge condition.
3.22	Subsidence monitoring on the New England Highway is to be undertaken on a 3 monthly basis until the cessation of the mining process and pending ground movement.	• AEMR 2008-2009 s.3.16 • AEMR 2007-2008 s.3.16	Yes	During mining, monitoring of the New England Highway includes: · Periodic visual inspection of road pavement and drainage structures; · Survey of pavement edges and Road Reserve; · Survey of top of drainage pits and culvert inverts; and · Periodic visual inspection of bridge deck. Results are reported in the AEMR's.
3.23	The Applicant shall report on monitoring conducted and provide a full interpretation results in the SMP and the AEMR.	• AEMR 2008-2009 s.3.16 • AEMR 2007-2008 s.3.16	Yes	The results of subsidence monitoring are reported in the AEMR's.
	End of Panel Reporting			
3.24	Within 4 month of completion of each longwall/miniwall panel, or as otherwise permitted by the D-G of DII, the Applicant shall, to the satisfaction of the D-G of DII: (a)prepare an end of panel report: •reporting all subsidence effects (both individual and cumulative) for the panel and comparing subsidence effects with the predictions; •reporting all subsidence effects (both individual and cumulative) for the panel and comparing subsidence effects for the panel; •discussing environmental consequences for all manmade and natural features impacted by the subsidence; and comparing subsidence impacts and environmental consequences with predictions;	• End of Panel Report Longwall 4, ACOL and SCT Operations P/L 12 May 2010	Yes	End of Panel Reports have been prepared and submitted to the relevant authorities within 4 months of completion of the underground works on each longwall panel 1-4.

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	and (b)submit the report to DII, and provide copies to the CCC, the Department, DECCW, NoW and any other relevant agency.			
	Subsidence Experts Assessments			
3.25	The Applicant shall pay the reasonable costs for the Department engaging independent experts to advise it when they assess the SMP's prepared under condition 3.18.			Noted
3.26	*Deleted*			
3.27	*Deleted*			
3.28	*Deleted*			
	Adverse longwall mining subsidence impacts			
3.29	The Applicant shall investigate and undertake to the satisfaction of the Director-General, and in consultation with the Department, DECCW, NOW and DII - Fisheries, alternative mine plans if subsidence impacts, such as impacts on groundwater systems, and potential long-term salinity impacts, as a result of the mine are demonstrated to be greater than those predicted in the EIS or SMPs. This may include altering mining methods or restricting long wall mining in certain areas.		Not triggered	Noted
	Heritage Assessment, Management and Monitoring			
	General			
3.30	The Applicant shall provide for permanent conservation of the land shown on the indicative plan in Schedule 3 (the "conservation area") through establishment of a Conservation Agreement with the Minister for the Environment under Part 4, Division 7 of the *National Parks and Wildlife Act 1974*. The purpose of the Conservation Agreement shall be to protect and conserve Aboriginal cultural heritage, and biodiversity, within the conservation area and any other purpose agreed to by the Applicant and the Minister for the Environment. The agreement shall include provision for the developing of a Plan of Management for the conservation area, developed in consultation with the local Aboriginal community, which reflects the purpose of the Conservation Agreement. The content of the Plan of Management shall be as agreed by the relevant parties and generally in accordance with the following principles: a) the area shall be conserved in perpetuity; b) agriculture and grazing shall be allowed in areas where such activities would not compromise or conflict with: (i) conservation of Aboriginal cultural heritage sites;	• Conservation Agreement between the Minister Administering NSW National Parks and Wildlife Act, submitted to DECCW, 15 Mar 2010	Yes	The Conservation Agreement between the Minister Administering NSW National Parks and Wildlife Act, and Ashton Coal Mines Limited was prepared and submitted to the DECCW on 15 March 2010 for signature by the Minister.

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	(ii) conservation of biodiversity; or, (iii) commitments regarding revegetation and management of native habitat areas, particularly the southern woodland remnant, made in documents referred to in condition 1.2; c) weed control and bushfire protection measures shall be permitted as necessary; d) underground mining of the conservation area shall be permitted, in accordance with this consent; e) specific measures shall be developed to ensure conservation of Aboriginal heritage and threatened species; f) rehabilitation and revegetation works shall be permitted where they do not conflict with conservation of Aboriginal cultural heritage; g) a permanent access road across the area shall be permitted; and h) access to the area by the local Aboriginal community shall be permitted. The Applicant shall commence negotiations with the Minister for the Environment within six months of the granting of the mining lease. The Applicant shall provide a copy of the agreement to the Director General and SSC within 14 days of the agreement being signed.			
3.31	The Applicant shall report on results of cultural heritage surveys and monitoring of the site before, during, and after mining operations annually in the AEMR. The purpose of the reporting shall be to identify new areas or increases to the area identified in condition 3.30 for the establishment of Conservation Agreements as defined in condition 3.30. The Applicant shall submit AEMRs to DECCW and the Director-General for consideration. Following evaluation of the reporting in the AEMRs, the Director-General may, in consultation with DECCW, request the Applicant to establish a Conservation Agreement following the procedure in condition 3.30.	• AEMR 2006-2007 sections 3.12 and 3.13 • AEMR 2007-2008 sections 3.12 and 3.13 • AEMR 2008-2009 sections 3.12 and 3.13	Yes	
3.32	Within six months of the commencement of mining operations, the Applicant shall make a contribution of $50,000 towards a trust fund set up by the Department and the Public Trustee for the purposes of a regional study into Aboriginal cultural heritage as defined by the Trust Deed.	• AEMR 2004-2005, section • Independent Compliance Audit, Pacrim, Aug 2007	Yes	It was reported in the 2004-2005 AEMR that ACP provided the $50,000 contribution for the regional Aboriginal Cultural Heritage study in 2004.
3.33	The Applicant shall provide the local Aboriginal community with the opportunity to recover artefacts as approved by the s90 permits, and arrange access to Aboriginal heritage on the site upon receipt of a request.		Yes	ACP have local Aboriginal representatives conduct a surface survey of any areas to be disturbed prior to any works and s90 Permits have been obtained for any artifacts that required to be removed.
3.34	If, during the course of any activities conducted under this consent, the Applicant becomes aware of any heritage or archaeological sites not previously identified, all work likely to affect the site shall cease immediately. The Applicant shall then consult with relevant authorities and decide on an		Yes	Noted

MCoA	Condition	Documentation	Compliance	Comments
	appropriate course of action prior to recommencement of work. The relevant authorities may include DECCW, the NSW Heritage Office, and the relevant local Aboriginal community. Any necessary permits or consents shall be obtained and complied with prior to recommencement of work.			
3.35	The Applicant shall consult regularly with the local Aboriginal community using consultation principles and strategies consistent with those outlined in the *"Guidelines for best practice community consultation in the NSW Mining and Extractive Industries"* or relevant DECCW guidelines when available. The results of these consultations shall be documented in the AEMR.			Noted
	Archaeology and Cultural Heritage Management Plan			
3.36	The Applicant shall prepare an Archaeology and Cultural Heritage Management Plan (ACHMP) to address Aboriginal and European cultural heritage issues. The Plan shall be prepared in consultation with the local Aboriginal community, and DECCW, and to the satisfaction of the Director-General. The Plan shall include but not be limited to: a) demonstration of consistency with commitments made in documents listed in condition 1.2 and compliance with the conditions of this consent; b) identification of all areas of conservation within the DA area; c) provision of management strategies including procedures and protocols for conservation and protection of Aboriginal heritage sites for all parts of the DA area; d) identification of any salvage, excavation and monitoring programs for any cultural heritage/archaeological sites within the DA area; e) details of any Section 90 applications to be lodged, or consents obtained from DECCW; f) details of consultation undertaken with the local Aboriginal community in the preparation of this Plan; g) details of procedures and programs to implement monitoring requirements in condition 3.37. h) details of the measures to fully document, in accordance with the NSW Heritage Office guidelines, any non-indigenous heritage sites that will be required to be removed as a result of the development; and i) details of proposed monitoring that will be undertaken in the areas adjacent to the non-indigenous heritage sites identified within the EIS. The ACHMP shall be submitted for the approval of the Director-General no later than one month prior to the commencement of construction of the development, or within such period otherwise agreed by the Director-General. Construction shall not commence until written approval has been received from the Director-General.	• Archaeology Management Plan, 5 Sep 2006	Yes	(a)Sections 2 and 3 list the commitments in the MCoA and documents listed in MCoA1.2; (b)Section 4 identifies areas requiring conservation within the ACP ML; (c) Section 6 addresses management safeguards and ameliorative actions related to the conservation of Aboriginal sites; (d)Table 1 of the Archaeological Management Plan lists the sites for which s90 Permits were obtained or would be required for salvage or destruction of cultural heritage/archaeological sites within the DA area; (e)Section 6 Table lists the s90 Applications for Permits; (f)Section 6.4 details the consultation conducted with the various Aboriginal community groups and NPWS; (g)procedures for implementation are included in the SMP; (h)Table 2 of the Archaeological Management Plan presents non-indigenous heritage sites that may be potentially impacted by the ACP development; (i) Table 2 of the Archaeological Management Plan presents non-indigenous heritage sites that may potentially impacted by the ACP development; The ACHMP is available on the Ashton Coal website for puiblic inspection if required.

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	Upon receipt of the Director-General's approval, the Applicant shall supply a copy of the ACHMP to Council, DECCW, and local Aboriginal community groups within 14 days. The Applicant shall make the ACHMP available for public inspection on request			
	Monitoring			
3.37	The Applicant shall monitor the effectiveness of the measures outlined in the Archaeology and Cultural Management Plan (Condition 3.36). A summary of monitoring results shall be included in the AEMR.	• AEMR 2006-2007 s.3.12 • AEMR 2007-2008 s.3.12 • AEMR 2008-2009 s.3.12	Yes	Monitoring of any archaeological sites on the ACP area is reported in the AEMR's section 3.12 Aboriginal Heritage.
	Flora and Fauna Assessment, Management and Monitoring			
	General			
3.38	The revegetation of the DA area shall include, as a minimum, vegetation as shown on the Conceptual Final Landform and Vegetation Patterns plan attached as Figure A to information submitted to the Department on 28 March 2002 where this activity does not impact on Aboriginal heritage values.	• Figure A - Additional information, HLA Enviro-sciences to Planning NSW, 28 Mar 2002	Yes	
3.39	Domestic stock and, where necessary, native fauna shall be excluded from all bushland revegetation areas.		Yes	The Conservation Area has been fenced to exclude stock grazing and limit native fauna entry to protect bush-land regeneration.
3.40	Revegetation of areas not to be disturbed by open-cut mining, surface infrastructure, or overburden emplacement shall be completed within 6 years of the granting of a mining lease.			Noted
3.41	The Applicant shall use, to the greatest extent possible, indigenous seed and propagation materials in revegetation of the site. This shall be based on an environmentally sensitive program of seed collection on the site and from surrounding vegetation remnants, subject to landholders consent.		Yes	Native seed mix is used for all revegetation of rehabilitated areas on the ACP site. The seed mix is spread on the finished contoured areas and establishment of the native vegetation managed with weed control practices applied to reduce competition for growth.
3.42	If threatened species are identified on the site during construction or operation of the coal mine, the Applicant shall cease any work immediately which could adversely impact on the species pending investigation and consultation with relevant government agencies. The Applicant shall engage a suitably qualified ecologist to investigate, and identify appropriate amelioration measures.			Noted
3.43	Those areas proposed to be mined and those areas proposed to be revegetated both by natural means and by direct seeding/planting shall be mapped so that the spatial and temporal relationship between the sequence of vegetation clearing, mining and habitat rehabilitation is clearly demonstrated.		Yes	Annual assessment of the areas revegetated with native seed is conducted to prepare reports on the spatial and temporal relationship between the sequences of vegetation rehabilitation.

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3.44	Natural drainage patterns shall be re-established as far as practical.			Noted
3.45	During the life of the mine and until the revegetated areas are established to the satisfaction of the DII - Minerals, the Applicant shall maintain the revegetated areas. Maintenance shall include, where necessary, but not be limited to: a) replanting failed or unsatisfactory areas; b) repairing erosion problems; c) fire management, fire suppression or fire encouragement; d) pest and weed control; e) control of feral animal populations; f) maintain and repair fencing; g) fertiliser application; and h) application of lime or gypsum to control pH and improve soil structure.	• Landscape and Revegetation Management Plan, Revision C, 31 May 2006 • Weed Management Plan, Revision A 19 Aug 2006	Yes	
	Flora and Fauna Management Plan			
3.46	The Applicant shall prepare and implement a Flora and Fauna Management Plan (FFMP) for the DA area. The Plan is specifically required to outline procedures for clearing or disturbing vegetation and other habitat types, along with measures for habitat reinstatement and management. The Plan shall be prepared in consultation with DECCW and SSC, and to the satisfaction of the Director-General. The Plan shall be prepared by an appropriately qualified and experienced ecologist. The ecologist shall be responsible for providing advice to minimise potential impacts upon threatened and protected fauna species that may utilise the site and to provide expert advice on the regeneration and reconstruction of flora and fauna habitat on mined areas. The Plan shall include but not be limited to: a) demonstration of consistency with commitments made in documents listed in condition 1.2 and compliance with the conditions of this consent; b) details of strategic vegetation management, outlining timeframes for clearing and re-vegetation activities and a map illustrating the Plan. The Plan should aim to maximise scope for new vegetation to establish and restore ecological integrity; c) details of the creation, landscaping and management of on-site vegetation to provide habitat for the Grey-crowned Babbler and other threatened species likely to occur on the site; d) details of the creation, landscaping and management of ponds along Bowmans Creek, where practical, to provide for Green and Golden Bell Frog habitat; the creation of new habitat must be based on current findings related	▪ Flora and Fauna Management Plan, Version C, 19 Jun 2006 ▪ Weed Management Plan, Revision A 19 Aug 2006 ▪ Landscape and Revegetation Management Plan, Revision C, 12 May 2006 ▪ Land Management Plan, Version B, 27 Jul 2006 ▪ Archaeological Heritage Management Plan,	Yes	The Flora and Fauna Management Plan Version C was prepared for ACP by EMR consultants, and approved by DoP on 28 August 2006. (a) The Plan was developed taking account of requirements and commitments in the documents listed in MCoA 1.2; (b) section 6 addresses seasonal clearing requirements and vegetation clearing procedures and clearing and revegetation activities are included in the MOP; (c) section 6 of the Plan outlines the management of existing habitat and riparian vegetation habitat for the Grey-crowned Babbler and other threatened species; (d) section 6 of the Plan outlines the management of riparian vegetation and waterways for protection of the green and golden bell frog habitat; (e) section 6 addresses Seasonal Clearing Requirements and vegetation clearing procedures; (f) section 6 addresses Pre-clearance inspections; (g) section 6 Clearing Procedures addresses the identification and inspection of trees containing tree hollows. (Observations during the audit inspection noted tree

MCoA	Condition	Documentation	Compliance	Comments
	to nearby populations and must be integrated with existing habitat for this species on the site at Bowmans Creek and Bettys Creek, and with habitat which is proposed to be created on Bettys Creek by Glendell Mine; e) details of the schedule for clearing activities incorporating seasonal habitat requirements for species such as bats and other mammals, with the objective of avoiding incidents during sensitive hibernation and breeding periods. f) details of pre-clearance inspections, including the identification and inspection of trees containing tree hollows, including stags, prior to clearing of any vegetation; g) details of how micro habitats including dead trees, stags, stumps and hollow branches will, where practical, be salvaged and relocated to areas depauperate of tree hollow habitat and in the recreation of habitat areas; h) details of the establishment of roost and denning boxes appropriate for bat and avifauna species and methods for their regular maintenance. The details on the specific height, aspect, design, location and timing for the placement of the roosts and nest boxes shall consider any publicly available results and recommendations following the ongoing fauna habitat monitoring program occurring at the Mt Owen mine; i) details of the methods for strategically placing felled trees between cleared and remnant bushland to provide runways of ground cover for dispersion of animals; j) details of measures to care for any animals injured or found during clearing activities, including the use of WIRES to attend to fauna as necessary, and the methods for their relocation if appropriate. This shall include measures for harbouring and releasing nocturnal animals at night; k) strategies for the establishment of long-term post-mining land use objectives over the site; l) measures to re-instate vegetation communities and to use local endemic species for revegetation as soon as possible; m) methods to actively manage existing areas of remnant vegetation (habitat management zones) through fencing (using animal friendly materials) to exclude grazing animals and control of feral animals where practical, revegetate where appropriate, and maintain weed and fire controls; n) strategies for the establishment of wildlife corridor links to adjoining habitat areas and integration of rehabilitation works with nearby mines; o) details of strategies for the exclusion of grazing stock on areas of native bushland reconstruction; p) measures to monitor the success of revegetated areas and plant additional species where necessary; q) methods of revegetation;			stumps and trunks were salvaged and replaced on rehabilitated areas on the Eastern Emplacement Area); (h) section 6 Habitat Creation outlines the establishment of roost boxes appropriate for bat and avifauna species and their design; (i) section 6 addresses the placement of felled trees to provide ground cover for fauna; (j) section 7 provides contact details for carers of injured wildlife and general principles for management of injured animals; (k) section 6 outlines Long Term Post Mining Management of flora and fauna on the site; (l) section 6 of the Plan addresses reinstatement of vegetation and there is further reference in the Landscape and Revegetation Management Plan, Land Management Plan, and MOP; (m) section 6 includes management of remnant vegetation, exclusion of grazing and weed and fire control (these matters are also referenced in the Landscape and Revegetation Management Plan, Land Management Plan, and MOP); (n) section 6 addresses Habitat Creation and Corridors; (o) section 6 Habitat Reinstatement and Management addresses exclusion of grazing and fencing of vegetated areas; (p) section 7 outlines Terrestrial Habitat Monitoring; (q) section 6 of the Plan and sections of the Landscape and Revegetation Management Plan, Land Management Plan, and MOP address the revegetation methods; (r) Aboriginal heritage management is addressed in the Archaeological Heritage Management Plan; (s) section 6 Management of Unknown Threatened Species provides an outline for the requirement of this MCoA; (t) section 7 addresses a Terrestrial Habitat monitoring and Aquatic Habitat monitoring program.

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	r) consideration of Aboriginal heritage management to ensure that activities under the Plan do not impact on Aboriginal heritage values; s) development of a protocol for identifying and managing significant impacts on any threatened flora and fauna species not identified in the EIS, during construction or operation of the mine; and t) details of the habitat monitoring required under this consent. The FFMP shall be submitted for the approval of the Director-General, in consultation with DECCW, no later than one month prior to the commencement of construction of the development, or within such period otherwise agreed by the Director-General. Construction shall not commence until written approval has been received from the Director-General. Upon receipt of the Director-General's approval, the Applicant shall supply a copy of the FFMP to Council, NOW, DII - Fisheries, and DECCW, within 14 days. The Applicant shall make the FFMP available for public inspection on request.			
	Monitoring			
3.47	The regeneration works shall be monitored by an appropriately qualified and experienced ecologist. The results of the monitoring and the effectiveness of the revegetation and the FFMP shall be reported annually as part of the Annual Environmental Management Report in accordance with the Department of Mineral Resource's Guidelines to the Mining, Rehabilitation and Environmental Management Process (March 1998) or its latest version.	▪ AEMR 2006-2007 section 3.6 ▪ AEMR 2007-2008 section 3.6 ▪ AEMR 2008-2009 section 3.6	Yes	
3.48	The Applicant shall prepare a detailed monitoring program of habitat areas on the site, including any wetlands and aquatic habitats, during the development and for a period after the completion of the development to be determined by the Director-General in consultation with DECCW. The monitoring program shall be included in the FFMP and a summary of the results shall be provided in the AEMR. The program shall: a) monitor impacts attributable to the development and include monitoring of the success of any restoration or reconstruction works. The Applicant shall carry out any further works required by the Director-General and DII - Minerals as a result of the monitoring; b) establish an ongoing monitoring program of the existing and proposed revegetated areas to assess their floristics and structure and to propose contingency measures for improvements to revegetation if required; and c) establish an ongoing monitoring program of fauna species diversity and abundance and the effectiveness of reconstructed ecosystems in providing fauna habitat and contingency measures should impacts be identified as occurring.	▪ AEMR 2006-2007 section 3.6 ▪ AEMR 2007-2008 section 3.6 ▪ AEMR 2008-2009 section 3.6	Yes	Habitat surveys are carried out in both the spring and autumn seasons. The main focus of the monitoring is the southern woodland (voluntary conservation area) which consists of open grassy woodland dominated by *Allocasuarina luehmannii*. Sub-dominant species include *Eucalyptus crebra* (narrow-leaved ironbark), *Eucalyptus melliodora* (yellow box) and *eucalyptus fibrosa* (grey box).

