



# **Wambo Coal Mine Independent Environmental Audit November 2006**

15 January 2007

Prepared for:  
**Wambo Coal Pty Limited**  
PMB 1  
Singleton NSW 2330

Report by:  
**Tebcon Pty Limited**  
**Trading as Trevor Brown & Associates**  
**applied environmental management consultants**  
ABN: 23 084 906 963

PO Box 238 Wentworth Falls NSW 2782 Australia  
Ph: +61 2 4757 2123  
Fax: +61 2 4757 3589

TBA Ref: WC11/07

## DISTRIBUTION

Copies	Recipient	Copies	Recipient
3	Wambo Coal Pty Limited		

This document was prepared for the sole use of Wambo Coal Pty Limited and the regulatory agencies that are directly involved in this project, the only intended beneficiaries of our work. No other party should rely on the information contained herein without the prior written consent of Trevor Brown & Associates.

By

**Tebcon Pty Limited**  
**Trading as Trevor Brown & Associates**  
ABN: 23 084 906 963

PO Box 238 Wentworth Falls NSW 2782

---

**Trevor Brown**  
**Principal Environmental Consultant**

---

**Kerrie Conant**  
**Director Tebcon Pty Limited**

---

## EXECUTIVE SUMMARY

An independent environmental audit of the mining and infrastructure areas of the Wambo Development Project (WDP) was conducted between 20-22 November 2006 by Trevor Brown of Trevor Brown & Associates, to assess the status of the mine activities in relation to the conditions of approval and in accordance with the Minister's Conditions of Approval (MCoA) Schedule 6, Condition 6.

The compliance audit was conducted in accordance with the Australian/New Zealand Standards AS/NZS ISO 19011:2002 – *Guidelines for Quality and/or Environmental Systems Auditing*.

The Independent Environmental Audit of WDP reviewed the available documentation in relation to the requirements of the MCoA and the other licenses and approvals granted for the project.

Documentation held was provided to the auditors in an organised and efficient manner making the audit process and verification of compliance with the MCoA and other statutory approvals a straight forward exercise.

A review of the Environmental Management Strategy Revision 2, dated March 2006 was undertaken as part of this audit and it was concluded that the content of the Strategy meets the requirements of the MCoA Schedule 6 Condition 1 and represents a sound basis for the environmental management of the activities and operation of the WDP.

The review of the air monitoring and surface water monitoring programs conducted as part of this audit indicated that an assessment of the data collected from the existing monitoring sites of the current program, should be undertaken to rationalise the number of monitoring sites and locations of the sites in relation to potentially affected properties not owned by WCPL. The rationalised program should ensure that the monitoring will provide data that will identify impacts from the mine operations on the surrounding area and land uses on properties not owned by WCPL. The review identified some areas in relation to dust deposition monitoring sites that should be considered for rationalisation of the program and clarification of wording for the sampling of surface waters during periods of no flow.

The attended noise monitoring conducted each quarter at the sites nominated in the Noise Monitoring Program indicated that extraneous noise sources (e.g. wind, birds, highway traffic, other mine operations) were dominant. Wambo mine noise levels were generally low although audible along with the other sources on some occasions. Mine 'hum' from mine operations other than Wambo were audible in both the March and May monitoring runs.

A non-compliance identified in relation to the requirements of the conditions attached to the Minister's Consent was:

- One blast result exceeded 120dB (Lin Peak) on 1 June 2006. The overpressure result of 125dB was reported to the DEC and indicated that the cause of the overpressure exceedence was probably a temperature inversion present at the time of the shot (0913 hours). The DEC issued a cautionary letter in relation to the failure to comply with the maximum permissible overpressure level of 120dB. Blasting procedures have been modified to minimise the potential for a similar incident to reoccur.

The DEC advised in a letter dated 7 September 2005 that *"while they encourage the preparation of management plans they will not review or comment on them"*. Consultation as such was not conducted with the DEC in relation to the Management Plans specified in MCoA 4, 5, 19, 29 or 30, but this has not been interpreted as a non-compliance with the condition due to the content of the DEC letter.

In conclusion, the documentation, reporting and activities at the WDP has demonstrated a high degree of compliance with the conditions attached to the current consent granted for the project.

# 1. Introduction

## 1.1 Background

The development consent granted to Wambo Coal Pty Ltd (WCPL) for the Wambo Development Project (WDP) included the requirement for an audit to be conducted in accordance with the Minister’s Condition of Approval (MCoA) Schedule 6, Condition 6 – Independent Environmental Audit:

6. *At the end of Year 1 of the development, and every 5 years thereafter, unless the Director-General directs otherwise, the Applicant shall commission and pay the full cost of an Independent Environmental Audit of the development. This audit must:*
  - (a) *be conducted by a suitably qualified, experienced, and independent person whose appointment has been endorsed by the Director-General;*
  - (b) *be consistent with ISO 19011:2002 – Guidelines for Quality and/or Environmental Systems Auditing, or updated versions of these guideline;*
  - (c) *assess the environmental performance of the development, and its effects on the surrounding environment;*
  - (d) *assess whether the development is complying with the relevant standards, performance measures, and statutory requirements;*
  - (e) *review the adequacy of the Applicant’s Environmental Management Strategy and Environmental Monitoring Program; and, if necessary,*
  - (f) *recommend measures or actions to improve the environmental performance of the development, and/or the environmental management and monitoring systems.*

An independent environmental audit of the mining and infrastructure areas of the Wambo Coal Mine was conducted between 20-22 November 2006 by Trevor Brown of Trevor Brown & Associates, to assess the status of the mine activities in relation to the conditions of approval and in accordance with the Minister’s Conditions of Approval (MCoA) Schedule 6, Condition 6.

## 1.2 Scope of Work

The compliance audit was conducted generally in accordance with the Australian/New Zealand Standards *ISO 19011:2002 – Guidelines for Quality and/or Environmental Systems Auditing*.

The scope of work for the independent environmental audit of the WDP included the following components:

- review of the development consent condition requirements and other approvals for the project;
- conduct of a site inspection and review on-site documentation and monitoring data for the project relevant to the audit;
- discussion of the development consent and other approval conditions and operation of the project with Wambo project staff;
- assess compliance of the project with the approval conditions and assess performance of the development and its effects on the surrounding environment;
- review of the environmental Management Strategy and Environmental Monitoring Program;
- preparation of the Independent Environmental Audit Report providing assessment of compliance against each consent condition and provision of recommendations or actions to improve the environmental performance of the development, and/or the environmental management and monitoring systems.

### 1.3 *Structure of the Audit Report*

The report has been prepared to provide comment on each condition of approval in a tabulated form, with additional discussion where required on specific matters. The tabulated comments are attached as Attachment A for the MCoA. The Independent Audit Report sections are:

Section 1	Introduction
Section 2	Wambo Coal Mine Status – November 2006
Section 3	Ministers Conditions of Approval (MCoA)
Section 4	Environmental Management Strategy and Environmental Monitoring Program
Section 5	Conclusions and Recommendations
Glossary	

Attachment A Ministers Conditions of Approval Table

### 1.4 *Compliance Table*

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

Compliance - Yes	Implies compliance with the intent and/or requirement of the approval condition.
Compliance - <b>NO</b>	The specific requirement of the consent condition was not met.
Substantial Compliance	The intent of the consent condition has been met for the majority of the time, with some incidents where full compliance did not occur (eg. where monitoring results exhibit non-compliance for less than 5% of the total results for blast overpressure). Comment provided.
In progress	Where activities have commenced but are not completed, and requirements of the MCoA are being implemented.
Not Activated	The condition had not been activated because the activity have not yet commenced, or the requirement of the condition have not been triggered (e.g. complaint driven monitoring, land acquisition).
Not Applicable	Conditions that do not apply due to actions or processes already taken.
Noted	No specific auditable requirement applicable to the condition.

## 2 Project status

The Wambo Development Project commenced on 14 November 2005 following surrender of the previous development consents issued for the Wambo Coal project by the Singleton Council with the exception of DA 108/91. The preparation and approval of the required environmental management plans in accordance with the MCoA and relevant approvals, permits, consents and licenses for the construction activities were obtained by WCPL to progress the development.

The general layout for the mine infrastructure and facilities are in accordance with the MCoA Schedule 3, Condition 2 – Terms of Approval, as amended in October 2006:

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

- (a) DA 305-7-2003;*
- (b) EIS titled Wambo Development Project, volumes 1-5, dated July 2003, and prepared by Resource Strategies Pty. Ltd.;*
- (c) letter from Holmes Air Sciences to the Department, dated 3 September 2003, and titled Wambo Development Project - Response Air Quality Assessment;*
- (d) letter from Wambo Coal Pty. Ltd. to the Department, dated 24 October 2003, and titled Wambo Development Project – Development Application Amendment (DA 305-7-2003-i);*
- (e) Statement of Environmental Effects titled Wambo Development Project – Wambo Seam Underground Mine Modification, dated January 2005, and prepared by Wambo Coal Pty Ltd;*
- (f) Document titled Wambo Development Project – Modification of DA 305-7-2003-i, dated 24 October 2005;*
- (g) Document titled Wambo Development Project – Modification of DA 305-7-2003-i, dated 23 January 2006;*
- (h) Document titled Wambo Development Project – Modification of DA 305-7-2003-i1; dated 27 July 2006; and*
- (i) conditions of this consent.”*

Following the development consent for the WDP granted in February 2004, a number of applications for modification have been lodged and approved:

### **Statement of Environmental Effects - Wambo Development Project – Wambo Seam Underground Mine Modification, January 2005**

Modification sought to modify the orientation and timing of the development of the Wambo Seam Underground Mine. WCPL proposed to mine the Wambo Seam Underground Mine before the Whybrow Seam Underground Mine and change the orientation of the Wambo Seam Underground Mine long-walls to facilitate access directly from the existing open cut operations. Approval for the modification was obtained in May 2005.

### **Wambo Development Project – Modification of DA 305-7-2003-i, 24 October 2005**

Modification was sought to facilitate the construction of infrastructure for the open cut and underground mines including the extension of the existing open cut contractors workshop and associated services, construction of surface infrastructure including a personnel transfer station and a diesel refuelling station at the North Wambo Underground mine, and modification of groundwater monitoring requirements in relation to coal seam aquifers. Approval of the modification was gained in January 2006.

### **Wambo Development Project – Modification of DA 305-7-2003-i, 23 January 2006**

Modification requested to facilitate extraction of remnant coal from the existing Wollemi Underground Mine. Approval for the extraction of the remnant coal to maximise recovery of resource was obtained in April 2006.