MCoA	Condition	Documentation	Compliance	Comments
	Erosion and Sediment Control			
	General			
3.49	Sedimentation dams must be constructed to contain or treat surface water runoff from all mining areas and areas disturbed by mining including overburden dumps, topsoil stockpiles, unsealed roads and areas cleared of vegetation. Sedimentation dams must be designed: a) so that the maximum flow velocity through the dams meets NOW guidelines; b) to prevent short circuiting; c) if inflow is likely to contain oil or other deleterious floating matter a baffle must be installed at the outlet to prevent discharge of that matter; and, d) so as to avoid impacts on Aboriginal heritage values.			
	Erosion and Sediment Control Plan			
3.50	The Applicant shall prepare an Erosion and Sediment Control Plan (ESCP) for the surface facilities and mining operations in consultation with NOW and SSC, taking account of the DLWC "*Draft Guideline for Establishment of Stable Drainage Areas on Rehabilitated Minesites*" or its latest version, and to the satisfaction of NOW, and the Director-General. The Erosion and Sediment Control Plan shall include but not be limited to: a) demonstration of consistency with commitments made in documents listed in condition 1.2 and compliance with the conditions of this consent; b) details of temporary and permanent sediment and erosion control systems to be used during both mine construction and operation, including for earthworks associated with landscaping; c) details of soil salinity management where relevant; d) measures that will be employed to minimise soil erosion and the discharge of sediment and other pollutants to lands and/or waters during construction and operation activities. e) demonstration that the Plan is in accordance with the requirements for such plans outlined in *Managing Urban Stormwater: Soils and Construction* (available from the Department of Housing) or its latest version for construction, or *Managing Urban Stormwater: Council Handbook* (available from the DECCW) or its latest version, for operation; f) details of the proposed measures to maximise the retrieval of topsoil for subsequent use in the rehabilitation program; g) consideration and management of erosion and sedimentation of surface watercourses/waterbodies, including all creeklines within the DA areas; h) consideration of Aboriginal heritage management to ensure that activities	▪ Erosion and Sediment Control Plan, revision 2, 10 Aug 2006	Yes	The Erosion and Sediment Control Plan was developed in consultation with the appropriate government authorities taking account of the DLWC "*Draft Guideline for Establishment of Stable Drainage Areas on Rehabilitated Minesites"* and approved in July 2003 prior to the commencement of construction of the ACP mine. The Plan was revised and approved in August 2006 prior to the commencement of underground mine works. (a) sections 2, 3 and 5 address requirements for compliance; (b) section 6 addresses control of erosion and sediment management for construction, operations and landscaping; (c) section 6.2.3 addresses Salinity Management; (d) control measures are outlined in section 6; (e) section 5 addresses criteria and guidelines and refers to the *Managing Urban Storm-water: Council Handbook;* (f) section 6.2.5 addresses topsoil management; (g) section 6.2.6 addresses drainage lines and management of erosion; (h) surface management to protect the existing values is generally covered and Aboriginal heritage value protection is addressed in the Archaeological Management Plan; (i) sections 6.2.1 and 6.2.2 address the diversion of water

MCoA	Condition	Documentation	Compliance	Comments
	under the Plan do not impact on Aboriginal heritage values; i) measures to construct banks, channels and similar works to divert stormwater away from disturbed and contaminated land surfaces such as mine workings, haul roads, overburden disposal areas, coal handling areas and wastewater treatment facilities. All diversion banks, channels and points of discharge must be constructed or stabilised so as to minimise erosion and scouring; and j) a program for reporting on the effectiveness of the sediment and erosion control systems and performance against objectives contained in the approved Erosion and Sediment Control Management Plan, and EIS. The Applicant may submit ESCPs for construction and mine operation separately. The ESCP(s) shall be submitted for the approval of the Director-General, and NOW, no later than one month prior to the commencement of construction or operation of the development, as appropriate, or within such period otherwise agreed by the Director-General. Construction or operation, as appropriate, shall not commence until written approval has been received from the Director-General and NOW. Upon receipt of the Director-General's approval, the Applicant shall supply a copy of the ESCP to Council and DII - Minerals within 14 days. The Applicant shall make the ESCP available for public inspection on request.			from disturbed areas and construction of banks etc; (j) section 7 describes the monitoring and reporting of erosion and sediment control measures to assess performance against the objectives of the Plan.
3.51	The Applicant shall prepare a Soil Stripping Management Plan (SSMP) to the requirements of DII - Minerals and NOW that shall include, but not be limited to: a) demonstration of consistency with commitments made in documents listed in condition 1.2 and compliance with the conditions of this consent; b) details of the management of soil stockpiles, soil stripping techniques and scheduling; and c) a program for reporting on the effectiveness of the soil stripping methods and performance against objectives contained in the Soil Stripping Management Plan, and EIS. The SSMP shall be submitted for the approval of DII - Minerals and NOW, no later than one month prior to the commencement of construction of the development, as appropriate, or within such period otherwise agreed by the DII -Minerals and NOW. Construction shall not commence until written approval has been received from DII - Minerals and NOW. Upon receipt of approval, the Applicant shall supply a copy of the SSMP to Council, and the Department within 14 days. The Applicant shall make the SSMP available for public inspection on request.	▪ Soil Stripping Management Plan, Version A, 9 Sep 2003	Yes	A Soil Stripping Management Plan was prepared in consultation with the relevant government authorities and approved by DMR on the 15 January 2003 and DLWC on 23 May 2003. (a) sections 2, 3 and 5 address the regulatory requirements and was consistent with the commitments of the relevant documents in MCoA 1.2; (b) section 6 addresses the measures for the management of the soil stripping, schedules and stockpiles; (c) section 7 addresses the monitoring and reporting of soil stripping and stockpiling.
	Site Rehabilitation Management			
3.52	The Applicant shall carry out rehabilitation of all mine areas in accordance		Yes	The rehabilitation of the disturbed areas of the ACP site has

MCoA	Condition	Documentation	Compliance	Comments
	with the requirements of any Mining Lease granted by the Minister for Mineral Resources and ensure the progressive rehabilitation of the area is also to the satisfaction of the Department. The rehabilitation shall also have regard to DII - Minerals' *Synoptic Plan – Integrated Landscapes for Minesite Rehabilitation (1999)* for the Upper Hunter, or its latest version.			been undertaken in accordance with the commitments in the approved Mining Operations Plan.
	Visual Amenity and Landscaping			
	General			
3.53	The Applicant shall design buildings and structures associated with the development with a colour scheme which aims to minimise the visual impact of the development on surrounding land uses and maximise the ability of the development to "blend into" local vegetation and other visual components.	▪ Landscape and Revegetation Management Plan, section 6, Revision C, 12 May 2006	Yes	The ACP buildings and other facilities are designed and have a colour scheme that minimises visual impact and the majority of the development and there is no line of sight of the majority of the built infrastructure from public roads.
3.54	The Applicant shall ensure that visual bunding is installed at strategic locations around the site, generally in accordance with the EIS, to minimise impacts on visual amenity.		Yes	The ACP development included an environmental bund along the boundary to minimise impact on the village of Camberwell.
	Landscape and Revegetation Management Plan			
3.55	The Applicant shall prepare a Landscape and Revegetation Management Plan (LRMP) for approval by the Director-General. The Plan shall be prepared in consultation with the SSC and DII - Minerals. The plan shall have regard to DII -Minerals's *Synoptic Plan – Integrated Landscapes for Minesite Rehabilitation (1999)* for the Upper Hunter, or its latest version. The Plan shall include, but not be limited to, the following: a) demonstration of consistency with commitments made in documents listed in condition 1.2 and compliance with the conditions of this consent; b) an on-site landscaping strategy detailing design and proposed planting of trees and shrubs and the construction of mounding or bunding along Glennies Creek Road and the New England Highway; c) appropriate erosion control and sediment control practices for earthworks associated with the landscaping; d) details of visual appearance of all buildings, structures, facilities or works (including paint colours and specifications); e) details, specifications, and staged work programs to be undertaken, maintenance of all landscape works and maintenance of building materials and cladding; f) details of how vegetation screening and fauna protection corridors will be incorporated into the proposed visual and landscaping works; and g) use of indigenous species and fauna habitat reconstruction in revegetation areas.	▪ Landscape and Revegetation Management Plan, Revision C, 12 May 2006 ▪ Erosion and Sediment Control Plan, revision 2, 10 Aug 2006	Yes	The Landscape and Revegetation Management Plan was developed in consultation with the relevant authorities and approved by DoP on 28 July 2006. (a) section 2, 3 and 5 address the regulatory requirements and the plan was generally consistent with the commitments made in MCoA 1.2. (b) the landscaping design is shown in Figure 1 of the Plan; (c) section 6 refers to the erosion and sediment control practices and the Erosion and Sediment Control Plan (2006) provides further detail; (d) section 6 describes visual aspects of the buildings and structures; (e) section 6 of the Plan describes the specifications, and staged work programs, maintenance of landscape works and maintenance of building materials and cladding; (f) section 6 describes vegetation screening and fauna protection corridors incorporated into the visual and landscaping works (g) section 6 outlines the used of indigenous species and fauna habitat reconstruction in revegetated areas.

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	The LRMP shall be submitted for the approval of the Director General, no later than one month prior to the commencement of construction of the development, or within such period otherwise agreed by the Director General. Construction shall not commence until written approval has been received from the Director General. Upon receipt of approval, the Applicant shall supply a copy of the LRMP to Council, and DII - Minerals within 14 days. The Applicant shall make the LRMP available for public inspection on request.			
3.55A	Within 1 month of placing overburden on the eastern emplacement area above RL 125 metres, the Applicant shall: a) commence implementation of an on-site and off-site landscaping strategy to minimise the visual impacts of the eastern emplacement area which includes tree planting along Glennies Creek Road, the slopes of the ridge south of Glennies Creek Road and adjacent to the New England Highway; and b) revise the Landscape and Revegetation Management Plan for the development to demonstrate consistency with the commitments made in documents listed in condition 1.2 and compliance with the conditions of this consent, to the satisfaction of the Director-General.	▪ Landscape/ Revegetation Management Plan, Revision C, 12 May 2006	Yes	The eastern emplacement area has been raised to RL135m and rehabilitation of the emplacement has been undertaken with the majority of the emplacement revegetated with pasture and native tree species. The Landscape and Revegetation Management Plan, was revised in 2006 and this revision took account of the increased height of the emplacement.
	Final Void Management			
3.56	The Applicant shall prepare a Final Void Management Plan (FVMP) to the satisfaction of the Director-General, in consultation with DII - Minerals, NOW, and SSC. The Plan shall include, but not be limited to, the following: a) demonstration of consistency with commitments made in documents listed in condition 1.2 and compliance with the conditions of this consent; b) an investigation of options for future use of the final void; c) a re-examination and validation of groundwater modelling of the potential effects on the local and regional groundwater; d) details of a strategy for the long term management of the final void; e) details of strategies to minimise any adverse impacts where the assessment indicates the potential for degradation to surrounding water resources; and f) details of programs for catchment management, including the types of fertilizers used in the rehabilitation programs to ensure that there is little residual risk of nutrient enrichment of final void water. The FVMP shall be submitted for the approval of the Director General, no later than the end of year 5 of the development or within such period otherwise agreed by the Director General. Upon receipt of approval, the Applicant shall supply a copy of the FVMP to Council, NOW, and DII - Minerals within 14		In progress	The Final Void Management Plan is being developed in consultation with DII and NOW. The Plan will be finalized when consultation and agreement with DII and NOW is gained through the ongoing consultation.

MCoA	Condition	Documentation	Compliance	Comments
	days. The Applicant shall make the FVMP available for public inspection on request.			
	Bushfire and other Fire Controls			
3.57	The Applicant shall: a) provide adequate fire protection works on site, including the availability of trained personnel, water tankers and fire fighting equipment and annual hazard reduction measures with particular attention to boundaries of adjoining landholdings; b) make available to the Rural Fire Service and emergency services when required, water carts and trucks in cases of bushfire incidents on the mine site; c) submit an annual report on fire management activities to the Singleton Fire Control Officer; and d) prior to commencement of mining operations prepare a Bushfire Management Plan for all its holdings contained in the DA area, to the satisfaction of SSC and the Rural Fire Service.	• Bushfire Management Plan, Version B, 9 Mar 2005 • Letter from Singleton Shire Council re Approval of Bushfire Management Plan, 9 Mar 2005 • Letter from Upper Hunter Area Rural Fire Service re Approval of Bushfire Management Plan, 9 Mar 2005	Yes	(a) Sufficient trained ACP personnel, water tankers and fire-fighting equipment are available on site to suppress localised fires. Perimeter fire trails are constructed and maintained for access. (b) Water tankers and other appropriate fire-fighting equipment are available on site for use by the RFS in the event of a fire and the equipment is maintained in good working order (c) An annual report on bushfire management activities and risk assessment is provided to the Upper Hunter Area RFS. A report to the Upper Hunter Area RFS would also be prepared for submission to the RFS after an incident of bushfire (d) Bushfire Management Plan was prepared by ACP and approved by the Singleton Shire Council and the Rural Fire Service (Upper Hunter Area).
	Land Management			
3.58	The Applicant shall, prepare a Land Management Plan (LMP) for the areas of the proposed surface facilities, and its holdings in the DA area, to provide for proper land management in consultation with NOW, DII - Agriculture, DECCW, and SSC, and to the satisfaction of the Director-General. The plan shall include, but not be limited to: a) demonstration of consistency with commitments made in documents listed in condition 1.2 and compliance with the conditions of this consent; b) a strategy for sustainable land management, including rehabilitation, revegetation, and habitat reconstruction works, for the land proposed to be swapped for the existing Camberwell Common and Travelling Stock Reserve. The strategy is to be funded and implemented by the Applicant and developed in consultation with the Camberwell Common Trust, the Rural Lands Protection Board, NOW, Singleton Landcare, and the Hunter Catchment Management Trust. The strategy must have the approval of the Camberwell Common Trust and the Rural Lands Protection Board before submission to the Director-General. In the event that the land swap is not finalised when the LRMP is submitted, the Applicant shall provide an indicative timetable for implementation of the strategy and completion of the land swap; c) a strategy for sustainable land management and enhancement of	▪ Land Management Plan, Version B, 27 Jul 2006 ▪ Weed Management Plan, Revision A, 19 Aug 2006	Yes	The Land Management Plan was prepared in consultation with the relevant authorities and approved by DoP on 26 April 2006. (a) Section 2 of the Land Management Plan addresses the commitments in MCoA 1.2; (b) Section 6 identified Key Environmental Strategies (c) Section 6 provides a strategy for sustainable land management taking account of biodiversity and heritage values; (d) Section 6 addresses agricultural and vegetation management strategies for the ACP site; (e) Section 6 describes strategies for prevention of land degregation; (f) Section 6 Weed Management and Control on stockpiles is addressed; (g) Timber that was cleared on the site has been reused for

MCoA	Condition	Documentation	Compliance	Comments
	agricultural values and production across the entire site, taking into account biodiversity and Aboriginal heritage values as appropriate; d) pastures and vegetation management; e) prevention and rehabilitation of land degradation; f) control of weed infestation on topsoil stockpile material; g) assessment of the potential for recycling of standing timber removed from the site; h) eradication of vermin and noxious weeds as required by the Rural Lands Protection Board, the Upper Hunter Weeds Authority, the Prickly Pear Authority and other relevant authorities; and, i) feral animal control. The LMP shall be submitted for the approval of the Director General, no later than one month prior to the commencement of mining operations, or within such period otherwise agreed by the Director General. Mining operations shall not commence until written approval has been received from the Director General. Upon receipt of approval, the Applicant shall supply a copy of the LMP to Council, NOW, DII-Agriculture, DECCW, and DII - Minerals within 14 days. The Applicant shall make the LMP available for public inspection on request.			habitat establishment on the eastern emplacement area; (h) Section 6 addresses management and eradication of vermin and noxious weeds in accordance with the Rural Lands Protection Board, the Upper Hunter Weeds Authority, and Prickly Pear Authority requirements. Results are reported in the AEMR's. (i) Section 6 addresses feral animal control and weed management (h) Noxious weed eradication is covered in the Weed Management Plan
3.59	The Applicant shall minimise the removal of trees and other vegetation from the proposed surface facilities area, and restrict any clearance to the areas occupied by mine activity, buildings and paved surfaces, and those areas necessary for fire control in accordance with SSC requirements.		Yes	The ACP mine development has occurred with minimal clearance of trees and other vegetation from the aboveground areas disturbed for the open cut and overburden emplacement.
	Pipelines for offsite tailings emplacement and water sharing			
3,60	The Applicant shall ensure that all pipelines for offsite tailings emplacement and water sharing are designed to remain safe, serviceable and repairable taking into account proposed and future mining by Newpac Underground Mine. The Applicant shall submit final working drawings for construction of pipelines in areas overlying the Newpac Underground Mine workings to the MSB for approval prior to commencement of works.			Noted
3.61	The Applicant shall ensure that design and construction of the pipeline crossing under the New England Highway shall be undertaken in accordance with paragraphs (a) – (k) or otherwise to the satisfaction of the RTA: a) the design shall be in accordance with information provided by Parsons Brinckerhoff (Drawing reference 2118508A-CIV-Figure 4) in the letter to the RTA dated 19 September 2006; b) a detailed survey with reference to bridge deck levels, the adjacent bridge piers and the proposed excavation levels shall be provided to the RTA's satisfaction;		Yes	The pipeline has been constructed in accordance with approved design plans to satisfy the requirements of the RTA. The pipeline is operated in accordance with the requirements of MCoA 3.61.

MCoA	Condition	Documentation	Compliance	Comments
	c) the difference between the bed level of the pipeline and the ground level at any pier shall not exceed 1.5m. If the level difference exceeds 1.5m a structural engineering report assessing the impact on the bridge structure shall be provided to the RTA; d) the proposed works shall not impact on the existing bridge structure, approaches or road pavements. All works shall be clear of the bridge including any proposed widening of the bridge structure; e) permanent markers are to be provided at the entry and exit points of the pipelines to the road reserve and the pipelines are to cross the road reserve in a straight line and as close to perpendicular as possible; f) any access points and valves shall be located outside of the highway reserve; g) all construction access shall be via existing access points, such as Brunkers Lane and the existing Ashton Coal access road. No new access to the New England Highway is permitted; h) the Applicant shall identify and avoid damaging any existing services, subsurface structures or above ground structures during construction works; i) any damage or impacts to the existing bridge structure or services within the road reserve caused during construction shall be repaired or remediated to the satisfaction of the RTA; j) all areas within the road reserve that are disturbed shall be restored to their original condition upon completion of the works and all restoration work shall be carried out to the satisfaction of the RTA; and k) works-as-executed drawings shall be provided to the RTA following completion of works within the road reserve.			
3.62	Prior to commissioning pipelines for offsite emplacement of tailings and water sharing the Applicant shall: a) ensure that an activated alarm system and emergency response procedures are established, as described in *Ashton Coal Tailings Pipeline - Application to Modify Development Consent* and *Statement of Environmental Effects*, dated 2 November 2006 and prepared by Parsons Brinkerhoff; and b) amend the Ashton Coal Emergency Management Plan to incorporate the pipelines and emergency response procedures, to the satisfaction of the DII.	▪ Emergency Management Plan, 2007	Yes	The pipelines were constructed in accordance with the approved design with alarm systems and emergency response procedures in place. The ACP Emergency Response Plan was revised to include the emergency and response procedures for the pipeline operation.
3.63	The Applicant shall ensure that the alarm system and emergency response procedures established under condition 3.62 are effectively maintained and operational at all times during the operation of the pipelines.			Noted
4.	**WATER MANAGEMENT AND MONITORING**			
	General			

MCoA	Condition	Documentation	Compliance	Comments
	Surface Water			
4.1	Except as may be expressly provided by a licence under the Protection of the Environment Operations Act 1997 in relation of the development, section 120 of the Protection of the Environment Operations Act 1997 must be complied with in and in connection with the carrying out of the development.			Noted
4.2	Any release of surplus mine water from the mine must comply with the requirements of the Hunter River Salinity Trading Scheme and any licence issued under the Protection of the Environment Operations Act unless otherwise directed by the DECCW.		Yes	There have been no discharges of water from the ACP site to date so ACOL does not operate under the Hunter River Salinity Scheme.
4.3	The concentration of a pollutant in wastes discharged under the Hunter River Salinity Trading Scheme must not: a) cause salinity in the Hunter River to exceed 900 micro Siemens/cm (uS/cm) measured at Singleton. b) contain more than 120 milligrams per litre (mg/l) of non-filtrable residue; and c) be of a pH less than 6.5 or greater than 9.5.		Not triggered	There have been no discharges of water from the ACP site to date so ACOL does not operate under the Hunter River Salinity Scheme.
4.4	Any application to the DECCW for a licence under the Protection of the Environment Operations Act to discharge surplus mine water must be supported by a tributary impact statement. The tributary impact statement must include a geomorphologic evaluation of the water course and an assessment of the impact of the proposed discharge on the streams flora and fauna as well as any users and residents, downstream.		Not triggered	There have been no discharges of water from the ACP site to date so ACOL does not operate under the Hunter River Salinity Scheme.
4.5	The Applicant shall develop contingency arrangements to dispose of excess saline water in a planned and managed manner to ensure that the mine water management system is not exceeded with a subsequent unmanaged discharge occurring.		Not triggered	No saline water has been discharged from the ACP operations.
4.6	Banks, channels and similar works must be constructed to divert stormwater away from disturbed and contaminated land surfaces such as mine workings, haul roads, overburden disposal areas, coal handling areas and wastewater treatment facilities. All diversion banks, channels and points of discharge must be constructed or stabilised so as to minimise erosion and scouring.		Yes	All stormwater runoff from disturbed areas of the ACP site is collected in ponds for settlement and used in the CHPP or for dust suppression.
4.7	The works associated with the proposal shall not damage or interfere in any way with: a) vegetation outside the area of operation; b) the stability of adjacent or nearby streams; or c) the quality of water in the stream or watercourse below its ANZECC beneficial water use classification prior to the commencement of mining	▪ Six monthly Water Quality Reports 2007-2010	Yes	No ACP works have damaged vegetation outside the operational site, stability of nearby steams (Bowmans Creek, Glennies Creek), or has affected the water quality of natural waterways in the area.

MCoA	Condition	Documentation	Compliance	Comments
	operations.			
4.8	The Applicant shall, in consultation with NOW, ensure that all soil and / or vegetation material to be removed from the area of operation is disposed of on an appropriate site where it will not be swept back into watercourses.		Yes	No soil or vegetation disturbed by the ACP operations has been removed from the area of operations.
4.9	*(Deleted)*			
	Licenses			
4.10	The Applicant shall obtain a licence from NOW under Part 5 of the *Water Act 1912* for the bores and wells which intersect the groundwater table, including monitoring bores, dewatering bores, longwalls, and other excavations which intersect the groundwater table; and		Yes	
4.11	The Applicant shall obtain a permit under Part 3A of the *Rivers and Foreshores Improvement Act 1948* or the *Water Management Act* 2000, as appropriate, for works within forty metres of a river as defined under the Act, prior to commencing any works for which the Approval is required.	▪ Letter from DNR re Part 3A for Proposed Pipeline crossing Bowman Creek, 20 Dec 2006	Yes	Part 3A approvals obtained for levees, process water dam and tailings pipeline.
	Site Water Balance			
4.12	The Applicant shall recalculate the mine water balance on a six-monthly basis to assess: a) whether climatic conditions and inflows to the mine are having a significant impact on mine water make and storage requirements; and, b) address issues of additional storage which may be necessary to cope with the increased water make into the water circuit of the mine. The recalculated water balances shall be reported in the AEMR.	▪ Water Balance, Sep 2009 to Feb 2010 ▪ Water Balance, Mar to Aug 2009	Yes	Flow meters are installed across the site and water balance is conducted six monthly and reported in the AEMR section 2.8.5.
	Groundwater			
4.13	All surface and underground operations including long wall mining shall be conducted to minimise potential impacts on groundwater flow and quality of the alluvial groundwater resource, integrity of the alluvial aquifer and to minimise off-site effects.			Noted
4.14	The Applicant shall undertake regular assessments of the accuracy of the groundwater model against the predictions outlined in the EIS, to the satisfaction of NOW. The scope of the assessment shall be determined in consultation with NOW and shall include the consideration of the establishment of trigger levels via sensitivity testing, drawdown, pit seepage and river leakage. Should an assessment identify significant differences between the model and EIS predictions, the Applicant shall revise the assessment of the potential impacts on groundwater systems to the satisfaction of NOW and implement any further mitigation measures to the satisfaction of NOW. The trigger levels for re-assessment of groundwater	▪ Groundwater Management Report, Peter Dundon & Associates, 14 Feb 2008 ▪ Groundwater Management Report, Aquaterra, 3 Dec 2008 ▪ Groundwater Management Report, Aquaterra, 30 Oct 2009	Yes	Aquaterra run the groundwater model annually and the comparison of groundwater inflow to the underground mine and groundwater monitoring is assessed for each 12 months. Results are included in the AEMR section 3.4 and the Aquaterra Report is included in Appendix 2 of the AEMR.

MCoA	Condition	Documentation	Compliance	Comments
	impacts shall be included in the Groundwater Management Plan required in condition 4.24.			
4.15	The Applicant shall develop contingency measures to manage any impacts identified by monitoring that the management strategies have failed to predict or control, particularly relating to ground waters associated with the alluvial aquifers of Bowman Creek, Glennies Creek and the Hunter River, to the satisfaction of NOW. The implementation of contingency measures shall be linked to performance and cut-off criteria as determined in consultation with NOW and specified in the Site Water Management Plan, and shall include both water quality and aquifer pressure levels, should agreed standards or performance indicator levels not be achieved.	▪ Groundwater Management Plan, Version G, 17 Mar 2009 ▪ Site Water Management Plan, Version C, 19 Aug 2006 ▪ Figure 1A Groundwater Monitoring Peizometer Locations for EPL, 26 Oct 2006	Yes	Section 8 of the Groundwater Management Plan describes management safeguards and ameliorative actions for groundwater and contingency measures with a trigger action response plan.
4.16	The Applicant shall prepare a statistical assessment to the satisfaction of NOW to initially benchmark the pre-mining natural variation in groundwater quality and quantity and to set trigger levels for accepting accountability. The assessment is to be documented in the SWMP (condition 4.24).	▪ Groundwater Management Report, Peter Dundon & Associates, 14 Feb 2008	Yes	Baseline monitoring of groundwater commenced for ACOL in 2000 and the natural variation in groundwater quality and quantity were used to determine trigger levels used in the development of the groundwater monitoring program.
4.17	In the event that the development adversely affects groundwater users the Applicant shall, to the satisfaction of the NOW, liaise with the users to provide a replacement water supply of similar quality and quantity to that affected, until such time as the development ceases to impact on the users' water supply. The cut-off levels for depressurization of the alluvial aquifer and water quality parameters shall be determined in consultation with the NOW.	▪ Groundwater Management Report, Peter Dundon & Associates, 14 Feb 2008 ▪ Groundwater Management Report, Aquaterra, 3 Dec 2008 ▪ Groundwater Management Report, Aquaterra, 30 Oct 2009	Not triggered	No adverse effects on groundwater users had occurred at the time of this audit.
	Wastewater management			
4.18	A water management system must be constructed and utilised to manage the collection, storage, treatment, use and disposal of minewater, sewage effluent and other wastewater.			Noted
4.19	Bund(s) must be installed around areas in which fuels, oils and chemicals are stored. Bunds must: a) have walls and floors constructed of impervious materials; b) be of sufficient capacity to contain 110% of the volume of the tank (or 110% volume of the largest tank where a group of tanks are installed); c) have walls not be less than 250 millimetres high; d) have floors graded to a collection sump; and e) not have a drain valve incorporated in the bund structure.		Yes	All fuel, oil and chemical storage areas have been constructed with bunds that would contain 110% of the volume of the largest tank/container. Each bunded area has a sump that would collect any leakage, rainwater etc within the storage area.

MCoA	Condition	Documentation	Compliance	Comments
4.20	A wastewater treatment facility with oil separator and sediment trap must be installed to treat drainage from the hardstand, vehicle servicing and general workshop areas.		Yes	The hardstand areas around the workshop and apron at the front of the workshop, and the truck wash areas each drain to a sump fitted with an oil water separator. The waste oil collected is placed into a bunded tank and removed as required by Transpacific for treatment and reuse.
4.21	An area must be provided for the use of effluent from the sewage treatment plant. The design of the system must be in accordance with the DECCW's draft guideline "Utilisation of Treated Effluent by Irrigation".		Yes	Envirocycle or GardenMaster plants collect waste from the bath houses and other sources on site and the treated water is used for irrigation of trees and landscaping around the site. The quality of the treated water is tested three monthly by contractor.
4.22	Wastewater utilisation areas must effectively utilise the wastewater applied to those areas. This includes the use for pasture or crop production, as well as ensuring the soil is able to absorb the nutrients, salts, hydraulic load and organic materials in the solids or liquids. Monitoring of land and receiving waters to determine the impact of wastewater application may be required by the DECCW.		Yes	The treated wastewater is used for irrigation around trees around the administration building and along the rail line area.
	Stream Gauging Infrastructure			
4.23	The Applicant is to negotiate relocation of the stream gauging station located on Bowmans Creek (formally known as stream gauge 210130,Foybrook downstream of Bowmans Bridge) with NOW, prior to commencement of underground mining. The relocation of the gauging station will be at the Applicant's cost and will include all aspects of design, replacement, installation, commissioning, and any costs associated with correlation of data between the existing gauge and the new gauge. In line with NSW Government policy, the relocated gauging station is to accommodate fish passage. Any unforeseen cost associated with relocation of the gauging station will also be at the Applicant's cost.		Yes	Gauging station on Bowmans Creek with a V-notch weir. ACOL are consulting with NOW re relocation of the gauging station if affected by any subsidence resulting from the longwall mining.
	Site Water Management Plan			
4.24	The Applicant shall prepare a Site Water Management Plan (SWMP) for the DA area, in consultation with NOW, DII - Fisheries, and Council, to the satisfaction of the Director-General, which shall include, but not be limited to, the following matters: a) demonstration of consistency with commitments made in documents listed in condition 1.2 and compliance with the conditions of this consent; b) management of the quality and quantity of surface and ground water within the DA area; c) management of stormwater and general surface runoff diversion to ensure separate effective management of clean and dirty water; d) measures to prevent the degradation of downstream surface water quality	▪ Site Water Management Plan, Version C 19 Aug 2006 ▪ Groundwater Management Plan, Version G, 17 Mar 2009	Yes	The Site Water Management Plan was prepared in consultation with the relevant authorities and approved by the Director-General on 15 July 2003. The Plan has been revised and Version C approved by DoP on 28 July 2006. (a) sections 4, 5 and 6 address commitments and statutory requirements; (b) section 7 addresses Management Safeguards and Ameliorative Actions for surface water and groundwater; (c) section 7.3 addresses surface runoff diversion to ensure separate effective management of clean and dirty water;

MCoA	Condition	Documentation	Compliance	Comments
	below the pre-mining ANZECC beneficial water use classification due to mining operations; e) contingency plans for managing adverse impacts of the development on surface and groundwater quality, beyond trigger levels set in condition 4.14 and the Groundwater Management Plan; f) details of any proposed water extraction or supply of water from other mines or off-site sources; g) details of reuse of contaminated water or circulation/ distribution between ACP and other mines or operations. The volume of any such water transfers is to be documented in the AEMR; h) measures to develop and implement a Stormwater Management Scheme to mitigate the impacts of stormwater run-off from and within the premises following the completion of construction activities. The Scheme shall be consistent with the Stormwater Management Plan for the catchment. Where a Stormwater Management Plan has not yet been prepared the Scheme should be consistent with the guidance contained in *Managing Urban Stormwater: Council Handbook* or its latest version (available from the DECCW); i) measures to ensure that poorer quality class waters are effectively reused on the site including consideration of segregation of waters based on salinity classes and other levels of contamination; j) details of a strategy for the decommissioning of water management structures, including dirty water dams and clean water diversion dams; k) measures to isolate contaminated waters, including waters containing oil and grease, or other pollutants, operation chemical residues or other criteria, to avoid mixing with reuse or discharge waters; l) details of design and maintenance of all storages, diversions, transmission channels and sedimentation basins for the site, to minimise sedimentation of watercourses; m) measures to ensure adequate consultation with NOW, DECCW, and the local Aboriginal community regarding design and location of surface water management structures; n) details of any licensing requirements for any extractions, storages, or other constructions on the site; o) measures for assessing chemical water quality impacts of the mining operation above and below the mine site p) projection of potential groundwater changes during mining (short term) and post mining (long term) with particular attention given to the affect of changes to groundwater quality and mobilisation of salts; q) a Groundwater Management Plan (GMP) to the satisfaction of NOW, which			(d) sections 7.4 and 7.5 provide an outline of measures to prevent the degradation of downstream surface water quality; (e)section 7.5 addresses contingency measures for storm-water, groundwater and groundwater dependent ecosystems; (f) section 7.1 discusses water supply; (g) section 7.32 discusses dirty water management and strategies for EEA, saline water and wastewater(process water etc); (i) section 7.3.2 addresses management of the process water circuit and site water balance; (k) section 7.3 outlines the management of dirty water and process water from the ACP operations; (l) section 7 outlines management strategies for maintenance of storages, diversions, transmission channels and settlement basins for the site; (m) section 8 outlines review and consultation related to modification of the Site Water Management Plan; (n) section 4 addresses the water management strategy and water extraction licences; (o) section 8 outlined the water monitoring program with the sites located on Figure 1 of the Site Water Management Plan; (p) section 8.3 underground mining groundwater discusses projection of potential groundwater changes during mining and groundwater is specifically addressed in the Subsidence Management Plans; (q) A Groundwater Management Plan was prepared prior to commencement of underground mining operations; (r) section 8 of the Plan and Figure 1 provide the detail of the water monitoring program; (s) section 8.4 Reporting outlines the requirements to address MCoA 4.24 requirements. The Site Water Management Plan was approved by the D-G and copies provided to Council, DECCW, DII - Minerals, NOW and DII – Fisheries.

MCoA	Condition	Documentation	Compliance	Comments
	details monitoring, contingency and remediation measures, and release criteria. The GMP component of the SWMP is to be endorsed by NOW prior to commencement of mining operations; r) measures to implement the surface and groundwater monitoring requirements in this consent; and, s) a program for reporting on the effectiveness of the water management systems and performance against objectives contained in the approved Site Water Management Plans, and EIS. The SWMP shall be submitted for the approval of the Director-General, no later than one month prior to the commencement of construction of the development, or within such period otherwise agreed by the Director-General. Construction shall not commence until written approval has been received from the Director-General and NOW. Upon receipt of the Director-General's approval, the Applicant shall supply a copy of the SWMP to Council, DECCW, DII - Minerals, NOW and DII – Fisheries, within 14 days. The Applicant shall make the SWMP available for public inspection on request.			
4.24A	Within 1 month of placing overburden on the eastern emplacement area above RL 125 metres, the Applicant shall revise the Site Water Management Plan to demonstrate consistency with the commitments made in the documents listed in condition 1.2 and compliance with the conditions of this consent, to the satisfaction of the D-G.	▪ Site Water Management Plan, Version C, 19 Aug 2006	Yes	The Site Water Management Plan updated prior to the commencement of placement of overburden above RL125m and prior to commencement of the underground mining.
	Surface and Groundwater Monitoring			
4.25	The Applicant shall: a) construct and locate surface and groundwater monitoring positions, as identified in the Site Water Management Plan in consultation with NOW and DECCW, and to the satisfaction of the Director-General, prior to the commencement of construction; b) prepare a detailed monitoring program in respect of ground and surface water quality and quantity, including water in and around the DA area before, during and after mine operations in consultation with NOW, DECCW, and DII - Fisheries, and to the satisfaction of the Director-General. The monitoring program shall have the capacity to collect sufficient data to adequately assess: (i) the impact of any licensed groundwater extraction on groundwater levels on neighboring properties and in the locality, and to identify any water quality impacts; (ii) the impact of the development on ground waters and groundwater dependent ecosystems associated with the alluvial aquifer(s) of Bowman Creek, Glennies Creek, and the Hunter River;	▪ Site Water Management Plan, Version C, 19 Aug 2006 ▪ Groundwater Monitoring Piezometer Plan Figure 1A, 2006 ▪ Groundwater Management Plan, Version G, 17 Mar 2009 ▪ AEMR 21007-2008, s.	Yes	(a) the groundwater monitoring bores and piezometers were installed and maintained in accordance with the Site Water Management Plan; (b) the groundwater quality and quantity monitoring program has been implemented to collect data to satisfy the requirements of MCoA 4.25.

MCoA	Condition	Documentation	Compliance	Comments
	(iii) any licensing requirements associated with the monitoring works; (iv) develop a contingency program, with identified stages of implementation, to address potential adverse impacts or degradation of the groundwater systems beyond predictions, particularly relating to the groundwater associated with the alluvial aquifer(s) of Bowman Creek, Glennies Creek, and the Hunter River and to the ground waters in the vicinity of any rejects. Degradation occurs where the quality classification of the groundwater system is reduced to a lower class; and (v) any concerns or complaints from surrounding landholders on groundwater matters, and any ensuing actions these records, which shall be maintained and be available to NOW. The monitoring program shall be incorporated in the Site Water Management Plan and shall include the duration (pre, during and post mining), sites to be sampled, frequency of sampling, the parameters to be measured, the need for any contingency plans, the reporting procedure and determination of appropriate cut-off criteria for monitoring purposes determined in consultation with NOW. The results of the monitoring program shall be reported in the AEMR. The monitoring program for post-mining shall be prepared by year 20 of mine operations and extend at least 5 years after mine closure or as determined by NOW. c) report on the monitoring results and raw data in the AEMR on the following matters: (i) a basic statistical analysis (mean, range, variance, standard deviation) of the results for the parameters measured in individual bores / wells and as a subset of the aquifer; (ii) an interpretation of the water quality results and changes in time for water quality and water levels (supported with graphs, contour plots showing changes in aquifer pressure levels); (iii) an interpretation and review of the results in relation to cut-off criteria and predictions made in the EIS; (iv) an interpretation of the water balance identifying the volume and make up of mine pit inflows as compared to Part V licence (required under Part V of the *Water Act 1912*), and predictions made in the EIS or previous AEMR; and (v) provide an electronic copy of the data forwarded to NOW.			(c) all groundwater monitoring is reviewed and assessment of the status of the groundwater conducted annually by Aquaterra and reported in the AEMR's.
	Underground Mining Groundwater Monitoring			
4.26	Prior to the commencement of underground mining and subject to NOW approval, the licence holder shall develop and implement a surface and	▪ Site Water Management Plan, Version C, 19 Aug	Yes	A Groundwater Management Plan and Groundwater

MCoA	Condition	Documentation	Compliance	Comments
	subsurface investigation and monitoring program to assess the likely fracturing of geological strata and hydraulic property changes above each longwall panel. The monitoring program shall provide an interpreted comparison of the results from all longwall panels against pre-mining baseline geological conditions, in order to assess the level of variability of fracture, changes in hydraulic properties between panels, and the impact on groundwater resources and surface expression from underground mining at varying depths. This investigation shall be repeated for each seam as it is mined from the site. The monitoring plan shall: a) measure the level of surface water flows, groundwater elevations and water quality prior to mining; b) assess the influence of mine-induced fracturing on aquifers and groundwater quantity; c) assess the influence of mine-induced fracturing and cross aquifer connection on groundwater quality; d) identify sampling locations, monitoring wells/bores along the mine path, to assess the impact of mining in mid goaf and at the predicted points of tension fracturing, at the edge of each long wall panel e) prescribe sampling and observation depths, monitoring frequency and parameters for monitoring; and f) specify the compilation, interpretation and reporting of groundwater data and analyses.	2006 ▪ Groundwater Management Plan, Version G, 17 Mar 2009 ▪ Groundwater Management Report, Peter Dundon & Associates, 14 Feb 2008 ▪ Groundwater Management Report, Aquaterra, 3 Dec 2008 ▪ Groundwater Management Report, Aquaterra, 30 Oct 2009		Monitoring Program was prepared in consultation with the relevant authorities and approved by DPI and DWE in July 2007 and DoP in November 2007. The implementation of the Plan by ACP with an annual assessment of the groundwater data is conducted by Aquaterra. (a) section 5 Baseline Groundwater Data Assessment addresses the requirement of this condition; (b) section 6 Potential Groundwater Impacts addresses the influence of mine-induced fracturing on aquifers and groundwater quantity influence of mine-induced fracturing on aquifers and groundwater quantity; (c) section 6 addresses the potential of influence of mine-induced fracturing and cross aquifer connection on groundwater quality; (d) section 9 Monitoring and Figure 1 Groundwater Monitoring Locations satisfy this condition; (e) section 9 addresses sampling and observation depths, monitoring frequency and parameters for monitoring; (f) section 10 Reporting and Review outlines the interpretation and reporting of groundwater data and analyses.
4.27	All monitoring data shall be submitted to NOW in a report which, includes data, interpretation of results, and a discussion of monitoring results compared to groundwater and salinity impact predictions stated in the EIS.	▪ Groundwater Management Report, Peter Dundon & Associates, 14 Feb 2008 ▪ Groundwater Management Report, Aquaterra, 3 Dec 2008 ▪ Groundwater Management Report, Aquaterra, 30 Oct 2009	Yes	All groundwater data is assessed annually by Aquaterra and the report provided to the relevant authorities. The Aquaterra reports are appended to the AEMR's.
4.28	The licence holder shall develop a reporting mechanism, for inclusion in the EMP, in order to: a) verify the predictions of the groundwater modelling used in the Environmental Impact Statement; and b) assess the potential long term changes in groundwater flow and quality which may occur as a result of mining operations and changes to hydraulic properties, as a result of subsidence of the hard rock strata underlying the alluvium.		Yes	All groundwater data is assessed annually by Aquaterra and the groundwater model is verified each year. The report by Aquaterra is provided to the relevant authorities and appended to the AEMR's.
5.	**HAZARDOUS MATERIALS AND OVERBURDEN MANAGEMENT**			
	Overburden Emplacement and Management			
5.1	The Applicant shall construct and manage the overburden emplacements as set out in the EIS, and to the satisfaction of the DII - Minerals; and			Noted

MCoA	Condition	Documentation	Compliance	Comments
5.1	The Applicant shall undertake measures, as far as practical, to prevent spontaneous combustion from occurring on the site.	▪ Spontaneous Combustion Management Plan, 12 Jan 2004	Yes	No spontaneous combustion has occurred on the ACP site.
	Waste			
5.3	One month prior to the commencement of construction works, the Applicant shall prepare and implement a Waste Management Plan (WMP) for the DA area in consultation with SSC and DECCW and to the satisfaction of the Director-General. The Plan shall include, but not be limited to: a) details of measures to facilitate waste management on site; b) details of compliance with the Applicant's obligations under the *Protection of the Environment Operations Act,1997*; c) identification of all types and quantities of waste materials produced at the mine site during construction, commissioning and operation; d) programs aimed at minimising the production of waste at the mine site through the implementation of operational and management measures; e) details of the potential reuse and recycling avenues for waste materials produced at the mine site, including collection and handling procedures; f) details of appropriate disposal routes in the event that reuse and recycling avenues are not available or are not practicable; and g) programs for involving and encouraging employees and contractors to minimize waste production at the mine site and reuse / recycling where appropriate.	▪ Waste Management Plan, Version A, 9 Sep 2003	Yes	The Waste Management Plan was prepared in consultation with the relevant government authorities and was approved by The Director-General on 4 September 2003. (a) section 3 Objectives and section 6 address measures to manage waste onsite; (b) sections 2, 3 and 5 outline regulatory requirements for the management of waste to comply with the *Protection of the Environment Operations Act 1997*; (c) Appendix 1 identifies the types of waste materials to be produced on the site; (d) section 6 addresses reuse, recycling and other options for waste minimisation on site; (e) section 6 addresses reuse, recycling and other options for waste minimisation on site; (f) section 6 addresses Disposal; (g) section 8 describes responsibilities of employees in relation to waste management.
5.4	The Applicant must not cause, permit or allow any waste generated outside the premises to be received at the premises for storage, treatment, processing, reprocessing or disposal or any waste generated at the premises to be disposed of at the premises, except as expressly permitted by a licence under the *Protection of the Environment Operations Act, 1997*. This condition only applies to the storage, treatment, processing, reprocessing or disposal of waste at the premises if it requires an environment protection licence under the *Protection of the Environment Operations Act, 1997*.		Yes	No waste from off site is received on to the ACP site.
5.5	The Applicant shall dispose of all solid waste and putrescible matter from the site to the satisfaction of SSC or DECCW, as relevant.		Yes	Transpacific have a waste contract for the ACP operations and collect and dispose of all solid and putrescible waste to approved disposal sites.
6.	**AIR QUALITY, BLAST, NOISE AND LIGHT MANAGEMENT**			
	Air Quality Management and Monitoring ***Air Quality Standards/Goals and Performance Criteria***			
6.1	The Applicant shall comply with the following ambient air quality standards /			Noted.

<table>
<tr><th>MCoA</th><th>Condition</th><th>Documentation</th><th>Compliance</th><th>Comments</th></tr>
<tr><td></td><td>goals:</td><td></td><td></td><td></td></tr>
<tr><td></td><td>Table 1 Long Term Particulate Matter Criteria
<table>
<tr><th>POLLUTANT</th><th>STANDARD / GOAL</th><th>AGENCY</th></tr>
<tr><td>Total Suspended Particulate Matter (TSP)</td><td>90ug/m^3 (annual mean)</td><td>NH & MRC</td></tr>
<tr><td>Particulate matter <10um (PM10)</td><td>30 ug/m^3 (annual mean)</td><td>NSW DECCW</td></tr>
</table>
Table 2 Short Term Particulate Matter Goal
<table>
<tr><th>POLLUTANT</th><th>STANDARD / GOAL</th><th>AGENCY</th></tr>
<tr><td>Particulate matter < 10um (PM_{10})</td><td>50ug/m^3 (24 hr average)</td><td>NSW DECCW</td></tr>
</table>
Table 3 NSW DECCW Amenity Based Criteria for Dust Fallout
<table>
<tr><th>POLLUTANT</th><th>AVERAGING PERIOD</th><th>MAX INCREASE IN DEPOSITED DUST LEVEL</th><th>MAX TOTAL DEPOSITED DUST LEVEL</th></tr>
<tr><td>Deposited dust</td><td>Annual</td><td>2 g/m^2/month</td><td>4 g/m^2/month</td></tr>
</table></td><td></td><td>Yes

NO

NO</td><td>The air quality monitoring conducted for the ACP site in accordance with the Air Quality Management Plan indicated that the PM_{10} monitoring indicated compliance with the annual cumulative average criteria of 30µg/m³ and the 24hour average criteria of 150µg/m³ at the community sites.

Dust deposition monitoring exhibited increased levels during 2009-2010 affected by high winds and dust storms (August 2009) but generally the dust levels were within the <4 g/m²/month criteria at the Camberwell residential sites. The following monitoring results exceeded the 4 g/m²/month criteria at August 2010: D5, D6, D7, D8, D13.

TSP was exceeded consistently at Site 1 meteorological station at Camberwell Village (the closest monitoring location to the mine activities and at sites 3 an8 for 2009.</td></tr>
<tr><td>6.2</td><td>The Applicant shall ensure the prompt and effective rehabilitation of all disturbed areas of the DA area following the completion of mining and associated activities in that area to minimise generation of wind blown dust.</td><td></td><td>Yes</td><td>The overburden emplacement areas and disturbed areas around the open cut mine have been rehabilitated with pasture grasses established as soon as an area is completed, contoured and prepared for seeding.</td></tr>
<tr><td>6.3</td><td>Activities occurring at the premises must be carried out in a manner that will minimise emissions of dust from the premises.</td><td></td><td>Yes</td><td>Three large CAT water carts available in the open cut operations and one water tanker that is road registered for use on all traffic areas and the underground surface areas.</td></tr>
<tr><td>6.4</td><td>Raw coal dump hoppers must be fitted with:
a) an automatically activated dust suppression water spray system; and
b) windshields. The windshields must be full walls on three sides with a height of not less than two metres above the dump grate.</td><td></td><td>Yes</td><td>CHPP, and ROM hopper have dust suppression sprays fitted.
Open cut hopper has wind shields fitted and the conveyors are enclosed on the top and sides (where exposed).</td></tr>
<tr><td>6.5</td><td>Belt conveyors, other than those whose functions preclude it, must be enclosed on the top and at least one side. Belt scrapers must be installed to effectively remove material from the underside of each belt.</td><td></td><td>Yes</td><td>All belt conveyors were observed to be covered on the top and enclosed on one side</td></tr>
<tr><td>6.6</td><td>Air pollution control equipment must be fitted to all drilling rigs to prevent fines generated during drilling being discharged to the atmosphere.</td><td></td><td>Yes</td><td>Dust control sprays and water injection on the drill when active drilling is occurring.</td></tr>
</table>

MCoA	Condition	Documentation	Compliance	Comments
6.7	An effective water spray system must be installed at open coal stockpiles and operated at sufficient frequency to maintain the entire surface of the stockpile and related coal handling areas in a condition that will minimise the emission of wind blown or traffic generated dust.		Yes	Water sprays are automatically triggered at 7m/s on the ROM stockpiles and other coal storage areas and the skyline conveyor also has a water spray system fitted.
6.8	Mobile tankers equipped with a pump and sprays must be provided to suppress dust from unsealed roads when in use.		Yes	One water tanker that is road registered for use on all traffic areas and the underground surface areas.
6.9	Roads for coal or overburden haulage must be surfaced in selected hard, non-friable material. Soft mudstone, clay stone and shale must not be used.		Yes	Selected hard, non-friable material has been used for the surface of the surface roads.
	Air Quality Management Plans			
6.10	The Applicant shall prepare a Construction Air Quality Management Plan (CAQMP), and an Operations Air Quality Management Plan (OAQMP), detailing air quality safeguards and procedures for dealing with dust and other air emissions from the ACP mine to the satisfaction of the Director-General. The CAQMP shall be prepared in consultation with SSC. The OAQMP shall be prepared following consultation with SSC and other nearby mines with the aim of achieving a consistent approach in the preparation of the ACP OAQMP. The Plans shall include, but not be limited to: a) demonstration of consistency with commitments made in documents listed in condition 1.2 and compliance with the conditions of this consent; b) the identification of adversely impacted properties in accordance with the criteria detailed in Tables 1, 2, and 3 of condition 6.1; c) specifications of procedures that will be used for monitoring dust deposition, PM10, and TSP for the purpose of undertaking independent investigations, including any joint investigations with nearby mines; d) a mine operating plan that will allow dust emissions from the mine to be progressively reduced should real-time ambient measurements of PM10 concentrations and/or meteorological observations or forecasts indicate that emissions from ACP are likely to exceed the 24-hour average PM10 standards in Table 2 of condition 6.1. The plan is to be updated as the mine develops and at least on an annual basis and should indicate specific measures that will be used to reduce dust emissions and the threshold conditions under which each control measure will be triggered; e) an outline of the procedure used to notify property owners and occupiers as identified in the EIS or by monitoring that are likely to be adversely impacted by emissions from the mine in excess of criteria detailed in Tables 1, 2, and 3 of condition 6.1; f) a procedure to address potential dust impacts on residential tenants at mine owned residences and at residences where an agreement has been made	▪ Air Quality Management Plan, Version C, 19 Aug 2006 ▪ Mining Operations Plan - 2007 to 2012, dated March 2008	Yes	The operations Air Quality Management Plan was prepared in consultation with the SSC and approved by the Director-General in January 2004. The Plan was revised and the Version C issued on 19 August 2006. (a) Section 3 Objectives of the Air Quality Management Plan address consistency of the ACP operations with the commitments in the EIS and supplementary documents and objectives to ensure compliance with the MCoA. (b) Section 4 Potential Impacts discusses potentially affected properties. (c) Relevant guidelines and standards identified as applicable to the management of air quality for the project are: • AS 3580.10.1 – 1991: Deposited Matter – Gravimetric methods for insoluble solids; • AS 3580.9.8 – 2001: Method for sampling and analysis of ambient air – Determination of suspended particulate matter – PM10 continuous direct mass method using a tapered element oscillating microbalance analyser; • Approved Methods for the Sampling and Analysis of Air Pollutants in NSW; • Approved Methods and Guidance for Modelling in Assessment of Air Pollutants in NSW. (d) Section 7.2 of the Mining Operations Plan (MOP) addresses best practice controls outlined in the MOP to manage dust generation and air quality impacts:

MCoA	Condition	Documentation	Compliance	Comments
	between a mining company and the landholder relating to exceedences of dust criteria, which is to be prepared in consultation with DECCW, NSW Health, landowners of any residences potentially affected by dust levels exceeding the criteria in condition 6.1 as a result of the development, and the operators of other mining/industrial operations contributing to the impacts. This procedure shall: (i) ensure that all existing tenants of identified properties are advised in writing of the increase to fine particulate levels likely to occur at those locations during the operational life of the mine and that these increases are likely to result in exceedences of the criteria in condition 6.1. Information shall also be provided to the residents on the available research relating to the health effects of fine particulate matter; (ii) ensure that all potential tenants are advised in writing of the increase to the fine particulate matter likely to occur at that location during the operational life of the mine prior to signing a residential tenancy agreement to occupy the residence. This advice must ensure that such tenants are aware that increases in emissions are likely to result in exceedences of the criteria in condition 6.1. Information shall also be provided to the residents on the available research relating to the health effects of fine particulate matter; (iii) ensure that the advice provided to current and future tenants is based on current knowledge of ambient air quality monitoring, dispersion modelling results and air quality criteria; and, (iv) provide a mechanism for providing current ambient air quality monitoring data, dispersion modelling results and air quality criteria to the residents of these affected residences. g) measures to reduce the potential for wind erosion from exposed surfaces, particularly the use of techniques that increase the surface roughness and reduce the potential for dust entrainment; h) methods and frequency of making dust monitoring data publicly available, such as the placement of monitoring details and results on the internet; i) details of an investigation program aimed at improving short-term modelling techniques, by better characterising dust source variations and focusing on the feasibility of developing shorter–term amenity indicators; j) details of an investigation program aimed at improving modelling of real-time dust control strategies such as that employed at ACP; k) the establishment of a protocol for handling dust complaints that include recording, reporting and acting on complaints; l) appropriate mechanisms for community consultation;			• Planning controls; • Engineering controls; and • Operational controls. (e) and (f) Appendix 2 of the Air Quality Management Plan provides the procedure for notifying residential tenants of potential impacts of mining operations . g) Section 6 Management Safeguards and Ameliorative Actions of the Air Quality Management Plan presents measures to reduce the potential for wind erosion from exposed surfaces. (h) The results and analysis of all air monitoring data is collated by the Environmental Officer and included in the Annual Environmental Management Report (AEMR). The AEMR will be available on the Internet. Updated air quality monitoring data is updated monthly and is available on the internet on the www.ashtoncoal.com.au website. The Community Consultative Committee (CCC) is also provided with a summary of air quality monitoring for the period since the previous meeting. (i) and (j) air quality modelling conducted by Holmes Air Sciences is verified with on site data collected from the approved monitoring sites to refine the model accuracy; (k) to (m) Section 6 Management Safeguards and Ameliorative Actions of the Air Quality Management Plan presents a Complaints Handling Procedure and Community Consultation section. (n) Appendix 1 of the Air Quality Management Plan provides proactive/predictive and reactive mitigation measures to reduce dust emissions. (o) Water trucks are available on site for dust control and dust generation and emissions are managed by speed limits on roads, road surface maintenance and equipment and vehicle maintenance to control emissions. (p) Operations are managed in response to real time weather conditions and air quality data measured within the Camberwell Village and surrounds. (q) to (s) The requirements for dust monitoring are defined in MCoA 6.11 and 6.12(a), and EPL conditions P1.1

MCoA	Condition	Documentation	Compliance	Comments
	m) outline of response and/or management measures to be undertaken in the event of complaints from a landowner where dust levels are demonstrated to be below the criteria in condition 6.1; n) outlining proactive/predictive and reactive mitigation measures to be employed to minimize dust emissions including visible dust emanating from the site; o) equipment to be available and used to control dust generation; p) methods to determine when and how the mine operation is to be modified to minimise the potential for dust emissions, particularly from surface activities; q) identification of longer term strategies directed towards mitigating dust levels; r) details of locations and frequency of ambient TSP and PM10 monitors and dust deposition gauges at the residential areas as agreed by the D-G; and s) a program to continue baseline monitoring undertaken prior to DA. The CAQMP and OAQMP shall be submitted for the approval of the Director-General, no later than one month prior to the commencement of construction and operation of the development, respectively, or within such period otherwise agreed by the D-G. Construction or operation, as appropriate, shall not commence until written approval has been received from the D-G. Upon receipt of the Director-General's approval, the Applicant shall supply copies of the CAQM and OAQMP to Council, DECCW, and DII - Minerals, within 14 days. The Applicant shall make the CAQMP and OAQMP available for public inspection on request.			(Monitoring points), M2 (Requirement to monitor pollutants discharged), M7 (Requirement to monitor weather) are described in the monitoring program. ACOL utilises dust deposition gauges, Hi-Vol air samplers to measure TSP and TEOMs to measure PM10. All air quality monitoring is undertaken in accordance with the *Approved Methods for the Sampling and Analysis of Air Pollutants in NSW* and the Air Monitoring Program as agreed with the NSW EPA.
	Air Quality and Dust Monitoring			
6.11	The Applicant shall submit to the DECCW with a licence application a draft air monitoring program for long term PM10, TSP and deposited matter emissions. The program must specify the data to be collected at regular intervals, continuously and during episodic periods relevant to specific operational and/or ambient conditions such that a representative picture of PM10 TSP and deposited matter impacts at all receivers can be established. The monitoring must be conducted at a sufficient number of points to represent the wider area and account for possible weather (such as seasonal wind direction) and operational effects. The DECCW will use the submitted draft monitoring program to include detailed licence conditions covering air monitoring locations, frequencies and methods. Monitoring locations for the mine operations, including sites for monitoring impacts of dust at the nearest non-mine owned residences and locations as may be determined to be necessary by the Director-General are to be decided in consultation with	▪ Air Quality Management Plan Version C, 19 Aug 2006	Yes	Section 7 Monitoring, Reporting and Review present the air monitoring program for measurement of PM10, TSP and deposited matter from the ACP operations. DEC approved the air quality monitoring program presented in Figure 1 of the Air Quality Management Plan. (EPL condition P1.1 identifies EPA identified monitoring points for dust). Figure 1 and Figure 2 of the Air Quality Management Plan identify the locations of the PM10, TSP and deposition gauges for the ongoing monitoring program for the ACP.

<table>
<tr><th>MCoA</th><th>Condition</th><th>Documentation</th><th>Compliance</th><th>Comments</th></tr>
<tr><td></td><td>DECCW. The sampling method, units of measure, interval and frequency of monitoring will be as set out in the Approved Methods for the Sampling and Analysis of Air Pollutants in NSW.</td><td></td><td></td><td></td></tr>
<tr><td>6.12</td><td>The Applicant shall:
a) establish real-time ambient monitoring stations to provide continuous measurements of PM10 concentrations at the closest residences for which no agreements have been negotiated.
b) provide quarterly reporting during operation and rehabilitation of the open cut mine on the performance of the control measures and results of the ambient air quality monitoring system, unless otherwise agreed by the Director-General. The reports shall be provided to the Director-General, CCC and SSC within seven days of completion of the report; and
c) provide all results and analysis of air quality monitoring in the AEMR.</td><td>▪ AEMR 2006-2007 section 3.1.1 Air Quality; and Appendix 1 Air Monitoring Data
▪ AEMR 2007-2008 section 3.1.1 Air Quality, and Appendix 1 Air Monitoring Data
▪ AEMR 2008-2009 section 3.1.1 Air Quality; and Appendix 1 Air Monitoring Data</td><td>Yes</td><td>To satisfy the requirements of the MCoA and EPL, ACOL utilises Hi-Vol air samplers to measure TSP and Tapered Element Oscillating Microbalances (TEOMs) to measure PM_{10}.
All air quality monitoring is undertaken in accordance with the Approved Methods for the Sampling and Analysis of Air Pollutants in NSW and the Air Monitoring Program as agreed with the NSW EPA.
The results of the air quality monitoring is reported in the AEMR's in section 3.1.1 Air Quality, and Appendix 1 Air Monitoring Data.</td></tr>
<tr><td>6.13</td><td>The following points (to be each of or representative of a defined group of all potentially affected properties) referred to in the table below are identified for the purposes of monitoring and/or the setting of limits for the emission of pollutants to the air from the point.
<table>
<tr><th>DECCW Identification no.</th><th>Air Monitoring Point</th><th>Description of Location</th></tr>
<tr><td>At locations to be determined by the DECCW based on the monitoring plan required by condition 6.11</td><td>Ambient air monitoring</td><td>At locations to be determined by the DECCW based on the monitoring plan required by condition 6.11</td></tr>
</table></td><td></td><td>Yes</td><td>The requirements for dust monitoring are defined in EPL conditions P1.1 (Monitoring points), M2 (Requirement to monitor pollutants discharged), M7 (Requirement to monitor weather) are described in the monitoring program.
Figures 1 and 2 of the Air Quality Management Plan identify the locations of the PM10, TSP and deposition gauges for the air monitoring program for the ACP.</td></tr>
<tr><td>6.14</td><td>For each monitoring point determined by the DECCW at the licence application stage the applicant must monitor (by sampling and obtaining results by analysis) the concentration of each pollutant specified in Column 1 of the following table. The applicant must use the sampling method, units of measure, and sample at the frequency, specified opposite in the other columns:
<table>
<tr><th>Air Pollutant</th><th>Units of Measure</th><th>Frequency</th><th>Sampling Method</th></tr>
<tr><td>Particulate Matter – PM10</td><td>µg/m³</td><td>1 day in 6 or continuous</td><td>AM-18 or AS3580.9.8 – 2001</td></tr>
<tr><td>Total suspended</td><td>µg/m³</td><td>1 day in 6</td><td>AM-15</td></tr>
</table></td><td></td><td>Yes</td><td>Dust deposition is monitored around the ACOL site and within the village of Camberwell. All dust deposition gauges are sampled monthly for insoluble matter (g/m2/month) and ash (percent) in accordance with Australian Standard 3580.10.1 1991 deposited Matter – Gravimetric methods for insoluble solids.
High Volume Air Sampler (HVAS) TSP and PM10 samples are analysed in accordance with Australian Standard 2724.3-1984 Particulate Matter –TSP-high volume air sampler.</td></tr>
</table>

MCoA	Condition	Documentation	Compliance	Comments
	par icles | | | | Particulates - Deposited Matter | g/m²/month | Continuous | AM-19			
6.15	Monitoring for the concentration of a pollutant emitted to the air required to be conducted under this consent, or a licence under the *Protection of the Environment Operations Act 1997*, in relation to the development or in order to comply with a relevant local calculation protocol must be done in accordance with: • any methodology which is required by or under the POEO Act 1997 to be used for the testing of the concentration of the pollutant; or • if no such requirement is imposed by or under the POEO Act 1997, any methodology which the general terms of approval or a condition of the licence or the protocol (as the case may be) requires to be used for that testing; or • if no such requirement is imposed by or under the POEO Act 1997 or by the general terms of approval or a condition of the licence or the protocol (as the case may be), any methodology approved in writing by the DECCW for the purposes of that testing prior to the testing taking place.		Yes	All air quality monitoring is undertaken in accordance with the *Approved Methods for the Sampling and Analysis of Air Pollutants in NSW* and the Air Monitoring Program as agreed with the NSW EPA.
	Exceedence of Dust Criteria/Goals			
6.16	In the event that: a) a landowner or occupier considers that dust from the project at his/her dwelling is in excess of the criteria detailed in Tables 1, 2, and 3 of condition 6.1 above; or, b) a landowner, having selected a suitable site for a dwelling on his/her vacant land, considers that dust from the project at his/her future dwelling would be in excess of the criteria detailed in Tables 1, 2, and 3 of condition 6.1 above, and the Director-General is satisfied that an investigation is required, the Applicant shall, upon the receipt of a written request: a) consult with the landowner or occupant affected to determine his/her concerns; b) make arrangements for, and bear the costs of, following consultation with other nearby mines, appropriate independent dust investigations in accordance with the OAQMP, and to the satisfaction of the Director-General, to quantify the impact and determine the source of the effect and contribution of the ACP mine; c) modify the mining activity or take other steps in accordance with the OAQMP if exceedences are demonstrated to result from ACP related activity. This shall include: (i) introduction of additional dust controls, on individual sources or on all	▪ Air Quality Management Pan Version C, Aug 2006	Not triggered	Section 6 Management Safeguards and Ameliorative Actions of the Air Quality Management Plan provides the processes in place for ACP to respond to the requirement of MCoA 6.16. Appendix B Procedure for Notifying Residential Tenants of Potential Impacts of Mining Operations also provides processes that may apply if MCoA 6.16 were to be activated.

<table>
<tr><th>MCoA</th><th>Condition</th><th>Documentation</th><th>Compliance</th><th>Comments</th></tr>
<tr><td></td><td>sources on the site, or modify operations to ensure that the dust criteria are achieved; and/or;
(ii) enter into an agreement with the landowner or provide such forms of benefit or amelioration of the impact of dust as may be agreed between the parties as providing acceptable compensation for the dust levels experienced. The agreement may also be made following consultation with other nearby mines.
d) conduct follow up investigation(s) to the satisfaction of the Director-General, where necessary.</td><td></td><td></td><td></td></tr>
<tr><td>6.17</td><td>If the independent dust investigations in condition 6.16 above confirm that ambient dust levels at the residence or proposed residence are in excess of the relevant criteria detailed in Tables 1 and 3 of condition 6.1 above, and if the measures in condition 6.16 c) (i) above do not reduce the dust levels below the criteria in Tables 1 and 3 of condition 6.1, or if agreement in accordance with condition 6.16 (c)(ii) above cannot be reached, the Applicant shall, at the written request of the owner, acquire the relevant property. Acquisition shall be in accordance with the procedures set out in conditions 11.5-11.11.
In the case of cumulative dust levels in excess of the criteria in Table 1 and 3 of condition 6.1, should the Applicant form an agreement with the relevant contributing parties under a Joint Acquisition Management Plan pursuant to Condition 11.12, the Applicant shall purchase an affected property in accordance with this Plan. Should a Joint Acquisition Management Plan not be prepared between the relevant contributing parties, the Applicant shall acquire the property in accordance with conditions 11.5-11.11.</td><td></td><td>Not triggered</td><td></td></tr>
<tr><td>6.18</td><td>If the independent dust investigations in condition 6.16 above confirm that ambient dust levels at the residence or proposed residence are in excess of the relevant criteria detailed in Table 2 of condition 6.1 above, and if the measures in condition 6.16 c) (i) above do not reduce the dust levels below the criteria in Table 2 of condition 6.1, or if agreement in accordance with condition 6.16 (c)(ii) above cannot be reached, the Applicant shall, assess ambient dust levels and the incremental contribution of ACP to ambient dust levels as set out in Table 4 below:
Table 4 Short Term Particulate Matter Acquisition Criteria
<table>
<tr><th>POLLUTANT</th><th>CRITERIA</th><th>AGENCY</th></tr>
<tr><td>Particulate matter < 10um (PM10)</td><td>50 ug/m3 (incremental contribution of ACP to ambient levels)</td><td>NSW DECCW</td></tr>
</table></td><td></td><td>Not triggered</td><td>ACP has established agreements with a number of residents in accordance with Conditions 6.16c(ii) and 6.49c(iii) of the development consent.

These residents have the opportunity to provide comments and feedback on mine operations, and these comments are recorded in a separate log but investigated in the same way as complaints from residents without agreements.
▪ ACP has established a process under this MCoA to provide for independent investigation of complaints;
▪ ACP continues to try and establish arrangements with other</td></tr>
</table>

MCoA	Condition	Documentation	Compliance	Comments
	Particulate matter < 10um (PM10) | 150 ug/m3 (cumulative) | US EPA If the independent dust investigations in condition 6.16 above confirm that ambient dust levels at the residence or proposed residence are in excess of either of the relevant criteria detailed in Table 4 above the Applicant shall, at the written request of the owner, acquire the relevant property. Acquisition shall be in accordance with the procedures set out in conditions 11.5-11.11. In the case of cumulative dust levels in excess of the criteria in Table 4, should the Applicant form an agreement with the relevant contributing parties under a Joint Acquisition Management Plan pursuant to Condition 11.12, the Applicant shall purchase an affected property in accordance with this Plan. Should a Joint Acquisition Management Plan not be prepared between the relevant contributing parties, the Applicant shall acquire the property in accordance with conditions 11.5-11.11.			mines in the vicinity to address concerns raised in respect to cumulative impacts, but there had been no agreements reached at the date of this audit.
6.19	If continued complaints and dust investigations confirm that ambient air quality criteria in Table 2 of condition 6.1 are being exceeded, but are less than the ambient dust levels in Table 4 of condition 6.18, the Applicant shall continue to negotiate with the landowner, and other nearby mines where relevant, until a resolution to the satisfaction of the Director General is reached.		Not triggered	
6.20	If a landowner disputes any dust mitigation or other measures proposed by the Applicant in accordance with condition 6.16 above, the matter shall be referred by either the Applicant or landowner to the Director-General in consultation with SSC. If the matter cannot be resolved within 21 days, the matter shall be referred to the Independent Dispute Resolution Process.		Not triggered	
6.21	Further independent investigation(s) shall cease if the Director-General is satisfied that the relevant criteria in Tables 1, 2, and 3 of condition 6.1 are not being exceeded and are unlikely to be exceeded in the future.		No triggered	
	Blast Management and Monitoring			
	Airblast Overpressure Criteria			
6.22	The Airblast overpressure level from blasting operations carried out in or on the premises must not exceed: (a) 115 dB(Lin Peak) for more than 5% of the total number of blasts during each reporting period; and (b) 120 dB (Lin Peak) at any time. at any residence or other noise sensitive receiver such as the St Clements Anglican Church and Camberwell Community Hall.	▪ Blast and Vibration Management Plan, Version C section 5, 19 Aug 2006	NO	The blast overpressure criteria of <115dBL was exceeded more than 5% of the time at both the St Clements Church and Camberwell village monitoring locations during the 2008-09 period and 120dBL criteria was also exceeded at both monitoring locations. At the time of the audit the the 115dBL criteria for the 2009-10 period was exceeding at Camebrwell Village and two exceedences of the >120dBL criteria were recorded.

<table>
<tr><th>MCoA</th><th>Condition</th><th>Documentation</th><th>Compliance</th><th>Comments</th></tr>
<tr><td></td><td></td><td></td><td></td><td></td></tr>
<tr><td></td><td>Ground vibration (ppv) Criteria</td><td></td><td></td><td></td></tr>
<tr><td>6.23</td><td>The ground vibration peak particle velocity from blasting operations carried out in or on the premises must not exceed:
(a) 2 mm/s for more than 5% of the total number of blasts carried out in or on the premises during each reporting period; and
(b) Exceed 10 mm/s at any time
At any residence or other noise sensitive receiver such as the St Clements Anglican Church and Camberwell Community Hall.</td><td>▪ Blast and Vibration Management Plan, Version C section 5, 19 Aug 2006</td><td>Yes</td><td>At the end of the 2007-2010 reporting period vibration results were within the 2mm/s criteria.
The 10mm/s criteria was not exceeded at any time.</td></tr>
<tr><td></td><td>Time of blasting</td><td></td><td></td><td></td></tr>
<tr><td>6.24</td><td>Blasting operations on the premises may only take place between 9.00am and 5.00pm Monday to Saturday inclusive.</td><td>▪ Blast and Vibration Management Plan, Version C section 5, 19 Aug 2006</td><td>Yes</td><td>ACP blasting only occurs between 9am and 5pm on Monday to Saturday.</td></tr>
<tr><td>6.25</td><td>The Applicant shall, as a minimum, advise residents of Camberwell village and occupiers of buildings within two (2) kilometres of blasting locations of future blasting events on at least a monthly basis, and of any changes to the proposed blast schedules. Such program shall also be available on the internet.</td><td>▪ Blast and Vibration Management Plan, Version C section 5, 19 Aug 2006</td><td>Yes</td><td>Blasting notification is provided to the residents of Camberwell Village and occupiers of buildings within 2kms and notifications are included on the ACOL website.
<table>
<tr><th colspan="2">Blasting Notifications</th></tr>
<tr><td>24/6/2010 : 12.30pm</td><td>Mine Blast</td></tr>
<tr><td>19/6/2010 : 12:00pm</td><td>Mine Blast</td></tr>
<tr><td>17/6/2010 : 12:30pm</td><td>Mine Blast</td></tr>
<tr><td>11/6/2010 : 12:30pm</td><td>Mine Blast Lower Barrett</td></tr>
<tr><td>9/6/2010 : 12:30pm</td><td>Mine Blast Upper Barrett</td></tr>
<tr><td>7/6/2010 : 4:00pm</td><td>Mine Blast</td></tr>
<tr><td>3/6/2010 : 12:30pm</td><td>Mine Blast Upper Barrett</td></tr>
</table></td></tr>
<tr><td></td><td>Blasting/Vibration Management Plans</td><td></td><td></td><td></td></tr>
<tr><td>6.26</td><td>The Applicant shall prepare and implement a Blasting/Vibration Management Plan (BVMP) in consultation with SSC, and to the satisfaction of the Director-General.
The Plan shall include, but not be limited to, the following matters:
a) demonstration of consistency with commitments made in documents listed in condition 1.2 and compliance with the conditions of this consent;
b) demonstration of compliance blasting criteria;
c) proposed mitigation measures;</td><td>▪ Blast and Vibration Management Plan, Version C section 2-8, 19 Aug 2006</td><td>Yes</td><td>The Blast and Vibration Management Plan was prepared in consultation with the relevant government authorities and approved by the Director-General on 23 December 2003. The Plan has been revised and Version C approved by DoP on 28 August 2007.
(a) the Plan was prepared to address the requirements in MCoA 1.2, as referenced in sections 2, 3 and 5.
(b) section 5 Criteria and Guidelines reference the required compliance criteria and section 6 addresses Blast Criteria</td></tr>
</table>