### **Wambo Development Project – Modification of DA 305-7-2003-i; 27 July 2006**

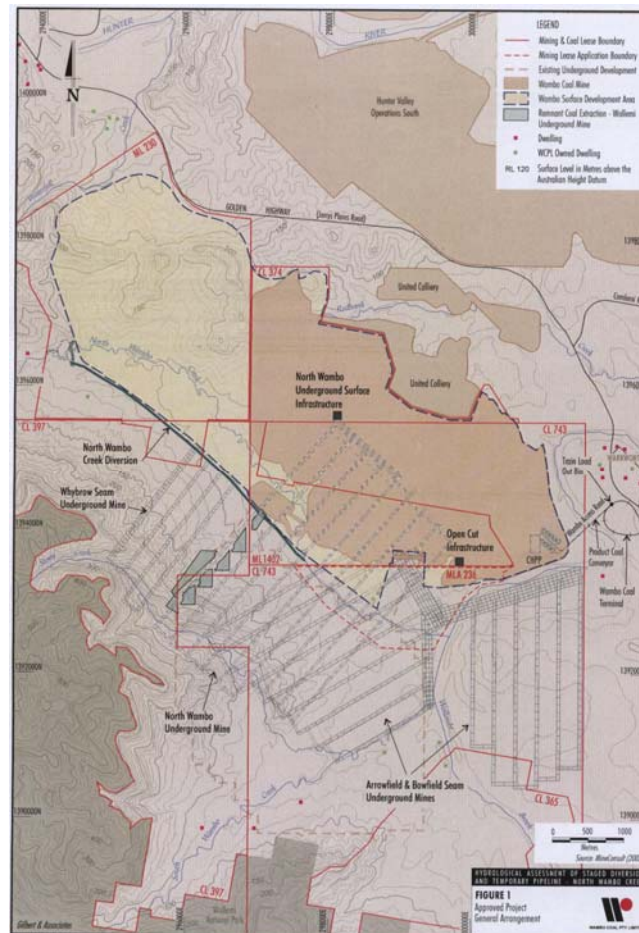
Modification sought to facilitate the construction of a temporary bypass of North Wambo Creek around open cut operations scheduled for the next two years, to provide time to design,

construct, stabilise and commission the Diversion of North Wambo Creek in accordance with MCoA Schedule 4 Condition 28. Approval was obtained in October 2006.

**Statement of Environmental Effects Wambo Coal Mine Modification, September 2006**

Modification to the consent was lodged for the staged construction of the North Wambo Creek Diversion, a temporary North Wambo Creek Pipeline and construction of gas drainage and dewatering infrastructure for the North Wambo Underground Mine. The modification was being assessed by DoP at the time of this November audit.

The project layout and location of the major activities shown in Figure 1.



The Wambo Development Project was progressing in accordance with the description of the project in the EIS and approved modifications and the Minister's Conditions of Consent (MCoA), detailed in MCoA Schedule 3 Condition 2. The status of the project in November 2006 was:

- Mining of the Wambo Open Cut was continuing with emplacement of waste rock and coarse reject within the mine waste rock emplacement areas to the southeast of the open cut pit;
- Construction of portals and drifts directly from the highwall of the open cut operations for access to the Wambo Seam Underground Mine;
- Module 1 of the Coal Handling and Preparation Plant (CHPP) had been demolished and Module 2 was operating at design capacity. Upgrade of the CHPP with the construction of Module 3 is planned with commissioning in 2007;
- Tailings from the CHPP continue to be placed in open cut voids to be capped with waste rock and coarse rejects and rehabilitated;

- The rail spur and loop and train loading infrastructure was complete and all coal from Wambo Coal Mine had been transported by rail since June 2006;
- Contractor's (Roche Mining) workshop and associated services have been constructed;
- Air quality monitoring stations have been installed and four (4) stations have been operational since July 2006;
- Real-time noise monitoring stations have been installed and four stations have been operational since July 2006.



### 3. Minister’s Conditions of Approval

The Development Consent (DA 305-7-2003-1) under the *Environmental Planning and Assessment Act 1979* and Minister’s Conditions of Approval (MCoA) for the WDP was granted 4 February 2004. Modifications to the consent were granted in May 2005, January 2006, April 2006 and October 2006, and include general requirements in relation to the overall development of the Wambo open cut and underground coal mines, and general terms of approval for the integrated approval from other agencies with specific legislative and administrative responsibilities (e.g. Department of Primary Industries, Department of Environment and Conservation, local Councils, etc).

This Independent Environmental Audit reviewed the available documentation in relation to the requirements of the MCoA granted for the project, and in particular the Environmental Management Strategy and Environmental Monitoring Program.

Where an authority other than Department of Planning had administrative responsibility for the requirements of the condition(s) or other approvals, the compliance status was determined by reviewing correspondence and consultation undertaken by WCPL to meet the requirement of the conditions of approval.

#### 3.1 Environmental Management Strategy

Schedule 6 of the MCoA required the development of an Environmental Management Strategy for the Wambo Development Project. The document was prepared in accordance with the requirements of MCoA Schedule 6 Condition 1, and submitted to the DoP for approval.

##### **Schedule 6 Environmental Management, Monitoring, Auditing and Reporting**

*Before carrying out any development, the Applicant shall prepare and implement an Environmental Management Strategy for the development to the satisfaction of the Director-General. This strategy must:*

- (a) *provide the strategic context for environmental management of the development;*
- (b) *identify the statutory requirements that apply to the development;*
- (c) *describe in general how the environmental performance of the development would be monitored and managed during the development;*
- (d) *describe the procedures that would be implemented to:*
  - *keep the local community and relevant agencies informed about the operation and environmental performance of the development;*
  - *receive, handle, respond to, and record complaints;*
  - *resolve any disputes that may arise during the course of the development;*
  - *respond to any non-compliance;*
  - *manage cumulative impacts; and*
  - *respond to emergencies; and*
- (e) *describe the role, responsibility, authority, and accountability of all the key personnel involved in environmental management of the development.*

The Environmental Management Strategy was prepared and submitted to the DoP in April 2005. Approval of the Environmental Management Strategy was obtained from the DoP on 10 October 2005.

Review of the Environmental Management Strategy Revision 2, dated March 2006 was undertaken as part of this audit and it was concluded that the content of the Strategy meets the requirements of the MCoA Schedule 6 Condition 1 and represents a sound basis for the environmental management of the activities and operation of the WDP.

### 3.2 Environmental Monitoring Program

Schedule 6 Condition 3 and 4 of the MCoA required the development of a consolidated Environmental Monitoring Program that collated all the monitoring requirements from the various management plans for the WDP into a single document. The document was prepared in accordance with the requirements of MCoA Schedule 6 Condition 3, and submitted to the DoP for approval on 16 December 2005. The Environmental Monitoring Program was approved in January 2006. The Monitoring Program was revised in April 2006 and resubmitted to the DoP with approval obtained in June 2006.

#### **Schedule 6 Environmental Management, Monitoring, Auditing and Reporting**

3. *Before carrying out any development, the Applicant shall prepare an Environmental Monitoring Program for the development in consultation with the relevant agencies, and to the satisfaction of the Director-General. This program must consolidate the various monitoring requirements in schedule 4 of this consent into a single document.*

*The Applicant shall regularly review, and if necessary update, this program in consultation with the Director-General.*

A review of the Environmental Monitoring Program was conducted as part of this audit.

It was confirmed that the monitoring requirements from each of the management plans were included in the consolidated document developed under MCoA Schedule 6 Condition 3, and the monitoring programs had been implemented by Wambo for the development. The monitoring results were maintained in electronic form and a summary of data was included in the Annual Environmental Management Report July 2005 – June 2006.

The Environmental Monitoring Program provides coverage of the mine site and surrounding area for blast, air, noise, surface and groundwater, and flora and fauna monitoring. The monitoring programs for flora and fauna, blasting, noise and groundwater address the requirements of the MCoA for the development as described in the EIS (2003).

The review of the air monitoring and surface water monitoring programs conducted as part of this audit indicated that an assessment of the data collected from the existing monitoring sites of the current program, should be undertaken to rationalise the number of monitoring sites and locations of the sites in relation to potentially affected properties not owned by WCPL. The rationalised program should ensure that the air quality monitoring will provide data that will identify impacts from the mine operations on the surrounding area and land uses on properties not owned by WCPL.

#### 3.2.1 Air Quality Monitoring Program

The current Environmental Monitoring Program document was developed using air monitoring locations established for the previous mine operations, with some additional monitoring locations added for the activities defined in the EIS 2003. A number of the monitoring sites included in the program are now located on mine owned land (following acquisition of properties by WCPL in relation to the WDP) and may not provide data that is useful for assessing impacts from the mine operations on privately owned dwellings and land that will be affected by the ongoing surface operations at the mine.

**Dust deposition sites** – the current monitoring program consists of 14 dust deposition gauges (including 4 located at the air quality monitoring sites). Several of the gauges are located on mine owned land or are within the mine lease area.

The suitability of the dust deposition gauges sites to meet Environment Protection Licence 529 condition P1.1, which requires the dust deposition and TSP monitoring sites to be at locations where the levels being sampled are representative of emissions from the operation

of the mine and take into account prevailing wind direction and the location of residential properties or other sensitive receivers, should be reviewed.

As the wind roses indicate a definite predominance of northwest, southwest to southeast winds the placement of dust deposition gauges to the west (where there are few residences) would seem to be unnecessary and where the monitoring sites are located on mine owned land the number of sites could be reduced unless the data is required for operational management of the mine.

**Recommendation**

As the surface workings at the WDP are to progress northwest towards Jerry’s Plains village it is suggested that the number of dust deposition gauges on the western side of the mine and other mine owned land be reduced and the adequacy of the dust deposition monitoring to the northwest of the current operations be reviewed. If necessary the dust monitoring program should be supplemented with new gauge locations to monitor impact from the mine operations on private dwellings outside the predicted areas of potential affectation (EIS 2003, pages 4-43 to 4-48).

**Air quality monitoring stations** – four AQMS have been established in accordance with MCoA Schedule 4 Condition 4 and were operating at the time of the audit. The locations for the AQMS were selected where power and security of the stations could be assured. The location, monitoring and operation of the AQMS are:

AQMS No.	Location	Parameters Monitored
		<b>Air Quality</b>
AQ01	‘Coralie’ dwelling, near the WRD load-out bin and rail loop area, east of Wollombi Creek and the mine surface workings	HV01, PM01, D19
AQ02	Caban dwelling, South Wambo adjacent to Wambo Road	HV02, PM02, D20
AQ03	Thelander and O’Neill dwellings, northwest of the Wambo surface workings	HV03, PM03, D21
AQ04	Muller dwelling, northwest of the Wambo surface workings	HV04, PM04, D22

**Recommendation**

The AQMS monitoring data from each station should also be reviewed after 12 months monitoring data has been collected to assess the suitability of the locations to meet the requirements of the MCoA and Environment Protection Licence 529 condition P1.1.