MCoA	Condition	Documentation	Compliance	Comments
	d) remedial action; e) monitoring methods and program in accordance with blast monitoring and inspection conditions; f) monitoring program for fly rock distribution; g) measures to be undertaken to demonstrate that ACP is achieving best practice in minimising air blast overpressure, ground vibration levels, fumes and odours from blasting activities; h) measures to protect underground utilities (e.g.: subsurface telecommunication and electric cables, irrigation lines) and livestock on non-mine owned land; i) measures to consider the blasting activities from other neighbouring mines. This shall include details of the proposed measures to ensure that cumulative blast related impacts are managed, such as through consultation with the other mines to coordinate blasting activities; j) measures to monitor and mitigate impacts of blasting on rail and road infrastructure; k) measures to manage and mitigate dust generation from blasting; l) procedures for the investigation of blast related complaints from ACP, in consultation with other mines in the event of cumulative related impacts m) procedures for the notification of occupiers of buildings and residents prior to detonation of each blast; and n) measures to ensure no damage by flyrock to people, property, livestock and power lines. The BVMP shall be submitted for the approval of D-G, no later than one month prior to the commencement of blasting, or within such period otherwise agreed by the D-G. Blasting shall not commence until written approval has been received from the D-G. Upon receipt of the D-G's approval, the Applicant shall supply a copy of the BVMP to Council, DECCW, and DII - Minerals within 14 days. The Applicant shall make the BVMP available for public inspection on request.			Compliance; (c) section 6 addresses Mitigation Measures; (d) section 6 addresses Remedial Action; (e) section 7 outlines Monitoring and Reporting Requirements; (f) section 6 addresses Flyrock Management; (g) section 7 outlines the review and reporting process for blast overpressure and vibration results; (h) section 6 refers to protection of underground utilities and protection of non-mine owned land; (i) section 6 addresses Neighbouring Mines; (j) section 6 addresses Road and Railway management; (k) section 6 addresses Dust Generation and Management; (l) and (m) section 6 addresses Complaints Handling and Notification Procedure; (n) section 6 addresses Flyrock Management.
6.27	The Applicant shall, in consultation with SSC, RTA and RIC, prepare and implement a Road and Rail Closure Management Plan (RRCMP) to the satisfaction of the Director-General. The Plan shall include, but not be limited to, the following matters: a) demonstration of consistency with commitments made in documents listed in condition 1.2 and compliance with the conditions of this consent; b) details of the proposed safety management measures during the period of the road closure and blast; c) details of the procedures for closing Glennies Creek Road the railway and	▪ Blast and Vibration Management Plan, Version C Section 6, 19 Aug 2006 ▪ Road and Rail Closure Management Plan, Version A, 12 Jan 2004	Yes	The Road and Rail Closure Management Plan was prepared in consultation with the relevant government authorities and approved by DIPNR on 23 December 2003. (a) the Plan was prepared to address the requirements in the documents referenced in MCoA 1.2; (b) section 6 of the Plan addresses safety management measures including signage, notification and personnel requirements for each closure;

MCoA	Condition	Documentation	Compliance	Comments
	the New England Highway, and the period which they will be closed during blasting activities; d) methods for ensuring the safety of road and rail users and the general public during the blast period; e) strategies for informing road and rail users and the local community of the proposed closures; f) details of the procedures for permitting the passage of emergency vehicles during the road closure. This shall also include details of the proposed methods for sufficiently notifying emergency service providers of the proposed times and period of the road closures; g) methods for clearing any debris resulting from a blast; and h) details of the disruptions that are likely to occur during the closure period. The RRCMP shall be submitted for the approval of the Director-General, no later than one month prior to the commencement of blasting, or within such period otherwise agreed by the Director-General. Blasting shall not commence until written approval has been received from the Director-General. Upon receipt of the Director-General's approval, the Applicant shall supply a copy of the RRCMP to Council, RIC, RTA, DECCW, and DII - Minerals within 14 days. The Applicant shall make the RRCMP available for public inspection on request.			(c) section 6 Road Closures address these matters; (d) section 6 of the Plan addresses safety management measures including signage, notification and personnel requirements for each closure; (e) section 6 Signage/Notification is described and includes notification on the ACOL website; (f) section 6 Emergency Vehicles addresses this matter; (g) section 6 Flyrock on Roads after Blasting addresses this issue; (h) section 4 addresses Potential Impacts related to road or rail closures.
	Blast Monitoring and Inspection			
6.28	To determine compliance with airblast overpressure and ground vibration criteria: a) Airblast overpressure and ground vibration levels must be measured at the most potentially affected residence or other noise sensitive receiver for all blasts carried out at the development; and b) Instrumentation used to monitor compliance must meet the requirements of Australian Standard 2187.2 of 1993. (c) The results of the blast monitoring must be submitted to DECCW at the end of each reporting period and be summarised and interpreted in the AEMR	▪ Blast and Vibration Management Plan, Version C 19 Aug 2006 ▪ DataMaster Calibration Report, 23 Jul 2010 ▪ Texcel Calibration Certificates, 11 May 2010	Yes	Blast and vibration monitoring is conducted at sites approved in the Blast and Vibration Management Plan. Calibration of the Dynamaster V6 Airblast equipment is conducted 12 monthly for the blast monitors and ground vibration monitoring stations.
6.29	The Applicant shall investigate any vibration problem(s) associated with above ground floor level of residential buildings which occur as a result of blasting at the mine in relation to the criteria in Conditions 6.22 and 6.23 above. Should such an investigation be necessary the Applicant shall advise the Director-General the result of such investigation and any proposed preventive/remedial measures.	▪ Blast and Vibration Management Plan, Version C, 19 Aug 2005 ▪ Structural Assessment of	Yes	Structural assessments have been conducted on the Stapleton residence and St Clements Church to assess the status of the structures following requests from the owners. Property assessments by an independent engineering consultant have generally not identified structural damage attributable to the ACP mine blasts, however on one occasion

<table>
<tr><th>MCoA</th><th>Condition</th><th>Documentation</th><th>Compliance</th><th>Comments</th></tr>
<tr><td>6.30</td><td>Upon written request of the owner of any dwellings located in Camberwell Village or within two (2) kilometres of the blasting locations, the Applicant shall arrange at its own costs, for the inspection by a technically qualified person agreed to by both parties, to record the material condition of any structure on such property within 14 days of receipt of the request. The Applicant shall supply a copy of any inspection report, certified by the person who undertook the inspection, to the relevant property owner within fourteen (14) days of receipt of the report.</td><td rowspan="3">Stapleton Residence, Camberwell, 19 Aug 2006
▪ Structural Assessment of Stapleton Residence, Camberwell, Jan 2010
▪ Structural Assessment of St Clements Anglican, Church Camberwell,</td><td>Yes</td><td>in June 2009 the engineer could not directly discount or attribute damage to a blast so ACP arranged for repairs to the properties.
Surrounding mines also conduct blasting and the levels of peak particle vibration from the ACP blasts have not exceeded the 2mm/sec criteria, which is significantly lower than the criteria applied to the other mine operations in the vicinity (i.e. 5-10mm/sec criteria).</td></tr>
<tr><td>6.31</td><td>The Applicant shall arrange at its own costs, for the inspection by a technically qualified person agreed to by the Director-General, to record the material condition of the St Clements Anglican Church and Camberwell Community Hall prior to the commencement of blasting. The Applicant shall supply a copy of any inspection report, certified by the person who undertook the inspection, to the relevant property owner and the Director-General within fourteen (14) days of receipt of the report.</td><td>Yes</td><td>See above</td></tr>
<tr><td>6.32</td><td>Upon receipt of a written request from the relevant property owner or manager, the Applicant shall investigate any blasting impacts or exceedences of blast criteria associated with the development at the St Clements Anglican Church or Camberwell Community Hall. Should such an investigation be necessary the Applicant shall advise the Director-General the result of such investigation and any proposed preventive/remedial measures.</td><td>Yes</td><td>Suspected damage to St Clements Church was assessed by an independent consultant. No damage resulting from blasting operations at ACP was identified.</td></tr>
<tr><td>6.33</td><td>The Applicant shall incur the costs for any damage to Glennies Creek Road, the Railway, and the New England Highway resulting from any blast related activities. The repairs shall be undertaken to a standard acceptable to SSC, RTA and RIC.</td><td>▪ Blast and Vibration Management Plan, Version C 19 Aug 2006</td><td>Not activated</td><td>Noted</td></tr>
<tr><td></td><td>Noise Control</td><td></td><td></td><td></td></tr>
<tr><td></td><td>Noise Criteria</td><td></td><td></td><td></td></tr>
<tr><td>6.34</td><td>Except as may be expressly provided by a DECCW licence, noise generated by the development must not exceed the limits specified in Table 5 below.
Table 5 Noise Limits (dB(A))
<table>
<tr><th>Location</th><th>Day</th><th>Evening</th><th></th><th>Night</th></tr>
<tr><td></td><td>LAeq (15 min)</td><td>LAeq (15min)</td><td>LAeq (15 min)</td><td>LA1 (1 min)</td></tr>
<tr><td>Any residence not owned by the Applicant or not subject to an agreement between the Applicant</td><td>38</td><td>38</td><td>36</td><td>46</td></tr>
</table></td><td></td><td></td><td>Noted</td></tr>
</table>

<table>
<tr><th>MCoA</th><th>Condition</th><th>Documentation</th><th>Compliance</th><th>Comments</th></tr>
<tr><td></td><td>and the residence owner as to an alternate noise.</td><td></td><td></td><td></td></tr>
<tr><td>6.35</td><td>The Applicant shall ensure that the design, construction and operation of the ACP shall not create amenity problem(s) associated with low frequency vibration. In the event of a problem arising the Applicant shall, in consultation with the DECCW, investigate the cause of any low frequency vibration associated with the ACP and report to the Director-General the result of any such investigation and practical mitigation measures that can be adopted to eliminate such problem.</td><td>▪ DataMaster Report - Investigation of Window Vibration at Stapleton Residence, 22 Feb 2010</td><td>Yes</td><td>DataMaster Report on Investigation of Window Vibration at Stapleton Residence related to a complaint received from Stapleton residence Camberwell concluded that the window assembly was in poor condition and the vibration was closely correlated with wind strength and the that the ACP open cut and underground operations did not contribute to the window vibration.</td></tr>
<tr><td></td><td>Noise Acquisition Criteria</td><td></td><td></td><td></td></tr>
<tr><td>6.36</td><td>The acquisition zone for noise is defined by predicted or demonstrated exceedence of the noise levels shown in Table 6 below:
Table 6 Acquisition Noise Limits (dB(A))
<table>
<tr><th rowspan="2">Location</th><th>Day</th><th>Evening</th><th>Night</th></tr>
<tr><td>LAeq(15 min)</td><td>LAeq (15min)</td><td>LAeq(15 min)</td></tr>
<tr><td>Any residence not owned by the Applicant or not subject to an agreement between the Applicant and the residence owner as to an alternate noise limit.</td><td>43</td><td>43</td><td>41</td></tr>
</table></td><td></td><td></td><td>Noted</td></tr>
<tr><td></td><td>Interpretation of Noise Levels</td><td></td><td></td><td></td></tr>
<tr><td>6.37</td><td>For the purpose of Conditions 6.34 and 6.36:
• Day is defined as the period from 7am to 6pm Monday to Saturday and 8am to 6pm Sundays and Public Holidays,
• Evening is defined as the period from 6pm to 10pm
• Night is defined as the period from 10pm to 7am Monday to Saturday and 10pm to 8am Sundays and Public Holidays.</td><td></td><td></td><td>Noted</td></tr>
<tr><td>6.38</td><td>Noise from the premises is to be measured at the most affected point on or within the residential boundary or at the most affected point within 30m of the dwelling where the dwelling is more than 30m from boundary to determine compliance with the LAeq(15 minute) noise limits in condition 6.34. Where it can be demonstrated that direct measurement of noise from the premises is impractical, the DECCW may accept alternative means of determining compliance. See Chapter 11 of the NSW Industrial Noise Policy. The modification factors presented in Section 4 of the NSW Industrial Noise Policy shall also be applied to the measured noise level where</td><td></td><td>Yes</td><td>All noise measurements taken during the noise monitoring program have been undertaken in accordance with the requirements in MCoA 6.38 and EPL condition L.6.3.</td></tr>
</table>

MCoA	Condition	Documentation	Compliance	Comments
	applicable.			
6.39	Noise from the premises is to be measured at 1m from the dwelling façade to determine compliance with the LA1(1 minute) noise limits in condition 6.34.			Noted. (Identified in the Spectrum Acoustics quarterly Reports).
6.40	The noise emission limits identified in condition 6.34 apply under the following meteorological conditions: a) wind speeds up to 3m/s at 10 metres above ground level; and b) temperature inversion conditions of up to 3oC/100m.			Noted
	Hours of Operation			
6.41	Open cut mining activities must only be conducted between 7am to 10pm Monday to Saturday and 8am to 10pm Sundays and Public Holidays.		Yes	Open cut mining activities are conducted between 7am to 10pm Monday to Saturday and 8am to 10pm Sundays and Public Holidays.
	Noise Management Plans			
6.42	The Applicant shall prepare and implement, a Construction Noise Management Plan (CNMP) in consultation with SSC, to the satisfaction of the Director-General. The Plan shall include, but not be limited to the following matters: a) demonstration of consistency with commitments made in documents listed in condition 1.2 and compliance with the conditions of this consent; b) compliance standards; c) community consultation; d) complaints handling monitoring/system; e) site contact person to follow up complaints; f) methods for the management of construction related traffic noise impacts; g) mitigation measures; h) the design/orientation of the proposed mitigation methods demonstrating best practice; i) construction times; j) contingency measures where noise complaints are received; and k) monitoring methods and program to comply with requirements of conditions 6.44-6.48. The CNMP shall be submitted for the approval of the Director-General, no later than one month prior to the commencement of construction, or within such period otherwise agreed by the Director-General. Construction shall not commence until written approval has been received from the Director-General. Upon receipt of the D-G's approval, the Applicant shall supply a copy of the CNMP to Council, DECCW, and DII - Minerals within 14 days. The		Not applicable	Not now applicable – construction condition

MCoA	Condition	Documentation	Compliance	Comments
	Applicant shall make the CNMP available for public inspection on request.			
6.43	The Applicant shall prepare and implement a Noise Management Plan (NMP) for the ACP mine, to the satisfaction of the D-G. The DECCW, SSC, and nearby mines shall be consulted prior to the finalisation of the Noise Management Plan. The Plan shall include: a) demonstration of consistency with commitments made in documents listed in condition 1.2 and compliance with the conditions of this consent; b) details of the methods to comply with requirements of conditions 6.44-6.48; c) details regarding operating configuration; determining survey intervals; weather conditions and seasonal variations; selecting variations, locations, periods and times of measurements; d) detail management measures where the target criteria in condition 6.34 of this consent are predicted to be exceeded, or are exceeded during mining operations; e) redefine both the acquisition and management zones on a yearly basis in the AEMR, unless otherwise agreed by the Director-General. This review shall draw upon the noise monitoring results obtained during the previous year and incorporate noise modeling to provide a forward plan of predicted noise levels for the year ahead; f) specify the procedures for a noise monitoring program for the purpose of undertaking independent noise investigations; g) outline the procedure to notify property owners and occupiers likely to be affected by noise from the operations; h) establish a protocol for handling noise complaints that include recording, reporting and acting on complaints, particularly where complaints are received and it is demonstrated noise levels are in excess of the criteria contained in this consent; i) record appropriate mechanisms for community consultation; j) outline proactive/predictive and reactive mitigation measures to be employed on the site to limit noise emissions; k) identify longer term strategies directed towards mitigating noise levels that exceed the noise target levels in condition 6.34; l) outline measures to reduce the impact of intermittent, low frequency and tonal noise (including truck reversing alarms); m) survey and investigate noise reduction measures from plant and equipment annually, subject to noise monitoring results and/or complaints received, and report in the AEMR at the conclusion of the first 12 months of operations and set targets for noise reduction taking into consideration valid	▪ Noise Management Plan, Version C, 10 Aug 2006		The Noise Management Plan was prepared in consultation with the relevant authorities and approved by DIPNR on 23 December 2003. The Plan has been reviewed and revised and Version C implemented from 10 August 2006. (a) the Noise Management Plan was prepared taking account of the commitments and requirements of the documents listed in MCoA 1.3; (b) sections 2, 3 and 4 address the requirements to be complied with by ACP and section 7 outlines the monitoring methods; (c) section 7 of the Plan outlines the Monitoring and Reporting requirements to meet the MCoA; (d) section 6 addresses Management Measures for Predicted or Actual Exceedences; (e) section 6 Definition of Acquisition and Management Zones addresses the requirement of this MCoA; (f) section 6 Independent Noise Investigations addresses this matter; (g) section 7 Notification Procedures outlines the requirements to satisfy this condition; (h) section 7 Noise Complaints Handling addresses this requirement; (i) section 7 Community Consultation outlines this requirement; (j) section 6 Proactive/predictive and reactive mitigation measures to limit noise emissions addresses this matter; (k) section 6 Long Term Strategies outline the process for management of noise emissions; (l) section 6 Measures to reduce low frequency and tonal noise addresses this requirement; (m) the noise surveys, monitoring and complaints are reported in the AEMR's; (n) section 6 Interrelationship of this plan with Noise Management Plans of other mines in the area outlines the way ACP would address this condition.

MCoA	Condition	Documentation	Compliance	Comments
	noise complaints in the previous year; and n) include details of the inter-relationship of this plan with Noise Management Plans of other mines in the area. The NMP shall be submitted for the approval of the Director-General, no later than one month prior to the commencement of mining operations, or within such period otherwise agreed by the Director-General. Mining operations shall not commence until written approval has been received from the D-G. Upon receipt of the Director-General's approval, the Applicant shall supply a copy of the NMP to Council, DECCW and DII - Minerals within 14 days. The Applicant shall make the NMP available for public inspection on request.			
6.43A	Within 1 month of placing overburden on the eastern emplacement area above RL 125 metres, the Applicant shall revise the Noise Management Plan to include a dumping strategy for the eastern emplacement area to minimise noise impacts and ensure compliance with the noise criteria in the consent, to the satisfaction of the Director-General.	▪ Noise Management Plan, Version C, 10 Aug 2006	Yes	The Noise Management Plan was revised and updated prior to the commencement of placing overburden above 125m and prior to commencement of the underground mining.
	Noise Monitoring			
6.44	The Applicant shall conduct detailed noise monitoring surveys at potentially affected residences (including potentially affected residences to the east of the mine prior to the cessation of overburden emplacement activities on the eastern emplacement area), on a 3-monthly basis, to the satisfaction of the Director-General.	▪ Spectrum Acoustics, Quarter 3 Noise Monitoring, 20 May 2010	Yes	Quarterly noise monitoring conducted by Spectrum Acoustics in accordance with the noise monitoring program approved in the Noise Management Plan.
6.45	A noise compliance assessment report shall be submitted to DECCW and the Director-General within three months of commencement of normal operations at the premises and on an annual basis thereafter. The report shall be prepared by an accredited acoustical consultant and shall determine compliance with the noise limits in condition 6.34. Annual noise compliance reports may be incorporated into the AEMR.	▪ Spectrum Acoustics Annual Noise Monitoring Reports - 2007/2008, 2008/2009 2009/2010	Yes	Spectrum Acoustics Annual Noise Monitoring Report 2007/2008, 2008/2009 2009/2010
6.46	Noise from the premises is to be measured at the most affected point on or within the residential boundary or at the most affected point within 30m of the dwelling where the dwelling is more than 30m from boundary to determine compliance with the LAeq(15 minute) noise limits in condition 6.34. Where it can be demonstrated that direct measurement of noise from the premises is impractical, the DECCW may accept alternative means of determining compliance. See Chapter 11 of the NSW Industrial Noise Policy. The modification factors presented in Section 4 of the NSW Industrial Noise Policy shall also be applied to the measured noise level where applicable.		Yes	The Spectrum Acoustics reports provide a description of the location of each monitoring site and provide reference to the NSW Industrial Noise Policy.
6.47	Noise from the premises is to be measured at 1m from the dwelling façade to determine compliance with the LA1(1 minute) noise limits in condition 6.34.		Yes	Noted
6.48	Noise monitoring results shall be of sufficient detail to assess whether ACP	▪ Spectrum Acoustics Noise	Yes	The Spectrum Acoustics Noise Monitoring Result Reports

MCoA	Condition	Documentation	Compliance	Comments
	noise contains low-frequency, tonal or impulsive components as defined in Section 4 of the INP.	Monitoring Results, 2009-2010 Q3, 20 May 2010		state – "This analysis showed the noise did not contain any tonal, impulsive or low frequency components as per definitions in the NSW Industrial Noise Policy
	Exceedence of Noise Criteria			
6.49	In the event that: a) a landowner or occupier considers that noise from the project at his/her dwelling is in excess of the criteria detailed in Table 5 of condition 6.34 above; or, b) a landowner, having selected a suitable site for a dwelling on his/her vacant land, considers that noise from the project at his/her future dwelling would be excess of the criteria detailed in Table 5 of condition 6.34 above, and the Director-General is satisfied that an investigation is required, the Applicant shall, upon the receipt of a written request: a) consult with the landowner or occupant affected to determine his/her concerns; b) make arrangements for, and bear the costs of, following consultation with other mine operations in the vicinity where necessary, appropriate independent noise investigations in accordance with the Noise Management Plan, and to the satisfaction of the Director-General, to quantify the impact and determine the source of the effect and the contribution of ACP to the effect; c) take steps in accordance with a noise reduction plan prepared as part of the Noise Management Plan, if exceedances are demonstrated to result from ACP. This shall include: (i) introduction of additional controls, either on noise emission from individual sources on the site or on site operations or modify operations, to ensure that the criteria in the Table 5 of condition 6.34 above are achieved, as far as possible; or (ii) with the agreement of the landowner, and in the case of cumulative impacts the other relevant mining operations, undertaking of noise control at the dwelling to achieve internal noise levels due to ACP alone or due to all mining activities, as relevant, which are at least 10dBA below the relevant external noise criterion in Table 5 of condition 6.34. Internal noise levels should be measured at the centre of any habitable room; or (iii) entering into an agreement with the landowner, and in the case of		Not triggered	

MCoA	Condition	Documentation	Compliance	Comments
	cumulative impacts the other relevant mining operations in the area and the landowner, to provide such other forms of benefit or amelioration of the impacts of noise as may be agreed between the parties, as providing acceptable compensation for the noise levels experienced; d) conduct follow up investigation(s) to the satisfaction of the Director-General, where necessary.			
6.50	If the independent noise investigation(s) in condition 6.49 above confirms that noise criteria in condition 6.36 are being exceeded, and the measures in condition 6.49(c) do not reduce the noise levels below the criteria in Table 5 of condition 6.34, or establish an agreement acceptable to the relevant parties, the Applicant shall, at the written request of the landowner, acquire the relevant property. Acquisition shall be in accordance with the procedures set out in conditions 11.5-11.11. In the case of cumulative levels in excess of the criteria in Table 6 of condition 6.36, should the Applicant form an agreement with the relevant contributing parties under a Joint Acquisition Management Plan pursuant to Condition 11.12, the Applicant shall purchase an affected property in accordance with this Plan. Should a Joint Acquisition Management Plan not be prepared between the relevant contributing parties, the Applicant shall acquire the property in accordance with conditions 11.5-11.11.			Noted
6.51	If continued complaints and noise investigations confirm that noise criteria in Table 5 of condition 6.34 are being exceeded, but are less than the noise levels in condition 6.36, the Applicant shall continue to negotiate with the landowner, and other mines in the vicinity where relevant, until a resolution to the satisfaction of the Director General is reached.		Not triggered	
6.52	If a landowner disputes any noise mitigation or other measures proposed by the Applicant in accordance with condition 6.49 above, the matter shall be referred by either the Applicant or landowner to the Director-General in consultation with SSC. If the matter cannot be resolved within 21 days, the matter shall be referred to the Independent Dispute Resolution Process.		Not triggered	
6.53	Further independent investigations shall cease if the Director-General is satisfied that the relevant criteria in Table 5 of condition 6.34 are not being exceeded and are unlikely to be exceeded in the future.			Noted
	Lighting Emissions			
6.54	All external lighting associated with the development shall comply with Australian Standard *AS4282 (INT) 1995 - Control of Obtrusive Effects of Outdoor Lighting*. Prior to the commencement of mining operations, the Applicant shall certify in writing, to the satisfaction of the Director-General, that all relevant lighting	▪ Light Management Plan, Version A, 12 Jan 2004 ▪ Letter from DIPNR re	Yes	The Light Management Plan for the ACP was prepared by ACOL and approved by Department of Infrastructure, Planning and Natural Resources on 23 December 2003.