### 3.2.2 Surface Water Quality Monitoring

The surface water monitoring program provides a satisfactory sampling regime for the surface water quality assessment of the South Wambo, North Wambo, and Stony Creek water courses.

The Surface Water Monitoring Program shown in Table 14 of the Environmental Monitoring Program specifies monthly sampling for all sites. The sampling of water courses when there is no flow does not provide useful data for the assessment of mine input to the water quality of the creeks.

**Recommendation**

It is recommended that the wording of the sampling frequency be changed to specify that sampling of water from the creeks only occur during periods of flow, and monthly where flow is continuous. This will ensure that sampling of stagnant pools in the water courses does not occur resulting in increased concentrations of parameters due to evaporation effects.

### 3.3 **Comments on the Minister’s Conditions of Consent**

There are a number of conditions of consent where compliance with the intent of the condition has been interpreted taking account of the status of action(s) of Wambo and/or the authority involved, at the time of the audit. Clarification of the wording of the conditions or removing conditions that are no longer applicable should be discussed with the DoP when the next modification of consent application is lodged. Comments are provided in the following conditions as suggestions for discussion with the Director-General:

MCoA	Recommended action	Comment
<b>Schedule 3</b>		
Conditions 11& 12	Delete	These conditions were only required to be undertaken once. As the requirements have now been met the conditions are no longer applicable.
<b>Schedule 4</b>		
Condition 4	Suggest removal	The Barry Property has been purchased by Coal & Allied and therefore is no longer privately owned. To ensure that the consent is as current as possible it is suggested that this requirement be removed.
Conditions 4, 5, 19, 29 and 30	Suggest amended wording for clarification	The DEC advised in a letter dated the 7 September 2005 that while they encourage the preparation of management plans they will not review or comment on them. Consultation as such was therefore not conducted with the DEC. The status of these conditions have not been recorded as a non-compliance in light of the DEC letter. . This issue should be clarified with the DEC and wording of the conditions.
Condition 15	Delete	This condition is only required to be undertaken once. This condition has now been met and therefore the condition is no longer applicable.
Conditions 16, 21 & 83	Amend wording to require action to implemented within 14 days	Fourteen days is not an adequate timeframe if the suitably qualified person has not already been appointed by the Director-General. The timeframe should be amended to allow sufficient time for the appropriate expert to be found, appointed and to implement the requirements of this condition.
Condition 17	Amend wording to clarify	The current wording of the condition is not clear. Adding the words “at the same time” would clarify the intent of the condition: “The Applicant shall undertake all reasonable steps to co-ordinate blasting at the development with the blasting at surrounding mines <b>at the same time</b> – such as Bulga, Mount Thorley, Warkworth, and Hunter Valley Operations – to minimise the cumulative impacts of blasting in the region.
Condition 20	Amend to conform with and include the Director-General’s approval of 30 June 2006.	WPCL is currently in negotiations to purchase the Skinner property. The preparation of the Skinner Blast Management Plan has been delayed until the negotiations are completed. This process was approved by the Director-General in the letter dated 30 June 2006.
Condition 30	Amend to reflect NSW Fisheries advice.	NSW Fisheries have verbally advised that they are only interested in the North Wambo Creek Diversion Plan and do not require consultation on the other components of the Site Water Management Plan as they are of no direct

MCoA	Recommended action	Comment
		relevance to their formal regulatory role. The wording of the condition should be amended to reflect this advice.
Condition 40	Amend wording to enable the condition to be with even though the Committee has not been established by the Director-General	The Hunter Coalfield Flora & Fauna Advisory Committee is to be an independent committee established by DoP to ensure flora fauna management is implemented in a consistent form across the Hunter Valley. WCPL has no control over the establishment of the committee however the current wording of the consent may be interpreted as a non-compliance. The wording of the condition should be modified to reflect that consultation with the committee is required once it is established.
Condition 40	Discuss achievement of the requirements of the condition in relation to the EIS estimates for the Enhancement Program – Table 4-16.	As presented in the EIS approximately 1,570ha in total will be rehabilitated on site, of this approximately 50% will be woodland. The condition is not consistent with the EIS estimates. Mine plan changes could result in less area being disturbed which will mean less area will require rehabilitation.
Conditions 42 to 49	Amend	Refer to the comment in condition 40 above.
Condition 56	Delete	This condition has been met and therefore no longer applicable.
Condition 62	Amend to allow for copies of the archival photographs to be provided to the Council and DoP.	The production of photographs to archival quality is an expensive exercise and while it is likely that the NSW Heritage Office require the photos to this quality it is suggested that a copy of the report and photos for the DoP and Council may be sufficient. It was reported that the DoP had previously agreed verbally to such an approach however it should be formalised through a modification to the consent condition.
Conditions 65 and 67	Amend	The conditions should be amended to ensure the most recent version of the Australian Standard is applicable. This will prevent future modifications to the consent conditions being required.
Condition 71	Amend to reflect that the alternative road and intersection will not be required when the property is purchased by Wambo.	WCPL are currently in discussions to purchase the only remaining private property accessed by Pinegrove Road. If successful an application to close Pinegrove Road will be made as the alternative road and intersection will not be required for access to the property.
Condition 73	Delete	WCPL has established adequate car parking on the site therefore this condition is no longer applicable.
Conditions 74 & 76	Delete	Rail loader has been commissioned. This condition no longer applies.
Condition 86	Amend	In some circumstances complying with AS4282 compromises safety particularly in relation to the angle of lights and highwalls. The condition should be reworded to read “All external lighting associated with the development shall comply with <i>Australian Standard AS4282 (INT) 1995 – Control of Obtrusive Effects of Outdoor Lighting, where safe and practicable</i> ”.
Condition 87	Amend or clarify	Underground mining operations commence with second workings approval under S.138 from DPI. Very little

MCoA	Recommended action	Comment
		greenhouse gas is released during the first workings development of access, roads etc. As the majority of greenhouse gas emissions are generated during the secondary workings (longwall mining process) it is assumed that the identification and assessment of the options for reducing GHG emissions is not required to be submitted to the Director-General until the commencement of second working.
Condition 88	Amend	Waste management is reported in the Annual Environmental Management Report (AEMR). The AEMR is the appropriate document to report and demonstrate that waste has been minimised. Suggested wording of the is: “The Applicant shall minimise the amount of waste generated by the development and report progress in the AEMR to the satisfaction of the Director-General.
Schedule 5		
Condition 1	Amend to: “.....the air quality and/or noise impact assessment criteria in conditions 2 and 0 of schedule 4.....”	The air quality criteria are in condition2 of Schedule 4, not condition 1.
<b>Schedule 6</b>		
Condition 7	Amend/Clarify	Consultants to undertake the audits could be commissioned by Wambo more than 3 months before the audit is due to be undertaken. It is therefore assumed that the intent of this condition is for the DoP is to obtain a copy of the audit report within 3 months of the audit being conducted.

## 4. Other Statutory Requirements

In addition to the Minister's conditions of approval the following licences, permits etc were relevant to the current status of the WDP.

### 4.1 Environment Protection Licence No. 529

Wambo Coal Pty Ltd received Environment Protection Licence (EPL) 529 under section 55 of the *Protection of the Environment Operations Act 1997* for the Wambo Development Project, with a renewal date of 15 October, and a review due date by 6 August 2009.

The licence applies to scheduled activities - Coal Mines and Coal Works. The fee based activity is coal mining (26) 3.5Mt – 5Mt tonnes produced. The licence also applies to other activities carried on at the premises including chemical storage facilities and sewage treatment works.

### 4.2 Mining Leases

The following Mining Leases have been granted to Wambo Coal Pty Ltd for the project area.

Lease Reference	Area (ha)	Date Granted	Expiry Date
Coal Lease 365	630	19 Sep 1990	19 Sep 2011
Coal Lease 374	382	Renewal submitted Mar 2005	Awaiting approval
Coal Lease 397	1,480	4 Jun 1992	4 Jun 2013
Consolidated Coal Lease 743	3,000	9 Mar 1990	23 Sep 2009
Mining Lease 1402	352	23 Sep 1996	9 Mar 2009
Mining Lease 1572	1,012	21 Dec 2005	21 Dec 2026
Mining Lease Application 236			
Exploration Licence A444	3,060	Renewal submitted May 06	Awaiting approval

A Mining Operations Plan for the open cut was prepared by Wambo for the period July 2005 to June 2010 and submitted to the DPI on 8 September 2005. The Mine Operations Plan for the underground mine was also prepared by Wambo for the period November 2005 to November 2012 and submitted to the DPI on 29 September 2005. The plans were accepted by DPI on 10 November 2005.

### 4.3 Water Licences

Bore Licence Certificates under section 115 of the Water Act 1912 are held for all the groundwater bores associated with the Wambo Development.

Licence No.	Lot/DP	Parish	County	Purpose	Works	Description	Extraction Limits
20BL132753	DP548749	Whybrow	Hunter	Mining	Well	Old Well No.1	243 ML/yr
20BL166910	DP110084	Whybrow	Hunter	Industrial	Bore	No.1 Dewatering Bore	450 ML/yr
20BL167737	DP548749	Whybrow	Hunter	Mining	Well	Well No.2	70 ML/yr
20SL033872	DP110084	Northumberland	Hunter			Pumps in Wollombi Brook	750 ML/yr
20AL200631		Hunter River Regulated Water Source from				Hunter River Pump	1,000 ML/yr
20CA201459		Goulburn River junction to Glennies Creek Junction		Water supply		Hunter River Licence	N/A
20WA200632		Hunter River Regulated Water Source from Glennies Creek Junction to Wollombi Brook Junction		works and water use	Pumps	Hunter River Licence	N/A
20BL168017	1/DP595702	Whybrow	Hunter	Mining	Bore	No.2 Dewatering Bore	750 ML/yr
20BL168643	DP548749	Lemington	Hunter	Drainage	Bore	Wollemi Boxcut Alluvials	300 ML/yr
20BL166438	A/33419	Wambo	Hunter	Stock	Bore	Clifton's Well	5 ML/yr
20BL167738	DP548749	Whybrow	Hunter	Mining	Bore	Wambo Bore	300 ML/yr
20BL168997	1/DP110084	Whybrow	Hunter	Test bore	Bore	Piezometer	
20BL168998	2/DP110084	Whybrow	Hunter	Test bore	Bore	Piezometer	
20BL168999	1/DP110084	Whybrow	Hunter	Test bore	Bore	Piezometer	Groundwater monitoring
20BL169000	79/753821	Whybrow	Hunter	Test bore	Bore	Piezometer	
20BL167810	58/DP53817	Wambo	Hunter	Domestic Farming Stock	Well		



## 5. Conclusion

The independent environmental audit of the Wambo Coal Mine was undertaken in November 2006 with a site inspection, document review and discussions with relevant project personnel conducted on site between 20-22 November 2006.