MCoA	Condition	Documentation	Compliance	Comments
	associated with the development will meet the requirements of this condition, and has generally been designed and installed to minimise lighting impacts outside the site.	Approval of Light Management Plan, 23 Dec 2003		The LMP addressed the requirements of *AS 4282 (INT) 1995 – Control of the Obtrusive Effects of Outdoor Lighting.*
6.44	The Applicant shall design and construct all roads and areas where mobile equipment and vehicles move on the site to minimise off-site lighting impacts from equipment lighting and headlights. Lighting from equipment and vehicles shall not shine directly on residences or vehicles moving along public roads at any time.	▪ Light Management Plan, Version A, Section 6, 12 Jan 2004	Yes	The site layout has occurred so lighting installations are positioned to avoid light spillage directly towards roads, residences or other potential viewing locations
6.56	The Applicant shall prepare a Lighting Management Plan (LMP) in consultation with SSC, and to the satisfaction of the Director-General. The Plan shall include, but not be limited to: a) demonstration of consistency with commitments made in documents listed in condition 1.2 and compliance with the conditions of this consent; b) details of the implementation of visual controls to screen, direct or manage all on-site lighting from mine related activities in respect of residences and roadways; c) details of the planting of vegetation screens along the mine boundary and around surface facilities and infrastructure; d) details of technical measures and work practices necessary to minimise the spillage of light from areas to be illuminated, and to minimise the total night time glow from the mine; e) details of the construction of mine facilities roads, and work areas, or placement of visual screens and/or overburden emplacements to screen lighting impacts; f) details of the proposed process and measures to address complaints that may be received from residents or road users impacted by lighting from the mine site; and g) details of any other effective operating practices to manage potential lighting impacts. The LMP shall be submitted for the approval of the Director-General, no later than one month prior to the commencement of mining operations, or within such period otherwise agreed by the Director-General. Mining operations shall not commence until written approval has been received from the Director-General. Upon receipt of the Director-General's approval, the Applicant shall supply a copy of the LMP to Council, DECCW, and DII - Minerals within 14 days. The Applicant shall make the LMP available for public inspection on request.	▪ Light Management Plan, Version A, 12 Jan 2004 ▪ Letter from DIPNR re Approval of Light Management Plan, 23 Dec 2003 ▪ EIS, Figure 4.4 Environmental Bunds ▪ Landscape and Revegetation Management Plan, Figure 1	Yes	(a)The LMP was prepared to comply with the MCoA (LMP section 2) and is consistent with the EIS commitments. (b)Environmental bunds have been established to assist in shielding site activities from residents of Camberwell Village and the public roads (c) Planting layout for the environmental bunds is detailed in Figure 1 of the Landscape and Revegetation Management Plan, to assist in shielding site activities from residents of Camberwell Village and the public roads. (d) see above. (e) The layout of the ACP open cut operations and the positioning of fixed operational equipment has occurred to reduce potential lighting impacts from the project (f) Complaints regarding lighting on the ACP site are responded to within 24 hours. An investigation will be undertaken to identify alternatives, such as the use of lower wattage lighting, re-direction of lighting or shielding to correct the cause of the complaint. (g) Lighting installations are positioned to avoid light spillage directly towards roads, residences or other potential viewing locations. The LMP was approved by DIPNR on 23 December 2003 prior to commencement of open cut mining in January 2004,
6.57	The Applicant shall report on the effectiveness of the lighting emission controls in the AEMR.	▪ 2006-2007 AEMR section 3.11	Yes	Light emission control is reported in the AEMR's in section 3.11 Visual, Stray Light.

MCoA	Condition	Documentation	Compliance	Comments
		▪ 2007-2008 AEMR section 3.11 ▪ 2008-2009 AEMR section 3.11		
7.	**TRANSPORT AND UTILITIES**			
	Road Transport			
7.1	No coal shall be hauled from the mine site on public roads, except under emergency circumstances and with the prior written approval of the Director-General and SSC.		Yes	No coal is hauled from the ACP mine site on public roads.
7.2	The Applicant shall ensure that all employees and contractors travelling to and from the mine site utilise the designated mine access road off Glennies Creek Road.		Yes	This is the only access to the mine operations site.
7.3	Any damage caused to the New England Highway pavement and shoulder caused by the movement of heavy vehicles for oversize equipment deliveries to the site shall be repaired at the Applicant's expense.			Noted. No damage has occurred to the NEW England Highway from the mine operations.
7.4	No coal shall be transported via any internal haul road to the Macquarie Generation conveyor as indicated in the EIS. Note: Condition 1.19 prohibits the construction of the private coal haul road.		Not triggered	No coal provided to Macquarie Generation.
	Road Construction			
	Local Roads			
7.5	The Applicant shall design and construct the following works in accordance with Council's *Development Design and Construction Specifications:* a) widen the radius of Glennies Creek Road at the New England Highway intersection to overcome the acute intersection angle; b) reseal the Glennies Creek Road surface from the New England Highway to the proposed mine entry road; c) construct an AUSTROADS type B intersection incorporating a left turn speed reducing lane to the new entry, and widen the eastern side of Glennies Creek Road to allow a right turn ingress lane from the intersection and an external slip lane for Glennies Creek Road; and, d) build a new realigned section of road to accommodate the new open cut mine. Plans for all works shall be submitted and approved by Council prior to commencement of works.		Yes	All road design and construction completed prior to 2007.
7.6	The Applicant will construct upgrade works on Glennies Creek Road in accordance with the conceptual design provided in supplementary information referred to in condition 1.2, with the exception that the design standard is to		Yes	The upgrade works on Glennies Creek Road were completed before 2007. Additional road repairs have been undertaken where cracking was observed following slippage of the

MCoA	Condition	Documentation	Compliance	Comments
	be upgraded to 80kph. All works to be to the satisfaction of SSC.			southern highwall.
	State Roads			
7.7	The Applicant shall obtain approval from the RTA for the upgrade of the intersection at Glennies Creek Road and the New England Highway, which shall be generally in accordance with the conceptual design provided in supplementary information referred to in condition 1.2.	▪ Letter from RTA re Approval to Commence Construction Works, 7 Feb 2006	Yes	The Glennies Creek Road intersection was constructed in accordance with the approved design.
7.8	The Applicant shall obtain RTA approval under Section 138 of the Roads Act for all works within the New England Highway road reserve.		Yes	Northwest mains headings for the underground mine workings within the road reserve have been notified to RTA and s138 approval provided by RTA.
7.9	The Applicant shall execute a Works Authorisation Deed with the RTA for the proposed road works on State Highway No. 9 New England Highway. The Works Authorisation Deed must be executed prior to commencement of any activity within the Highway road reserve.		Not applicable	
7.10	The Applicant shall bear all costs associated with the design, survey, approval, construction, maintenance, monitoring, rehabilitation and removal of all mine related infrastructure and works affecting the New England Highway road reserve.		Not triggered	
7.11	The Applicant shall pay to the RTA the cost incurred by the RTA of making good any damage to the New England Highway, and its associated structures, caused by activities associated with this consent. Provided however that the amount to be paid by the Applicant as aforesaid shall be reduced by such sum of money, if any, as may be paid to the RTA from the Mine Subsidence Compensation Fund constituted under the Mine Subsidence Compensation Act, 1961, in the form of a claim for compensation for the same damage.		Not triggered	
7.12	Activities associated with this consent shall not restrict in any way the ability of the RTA and its contractors to access and/or undertake works to Bowmans Creek Bridge and its underside.			Noted
7.13	Any adjustments or alterations to activities associated with this consent resulting from improvements/upgrade of the New England Highway shall be the responsibility of the Applicant and at no cost to the RTA.		Not triggered	Noted
7.14 to 7.21	*(Deleted)*			Noted
	Road Closures			
7.22	The Applicant shall maintain signs on Glennies Creek Road and in Camberwell Village to provide at least 24 hours notice of temporary road closures. The location and wording of the signs are to be approved by SSC. Timetables for road closures are also to be available on the internet. A		Yes	Signage is located on Glennies Creek Road and in Camberwell notifying of road closure. ACP provide qualified traffic controllers on the roads at the time of the closure.

MCoA	Condition	Documentation	Compliance	Comments
	protocol is to be established in consultation with the emergency services during road closures. Notification shall also be provided to relevant emergency services via fax or other written means seven (7) days prior to the road closure.			Emergency Services are notified of road closures and Camberwell residents are notified by telephone of proposed blasts and road closures.
	Relocation of Electrical Transmission Lines			
7.23	The Applicant shall, to the satisfaction of Energy Australia and at its own cost, undertake the relocation and/or construction of any electrical transmission lines which may be required as a result of the development. The Applicant shall also bear any costs associated with relocation of Registered Easements for relocated or new transmission lines required as a result of the development. Such work shall be completed prior to any existing line being affected by mining activity from ACP.		Not triggered	No relocation of electrical transmission lines has been required. Three wooden pole structures over longwall panel 4 were replaced with concrete poles by ACP to ensure stability of supply (the wooden poles were in poor condition).
	Utility Services			
7.24	The Applicant shall, to the satisfaction of telecommunications providers and at its own cost, or by agreement with relevant parties, undertake the relocation of any telecommunications cables which may be required as a result of the development.		Not triggered	No relocation of telecommunications has been required.
	Rail Construction			
7.25	The Applicant shall construct the proposed railway siding to the satisfaction of RIC and at its own costs.		Yes	The ACP rail siding constructed prior to commencement of mining in late 2004.
8.	**MONITORING / AUDITING**			
8.1	In addition to the requirements contained elsewhere in this consent, the Director-General may, at any time in consultation with the relevant government authorities and Applicant, require the monitoring programs under this consent to be revised or updated to reflect changing environmental circumstances or changes in technology/operational practices. Changes shall be made and approved in the same manner as the initial monitoring programs. All monitoring programs shall also be made publicly available at SSC and on the internet within two weeks of approval by the relevant government authority.			Noted
8.2	All sampling strategies and protocols undertaken as part of any monitoring program shall include a quality assurance/quality control plan and shall be included in the relevant environmental management plan. Only accredited laboratories shall be used for laboratory analysis.		Yes	Quality/control/assurance is conducted for samples sent to ALS or ACIRL for analysis. QC/QA data is provided back to ACP with the analytical results.
	Third Party Monitoring / Auditing			
	Independent Expert Review			
8.3	The Director-General may, in consultation with DECCW, DII - Fisheries, SSC,		Not triggered	

MCoA	Condition	Documentation	Compliance	Comments
	and other relevant agencies, direct the Applicant to, at the Applicant's own costs, provide ongoing funding for Independent Expert Review of documents, plans, and monitoring programs required by this consent. Independent expert(s) may be required provide independent advice to the Director-General, and through the Director-General to other regulatory authorities. The payments shall be paid according to a schedule specified by the Director-General, should Independent Expert Review be required.			
8.4	Independent Expert Review shall be carried out by one or more independent experts in relevant disciplines and may include experts in subsidence, water quality / quantity, ecology, groundwater, air quality, noise, or cultural heritage. The Director-General shall select the relevant discipline(s) and appoint the expert(s) in consultation with relevant Government agencies and the Applicant.		Not triggered	
8.5	The functions of any Independent Expert Review may include, but not be limited to, assessing and evaluating the following documents required under this consent: a) Environmental Management Plans; b) Monitoring programs and compliance reports; c) End of Panel Reports; and, d) Annual Environmental Management Reports.		Not Triggered	
8.6	The results of any review, including any specific recommendations, shall be submitted to the Director-General, DECCW, DII - Fisheries, DII - Minerals, and other relevant agencies to be determined by the Director-General. Reports produced by a review shall be made public.		Not triggered	
8.7	The Director-General may, after considering any submission made as a result of an Independent Expert Review, notify the Applicant of any requirements with regard to any recommendations made in the submission. The Applicant shall comply with those requirements within such time as the Director-General may require.		Not triggered	
	Independent Environmental Auditing			
8.8	One year after commencement of construction and every three years thereafter until five years after completion of mining in the DA area, or as otherwise directed by the Director-General, the Applicant shall conduct an environmental audit of the mining and infrastructure areas of the development in accordance with ISO 14010-Guidelines and General Principles for Environmental Auditing, and ISO 14011-Procedures for Environmental Auditing (or the current versions), and in accordance with any specifications required by the Director-General. Copies of the report shall be submitted by the Applicant to the Director-General, SSC, DECCW, NOW, DII -Minerals,	Independent Audit Report, Pacrim Environmental, August 2007	Yes	Pacrim Environmental conducted the first independent audit in 2004, 1 year after construction commenced and the second audit 3 years following on the 27-28 August 2007, to satisfy this condition. Copies of the Environmental Regulatory Compliance Audit Report were submitted to the relevant authorities. This current independent environmental audit was conducted

MCoA	Condition	Documentation	Compliance	Comments
	RTA, DII - Fisheries, MSB, DII - Agriculture and the CCC within two weeks of the report's completion for comment.			on 9 and 10 August 2010 by Trevor Brown of Trevor Brown & Associates, for the period August 2007 to August 2010.
8.9	The independent environmental audit shall: a) assess compliance with the requirements of this consent, licences, and approvals; b) assess the development against the predictions made in the EIS and the predictions and commitments made in the documents listed in condition 1.2; c) assess the development against predictions made in SMPs required under conditions 3.18. d) review the effectiveness of the environmental management of the mine, including any mitigation works; e) be carried out at the Applicant's expense; and f) be conducted by a duly qualified independent person or team approved by the Director-General in consultation with SSC and other relevant agencies	▪ Independent Audit Report, Pacrim Environmental, August 2007	Yes	The 2007-2010 Independent Environmental Audit was conducted to satisfy the components of MCoA 8.9: (a) Section 3 of this Report (b) Section 6 of this Report (c) Section 7 of this Report (d) Section 6 of this Report
8.10	The Director-General may, after considering any submission made by the relevant government agencies, SSC and the CCC on the report, notify the Applicant of any requirements with regard to any recommendations in the report. The Applicant shall comply with those reasonable requirements within such time as the Director-General may require.			Noted
	Meteorological Station(s)			
8.11	The Applicant shall establish a meteorological station(s) at a relevant location(s) in accordance with the requirements of AS 2922 1987 "Ambient Air Guide for Siting of Sampling Units" or its updated version or as directed by the DECCW. The Meteorological station(s) must be capable of recording wind direction and speed, temperature and sigma theta and be operated in accordance with the requirements of AS 2923-1987 "Ambient Air Guide Horizontal Wind for Air Quality Application", or subsequent relevant standards.		Yes	Two meteorological stations have been established for the ACP operations: ▪ Site1 in Camberwell (used for inversion calculations - recording wind direction and speed, rainfall, temperature and sigma theta. The Site 1 station also has an HVAS, TEOM and dust deposition gauge within the meteorological station yard. ▪ a repeater station on ACOL property near Glennies Creek Road.
8.12	The Applicant must monitor (by sampling and obtaining results by analysis) the parameters specified in Column 1. The applicant must use the sampling method, units of measure, averaging period and sample at the frequency, specified opposite in the other columns: **Parameter Units of measure Averaging Period Frequency Method** Rainfall mm/hr 1-hour Continuous AM-4 Sigma Theta @ 10 m ° 1-hour Continuous AM-2	▪ AEMR 2008-2009, section 1.4 ▪ AEMR 2007-2008, section 1.4 ▪ AEMR 2006-2007, section 1.4		

MCoA	Condition	Documentation	Compliance	Comments
	Temperature @ 10 m K 1-hour Continuous AM-4 Temperature @ 2 m K 1-hour Continuous AM-4 Atmospheric inversion ^{0}C/100m Continuous Total Solar Radiation @ 10 m W/m2 1-hour Continuous AM-4 Wind Direction @ 10 m ° 1-hour Continuous AM-2 Wind Speed @ 10 m m/s 1-hour Continuous AM-2			
9.	**REPORTING**			
	Reports on Operations			
9.1	The Applicant shall report on mine operations in accordance with the mine operations plan (refer to Condition 2.1).			Noted
	Annual Environmental Management Report (AEMR)			
9.2	The Applicant shall, throughout the life of the mine and for five years after completion of mining in the DA area, prepare and submit an Annual Environmental Management Report (AEMR) to the satisfaction of the Director-General and DII -Minerals. The AEMR shall review the performance of the mine against the Environmental Management Strategy and the relevant Mining Operations Plans, the conditions of this consent, and other licences and approvals relating to the mine. To enable ready comparison with the predictions made in the EIS, diagrams and tables, the report shall include, but not be limited to, the following matters: a) an annual compliance audit of the performance of the project against conditions of this consent and statutory approvals; b) assess the development against the predictions made in the EIS and the terms and commitments made in the documents listed in condition 1.2; c) assess the development against predictions made in SMPs required under conditions 3.18; d) Groundwater Management Report prepared by an independent expert to the satisfaction of NOW, addressing: (i) work done under and the level of compliance with, the groundwater management measures defined in the Groundwater Management Plan; and (ii) identification of trends in groundwater monitoring data and comparison with predictions, in documents referred to in condition 1.2 and any previous SMPs, over the life of mining operations. e) a review of the effectiveness of the environmental management of the mine in terms of DECCW, NOW, DII - Minerals, and SSC requirements; f) results of all environmental monitoring required under this consent or other approvals, including interpretations and discussion by a suitably qualified	▪ AEMR 2008-2009, s 1.4 ▪ AEMR 2007-2008, s 1.4 ▪ AEMR 2006-2007, s 1.4	Yes	(a) An internal audit of compliance with the MCoA and other approvals has been conducted by ACOL and reported in the AEMR section 1.4 (b)

MCoA	Condition	Documentation	Compliance	Comments
	person; g) reporting requirements under condition 3.31; h) identify trends in monitoring results over the life of the mine; i) an assessment of any changes to agricultural land suitability resulting from the mining operations, including cumulative changes; j) a listing of any variations obtained to approvals applicable to the DA area during the previous year; k) the outcome of the mine water balance for the year; l) status of rehabilitation and revegetation works; and m) environmental management targets and strategies for the next year, taking into account identified trends in monitoring results.			
9.3	In preparing the AEMR, the Applicant shall: a) consult with the Director-General during preparation of each report; b) comply with any reasonable requirements of the Director-General or other relevant government agency; and c) ensure that the first report is completed and submitted within twelve months of this consent, or at a date determined by the Director-General in consultation with the DII - Minerals and the DECCW.	▪ Letter to D-G re AEMR, 6 Oct 2009 ▪ Letter from D-G re AEMR and Groundwater Management Report, 9 Oct 2008	Yes	Correspondence with the D_G has occurred in relation to the preparation of the AEMR's and in 2008 the request for additional information on groundwater to be included in the 2008-2009 AEMR. A specialist report was commissioned with Aquaterra and the report appended to the AEMR.
9.4	The Applicant shall ensure that copies of each AEMR are submitted at the same time to the Director-General, DII - Minerals, DECCW, NOW, DII - Fisheries, SSC and the CCC, and made available for public information at SSC within fourteen days of submission to these authorities.	▪ Letters to Director-General, DII - Minerals, DECCW, NOW, DII - Fisheries, SSC and the CCC re AEMR, 10 Nov 2009 ▪ Letters to Director-General, DII - Minerals, DECCW, NOW, DII - Fisheries, SSC and the CCC re AEMR,25 Jun 2009	Yes	Copies of the AEMR have been provided to the relevant authorities at the same time as the Director General.
	Recording and Reporting Requirements - *Monitoring Records*			
9.5	The results of any monitoring required to be conducted by the DECCW's general terms of approval, or a licence under the *Protection of the Environment Operations Act 1997*, in relation to the development or in order to comply with any load calculation protocol must be recorded and retained as set out in conditions 9.6 and 9.7.		Not applicable	
9.6	All records required to be kept by the licence must be: _ in a legible form, or in a form that can readily be produced to a legible form; __ kept for at least 4 years after the monitoring or event to which they relate		Yes	All records have been kept in electronic and/or hard copies in the ACP filing system since the commencement of the project.

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	took place; and _ _produced in a legible form to any authorised officer of the DECCW who asks to see them			
9.7	The following records must be kept in respect of any samples required to be collected: ▪ the date(s) on which the sample was taken; ▪ the time(s) at which the sample was collected; ▪ the point at which the sample was taken; and ▪ the name of the person who collected the sample.	▪ Chain-of Custody Water Sampling ▪ Monthly Groundwater Field Sheets ▪ Dust Deposition Gauge Field Sheet ▪ Form 1B-1 HVAS Field Record Sheet	Yes	Chain-of-Custody documents are completed for all water samples and Carbon Based are contracted for the collection and delivery of the samples to the NATA registered laboratories.
9.8	The Applicant must provide an annual return to the DECCW in relation to the development as required by any licence under the *Protection of the Environment Operations Act 1997* in relation to the development. In the return the Applicant must report on the annual monitoring undertaken (where the activity results in pollutant discharges), provide a summary of complaints relating to the development, report on compliance with licence conditions and provide a calculation of licence fees (administrative fees and, where relevant, load based fees) that are payable. If load based fees apply to the activity the applicant will be required to submit load-based fee calculation worksheets with the return. This may form part of the AEMR.	▪ Annual Return – EPL 11879, 24 October 2008 ▪ Annual Return – EPL 11879,	Yes	Annual Returns are provided to the DECCW in accordance with the EPL.
10.	**COMMUNITY CONSULTATION / OBLIGATIONS**			
	Community Consultative Committee			
10,1	10.1 The Applicant shall: a) establish a Community Consultative Committee (CCC) and aim to hold the first meeting prior to submission of the Environmental Management Strategy. Should the CCC not be formed at the preparation of the Environmental Management Strategy or environmental management plans, the Applicant shall consult the CCC, once formed, on the Strategy and any management plans. The Applicant shall provide a report to the Director-General on the issues raised as a result of these consultations and the Director-General may require the Environmental Management Strategy or environmental management plans be revised in light of this report. Selection of representatives shall be to the satisfaction of the Director-General in consultation with the Applicant and SSC. The CCC shall comprise two (2) representatives of the Applicant (including the Environmental Officer), one (1) representative of SSC, and four (4) community representatives. The CCC shall be chaired by SSC. b) representatives from relevant government agencies, the local community,	• CCC Meeting, DECCW 2008 • CCC meeting, 24 Mar 2009 - South East open Cut update • CCC Meeting, 10 Jun, 2009 • CCC Meeting, Sep 2009 - South East Open Cut Presentation		Singleton Council – Godfrey Adamthwaite Chairman Brian Thomas Community Representatives: Steve Ernst, John McInerney, Thelma DeJong, Deidre Olofsson, Company Representatives: Brian Chilcott Open Cut Mining Manager Lisa Richards Environment & Community Relations Manager Scotney Moore Environmental Co-ordinator DII – attend CCC after submission of the AEMR No representation from other government authorities or the Aboriginal community attended the CCC meetings between

MCoA	Condition	Documentation	Compliance	Comments
	the local Aboriginal community, or other individuals may be invited to attend meetings as required by the Chairperson. The CCC may make comments and recommendations about the preparation and implementation of environmental management plans, monitor compliance with conditions of this consent relevant to the operation of the mine during the term of the consent. The Applicant shall ensure that the CCC has reasonable access to the necessary plans for such purposes. The Applicant shall consider the recommendations and comments of the CCC and provide a response to the CCC and Director-General.			2007 and 2010.
10.2	The Applicant shall, at its own expense: (i) nominate two (2) representatives (including the Environmental Officer) to attend all meetings of the CCC; (ii) provide to the CCC regular information on the progress of work and monitoring results; (iii) promptly provide to the CCC such other information as the Chair of the CCC may reasonably request concerning the environmental performance of the development; (iv) provide access for site inspections by the CCC; and (v) provide meeting facilities for the CCC, and take minutes of CCC meetings. These minutes shall be available for public inspection at SSC within 14 days of the meeting, or as agreed by the CCC.			
	Complaint Handling Procedures			
10.3	The Environmental Officer(s) employed by the mine (refer condition 3.1) shall be responsible for: a) establishing and maintaining a system for recording complaints with respect to construction works and mine operations on a dedicated and publicly advertised telephone line, 24 hours per day 7 days per week, entering complaints or comments in an up to date log book, or other suitable data base, and ensuring that an initial response is provided to the complainant within 24 hours; b) for providing a report of complaints received with respect to the construction and operation of the mine, every six months throughout the life of the project to the Director-General, SSC, DECCW, DII - Minerals, and the CCC, or as otherwise agreed by the Director-General. A summary of this report shall be included in the AEMR (conditions 9.2-9.4); c) maintaining access to documents on the ACP internet site, as required by this consent, and publicizing the address to the site to the public and regulatory authorities;			Complaints received from the community are handled by the Environment Co-ordinator and/or Environment and Community Relations Manager.