The documentation held by WCPL at the WCM site was presented to the auditor in a well organised format which made the verification of compliance with the conditions of approval and other statutory approvals a straight forward exercise.

The documentation, reporting and activities at Wambo Coal demonstrated a high degree of compliance with the conditions attached to the development consent, licenses and approvals granted to WCPL for the project.

Review of the Environmental Management Strategy Revision 2, dated March 2006 was undertaken as part of this audit and it was concluded that the content of the Strategy meets the requirements of the MCoA Schedule 6 Condition 1 and represents a sound basis for the environmental management of the activities and operation of the WDP. The Environmental Management Strategy review did not identify that any changes would need to be made to the document as the general strategies presented provide a sound basis for the environmental management of the project.

The Environmental Monitoring Program provides coverage of the mine site and surrounding area for blast, air, noise, surface and groundwater, and flora and fauna monitoring. The monitoring programs for flora and fauna, blasting, noise and groundwater address the requirements of the MCoA for the development as described in the EIS (2003).

The review of the air monitoring and surface water monitoring programs conducted as part of this audit indicated that an assessment of the data collected from the existing monitoring sites of the current program, should be undertaken to rationalise the number of monitoring sites and locations of the sites in relation to potentially affected properties not owned by WCPL. The rationalised program should ensure that the monitoring will provide data that will identify impacts from the mine operations on the surrounding area and land uses on properties not owned by WCPL. The review identified some areas in relation to dust deposition monitoring sites that should be considered for rationalisation of the program and surface water monitoring frequency clarification of wording for the sampling of waters during periods of no flow.

### **Recommendation**

As the surface workings at the WDP are to progress northwest towards Jerry's Plains village it is suggested that the number of dust deposition gauges on the western side of the mine and other mine owned land be reduced and the adequacy of the dust deposition monitoring to the northwest of the current operations be assessed. If necessary the dust monitoring program should be supplemented with new gauge locations to monitor impact from the mine operations on private dwellings outside the predicted areas of potential affectation (EIS 2003, pages 4-43 to 4-48).

### **Recommendation**

The AQMS monitoring data from each station should also be reviewed after 12 months monitoring data has been collected to assess the suitability of the locations to meet the requirements of the MCoA and Environment Protection Licence 529 condition P1.1.

The Surface Water Monitoring Program shown in Table 14 of the Environmental Monitoring Program specifies monthly sampling for all sites. The sampling of water courses when there is no flow does not provide useful data for the assessment of mine input to the water quality of the creeks.



**Recommendation**

It is recommended that the wording of the sampling frequency be changed to specify that sampling of water from the creeks only occur during periods of flow, and monthly where flow is continuous. This will ensure that sampling of stagnant pools in the water courses does not occur resulting in increased concentrations of parameters due to evaporation effects.

The attended noise monitoring conducted each quarter at the sites nominated in the Noise Monitoring Program indicated that extraneous noise sources (e.g. wind, birds, highway traffic, other mine operations) were dominant. Wambo mine noise levels were generally low although audible along with the other sources on some occasions. Mine 'hum' from mine operations other than Wambo were audible in both the March and May monitoring runs.

One blast result exceeded 120dB (Lin Peak) on 1 June 2006. An overpressure result of 125dB was reported to the DEC. Results of the investigations indicated that the cause of the overpressure exceedence was probably a temperature inversion present at the time of the shot (0913 hours). The DEC issued a cautionary letter in relation to the failure to comply with the maximum permissible overpressure level of 120dB.

The DEC advised in a letter dated 7 September 2005 that "while they encourage the preparation of management plans they will not review or comment on them". Consultation as such was not conducted with the DEC in relation to the Management Plans specified in MCoA 4, 5, 19, 29 or 30, but this has not been interpreted as a non-compliance with the condition due to the content of the DEC letter.

In conclusion, the documentation, reporting and activities at the WDP demonstrated a high degree of compliance with the conditions attached to the current consent granted for the project..

---

## Glossary of Terms

AEMR	Annual Environmental Management Report
AR	Annual Return – EPA
BCA	Building Code of Australia
BL	Bore Licence
CCC	Community Consultative Committee
DA	Development Application
DEC	Department of Environment and Conservation
DIPNR	Department of Infrastructure, Planning and Natural Resources (now DoP)
Director-General	Director-General of DoP
DLWC	Department of Land and Water Conservation (now part of DIPNR)
DMR	Department of Mineral Resources (now part of DPI)
DoP	Department of Planning (formerly DIPNR)
DPI	Department of Primary Industries (includes Mineral Resources)
DSC	Dam Safety Committee
EIS	Environmental Impact Statement
EPA	Environment Protection Authority (now part of DEC)
EPL	Environment Protection Licence
MCoA	Minister’s Conditions of Approval
NPWS	National Parks and Wildlife Service
RTA	Roads and Traffic Authority
SC	Singleton Council
SIS	Species Impact Statement
WCPL	Wambo Coal Pty Ltd
WDP	Wambo Development Project

## Attachment A Minister's Conditions of Approval (MCoA)

Blue type represents 2004 modification

Red type represents May 2005 modification

Green type represents January 2006 modification

Purple type represents April 2006 modification

Orange type represents July 2006 modification

**Appendix A Minister’s Conditions of Approval**

MCoA No.	Consent Condition	Audit Evidence	Compliance	Comments
	<b>SCHEDULE 3 ADMINISTRATIVE CONDITIONS</b>			
	<b>Obligation to Minimise Harm to the Environment</b>			
3/1	The Applicant shall implement all practicable measures to prevent and/or minimise any harm to the environment that may result from the construction, operation, or rehabilitation of the development		Noted	
	<b>Terms of Approval</b>			
3/2	The Applicant shall carry out the development generally in accordance with the: <ul style="list-style-type: none"> <li>a) DA 305-7-2003;</li> <li>b) EIS titled <i>Wambo Development Project</i>, volumes 1-5, dated July 2003, and prepared by Resource Strategies Pty. Ltd.;</li> <li>c) letter from Holmes Air Sciences to the Department, dated 3 September 2003, and titled <i>Wambo Development Project - Response Air Quality Assessment</i>;</li> <li>d) letter from Wambo Coal Pty. Ltd. to the Department, dated 24 October 2003, and titled <i>Wambo Development Project – Development Application Amendment (DA 305-7-2003-i)</i>;</li> <li>e) Statement of Environmental Effects titled <i>Wambo Development project – Wambo Seam Underground Mine Modification</i>, dated January 2005, and prepared by Wambo Coal Pty Ltd;</li> <li>f) Document titled <i>Wambo Development Project – Modification of DA 305-7-2003-I</i>, dated 24 October 2005;</li> <li>g) Document titled <i>Wambo Development Project – Modification of DA 305-7-2003-1</i>, dated 23 January 2006; and</li> <li>h) <i>Document titled Wambo Development Project – Modification of DA 305-7-2003-1; dated 27 July 2006; and</i></li> <li>i) <i>conditions of this consent.</i></li> </ul>	<ul style="list-style-type: none"> <li>• EIS - <i>Wambo Development Project</i>, volumes 1-5, dated July 2003, and prepared by Resource Strategies Pty Ltd</li> <li>• Ministers Conditions of Consent October 2006</li> <li>• Statement of Environmental Effects <i>Wambo Development Project – Wambo Seam Underground Mine Modification</i>, Jan 2005</li> <li>• <i>Wambo Development Project – Modification of DA 305-7-2003-i</i>, 4 Oct 2005;</li> <li>• <i>Wambo Development Project – Modification of DA 305-7-2003-i</i>, 23 Jan 2006;</li> <li>• <i>Wambo Development Project – Modification of DA 305-7-2003-i</i>, 27 Jul 2006;</li> <li>• Statement of Environmental Effects <i>Wambo Coal Mine Modification</i>, Sep 2006</li> </ul>	Noted	The Wambo Development project is being developed in accordance with the EIS2003 and the modifications approved in May 2005, January 2006, April 2006 and October 2006.
3/3	If there is any inconsistency between the above, either the conditions of this consent or the most recent document shall prevail to the extent of any inconsistency.		Noted	
3/4	The Applicant shall comply with any reasonable requirement/s of the Director-General arising from the Department’s assessment of: <ul style="list-style-type: none"> <li>(a) any reports, plans or correspondence that are submitted in accordance with this consent; and</li> <li>(b) the implementation of any actions or measures contained in these</li> </ul>		Noted	

reports, plans or correspondence				
<b>Deferred Commencement</b>				
3/5	This consent shall only commence when the Applicant has surrendered all previous development consents for the Wambo coal mine, excluding DA No. 108/91 issued by Singleton Shire Council, to the satisfaction of the Director-General	<ul style="list-style-type: none"> <li>Letter from Singleton Shire Council re Surrender of Existing Consent, 14 November 2006</li> <li>Letter from DoP re Commencement of DA 305-7-2003, 14 November 2005</li> </ul>	Yes	Wambo Coal Pty Ltd surrendered the previous Singleton Council development consents on 14 November 2005, excluding DA108/91, in accordance with the requirements of this condition.
<b>Limits on Approval</b>				
3/6	This consent lapses 21 years after the date it commences.	<ul style="list-style-type: none"> <li>Letter from Singleton Shire Council re Surrender of Existing Consent, 14 November 2006</li> </ul>	Noted	In accordance with the condition and the letter from DoP the consent lapses on 14 November 2023.
3/7	The Applicant shall not extract more than 14.7 million tonnes of ROM coal a year from the development.	<ul style="list-style-type: none"> <li>AEMR 2005-2006, submitted to DoP 31 August 2006</li> </ul>	Yes	5.848 Mt was extracted during 2005-06 reporting period.
<b>Management Plans/Monitoring Programs</b>				
3/7A	The Applicant may prepare and submit for approval all the management plans and monitoring programs required by this consent on a progressive basis. Where such management plans and monitoring programs are required before carrying out any development, or stage of development, they may be prepared and submitted for approval in relation to either discrete components of the development or for a specified time period.	Letter from DoP re Submission of Skinner Blast Management Plan, 30 Jun 2005	Yes	All required management plans for the project development have been submitted and approved. The following management plans are in draft form and have yet to be approved by the relevant authorities: Conservation Management Plan Traffic Management Plan Rejects Emplacement Strategy
<b>Structural Adequacy</b>				
3/8	The Applicant shall ensure that all new buildings and structures, and any alterations or additions to existing buildings and structures, are constructed in accordance with the relevant requirements of the BCA. <i>Notes:</i> <i>Under Part 4A of the EP&amp;A Act, the Applicant is required to obtain construction and occupation certificates for the proposed building works.</i> <i>Part 8 of the EP&amp;A Regulation sets out the requirements for the certification of development.</i> <i>The development is located in the Patrick Plains Mine Subsidence District. Under section 15 of the Mine Subsidence Compensation Act 1961, the Applicant is required to obtain the Mine Subsidence Board’s approval before constructing or relocating any improvements on the site</i>	<ul style="list-style-type: none"> <li>Construction Certificate No.76/05N for Industrial Workshop and Office, Dix Gardner Pty Ltd, 9 Nov 2005</li> <li>Occupation Certificate No.79/06N for Industrial Workshop and Office, Dix Gardner Pty Ltd, 18 Oct 2006</li> <li>Construction Certificate No.53/06N for Belt Switchgear, Transfer and Compressor Sheds, Dix Gardner Pty Ltd, 1 May 2006</li> <li>Occupation Certificate No.84/06N for Belt Switchgear, Transfer and Compressor Sheds, Dix Gardner Pty Ltd, 23</li> </ul>	Yes	New structures for the Wambo Development Project have the relevant Construction and Occupation Certificates issued by Dix Gardner Pty Ltd.

		<ul style="list-style-type: none"> <li>Oct 2006</li> <li>Construction Certificate No.76/05N for Stores Shed, Dix Gardner Pty Ltd, 6 Sep 2005</li> <li>Occupation Certificate No.85/06N for Stores Sheds, Dix Gardner Pty Ltd, 23 Oct 2006</li> </ul>		
	<b>Demolition</b>			
3/9	The Applicant shall ensure that all demolition work is carried out in accordance with AS 2601-2001: <i>The Demolition of Structures</i> , or its latest version.	<ul style="list-style-type: none"> <li>Australian Demolition Industries Limited, Quality Assurance Commitment</li> </ul>	Yes	Demolition of a redundant coal washery shed was undertaken by Australian Demolition Industries Limited in accordance with AS 2601-2001.
	<b>Operation of Plant and Equipment</b>			
3/10	The Applicant shall ensure that all plant and equipment used at the site, or to transport coal off-site, are: (a) maintained in a proper and efficient condition; and (b) operated in a proper and efficient manner	<ul style="list-style-type: none"> <li>Roche Maintenance System – Wambo Coal Mine</li> </ul>	Yes	Maintenance of all equipment used at the Wambo Coal operations is conducted under contract by Roche Mining Corporation in accordance with the Roche Maintenance System.
	<b>Section 94 Contribution</b>			
3/11	Before carrying out any development, or as agreed otherwise by Council, the Applicant shall pay Council \$60,000 in accordance with Council’s Section 94 Contribution Plan.	<ul style="list-style-type: none"> <li>Letter from Wambo Coal Pty Limited to Singleton Council re S94 Contributions, 31 Oct 2005</li> <li>Receipt from Singleton Council for \$75,000 contribution, 4 Nov 2005</li> </ul>	Yes	A cheque for \$60,000 for the S94 contribution and \$15,000 Community Enhancement Contributions was submitted to the Singleton Council in November 2005.
	<b>Community Enhancement Contribution</b>			
3/12	Before carrying out any development, or as agreed otherwise by Council, the Applicant shall pay Council \$15,000 for the enhancement of community infrastructure or services in the Warkworth/Jerry’s Plains area.	<ul style="list-style-type: none"> <li>Letter from Wambo Coal Pty Limited to Singleton Council re Community Enhancement Contributions, 31 Oct 2005</li> <li>Receipt from Singleton Council for \$75,000 contribution, 4 Nov 2005</li> </ul>	Yes	A cheque for \$60,000 for the S94 contribution and \$15,000 Community Enhancement Contributions was submitted to the Singleton Council in November 2005.
	<b>SCHEDULE 4 SPECIFIC ENVIRONMENTAL CONDITIONS</b>			
	<b>ACQUISITION UPON REQUEST</b>			
4/1	Upon receiving a written request for acquisition from the landowner of the land listed in Table 1, the Applicant shall acquire the land in accordance with the procedures in conditions 9-11 of schedule 5:	<ul style="list-style-type: none"> <li>Letters to Kannar, Hawkes, Lambkin, Skinner, Kelly, Henderson and Haynes re Right to Property Acquisition Upon Request, 20 Jul 2005</li> </ul>	Yes	Two properties were purchased from Long in Feb 2003 and Dec 2003. Fisher property was purchased in Sep 2004. Haynes property was purchased in Sep 2006.

	<table border="1"> <tr> <td>2 – Lambkin</td> <td>23A &amp; B - Kannar</td> </tr> <tr> <td>13C - Skinner</td> <td>31A,B,C &amp; D - Fisher</td> </tr> <tr> <td>19A &amp; B – Kelly</td> <td>51 – Hawkes</td> </tr> <tr> <td>22 – Henderson</td> <td>56 - Haynes</td> </tr> </table>	2 – Lambkin	23A & B - Kannar	13C - Skinner	31A,B,C & D - Fisher	19A & B – Kelly	51 – Hawkes	22 – Henderson	56 - Haynes		<ul style="list-style-type: none"> <li>• Letters from Curtis Delaney Gray Solicitors re Haynes Property Acquisition, 23 Jan 2006 and 21 July 2006</li> <li>• Letters from CEC M Hawkes re Property Acquisition – “Springwood”, 21 Nov 2005, 21 Sep 2006</li> <li>• Letters from Wambo to Hawkes re Property Acquisition, 21 Dec 2005, 7 Apr 2006</li> <li>• Letter from Wambo to DoP re Hawkes Property Acquisition, 28 Jun 2006</li> <li>• Letter to Wambo re Hawkes “Springwood” Property, Prince Property Valuers, 22 Sep 2006</li> <li>• Letter from DoP re Hawkes “Springwood” Property, 23 Oct 2006</li> <li>• Letter to Wambo re Kannar Property Acquisition, Smith Dunlop Lawyers, 23 Sep 2006</li> </ul>		<p>Kannar property – offer made and accepted in 2006. Hawkes property is currently being assessed by an independent valuer. Lambkin, Henderson, Skinner, and Kelly properties have been advised of their right to acquisition.</p>																				
2 – Lambkin	23A & B - Kannar																																
13C - Skinner	31A,B,C & D - Fisher																																
19A & B – Kelly	51 – Hawkes																																
22 – Henderson	56 - Haynes																																
<p><b>AIR QUALITY - Impact Assessment Criteria</b></p>																																	
<p>4/2</p>	<p>Applicant shall ensure that the air pollution generated by the development does not exceed the criteria listed in Tables 2, 3, and 4 at any privately-owned land.</p> <table border="1"> <thead> <tr> <th>Pollutant</th> <th>Averaging period</th> <th>Criterion</th> </tr> </thead> <tbody> <tr> <td>Total suspended particulate (TSP) matter</td> <td>Annual</td> <td>90 µg/m<sup>3</sup></td> </tr> <tr> <td>Particulate matter &lt; 10 µm (PM<sub>10</sub>)</td> <td>Annual</td> <td>30 µg/m<sup>3</sup></td> </tr> </tbody> </table> <p><i>Table 2: Long term impact assessment criteria for particulate matter</i></p>	Pollutant	Averaging period	Criterion	Total suspended particulate (TSP) matter	Annual	90 µg/m <sup>3</sup>	Particulate matter < 10 µm (PM <sub>10</sub> )	Annual	30 µg/m <sup>3</sup>	<ul style="list-style-type: none"> <li>• AEMR 2005-2006</li> <li>• Dust and PM<sub>10</sub> Monitoring Program Results Nov 2005- Oct 2006</li> </ul>	<p>Yes</p>	<p>Air quality monitoring results indicated: <u>Dust Deposition Gauges</u> 14 Dust deposition gauges have been installed in the area surrounding the Wambo Coal operations. All dust gauges located in residential properties demonstrated deposition rates below the annual average criteria of 4g/m<sup>2</sup>/mth. <u>Air Quality Monitoring Stations</u> PM<sub>10</sub> exceeded the 24hr criteria of 50 µg/m<sup>3</sup> on the following occasions between November 2005 and October 2006:</p> <table border="1"> <thead> <tr> <th>Location</th> <th>Dates</th> <th>Results &gt;50µg/m<sup>3</sup></th> <th>YTD Average</th> </tr> </thead> <tbody> <tr> <td>Coralie AQ01</td> <td>5/11/05-31/10/06</td> <td>16 of 212</td> <td>23µg/m<sup>3</sup></td> </tr> <tr> <td>Caban AQ02</td> <td>12/4/06-31/10/06</td> <td>2 of 203</td> <td>20µg/m<sup>3</sup></td> </tr> <tr> <td>Thelander AQ03</td> <td>1/7/06-31/10/06</td> <td>3 of 123</td> <td>18.4µg/m<sup>3</sup></td> </tr> <tr> <td>Muller AQ04</td> <td>1/7/06 - 31/10/06</td> <td>3 of 123</td> <td>20.2µg/m<sup>3</sup></td> </tr> </tbody> </table>	Location	Dates	Results >50µg/m <sup>3</sup>	YTD Average	Coralie AQ01	5/11/05-31/10/06	16 of 212	23µg/m <sup>3</sup>	Caban AQ02	12/4/06-31/10/06	2 of 203	20µg/m <sup>3</sup>	Thelander AQ03	1/7/06-31/10/06	3 of 123	18.4µg/m <sup>3</sup>	Muller AQ04	1/7/06 - 31/10/06	3 of 123	20.2µg/m <sup>3</sup>
Pollutant	Averaging period	Criterion																															
Total suspended particulate (TSP) matter	Annual	90 µg/m <sup>3</sup>																															
Particulate matter < 10 µm (PM <sub>10</sub> )	Annual	30 µg/m <sup>3</sup>																															
Location	Dates	Results >50µg/m <sup>3</sup>	YTD Average																														
Coralie AQ01	5/11/05-31/10/06	16 of 212	23µg/m <sup>3</sup>																														
Caban AQ02	12/4/06-31/10/06	2 of 203	20µg/m <sup>3</sup>																														
Thelander AQ03	1/7/06-31/10/06	3 of 123	18.4µg/m <sup>3</sup>																														
Muller AQ04	1/7/06 - 31/10/06	3 of 123	20.2µg/m <sup>3</sup>																														

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

*Table 3: Short term impact assessment criterion for particulate matter*


Pollutant	Averaging period	Maximum increase in deposited dust level	Max. total dep. dust level
Deposited dust	Annual	2 g/m <sup>2</sup> /mth	4 g/m <sup>2</sup> /mth

*Table 4: Long term impact assessment criteria for deposited dust*

The Year to Date average for the PM10 results indicate that the annual average of 30µg/m<sup>3</sup> was not exceeded at any of the four stations over the monitoring period, although the 50 µg/m<sup>3</sup> 24 hour average was exceeded on a number of occasions. However not all of these could be attributed to the Wambo operations.