MCoA	Condition	Documentation	Compliance	Comments
	d) consult with the environmental officer(s) employed by other mines in the vicinity to seek to co-ordinate a response to any complaints received regarding the operations of ACP and other mines.			
10.4	The Applicant must nominate at least two persons (and their telephone numbers) who will be available to the DECCW on a 24 hours basis, and who have authority to provide information and to implement such measures as may be necessary from time to time to address a pollution incident or to prevent pollution from continuing as directed by an authorised officer of the DECCW.			Peter Barton (General Manager) and/or Lisa Richards (Environment and Community Relations Manager) are the nominated persons for the DECCW primary contacts.
11.	**PROPONENTS OBLIGATIONS - Cumulative Impact Management**			
11.1	In the event that the cumulative impact of noise or dust contributed to by the operation of the ACP mine and other nearby mining activities and any future mining/industrial operations, at dwellings, or proposed dwellings on vacant land (as described in Condition 6), in the vicinity of the operation, exceeds the noise or dust criteria contained in condition 6, the Applicant shall negotiate with the other mines and landowner(s) to determine appropriate arrangements to reasonably contribute to the management of the identified cumulative impacts or acquisition of the property to the satisfaction of the Director-General in proportion to their contributions to the impact.		Not triggered	Noted
11.2	If it is identified that total industrial noise levels at any point exceed the criteria set out in Condition 6.34, and that an industrial source from within the mine contributes significantly to this total, the Applicant shall prepare a report to the Director-General outlining the contribution from sources within the mine to the total measured noise level.			Noted
11.3	If agreement on appropriate contributions towards mitigation measures/acquisition cannot be reached from negotiations undertaken in accordance with condition 11.1, then the matter shall be referred to the Director-General in consultation with SSC by either the Applicant or landowner. If the matter is not resolved within 21 days of the referral, the matter will be referred to an Independent Dispute Resolution Process as determined by the Director-General, and resolved as agreed by the Director-General. The Independent Dispute Resolution Process shall determine the responsibilities of each of the mining companies in accordance with condition 11.1 above and actions to be undertaken. The DECCWision of the Independent Dispute Resolution Process shall be final and binding on all parties, as agreed by the Director-General.			Noted
11.4	The applicant shall be responsible for the costs of all impact management measures (including measures to minimize, mitigate, offset or remediate impacts of the development which are not recoverable by a third party through the Mine Subsidence Compensation Act 1961, or the Mining Act 1992)		Not triggered	Noted

MCoA	Condition	Documentation	Compliance	Comments
	including but not limited to remediation of natural features, rehabilitation of ecological systems, monitoring of the effectiveness of the works and provision of supplementary water flows, as determined by the D-G.			
	Area of Affectation – Land Acquisition	**Note***:* In Conditions 11.5-11.11 "land" means the whole of a lot in a current plan registered at the Land Titles Office as at the date of this consent.		
11.5	The Applicant shall negotiate and purchase property No. 115 as identified within the EIS (Volume 3 Figure 3.13), within six (6) months of a written request from the affected land owner. The owner of any dwelling, or vacant land where a dwelling is proposed (as described in Condition 6), located in areas that exceed noise and/or air quality criteria established in accordance with conditions 6.17, 6.18, and 6.50 of this consent, and at any time after the granting of development consent, may request the Applicant in writing to purchase the whole of that property.			No further purchases under these conditions following 2003 purchase of No.115 property.
11.6	In respect of a request to purchase land arising under condition 11.5, the Applicant shall pay the owner the acquisition price which shall take into account and provide payment for: a) a sum not less than the current market value of the owner's interest in the land at the date of this consent, as if the land was unaffected by the ACP the subject of this DA, having regard to: (i) the existing use and permissible use of the land in accordance with the applicable planning instruments at the date of the written request; and (ii) the presence of improvements on the land and/or any Council approved building or structure which although substantially commenced at the date of request is completed subsequent to that date. b) the owner's reasonable compensation for disturbance allowance and relocation costs within the Singleton or Muswellbrook Local Government Area, or within such other location as may be determined by the Director-General in exceptional circumstances; and c) the owner's reasonable costs for obtaining legal advice and expert witnesses for the purposes of determining the acquisition price of the land and the terms upon which it is to be acquired. Notwithstanding any other condition of this consent, the Applicant may, upon request of the landowner, acquire any property affected by the project during the course of this consent on terms agreed to between the Applicant and the landowner.		Not triggered	
11.7	In the event that the Applicant and any owner referred to in this condition cannot agree within the time limit upon the acquisition price of the land and/or the terms upon which it is to be acquired, then: a) either party may refer the matter to the Director-General, who shall request		Not triggered	

MCoA	Condition	Documentation	Compliance	Comments
	the President of the Australian Institute of Valuers and Land Economists to appoint a qualified independent valuer or Fellow of the Institute, who shall determine, after consideration of any submissions from the owners, a fair and reasonable acquisition price for the land as described in condition 11.6 and/or terms upon which it is to be acquired; b) in the event of a dispute regarding outstanding matters that cannot be resolved, the independent valuer shall refer the matter to the Director-General, recommending the appointment of a qualified panel. The Director-General, if satisfied that there is need for a qualified panel, shall arrange for the constitution of the panel. The panel shall consist of: (i) the appointed independent valuer, (ii) the Director-General or nominee, and (iii) the President of the Law Society of NSW or nominee. The qualified panel shall determine a fair and reasonable acquisition price as described in condition 11.6 above and/or the terms upon which the property is to be acquired.			
11.8	The Applicant shall bear the costs of any valuation or survey assessment requested by the independent valuer, panel, or the Director-General and the costs of determination referred to in conditions 11.6 and 11.7.		Not triggered	
11.9	Upon receipt of a determination pursuant to conditions 11.6 and 11.7, the Applicant shall, within 14 days, offer in writing to acquire the relevant land at a price not less than the determination. Should the Applicant's offer to acquire not be accepted by the owner within six (6) months of the date of such offer, the Applicant's obligations to purchase the property shall cease, unless otherwise agreed by the Director-General.		Not triggered	
11.10	In the event that the Applicant and the land owner agree that only part of the land is to be transferred to the Applicant, the Applicant shall pay all reasonable costs associated with obtaining Council approval to any plan of subdivision and registration of the plan at the Office of the Registrar-General.		Not triggered	
11.11	The provisions of conditions 11.5-11.10 do not apply to a land owner who is the holder of an authority under the Mining Act, 1992.			
	Joint Acquisition Management Plan			
11.12	The Applicant shall, prior to commencement of mining operations of the ACP or as agreed in writing by the Director General, prepare a Joint Acquisition Management Plan as far as practical, with the agreement of surrounding existing and approved mines, to the satisfaction of the Director-General. The plan shall: a) provide details of a joint approach to be adopted by the Applicant, and			An attempt was made to develop a Joint Management Plan with surrounding mines but the other mining companies were reported not to have wished to participate in consultation on the matter as their consent approvals did not include a condition with these requirements.

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	surrounding existing and approved mines in regard to meeting the acquisition procedure requirements outlined in conditions 11.5-11.11 of this consent relating to the cumulative impacts of the ACP mine, and the surrounding existing and approved mines, should acquisition be required.			
	Contributions to Council			
11.13	Prior to the commencement of construction, the Applicant shall enter into a legally binding agreement with SSC for financial and/or in kind contribution to SSC for the purpose of community enhancement to address the social, amenity and associated community infrastructure requirements arising from the operation of the development. The financial and/or in kind contribution shall be generally in accordance with the SSC Section 94 Contribution Plan No 1 (1993) and as agreed between the applicant and SSC. A copy of the agreement is to be forwarded to the Director-General.	• Section 94 Contribution to SSC - $117,008 submitted to SSC, 18 Dec 2006	Yes	The s.94 contributions were made at a rate of $1136.00 per person as advised by the SSC. The total contribution of $117,008.00 was provided to SSC on 18 December 2006.
	Responsibility for the Costs of Remediation			
11.14	The Applicant shall be responsible for the cost of all remedial works required including reasonable costs of Government agencies, arising from impacts of the mine not recoverable through the *Mine Subsidence Compensation Act 1961* including, but not limited to, remediation of natural features, rehabilitation of ecological systems, and the provision of supplementary water flows, as determined by the Director-General.		Not triggered	
12.	**FURTHER APPROVALS AND AGREEMENTS**			
	Statutory Requirements			
12.1	The Applicant shall ensure that all statutory requirements including but not restricted to those set down by the Environmental Planning and Assessment Act 1979, Local Government Act 1993, Protection of the Environment Administration Act 1991, Protection of the Environment Operations Act 1997, Rivers and Foreshores Improvement Act 1948, Water Act 1912, National Parks and Wildlife Act 1974, and all other relevant legislation, Regulations, Australian Standards, Codes, Guidelines and Notices, Conditions, Directions, Notices and Requirements issued pursuant to statutory powers by the SSC, DECCW, DII - Minerals, NOW, RTA, DII - Agriculture, DII - Fisheries and other Government agencies, are fully met.		Yes	Part 3A Water Extraction S90 Permit EPL
	Structural Adequacy			
12.2	Detailed plans and specifications relating to the design and construction of each structural element associated with the proposed development are to be submitted to the Principal Certifying Authority prior to the construction of each particular building or structure. Such plans and specifications must be accompanied by certification provided by a practicing professional structural engineer or an accredited certifier certifying the structural adequacy of the	• Construction Certificate, CHPP, Roberts and Schafer, 23 Sep 2003 • Construction Certificate, Module 2 CHPP, 29 Nov	Ongoing approvals as buildings are proposed and/or	Construction Certificates – all construction design plans were submitted to SSC for the various buildings on site between2003-2006. Fire inspections and certification by a consultant Fire Engineer and Fire Safety Compliance Reports submitted to the SSC.

MCoA	Condition	Documentation	Compliance	Comments
	proposed building design and compliance with the Building Code of Australia.	2006	constructed.	Minor changes required for disabled toilets and entry to the administration building were undertaken to satisfy the SSC and BCA requirements.
	Verification of Construction			
12.3	All new buildings and structures, and alterations or additions to buildings and structures, shall be carried out in accordance with the relevant requirements of the BCA.			Noted
12.4	The Applicant shall provide to the Director-General and Council with copies of all Construction Certificates issued for buildings or structures and copies of all Occupation Certificates issued for the development.		Ongoing	Construction and Occupation Certificates for buildings and structures will be submitted to the D-G when issued by SSC.
12.5	The applicant shall ensure that arrangements are made for the Principal Certifying Authority to carry out inspections of the building at the following stages of construction, as applicable: a) The pier holes before they are filled with concrete. b) The footing trenches with reinforcing steel in position before concrete is placed. c) The reinforcing steel when in position prior to placing concrete for slab/s, swimming pools or walls. d) The framework including roof members, wall ties, vermin wire, flashings and cavities where applicable, prior to fixing of any internal sheets. e) The WET AREAS damp-proofing and flashing before lining or covering. f) The building or structure when completed, prior to occupation/use.	• Pre-pour Check Sheet, R Troup, Roberts and Schafer • Application for Development and Construction Certificate, Demountable Office, 30 Jun 2008	Ongoing	Buildings have been inspected and reports submitted to SSC. No major construction buildings have been completed on the site between 2007 2010 requiring Construction Certficates.
12.6	The applicant shall ensure that arrangements are made for Council to carry out INSPECTIONS at the following stages as applicable: a) INTERNAL DRAINAGE LINES before the floor is laid, or concrete placed. b) EXTERNAL DRAINAGE LINES before backfilling of the trenches. Information on booking inspections with Council may be obtained either by telephone on (02) 65 787 290 or in person at the CUSTOMER SERVICE Counter. Inspection requests are subject to the following:- (i) Applicants are required to nominate the relevant development application number and location prior to the inspection request being granted. (ii) Clerical staff only will receive all requests for inspections. (iii) Where building work is not prepared, ready for inspection, applicants will be required to re-book inspections through the Customer Service Centre for the next available day and a re-inspection fee may be charged. (iv) Requests for inspections must be received prior to 9.30am on the working		Ongoing	Inspections of construction works have been conducted when new structures etc are proposed by ACOL.

MCoA	Condition	Documentation	Compliance	Comments
	day the inspection is required. (v) Inspections within the township of Singleton will be conducted as AM inspections (10.00am to 1.00pm) and PM inspections (2.00pm to 4.00pm). Inspections for all other areas will be carried out at some stage during the day nominated.			
12.7	All demolition work shall be carried out in accordance with *AS2601-1991 The Demolition of Structures.*			Noted
	Approvals within a Mine Subsidence District			
12.8	The Applicant shall seek the approval of the Mine Subsidence Board for the construction of any improvements, including those related to the mine buildings and associated works, any relocation or diversion of infrastructure or existing improvements, prior to undertaking the works. The Applicant shall submit a copy of the final plans to MSB prior to commencement of construction.			Noted

APPENDIX B ENVIRONMENT PROTECTION LICENCE

EPL 11879 - section 58(5) Notices of Variation to the EPL, dated 3 November 2003, 28 February 2005, 17 November 2005, 20 November 2006, 27 December 2007, 28 April 2009 and 17 November 2009, have been granted for the project.

EPL No.	Condition	Verification Documentation	Compliant	Comments
1.	**Administrative conditions**			
A1	**What the licence authorises and regulates**			
A1.1	This licence authorises the carrying out of the scheduled development work listed below at the premises listed in A2: Coal mine and coal washery			Noted
A1.2	This licence authorises the carrying out of the scheduled activities listed below at the premises specified in A2. The activities are listed according to their scheduled activity classification, fee based activity classification and the scale of the operation. Unless otherwise further restricted by a condition of this licence, the scale at which the activity is carried out must not exceed the maximum scale specified in this condition. **Scheduled Activity** Mining for coal Coal works **Fee Based Activity Scale** Coal works > 5000000 - T loaded Mining for coal > 5000000 - T produced			Noted
A.13	The licensee must not carry on any scheduled activities until the scheduled development works are completed, except as elsewhere provided in this licence.			Noted
A2	**Premises to which this licence applies**			
A2.1	The licence applies to the following premises: Ashton Coal Mine Glennies Creek Road and New England Highway CAMBERWELL NSW 2330 Mining Lease (ML) 1533			Noted
A3	**Other activities**			Not applicable
A4	**Information supplied to the EPA**			
A4.1	Works and activities must be carried out in accordance with the proposal contained in the licence application, except as expressly provided by a condition of this licence. In this condition the reference to "the licence application" includes a reference to: (a) the applications for any licenses (including former pollution control approvals) which this licence replaces under the *Protection of the Environment Operations (Savings and Transitional) Regulation 1998*; and (b) the licence information form provided by the licensee to the EPA to assist the EPA in connection with the issuing of this licence.			Noted

<table>
<tr><th>EPL No.</th><th>Condition</th><th>Verification Documentation</th><th>Compliant</th><th>Comments</th></tr>
<tr><td>P1</td><td>Location of monitoring/discharge points and areas</td><td></td><td></td><td></td></tr>
<tr><td>P1.1</td><td>The following points referred to in the table below are identified in this licence for the purposes of monitoring and/or the setting of limits for the emission of pollutants to the air from the point.</td><td></td><td></td><td>Noted</td></tr>
<tr><td></td><td>Air<table><tr><th>EPA no.</th><th>Type of Monitoring</th><th>Description of Location</th></tr><tr><td>1</td><td>Dust monitoring</td><td>Locations shown on Figure 1 titled "Air Quality Monitoring Locations for EPL" dated 19/10/06</td></tr></table></td><td>• Air Quality Management Plan, Version C, 19 Aug 2006</td><td>Yes</td><td>The dust monitoring sites for the ACP have been established in accordance with the Air Quality Management Plan and Figure 1 titled Air Quality Monitoring locations.</td></tr>
<tr><td>P1.2</td><td>The following points referred to in the table are identified in this licence for the purposes of the monitoring and/or the setting of limits for discharges of pollutants to water from the point.</td><td>• Site Water Management Plan, Version C, 19 Aug 2006</td><td></td><td></td></tr>
<tr><td>P1.3</td><td>The following utilisation areas referred to in the table below are identified in this licence for the purposes of the monitoring and/or the setting of limits for any application of solids or liquids to the utilisation area.</td><td></td><td></td><td>Noted</td></tr>
<tr><td></td><td>Water and land<table><tr><th>EPA no.</th><th>Type of monitoring</th><th>Description of location</th></tr><tr><td>2</td><td rowspan="7">Ambient surface water monitoring</td><td>In Bowmans Creek upstream of the mine shown as point SM3 in Figure 4 dated 8/8/03 titled "EPA Surface Water Monitoring Sites".</td></tr><tr><td>3</td><td>In Bowmans Creek near the New England Highway shown as point SM4 in Figure 4 dated 8/8/03 titled "EPA Surface Water Monitoring Sites"</td></tr><tr><td>4</td><td>In Bowmans Creek near the proposed longwall panels shown as point SM5 in Figure 4 dated 8/8/03 titled "EPA Surface Water Monitoring Sites"</td></tr><tr><td>5</td><td>In Bowmans Creek at the Hunter River confluence shown as point SM6 in Figure 4 dated 8/8/03 titled "EPA Surface Water Monitoring Sites"</td></tr><tr><td>6</td><td>In the Hunter River upstream of Bowmans Creek shown as point SM9 on Figure 4 dated 8/8/03 titled "EPA Surface Water Monitoring Sites".</td></tr><tr><td>7</td><td>In the Hunter River downstream of Bowmans Creek confluence shown as point SM10 on Figure 4 dated 8/8/03 titled "EPA Surface Water Monitoring Sites".</td></tr><tr><td>8</td><td>Groundwater</td><td>Locations shown on Figure 1A titled</td></tr></table></td><td>• Site Water Management Plan, Version C, 19 Aug 2006</td><td>Yes</td><td>Noted. The monitoring locations are identified on Figure 1 in the Plan and the monitoring has been conducted in accordance with the Plan during the 2007-2010 period.</td></tr>
</table>

EPL No.	Condition	Verification Documentation	Compliant	Comments
	monitoring — "Groundwater Monitoring Piezometer Locations for EPL" dated 26/10/06			
3.	**Limit conditions**			
L1	**Pollution of waters**			
L1.1	Except as may be expressly provided in any other condition of this licence, the licensee must comply with section 120 of the Protection of the Environment Operations Act 1997.			Noted
L2	**Load limits**	Not applicable		
L3	**Concentration limits**	Not applicable		
L4	**Volume and mass limits**	Not applicable		
L5	**Waste**	Not applicable		
L6	**Noise Limits**			
L6.1	Noise from the premises must not exceed the limits specified in the table below: **Location** / **Day** / **Evening** / **Night** (LAeq(15 minute); LA1(1 minute)) Any residence not owned by the licensee or not subject to an Agreement between the licensee and the residence owner as to an alternate noise limit. — 38 / 38 / 38 / 36			Noted
L6.2	For the purpose of Condition 6.1: • Day is defined as the period from 7am to 6pm Monday to Saturday and 8am to 6pm Sundays and Public Holidays, • Evening is defined as the period from 6pm to 10pm • Night is defined as the period from 10pm to 7am Monday to Saturday and 10pm to 8am Sundays and Public Holidays.			Noted.
L6.3	Noise from the premises must be measured at the most affected point on or within the residential boundary or at the most affected point within 30m of the dwelling where the dwelling is more than 30m from boundary to determine compliance with LAeq(15 minute) noise limits in condition L6.1. Where it can be demonstrated that direct measurement of noise from the premises is impractical, the EPA may accept alternative means of determining compliance. See Chapter 11 of the NSW Industrial Noise Policy. The modification factors presented in Section 4 of the NSW Industrial Noise Policy shall also be applied to the measured noise level where applicable.	• Noise Management Plan • Quarterly Noise Monitoring Results, Spectrum Acoustics, 2008 and 2009 • NSW Industrial Noise Policy, EPA	Yes	Noise monitoring is conducted in accordance with the NSW Industrial Noise Policy and requirements of this condition.
L6.4	Noise from the premises is to be measured or computed at 1m from the dwelling facade to determine compliance with condition 6.1 (LA1 (1 minute) noise limit).			

EPL No.	Condition	Verification Documentation	Compliant	Comments
L6.5	The noise emission limits identified in condition L6.1 apply under the following meteorological conditions: (a) wind speeds up to 3m/s at 10m above ground level; and (b) temperature inversion conditions up to 3°C/100m.	• Quarterly Noise Monitoring Results, Spectrum Acoustics, 2008 and 2009	Yes	Noted
L6.6	Open cut mining activities must only be carried out between the hours of 0700 and 2200 Monday to Saturday, and 0800 and 2200 on Sundays and Public Holidays.		Yes	ACP open cut mine operations are conducted from 7am to 10pm Monday to Saturday and 8am to 10pm Sundays and Public Holidays.
L7	**Blasting limits**			
L7.1	Blasting in or on the premises must only be carried out between 0900 hours and 1700 hours, Monday to Saturday. Blasting in or on the premises must not take place on Sundays or Public Holidays without the prior approval of the EPA.	▪ Blast and Vibration Management Plan, Version C 19 Aug 2006	Yes	ACP blasting is limited to between 9am and 5pm on Monday to Saturday. No blasting occurs on Sundays or public holidays.
L7.2	The overpressure level from blasting operations carried out in or on the premises must not: (a) exceed 115 dB(L) for more than 5% of the total number of blasts carried out on the premises within the 12 months annual reporting period; and (b) exceed 120 dB(L) at any time at any residence or noise sensitive location (such as a school or hospital) that is not owned by the licensee or subject of a private agreement between the owner of the residence or noise sensitive location and the licensee as to an alternative overpressure level.	▪ Blast and Vibration Management Plan, Version C 19 Aug 2006	**NO**	The blast overpressure criteria of <115dBL was exceeded more than 5% of the time at both the St Clements Church and Camberwell village monitoring locations during the 2007-2009 period and 120dBL criteria was also exceeded at both monitoring locations. During September 2009 to August 2010 the 115dBL criteria was compliant, with two occasion when a level >120dBL was exceeded at Camberwell.
L7.3	The ground vibration peak particle velocity from blasting operations carried out in or on the premises must not: (a) exceed 2mm/second for more than 5% of the total number of blasts carried out on the premises within the 12 months annual reporting period; and (b) exceed 10mm/second at any time at any residence or noise sensitive location (such as a school or hospital) that is not owned by the licensee or subject of a private agreement between the owner of the residence or noise sensitive location and the licensee as to an alternative ground vibration level.	▪ Blast and Vibration Management Plan, Version C 19 Aug 2006	Yes	During the 2007-2010 reporting period vibration results were all within the 2mm/s criteria. The 10mm/s criteria has not been exceeded
4.	**Operating conditions**			
O1	**Activities must be carried out in a competent manner**			
O1.12	Licensed activities must be carried out in a competent manner. This includes: (a) the processing, handling, movement and storage of materials and substances used to carry out the activity; and (b) the treatment, storage, processing, reprocessing, transport and disposal of waste generated by the activity.			Noted
O2	**Maintenance of plant and equipment**			
O2.1	All plant and equipment installed at the premises or used in connection			