Land Acquisition Criteria																																					
4/3	<p>If the air pollution generated by the development exceeds the criteria in Tables 5, 6, and 7 at any privately-owned land, the Applicant shall, upon receiving a written request for acquisition from the landowner, acquire the land in accordance with the procedures in conditions 9-11 of schedule 5.</p> <table border="1"> <thead> <tr> <th>Pollutant</th> <th>Averaging period</th> <th>Criterion</th> </tr> </thead> <tbody> <tr> <td>Total suspended particulate (TSP) matter</td> <td>Annual</td> <td>90 µg/m<sup>3</sup></td> </tr> <tr> <td>Particulate matter &lt; 10 µm (PM<sub>10</sub>)</td> <td>Annual</td> <td>30 µg/m<sup>3</sup></td> </tr> </tbody> </table> <p><i>Table 5: Long term land acquisition criteria for particulate matter</i></p> <table border="1"> <thead> <tr> <th>Pollutant</th> <th>Averaging period</th> <th>Criterion</th> <th>Percentile<sup>1</sup></th> <th>Basis</th> </tr> </thead> <tbody> <tr> <td>Particulate matter &lt; 10 µm (PM<sub>10</sub>)</td> <td>24 hour</td> <td>150 µg/m<sup>3</sup></td> <td>99<sup>2</sup></td> <td>Total<sup>3</sup></td> </tr> <tr> <td>Particulate matter &lt; 10 µm (PM<sub>10</sub>)</td> <td>24 hour</td> <td>50 µg/m<sup>3</sup></td> <td>98.6</td> <td>Increment<sup>4</sup></td> </tr> </tbody> </table> <p><i>Table 6: Short term land acquisition criteria for particulate matter</i></p> <p><sup>1</sup>Based on the number of block 24 hour averages in an annual period.  <sup>2</sup>Excludes extraordinary events such as bushfires, prescribed burning, dust storms, sea fog, fire incidents, illegal activities or any other activity agreed by the Director-General in consultation with the DEC.  <sup>3</sup>Background PM<sub>10</sub> concentrations due to all other sources plus the incremental increase in PM<sub>10</sub> concentrations due to the mine alone.  <sup>4</sup>Incremental increase in PM<sub>10</sub> concentrations due to the mine alone.</p> <table border="1"> <thead> <tr> <th>Pollutant</th> <th>Averaging period</th> <th>Maximum increase in deposited dust level</th> <th>Maximum total deposited dust level</th> </tr> </thead> <tbody> <tr> <td></td> <td></td> <td></td> <td></td> </tr> </tbody> </table>			Pollutant	Averaging period	Criterion	Total suspended particulate (TSP) matter	Annual	90 µg/m <sup>3</sup>	Particulate matter < 10 µm (PM <sub>10</sub> )	Annual	30 µg/m <sup>3</sup>	Pollutant	Averaging period	Criterion	Percentile <sup>1</sup>	Basis	Particulate matter < 10 µm (PM <sub>10</sub> )	24 hour	150 µg/m <sup>3</sup>	99 <sup>2</sup>	Total <sup>3</sup>	Particulate matter < 10 µm (PM <sub>10</sub> )	24 hour	50 µg/m <sup>3</sup>	98.6	Increment <sup>4</sup>	Pollutant	Averaging period	Maximum increase in deposited dust level	Maximum total deposited dust level					Yes	No written requests from landowners of privately owned land have been received.
Pollutant	Averaging period	Criterion																																			
Total suspended particulate (TSP) matter	Annual	90 µg/m <sup>3</sup>																																			
Particulate matter < 10 µm (PM <sub>10</sub> )	Annual	30 µg/m <sup>3</sup>																																			
Pollutant	Averaging period	Criterion	Percentile <sup>1</sup>	Basis																																	
Particulate matter < 10 µm (PM <sub>10</sub> )	24 hour	150 µg/m <sup>3</sup>	99 <sup>2</sup>	Total <sup>3</sup>																																	
Particulate matter < 10 µm (PM <sub>10</sub> )	24 hour	50 µg/m <sup>3</sup>	98.6	Increment <sup>4</sup>																																	
Pollutant	Averaging period	Maximum increase in deposited dust level	Maximum total deposited dust level																																		

		Deposited dust	Annual	2 g/m <sup>2</sup> /month	4 g/m <sup>2</sup> /month																								
<p>Table 7: Long term land acquisition criteria for deposited dust</p>																													
<p><b>Monitoring</b></p>																													
4/4	<p>Applicant shall establish air quality monitoring stations at a minimum of 4 locations around the site, including the residences on properties 40 (Muller) and 125 (Barry) whilst privately-owned, to monitor (by sampling and obtaining results by analysis) the concentration of each pollutant in Table 8 to the satisfaction of DEC and the Director-General, using the specified averaging period, frequency, and sampling method:</p> <table border="1"> <thead> <tr> <th>Pollutant</th> <th>Units of Measure</th> <th>Averaging Period</th> <th>Frequency</th> <th>Sampling method<sup>1</sup></th> </tr> </thead> <tbody> <tr> <td>PM<sub>10</sub></td> <td>µg/m<sup>3</sup></td> <td>24 hour, annual</td> <td>Continuous</td> <td>AS3580.9.8 – 2001<sup>2</sup></td> </tr> <tr> <td>TSP</td> <td>µg/m<sup>3</sup></td> <td>24 hour, annual</td> <td>1 day in 6</td> <td>AM-15</td> </tr> <tr> <td>Dust Deposition Siting</td> <td>g/m<sup>2</sup>/month</td> <td>Month, annual</td> <td>Continuous</td> <td>AM-19</td> </tr> <tr> <td></td> <td>-</td> <td>-</td> <td>-</td> <td>AM-1</td> </tr> </tbody> </table> <p>Table 8: Air quality monitoring</p> <p><sup>1</sup> NSW EPA, 2001, <i>Approved Methods for the Sampling and Analysis of Air Pollutants in NSW</i>.</p> <p><sup>2</sup> Standards Australia, 2001, AS3580.9.8-2002, <i>Method for Sampling and Analysis of Ambient Air - Determination of Suspended Particulate Matter - PM<sub>10</sub> Continuous Direct Mass Method using a Tapered Element Oscillating Microbalance Analyser, or any other method that is approved by the DEC and the Director-General</i>.</p>	Pollutant	Units of Measure	Averaging Period	Frequency	Sampling method <sup>1</sup>	PM <sub>10</sub>	µg/m <sup>3</sup>	24 hour, annual	Continuous	AS3580.9.8 – 2001 <sup>2</sup>	TSP	µg/m <sup>3</sup>	24 hour, annual	1 day in 6	AM-15	Dust Deposition Siting	g/m <sup>2</sup> /month	Month, annual	Continuous	AM-19		-	-	-	AM-1	<ul style="list-style-type: none"> <li>Environmental Monitoring Program – Section 4 Air Quality, Mar 2006</li> <li>Air Quality Monitoring Program, Aug 2005</li> <li>Letter from DEC re Air Quality Monitoring Program, 7 Sep 2005</li> <li>Letter from DIPNR re Air Quality Monitoring Program, 13 Sep 2005</li> </ul>	Yes	<p>Four air quality monitoring stations with continuous PM<sub>10</sub>, hi-volume dust samplers and dust deposition gauges have been established at Coralie, Caban, Thelander and Muller locations.</p> <p>Additional 10 dust deposition gauges have also been installed around the project site.</p>  <p>Plate 1: Air quality monitoring station with high volume dust sampler, PM<sub>10</sub> continuous monitor and dust deposition gauge</p>
Pollutant	Units of Measure	Averaging Period	Frequency	Sampling method <sup>1</sup>																									
PM <sub>10</sub>	µg/m <sup>3</sup>	24 hour, annual	Continuous	AS3580.9.8 – 2001 <sup>2</sup>																									
TSP	µg/m <sup>3</sup>	24 hour, annual	1 day in 6	AM-15																									
Dust Deposition Siting	g/m <sup>2</sup> /month	Month, annual	Continuous	AM-19																									
	-	-	-	AM-1																									
4/5	<p>Before carrying out any development, the Applicant shall prepare an Air Quality Monitoring Program, in consultation with DEC, and to the satisfaction of the Director-General.</p>	<ul style="list-style-type: none"> <li>Environmental Monitoring Program – Section 4 Air Quality, Mar 2006</li> <li>Letter from DEC re Consultation and Approval of Management Plans, 7 Sep 2005</li> </ul>	Yes	<p>The DEC advised in a letter dated 7 September 2005 that “while they encourage the preparation of management plans they will not review or comment on them”. Consultation as such was not conducted with the DEC but this has not been interpreted as a non-compliance with the condition due to the content of the DEC letter..</p>																									
<p><b>NOISE</b></p>																													

<sup>1</sup> Incorporates DEC GTA

4/6	<b>Noise Impact Assessment Criteria</b>			<ul style="list-style-type: none"> <li>• Noise Monitoring Report Dec 2005</li> <li>• Noise Monitoring Report Mar 2006</li> <li>• Noise Monitoring Report May 2006</li> </ul>	Yes	<p>The quarterly attended noise monitoring has indicated that extraneous noise sources (e.g. wind, birds, insects, highway traffic, mines other than Wambo) were the dominant sources of noise measured at the residences around the Wambo operations. Wambo mine noise levels were generally low although audible along with the other sources at some of the properties. Mine ‘hum’ from mine operations other than Wambo were audible on many occasions in the March and May monitoring runs.</p> <p>Wambo Coal installed Real Time Noise Monitoring Stations at four locations in June 2006 as a management tool to provide improved noise recording with the option of searching increased levels for interpretation of the results where noise criteria are exceeded.</p>	
	The Applicant shall ensure that the noise generated by the development does not exceed the noise impact assessment criteria presented in Table 9.						
	<b>Day</b> <i>L<sub>Aeq</sub>(15 minute)</i>	<b>Evening/ Night</b> <i>L<sub>Aeq</sub>(5 1minute)</i>	<b>Night</b> <i>L<sub>A1</sub>(1 minute)</i>				<b>Land Number</b>
	35	41	50				94 – Curlewis
	35	40	50				3 – Birrell
							4B – Circosta
							15B - McGowen/Caslick
							16 – Cooper
							23C – Kannar
							25 – Fenwick
							28A & B – Garland
							33 -Thelander/O'Neill
							39 – Northcote
							40 – Muller
	254A – Algie						
35	39	50	5 – Strachan				
			6 - Merrick				
			7 - Maizey				
			37 - Lawry				
35	38	50	48 - Ponder				
			1 - Brosi				
			17 - Carter				
			18 - Denney				
			38 - Williams				
			49 - Oliver				

				75 - Barnes 91 - Bailey 27 - Birralee 43 - Carmody 137 - Woodruff 163 - Rodger/Williams 246 - Bailey 13B - Skinner 178 - Smith 188 - Fuller 262A, B & C - Moses All other residential or sensitive receptors, excluding the receptors listed in condition 1 above			
Table 9: Noise impact assessment criteria dB(A)							
<b>Land Acquisition Criteria</b>							
7	If the noise generated by the development exceeds the criteria in Table 10, the Applicant shall, upon receiving a written request for acquisition from the landowner, acquire the land in accordance with the procedures in conditions 9-11 of schedule 5.			• Letter to Wambo re Kannar Property Acquisition, Smith Dunlop Lawyers, 23 Sep 2006		A written request was received from Kannar on 23 Sep 2006. The acquisition process is underway but has been delayed due to the title search. No other requests for acquisition have been received.	
	<b>Day/Evening/Night</b> $L_{Aeq}(15\text{ minute})$	<b>Property</b>					
	43	94 - Curlewis 23C – Kannar 254A - Algie					
	40	All other residential or sensitive receptor, excluding the receptors listed in condition 1 above					
Table 10: Land acquisition criteria dB(A)							

Monitoring																																								
4/8	Applicant shall conduct real-time monitoring of the noise generated by the development at a minimum of four properties to the south and north-west of the site, in general accordance with the <i>NSW Industrial Noise Policy</i> and <i>AS1055-1997: Acoustics – Description and Measurement of Environmental</i> .	<ul style="list-style-type: none"> <li>Environmental Monitoring Program – Section 5 Noise Monitoring Figure 2</li> </ul>	Yes	<p>Four real-time noise monitors have been located around the site. Additional attended and unattended monitoring has been conducted on a quarterly basis.</p> <p>Real time noise monitoring is conducted at the following locations approved by DoP on 10 Oct 2005:</p> <p>Muller and Thelander residence (northwest of the project area); Harris residence (located south of the project area); and Kelly residence (located to the east of the project area).</p>																																				
4/9	Before carrying out any development, the Applicant shall prepare a Noise Monitoring Program to the satisfaction of the Director-General, which includes a noise monitoring protocol for evaluating compliance with the criteria in Tables 9 & 10	<ul style="list-style-type: none"> <li>Noise Monitoring Program, Sep 2005</li> <li>Letter from DoP re Noise Monitoring Program, 10 Oct 2005</li> </ul>	Yes																																					
<b><sup>2</sup>METEOROLOGICAL MONITORING</b>																																								
4/10	Applicant shall establish a permanent meteorological station at a location approved by the DEC, and to the satisfaction of the Director-General, to monitor the parameters specified in Table 11, using the specified units of measure, averaging period, frequency, and sampling method in the table.	<ul style="list-style-type: none"> <li>AEMR 2005-2006, Appendix 2A Meteorological Data</li> <li>Wambo Coal Weather Summary Sheets – Jul, Aug and Sep 2006</li> </ul>	Yes	<p>A permanent meteorological station is located at the Wambo Administration Building with the following parameters measured:</p> <ul style="list-style-type: none"> <li>lapse rate;</li> <li>rainfall;</li> <li>sigma theta at 10m;</li> <li>temperature at 10m;</li> <li>temperature at 2m;</li> <li>solar radiation at 10m;</li> <li>wind direction at 10m;</li> <li>and wind speed at 10m.</li> </ul>																																				
	<table border="1"> <thead> <tr> <th>Parameter</th> <th>Units</th> <th>Averaging period</th> <th>Frequency</th> <th>Sampling method<sup>1</sup></th> </tr> </thead> <tbody> <tr> <td>Lapse rate</td> <td>°C /100m</td> <td>1 hour</td> <td>Continuous</td> <td>Note<sup>2</sup></td> </tr> <tr> <td>Rainfall</td> <td>mm/hr</td> <td>1 hour</td> <td>Continuous</td> <td>AM-4</td> </tr> <tr> <td>Sigma Theta @ 10 m</td> <td>°</td> <td>1 hour</td> <td>Continuous</td> <td>AM-2</td> </tr> <tr> <td>Siting</td> <td>-</td> <td>-</td> <td>-</td> <td>AM-1</td> </tr> <tr> <td>Temp @ 10 m</td> <td>K</td> <td>1 hour</td> <td>Continuous</td> <td>AM-4</td> </tr> <tr> <td>Temp @ 2 m</td> <td>K</td> <td>1 hour</td> <td>Continuous</td> <td>AM-4</td> </tr> </tbody> </table>	Parameter	Units	Averaging period	Frequency	Sampling method <sup>1</sup>	Lapse rate	°C /100m	1 hour	Continuous	Note <sup>2</sup>	Rainfall	mm/hr	1 hour	Continuous	AM-4	Sigma Theta @ 10 m	°	1 hour	Continuous	AM-2	Siting	-	-	-	AM-1	Temp @ 10 m	K	1 hour	Continuous	AM-4	Temp @ 2 m	K	1 hour	Continuous	AM-4				
Parameter	Units	Averaging period	Frequency	Sampling method <sup>1</sup>																																				
Lapse rate	°C /100m	1 hour	Continuous	Note <sup>2</sup>																																				
Rainfall	mm/hr	1 hour	Continuous	AM-4																																				
Sigma Theta @ 10 m	°	1 hour	Continuous	AM-2																																				
Siting	-	-	-	AM-1																																				
Temp @ 10 m	K	1 hour	Continuous	AM-4																																				
Temp @ 2 m	K	1 hour	Continuous	AM-4																																				

<sup>2</sup> Incorporates DEC GTA

	<table border="1"> <tr> <td>Total Solar Radiation @ 10m</td> <td>W/m<sup>2</sup></td> <td>1 hour</td> <td>Continuous</td> <td>AM-4</td> </tr> <tr> <td>Wind Direction @ 10 m</td> <td>°</td> <td>1 hour</td> <td>Continuous</td> <td>AM-2</td> </tr> <tr> <td>Wind Speed @ 10 m</td> <td>m/s</td> <td>1 hour</td> <td>Continuous</td> <td>AM-2</td> </tr> </table>	Total Solar Radiation @ 10m	W/m <sup>2</sup>	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			
Total Solar Radiation @ 10m	W/m <sup>2</sup>	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															
<i>Table 11: Meteorological monitoring</i>																			
<b><sup>3</sup>BLASTING &amp; VIBRATION - Airblast Overpressure Limits</b>																			
4/11	<p>The Applicant shall ensure that the airblast overpressure level from blasting at the development does not exceed the criteria in Table 12 at any residence on privately-owned land with the exception of property 13C (Skinner) (see condition 20 below).</p> <table border="1"> <thead> <tr> <th>Airblast overpressure level (dB(Lin Peak))</th> <th>Allowable exceedance</th> </tr> </thead> <tbody> <tr> <td>115</td> <td>5% of the total number of blasts over a period of 12 months</td> </tr> <tr> <td>120</td> <td>0%</td> </tr> </tbody> </table>	Airblast overpressure level (dB(Lin Peak))	Allowable exceedance	115	5% of the total number of blasts over a period of 12 months	120	0%	<ul style="list-style-type: none"> <li>AEMR 2005-2006</li> <li>Blast Monitoring Results 1 Nov 2005 to 31 Oct 2006</li> <li>Environmental Incident Report No.11 re Blast Overpressure Result at Muller monitoring site.</li> <li>Letter from DEC re blast Overpressure Exceedance, 13 Jun 2006</li> </ul>	NO	<p>One blast result exceeded 120dB (Lin Peak) on 1 June 2006. The overpressure result of 125dB was reported to the DEC on 1 June 2006 and an investigation report provided to the DEC on 7 June 2006 indicated that the cause of the overpressure exceedance was probably a temperature inversion present at the time of the shot (0913 hours).</p> <p>The DEC issued a cautionary letter in relation to the failure to comply with the maximum permissible overpressure level of 120dB.</p> <p>Two measurements of greater than 115dB were recorded at the Kelly blast monitor site, from 157 blasts. No other exceedance of the criteria was recorded.</p>									
Airblast overpressure level (dB(Lin Peak))	Allowable exceedance																		
115	5% of the total number of blasts over a period of 12 months																		
120	0%																		
<i>Table 12: Airblast overpressure impact assessment criteria</i>																			
<b>Ground Vibration Impact Assessment Criteria</b>																			
4/12	<p>The Applicant shall ensure that the ground vibration level from blasting at the development does not exceed the criteria in Table 13 at any residence on privately-owned land with the exception of property 13C (Skinner) (see condition 20 below).</p> <table border="1"> <thead> <tr> <th>Peak particle velocity (mm/s)</th> <th>Allowable exceedance</th> </tr> </thead> <tbody> <tr> <td>5</td> <td>5% of the total number of blasts over a period of 12 months</td> </tr> <tr> <td>10</td> <td>0%</td> </tr> </tbody> </table>	Peak particle velocity (mm/s)	Allowable exceedance	5	5% of the total number of blasts over a period of 12 months	10	0%	<ul style="list-style-type: none"> <li>AEMR 2005-2006</li> <li>Blast Monitoring Results 1 Nov 2005 to 31 Oct 2006</li> </ul>	Yes	<p>There have been no results recorded that exceeded the 5mm/sec peak particle velocity criteria.</p>									
Peak particle velocity (mm/s)	Allowable exceedance																		
5	5% of the total number of blasts over a period of 12 months																		
10	0%																		