EPL No.	Condition	Verification Documentation	Compliant	Comments
	with the licensed activity: (a) must be maintained in a proper and efficient condition; and (b) must be operated in a proper and efficient manner.			
O3	**Dust Control**			
O3.1	All operations and activities occurring at the premises must be carried out in a manner that will minimise the emission of dust from the premises.	• Air Quality Management Plan, Version C, 19 Aug 2006	Yes	Noted
O3.2	All trafficable areas, coal storage areas and vehicle maneuvering areas in or on the premises must be maintained, at all times, in a condition that will minimise the generation, or emission from the premises, of wind-blown or traffic generated dust.	• Air Quality Management Plan, Version C, 19 Aug 2006	Yes	Water trucks are used on site for the management of the generation of dust from the trafficable areas.
O4	**Stormwater Management**			
O4.1	A Stormwater Management Scheme must be prepared for the development and must be implemented. Implementation of the Scheme must mitigate the impacts of stormwater runoff from and within the premises following the completion of construction activities. The Scheme should be consistent with the Stormwater Management Plan for the catchment. If a Stormwater Management Plan has not yet been prepared the Scheme should be consistent with the guidance contained in *Managing Urban Stormwater: Council Handbook* (available from the EPA).	• Site Water Management Plan. section 7, Version C, 31 May 2006	Yes	
O4.2	Banks, channels and similar works must be constructed and maintained to divert stormwater away from disturbed or contaminated land surfaces such as mine workings, haul roads, overburden disposal areas, coal handling areas and wastewater treatment facilities. All diversion banks, channels and points of discharge must be constructed or stabilised so as to minimise erosion and scouring.	• Site Water Management Plan, section 7, Version C, 31 May 2006	Yes	The disturbed areas of the mine site have constructed banks to divert all surface runoff to settlement ponds on site for reuse in dust suppression or in the CHPP. No water is discharged from the ACP site.
O5	**Wastewater management**			
O5.1	A water management system must be constructed and utilised to manage the collection, storage, treatment, use and disposal of minewater, sewage effluent and other wastewater.	• Site Water Management Plan, section 7, Version C, 31 May 2006	Yes	The water management system for the mine site ensures that all surface runoff, mine water, treated sewage and other wastewater is collected, contained and reused on site for reuse in dust suppression or in the CHPP. No water is discharged from the ACP site.
	Bund(s) must be installed around areas in which fuels, oils and chemicals are stored. Bunds must: • have walls and floors constructed of impervious materials; • be of sufficient capacity to contain 110% of the volume of the tank (or 110% volume of the largest tank where a group of tanks are installed); • have walls not be less than 250 millimetres high; • have floors graded to a collection sump; and • not have a drain valve incorporated in the bund structure.	• Site Water Management Plan, section 7, Version C, 31 May 2006	Yes	All fuel and chemical areas are bunded with sufficient capacity to contain any spillage from the largest tank/container within the bund.
O5.3	A wastewater treatment facility with oil separator and sediment trap must be installed to treat drainage from the hardstand, vehicle servicing and general workshop areas.	• Site Water Management Plan, section 7, Version C, 31 May 2006	Yes	The workshop areas, hardstand and truck washdown areas drain to sumps that are fitted with oil-water separators. The collected oil is placed in a waste oil

<table>
<tr><th>EPL No.</th><th>Condition</th><th>Verification Documentation</th><th>Compliant</th><th>Comments</th></tr>
<tr><td></td><td></td><td></td><td></td><td>tank within abund. The waste oil is collected by a contractor for recycling.</td></tr>
<tr><td>O5.4</td><td>An area must be provided for the use of effluent from the sewage treatment plant. The design of the system must be in accordance with the EPA's draft guideline "Utilisation of Treated Effluent by Irrigation".</td><td></td><td>Yes</td><td>The treated sewage effluent is used on landscaped areas for watering.</td></tr>
<tr><td>O5.5</td><td>Wastewater utilisation areas must effectively utilise the wastewater applied to those areas. This includes the use for pasture or crop production, as well as ensuring the soil is able to absorb the nutrients, salts, hydraulic load and organic materials in the solids or liquids. Monitoring of land and receiving waters to determine the impact of wastewater application may be required by the EPA.</td><td></td><td>Yes</td><td>The wastewater volume is not large and the irrigation system to the landscaped areas ensures there is no loss of water from the site.</td></tr>
<tr><td>O6</td><td>Incineration or open burning</td><td></td><td></td><td></td></tr>
<tr><td>O6.1</td><td>There must be no incineration or open burning of any material(s) on the premises, except as specifically authorised by the EPA.</td><td></td><td>Yes</td><td>No open burning conducted by ACP.</td></tr>
<tr><td>5.</td><td>Monitoring and recording conditions</td><td></td><td></td><td></td></tr>
<tr><td>M1</td><td>Monitoring records</td><td></td><td></td><td></td></tr>
<tr><td>M1.1</td><td>The results of any monitoring required to be conducted by this licence or a load calculation protocol must be recorded and retained as set out in this condition.</td><td></td><td></td><td>Noted</td></tr>
<tr><td>M1.2</td><td>All records required to be kept by this licence must be:
(a) in a legible form, or in a form that can readily be reduced to a legible form;
(b) kept for at least 4 years after the monitoring or event to which they relate took place; and
(c) produced in a legible form to any authorised officer of the EPA who asks to see them.</td><td></td><td>Yes</td><td>All monitoring records are retained by the Environmental Department in the administration office at the mine site and would be available on request by any authorized officer.</td></tr>
<tr><td>M1.3</td><td>The following records must be kept in respect of any samples required to be collected for the purposes of this licence:
(a) the date(s) on which the sample was taken;
(b) the time(s) at which the sample was collected;
(c) the point at which the sample was taken; and
(d) the name of the person who collected the sample.</td><td></td><td>Yes</td><td>All samples collected are entered onto a Chain-of-Custody form for submission to the laboratory and have the required information to satisfy this condition.</td></tr>
<tr><td>M2</td><td>Requirement to monitor concentration of pollutants discharged</td><td></td><td></td><td></td></tr>
<tr><td>M2.1</td><td>For each monitoring/discharge point or utilisation area specified below (by a point number), the licensee must monitor (by sampling and obtaining results by analysis) the concentration of each pollutant specified in Column 1. The licensee must use the sampling method, units of measure, and sample at the frequency, specified opposite in the other columns:</td><td></td><td></td><td>Noted</td></tr>
<tr><td></td><td>
<table>
<tr><th colspan="4">POINT 1</th></tr>
<tr><th>Pollutant</th><th>Units of measure</th><th>Frequency</th><th>Sampling Method</th></tr>
<tr><td>PM10</td><td>Micrograms/</td><td>Daily</td><td>AS 3580.9.8 - 2001</td></tr>
</table>
</td><td>• Air Quality Management Plan, Version C, 19 Aug 2006</td><td>Yes</td><td></td></tr>
</table>

<table>
<tr><th>EPL No.</th><th>Condition</th><th>Verification Documentation</th><th>Compliant</th><th>Comments</th></tr>
<tr><td></td><td>
<table>
<tr><td></td><td>cubic metre</td><td></td><td></td></tr>
<tr><td>Particulates - Deposited Matter</td><td>Grams/square metre/month</td><td>Once a mth (min. of 4 Weeks)</td><td>AM-19</td></tr>
<tr><td>Total suspended particles</td><td>Micrograms/ cubic metre</td><td>Every 6 days 24 hr composite sample</td><td></td></tr>
</table>
</td><td></td><td></td><td></td></tr>
<tr><td></td><td>
<table>
<tr><td colspan="4">POINT 2,3,4,5,6,7</td></tr>
<tr><td>Pollutant</td><td>Units of measure</td><td>Frequency</td><td>Sampling Method</td></tr>
<tr><td>Conductivity</td><td>microSiemens/ cm</td><td rowspan="2">Once a mth (min. of 4 weeks)</td><td>Probe to measure the range 0 to 10,000 uS/cm</td></tr>
<tr><td>Total suspended solids</td><td>milligrams per litre</td><td>Grab sample</td></tr>
<tr><td>pH</td><td>pH</td><td>Once a mth (min. of 4 wks)</td><td>Grab sample</td></tr>
</table>
</td><td>• Site Water Management Plan, Figure 2, Version C, 19 Aug 2006,</td><td>Yes</td><td>Water monitoring has been conducted in accordance with EPL condition M2.1.</td></tr>
<tr><td></td><td>
<table>
<tr><td colspan="4">POINT 8</td></tr>
<tr><td>Pollutant</td><td>Units of measure</td><td>Frequency</td><td>Sampling Method</td></tr>
<tr><td>Conductivity</td><td>microSiemen/ centimetre</td><td>Every 6 months</td><td>Grab sample</td></tr>
<tr><td>Standing Water Level</td><td>metres</td><td>Every 6 months</td><td>In line instrumentation</td></tr>
</table>
</td><td>• Site Water Management Plan, Figure 2, Version C, 19 Aug 2006</td><td>Yes</td><td>Water monitoring has been conducted in accordance with EPL condition M2.1.</td></tr>
<tr><td>M3</td><td>Testing methods - concentration limits</td><td></td><td></td><td></td></tr>
<tr><td>M3.1</td><td>Monitoring for the concentration of a pollutant emitted to the air required to be conducted by this licence must be done in accordance with:
(a) any methodology which is required by or under the Act to be used for the testing of the concentration of the pollutant; or
(b) if no such requirement is imposed by or under the Act, any method which a condition of this licence requires to be used for that testing; or
(c) if no such requirement is imposed by or under the Act or by a condition of this licence, any methodology approved in writing by the EPA for the purposes of that testing prior to the testing taking place.</td><td>• ALS Laboratory Group, Environmental Division Quality Control Reports</td><td>Yes</td><td>HVAS and TEOMs are calibrated annually.
Water monitoring and analysis is conducted in accordance with the requirements of the EPL condition and analysed by NATA registered laboratories (ALS and ACIRL) with QA/QC data included in the reporting to ACP.</td></tr>
<tr><td>M3.2</td><td>Subject to any express provision to the contrary in this licence, monitoring for the concentration of a pollutant discharged to waters or applied to a</td><td></td><td>Not triggered</td><td></td></tr>
</table>

EPL No.	Condition	Verification Documentation	Compliant	Comments
	utilisation area must be done in accordance with the Approved Methods Publication unless another method has been approved by the EPA in writing before any tests are conducted.			
M4	**Recording of pollution complaints**			
M4.1	The licensee must keep a legible record of all complaints made to the licensee or any employee or agent of the licensee in relation to pollution arising from any activity to which this licence applies.		Yes	All complaints received by ACP are recorded and the records retained by the Environment Officer.
M4.2	The record must include details of the following: (a) the date and time of the complaint; (b) the method by which the complaint was made; (c) any personal details of the complainant which were provided by the complainant or, if no such details were provided, a note to that effect; (d) the nature of the complaint; (e) the action taken by the licensee in relation to the complaint, including any follow-up contact with the complainant; and (f) if no action was taken by the licensee, the reasons why no action was taken.	• Ashton Coal Complaint/Enquiry Form • Complaints Summary 2010 • AEMR 2008-2009 Section 4.1	Yes	The Complaints Register contains all information regarding the complaint, complainant, response and action taken by ACP.
M4,3	The record of a complaint must be kept for at least 4 years after the complaint was made.		Yes	All records have been retained in the environmental department filing system. Documents older than 5 years may be archived in the future.
M4.4	The record must be produced to any authorised officer of the EPA who asks to see them.			Noted
M5	**Telephone complaints line**			
M5.1	The licensee must operate during its operating hours a telephone complaints line for the purpose of receiving any complaints from members of the public in relation to activities conducted at the premises or by the vehicle or mobile plant, unless otherwise specified in the licence.	www.ashtoncoal.com.au	Yes	Ashton Coal established a telephone Environmental Hotline for complaints line for the receipt of any complaints from members of the public in relation to activities conducted at the premises. The Environmental Hotline is advertised on their website – http://www.ashtoncoal.com.au/ContactUs.aspx **Environmental Hotline:** 1800 657 639
M5.2	The licensee must notify the public of the complaints line telephone number and the fact that it is a complaints line so that the impacted community knows how to make a complaint.		Yes	
M5.3	Conditions M5.1 and M5.2 do not apply until 3 months after: (a) the date of the issue of this licence; or (b) if this licence is a replacement licence within the meaning of *the Protection of the Environment Operations (Savings and Transitional) Regulation 1998*, the date on which a copy of the licence was served on the licensee under clause 10 of that regulation.			Noted
M6	**Requirement to monitor volume or mass**	Not applicable		
M7	**Requirement to monitor weather**			
M7.1	The licensee must collect and analyse meteorological data at an on-site monitoring station for the parameters, at a frequency, averaging period and using a method as specified in the table below.		Yes	Two meteorological stations, one adjacent to the mine lease and one at Site 1 in Camberwell.

<table>
<tr><th>EPL No.</th><th>Condition</th><th>Verification Documentation</th><th>Compliant</th><th>Comments</th></tr>
<tr><td></td><td>Meteorological Monitoring
<table>
<tr><th>Parameter</th><th>Units of measure</th><th>Frequency</th><th>Averaging Period</th><th>Sampling Method</th></tr>
<tr><td>Atmospheric inversion</td><td>0C/100m</td><td>Continuous</td><td></td><td>instrumental</td></tr>
<tr><td>Temperature@ 1.2m C</td><td>0C</td><td>Continuous</td><td>1 hour</td><td>AM-4</td></tr>
<tr><td>Rainfall</td><td>mm</td><td></td><td>24 hours</td><td>Std rain gauge</td></tr>
<tr><td>Wind direction @ 10m</td><td></td><td>Continuous</td><td>10 mins</td><td>AM2 & AM-4</td></tr>
<tr><td>Wind speed @ 10m</td><td>m/sec</td><td>Continuous</td><td>10 mins</td><td>AM2 & AM-4</td></tr>
</table></td><td></td><td></td><td></td></tr>
<tr><td>M8</td><td>Requirement to monitor blasts</td><td></td><td></td><td></td></tr>
<tr><td>M8.1</td><td>In order to determine compliance with condition L7:
(a) Airblast overpressure and ground vibration levels must be measured at, or near, the nearest residence, or noise sensitive location, that is likely to be most affected by the blast and that is not owned by the licensee, or is the subject of a private agreement between the owner of the residence, or noise sensitive location, and the licensee, as to an alternative overpressure or ground vibration level for all blasts carried out in, or on, the premises; and
(b) Instrumentation used to measure the airblast overpressure and ground vibration levels must meet the requirements of Australian Standard 2187.2 of 1993.</td><td>▪ Blast and Vibration Management Plan, Version C 19 Aug 2006</td><td>Yes</td><td></td></tr>
<tr><td>M9</td><td>Requirement to monitor noise</td><td></td><td></td><td></td></tr>
<tr><td>M9.1</td><td>A noise compliance assessment report must be submitted to EPA on an annual basis with the Annual Return as set out in Condition R1. The report must be prepared by an accredited acoustical consultant and determine compliance with the noise limits in Condition L6.1.</td><td>• Quarterly Noise Monitoring Results, Spectrum Acoustics, 2009</td><td>Yes</td><td></td></tr>
<tr><td>6.</td><td>Reporting conditions</td><td></td><td></td><td></td></tr>
<tr><td>R1</td><td>Annual return documents</td><td></td><td></td><td></td></tr>
<tr><td></td><td>What documents must an Annual Return contain?</td><td></td><td></td><td></td></tr>
<tr><td>R1.1</td><td>The licensee must complete and supply to the EPA an Annual Return in the approved form comprising:
(a) a Statement of Compliance; and
(b) a Monitoring and Complaints Summary.
A copy of the form in which the Annual Return must be supplied to the EPA accompanies this licence. Before the end of each reporting period, the EPA will provide to the licensee a copy of the form that must be completed and returned to the EPA.</td><td>• Annual Return 2007-2008, submitted to DECC, 24 Oct 2008
• Annual Return 2008-2009 submitted to DECC, 3 Nov 2009</td><td>Yes</td><td>Annual Returns are prepared for the period 2 September to 1 September the following year. Annual Returns have been prepared by ACP and submitted to DECCW within the 60 day period (refer EPL condition R1.5).</td></tr>
<tr><td></td><td>Period covered by Annual Return</td><td></td><td></td><td></td></tr>
</table>

EPL No.	Condition	Verification Documentation	Compliant	Comments
R1.2	An Annual Return must be prepared in respect of each reporting period, except as provided below.			Noted
R1.3	Where this licence is transferred from the licensee to a new licensee: (a) the transferring licensee must prepare an Annual Return for the period commencing on the first day of the reporting period and ending on the date the application for the transfer of the licence to the new licensee is granted; and (b) the new licensee must prepare an Annual Return for the period commencing on the date the application for the transfer of the licence is granted and ending on the last day of the reporting period.			Noted
R1.4	Where this licence is surrendered by the licensee or revoked by the EPA or Minister, the licensee must prepare an Annual Return in respect of the period commencing on the first day of the reporting period and ending on: (a) in relation to the surrender of a licence - the date when notice in writing of approval of the surrender is given; or (b) in relation to the revocation of the licence - the date from which notice revoking the licence operates.			Noted
	Deadline for Annual Return			
R1.5	The Annual Return for the reporting period must be supplied to the EPA by registered post not later than 60 days after the end of each reporting period or in the case of a transferring licence not later than 60 days after the date the transfer was granted (the 'due date').		Yes	Annual Returns are prepared for the period 2 September to 1 September the following year. Annual Returns have been prepared by ACP and submitted to DECCW within the 60 day period
R1.6	**Notification where actual load can not be calculated**	Not applicable		
	Licensee must retain copy of Annual Return			
R1.7	The licensee must retain a copy of the Annual Return supplied to the EPA for a period of at least 4 years after the Annual Return was due to be supplied to the EPA.		Yes	Copies of the Annual Return are retained by ACP in the Environment Department files.
	Certifying of Statement of Compliance and signing of Monitoring and Complaints Summary			
R1.8	Within the Annual Return, the Statement of Compliance must be certified and the Monitoring and Complaints Summary must be signed by: (a) the licence holder; or (b) by a person approved in writing by the EPA to sign on behalf of the licence holder.	• Annual Return 2007-2008, submitted to DECC, 24 Oct 2008 • Annual Return 2008-2009 submitted to DECC, 3 Nov 2009	Yes	Annual Returns submitted to DECC are signed by the licence holder (ACOL Directors) in Section E Signature and Certification of the Annual Return form.
R1.9	A person who has been given written approval to certify a certificate of compliance under a licence issued under the Pollution Control Act 1970 is taken to be approved for the purpose of this condition until the date of first review of this licence.			Noted
R2	**Notification of environmental harm**			
R2.1	Notifications must be made by telephoning the Environment Line service on 131 555.		Yes	Notification of any exceedence of EPL conditions is provided to DECCW by telephone before close of

EPL No.	Condition	Verification Documentation	Compliant	Comments
				business on the day of the exceedence.
R2.2	The licensee must provide written details of the notification to the EPA within 7 days of the date on which the incident occurred.	• Letter to DECCW re Investigation of Exceedence Blast Overpressure Limit, 21 Jun 2009 • Letter of Notification re Blasting Overpressure Exceedence, 11 Dec 2009 • Letter to DECCW re Investigation of Blast Overpressure Exceedence,16 Feb 2010	Yes	Email provided immediately of written notification of exceedence and written report provided when investigation of the event is completed by ACP. Emails of exceedence provided on the day of the airblast exceedences on 25 June 2009, 4 Dec 2009 and 6 Jan 2010. Investigation reports were submitted to DECCW re the exceedence investigation on 21 June 2009, 11 December 2009, and 16 February 2010 respectively.
R3	**R3 Written report**			
R3.1	Where an authorised officer of the EPA suspects on reasonable grounds that: (a) where this licence applies to premises, an event has occurred at the premises; or (b) where this licence applies to vehicles or mobile plant, an event has occurred in connection with the carrying out of the activities authorised by this licence, and the event has caused, is causing or is likely to cause material harm to the environment (whether the harm occurs on or off premises to which the licence applies), the authorised officer may request a written report of the event.	• Letter from DECCW re Notice 1090466 to Provide Information and/or Records, 3 Jul 2008 • Letter from DECCW re Variation to Notice 1089973 to Provide, 23 Jul 2008	Yes	Request from DECCW for information on noise testing results obtained by DECCW and comparison with ACP data and measurements conducted in Camberwell. ACP responded and DECCW varied the EPL No 11879 to include Special Condition U1. Response to U1 was provided on 22 July 2008.
R3.2	The licensee must make all reasonable inquiries in relation to the event and supply the report to the EPA within such time as may be specified in the request.			Noted
R3.3	The request may require a report which includes any or all of the following information: (a) the cause, time and duration of the event; (b) the type, volume and concentration of every pollutant discharged as a result of the event; (c) the name, address and business hours telephone number of employees or agents of the licensee, or a specified class of them, who witnessed the event; (d) the name, address and business hours telephone number of every other person (of whom the licensee is aware) who witnessed the event, unless the licensee has been unable to obtain that information after making reasonable effort; (e) action taken by the licensee in relation to the event, including any follow-up contact with any complainants; (f) details of any measure taken or proposed to be taken to prevent or mitigate against a recurrence of such an event; and			Noted (see EPL Condition R3.1)

EPL No.	Condition	Verification Documentation	Compliant	Comments
	(g) any other relevant matters.			
R3.4	The EPA may make a written request for further details in relation to any of the above matters if it is not satisfied with the report provided by the licensee. The licensee must provide such further details to the EPA within the time specified in the request.	• Letter to DECCW re Investigation of Exceedence Blast Overpressure Limit, 21 Jun 2009 • Letter of Notification re Blasting Overpressure Exceedence, 11 Dec 2009 • Letter to DECCW re Investigation of Blast Overpressure Exceedence,16 Feb 2010	Yes	Noted (see EPL condition U1)
R4	**Reporting of exceedance of blasting limits**			
R4.1	The licensee must report any exceedence of the licence blasting limits to the regional office of the EPA as soon as practicable after the exceedence becomes known to the licensee or to one of the licensee's employees or agents.	• Letter to DECCW re Exceedence Blast Overpressure Limit, 13 Jul 2009 • Letter of Notification re Blasting Overpressure Exceedence, 4 Dec 2009Letter from DECCW re Blast Overpressure Exceedence, 6, Jan 2010	Yes	Email provided immediately of written notification of exceedence and written report provided when investigation of the event is completed by ACP. Emails of exceedence provided on the day of the exceedence for the airblast exceedences on 25 June 2009, 4 Dec 2009 and 6 Jan 2010. Investigation reports were submitted to DECCW re the exceedence investigations on 21 June 2009, 11 December 2009, and 16 February 2010 respectively.
R5	**Blast monitoring reporting**			
R5.1	The licensee must supply annually a Blast Monitoring Report with the Annual Return, which must include the following information relating to each blast carried out within the premises during the respective reporting period: (a) the date and time of the blast; (b) the location of the blast; (c) the blast monitoring results at each blast monitoring station; and (d) an explanation for any missing blast monitoring readings.	▪ Blast and Vibration Management Plan, Version C 19 Aug 2006	Yes	Blast monitoring results with time, date, location, and overpressure and vibration data are recorded for each blast with notification to the DECCW/DII and DoP of any blasts that exceed the airblast and/or vibration criteria.
	General conditions			
G1	**Copy of licence kept at the premises**			
G1.1	A copy of this licence must be kept at the premises to which the licence applies.		Yes	Displayed on the ACOL website and a copy is available in the Environment Office at ACP and an electronic copy on the ACP internal system.
G1.2	The licence must be produced to any authorised officer of the EPA who asks to see it.			Noted
G1.3	The licence must be available for inspection by any employee or agent of the licensee working at the premises.			Noted
G2	**G2 Contact number for incidents and responsible employees**			

EPL No.	Condition	Verification Documentation	Compliant	Comments
G2.1	The licensee must operate one 24-hour telephone contact line for the purpose of enabling the EPA: (a) to contact the licensee or a representative of the licensee who can respond at all times to incidents relating to individual premises, and (b) to contact the licensee's senior employees or agents authorised at all times to: (i) speak on behalf of the licensee, and (ii) provide any information or document required under licence.			Noted
	Pollution studies and reduction programs			
U1	U1 The Licensee must provide a report which includes but need not be limited to: - A comparison of actual measured noise levels generated by the Licensee with those predicted in the EIS under all conditions including inversions and noise enhancing winds; and - A list of measures to be taken by the Licensee to ensure that noise generated by the mine is not in excess of the predicted levels or limits. The report must be submitted to the EPA's Regional, Manager Hunter (Environment Protection and Regulation Division) by 10 July 2009.	• Letter to DECCW re Condition U1 Pollution Studies and Reduction Program, 22 Jul 2009 • Comparison of Actual Noise Levels Against EIS Predictions, 22 Jul 2009 • Email to DECCW re Submission of the U1 Report Requesting an extension to 17 Jul 2009	Yes	The report on Comparison of Actual Noise Levels Against EIS Predictions was prepared by ACP and submitted to DECCW on 22 July 2009 (A request for extension of the submission date to 17 July 2009 was made by ACP to DECC on 10 July 2009. No response was received from DECC re the extension and the Report was submitted 12 days beyond the original date specified in the condition.). The report noted results exhibited exceedence of the 38dBA noise criteria on 21 0ccasions between 2005 and 2009. The exceedences were reported at the time of occurrence as non-compliances to the relevant administering authorities.
	Special conditions			
E1	E1 Not applicable			