<sup>3</sup> Incorporates DEC GTA

<i>Table 13: Ground vibration impact assessment criteria</i>				
<b>Blasting Hours</b>				
4/13	The Applicant shall only carry out blasting at the development between 9 am and 5 pm Monday to Saturday inclusive. No blasting is allowed on Sundays, public holidays or any other time without the written approval of DEC	<ul style="list-style-type: none"> <li>• Blast Monitoring Results 1 Nov 2005 to 31 Oct 2006</li> </ul>	Yes	No blasts occurred outside the allowable hours of 0900 to 1700 hours.
<b>Public Notice</b>				
4/14	<p><i>During the life of the development, the Applicant shall:</i></p> <p>(a) operate a Blasting Hotline, or alternate system agreed to by the Director-General, to enable the public to get up-to-date information on blasting operations at the development; and</p> <p>(b) notify the occupants of any land within 2 km of the site about this hotline or system on an annual basis</p>	<ul style="list-style-type: none"> <li>• Wambo Wrap Jan 2006</li> <li>• Wambo Wrap Jul 2006</li> <li>• Letters to Residents (43) re Hotline and Blast Notification, 3 Nov 2005</li> </ul>	Yes	A blasting Hotline has been established (tel: 8250 5205). Residents within 2km of the mine have been advised of the Hotline number, and the Hotline number is also provided in the Wambo Wrap Newsletter that is distributed twice a year to the residents of Jerrys Plains, Warkworth Village, Long Point Road and Wambo Road.
<b>Property Inspection</b>				
15	Before carrying out any blasting, the Applicant shall advise all landowners within 2 km of the site that they are entitled to a property inspection.	<ul style="list-style-type: none"> <li>• Letters to Residents (43) re Hotline and Blast Notification, 3 Nov 2005</li> </ul>	Yes	Residents within 2km of the mine site were advised that they were entitled to a property inspection in the letter of Nov 2005.
16	<p><i>If the Applicant receives a written request for a property inspection from any landowner within 2 km of the site, the Applicant shall:</i></p> <p>(a) within 14 days of receiving the request, commission a suitably qualified person, whose appointment has been approved by the Director-General, to inspect the condition of any building or structure on the land, and recommend measures to mitigate any potential blasting impacts; and</p> <p>(b) give the landowner a copy of this property inspection report within 14 days of receiving the report</p>	<ul style="list-style-type: none"> <li>• Letter from Wambo to DoP re Appointment of Property Inspector, 7 Oct 2005</li> <li>• Letter from DoP re Approval of Kane Building Services, 13 Oct 2005</li> <li>• Letter from RTM re Request for Property Inspection at 563 Redmanvale Road Jerrys Plains, 8 Nov 2005</li> <li>• Letter from Barnes re Request for Property Inspection- 390 Redmanvale Road Jerrys Plains, 15 Nov 2005</li> <li>• Letter from Carmody re Request for Property Inspection - 2228 Jerrys Plains Road, 18 Nov 2005</li> <li>• Letter from Rodger &amp; Associates re Request for Property Inspection at 449 Redmanvale Road Jerrys Plains, 23 Nov 2005</li> <li>• Letter from Lianos re Request for Property Inspection - 217 Wambo Rd Bulga, 7 Dec 2005</li> </ul>	Yes	Five written requests and four telephone requests for property inspections were received and reports commissioned by the approved property inspectors. Reports have been prepared and provided to each of the property owners.

		<ul style="list-style-type: none"> <li>• Letter from Mills re Request for Property Inspection at 469 Redmanvale Road Jerrys Plains, 25 Jan 2006</li> <li>• Letter from Woodruff re Request for Property Inspection -365 Redmanvale Road Jerrys Plains, 7 Mar 2006</li> <li>• Letter from Northcote re Request for Property Inspection at Lot 5, Jerrys Plains Road, 21 Sep 2006</li> </ul>																	
	<b>Cumulative Impacts</b>																		
4/17	The Applicant shall undertake all reasonable steps to co-ordinate blasting at the development with the blasting at surrounding mines – such as Bulga, Mount Thorley, Warkworth, and Hunter Valley Operations – to minimise the cumulative impacts of blasting in the region.		Yes	There is a procedure in place for interaction with United Collieries in relation to blasting. Blasting at Wambo Coal does not currently require road closures.															
	<b>Monitoring</b>																		
4/18	<p>The Applicant shall monitor the airblast overpressure and ground vibration impacts of the development at a minimum of four locations around the site, using the specified units of measure, frequency, sampling method, and location in Table 14.</p> <table border="1"> <thead> <tr> <th>Parameter</th> <th>Units of Measure</th> <th>Frequency</th> <th>Sampling Method</th> <th>Location</th> </tr> </thead> <tbody> <tr> <td>Airblast over pressure</td> <td>dB(Lin Peak)</td> <td>During every blast</td> <td>AS2187.2-1993<sup>1</sup></td> <td>Not less than 3.5 m from a building or structure</td> </tr> <tr> <td>Peak particle velocity</td> <td>mm/s</td> <td>During every blast</td> <td>AS2187.2-1993</td> <td>Not more than 30 m from a building or structure</td> </tr> </tbody> </table> <p><i>Table 14: Airblast overpressure and ground vibration monitoring</i> <sup>1</sup>Standards Australia, 1993, AS2187.2-1993: Explosives - Storage, Transport and Use - Use of Explosives.</p>	Parameter	Units of Measure	Frequency	Sampling Method	Location	Airblast over pressure	dB(Lin Peak)	During every blast	AS2187.2-1993 <sup>1</sup>	Not less than 3.5 m from a building or structure	Peak particle velocity	mm/s	During every blast	AS2187.2-1993	Not more than 30 m from a building or structure	<ul style="list-style-type: none"> <li>• Blast Monitoring Program Sept 2005</li> <li>• Environmental Monitoring Program Mar 2006</li> </ul>	Yes	Airblast overpressure and peak particle velocity are measured at fixed locations at Muller, Kelly, Harris properties and the tailings emplacement embankment.
Parameter	Units of Measure	Frequency	Sampling Method	Location															
Airblast over pressure	dB(Lin Peak)	During every blast	AS2187.2-1993 <sup>1</sup>	Not less than 3.5 m from a building or structure															
Peak particle velocity	mm/s	During every blast	AS2187.2-1993	Not more than 30 m from a building or structure															
4/19	Before carrying out any development, the Applicant shall prepare a detailed Blast Monitoring Program for the development, in consultation with DEC, and to the satisfaction of the Director-General.	<ul style="list-style-type: none"> <li>• Blast Monitoring Program Sept 2005</li> <li>• Environmental Monitoring Program Mar 2006</li> </ul>	Yes																



		<ul style="list-style-type: none"> <li>• Letter from DoP re Blast Monitoring Program, 1 Dec 2006</li> <li>• Letter from DEC re Blast Monitoring Program, undated</li> </ul>		
	<b>Blast Management</b>			
4/20	Before carrying out any development, the Applicant shall prepare a Blast Management Plan for property 13C (Skinner) in consultation with the landowner, and to the satisfaction of the Director-General. This plan must include measures to minimise, mitigate, and if necessary remediate the blasting impacts on the property. The Applicant shall implement this plan whilst the property is privately-owned.	<ul style="list-style-type: none"> <li>• Letter from DoP re Extension of Date of Submission for Skinner Blast Management Plan, 30 Jun 2006</li> </ul>	Noted	The Skinner property is subject to acquisition negotiations and the DoP agreed to an extension of time for the submission of the blast management plan to accommodate negotiations with the affected land owner.
	<b>Property Investigations</b>			
4/21	<p>If any landowner within a 2 km radius of the site claims that his/her property has been damaged as a result of blasting at the development, the Applicant shall:</p> <p>(a) within 14 days of receiving this claim in writing, commission a suitably qualified person whose appointment has been approved by the Director-General to investigate the claim; and</p> <p>(b) give the landowner a copy of the property investigation report within 14 days of receiving the report.</p> <p>If this independent investigation confirms the landowner’s claim, and both parties agree with these findings, then the Applicant shall repair the damages to the satisfaction of the Director-General.</p> <p>If the Applicant or landowner disagrees with the findings of the independent property investigation, then either party may refer the matter to the Director-General for resolution.</p> <p>If the matter cannot be resolved within 21 days, the Director-General shall refer the matter to an Independent Dispute Resolution Process (See Appendix 2)</p>		NA	There have been no claims for damages caused by blasting, from residents within a 2km radius of the site.
	<b>SUBSIDENCE - Subsidence Management Plan</b>			
4/22	<p>Before carrying out any underground mining operations that will potentially lead to subsidence of the land surface, the Applicant shall prepare a Subsidence Management Plan for those operations in accordance with the DPI documents:</p> <ul style="list-style-type: none"> <li>• New Approval Process for Management of Coal Mining Subsidence - Policy; and</li> <li>• Guideline for Applications for Subsidence Management Approvals</li> </ul> <p>to the satisfaction of the Director-General of DPI</p>	<ul style="list-style-type: none"> <li>• Wambo Seam Underground First Workings Subsidence Management Plan, Mar 2005</li> <li>• Letter from DPI re Wambo First Workings SMP LW1, 21 Oct 2005</li> <li>• North Wambo Underground Mine Subsidence Management Plan, Mar 2006</li> <li>• Letter from DPI re North</li> </ul>	Yes	A Subsidence Management Plan for first workings in the Wambo Seam was approved by DPI- Mineral Resources in Oct 2005, and the Subsidence Management Plan for 2005 to 2012 has been submitted and was pending approval at the time of the audit.

		Wambo Underground Mine Subsidence Management Plan, 8 Mar 2006											
	<b>REJECTS EMPLACEMENT STRATEGY</b>												
4/22A	Within 6 months of this consent commencing, the Applicant shall prepare a Life of Mine Rejects Emplacement Strategy for the development, to the satisfaction of the Director-General of DPI.	<ul style="list-style-type: none"> <li>Rejects Emplacement Strategy, May 2006</li> </ul>	Yes	The Rejects Emplacement Strategy was submitted to the DPI within 6 months of the date of commencement of the Consent (i.e. 14 November 2005).									
	<b>*SURFACE &amp; GROUND WATER</b> - Note: The Applicant is required to obtain licences for the development under the Water Act 1912 and the Protection of the Environment Operations Act 1997												
	<b>Pollution of Waters</b>												
4/23	Except as may be expressly provided by a DEC licence, the Applicant shall comply with section 120 of the Protection of the Environment Operations Act 1997 during the carrying out of the development.		Noted										
	<b>Discharge Limits</b>												
24	<p>Except as may be expressly provided by a DEC licence or the Protection of the Environment Operations (Hunter River Salinity Trading Scheme) Regulation 2002, the Applicant shall:</p> <p>(a) not discharge more than 250 ML/day from the licenced discharge point/s at the development;</p> <p>(b) ensure that the discharges from any licenced discharge point comply with the limits in Table 15:</p> <table border="1" data-bbox="268 846 869 984"> <thead> <tr> <th>Pollutant</th> <th>Units of measure</th> <th>100 percentile concentration limit</th> </tr> </thead> <tbody> <tr> <td>pH</td> <td>pH</td> <td>6.5 ≤ pH ≤ 9</td> </tr> <tr> <td>Non-filterable residue</td> <td>mg/litre</td> <td>NFR ≤ 120</td> </tr> </tbody> </table> <p>Table 15: Discharge Limits</p>	Pollutant	Units of measure	100 percentile concentration limit	pH	pH	6.5 ≤ pH ≤ 9	Non-filterable residue	mg/litre	NFR ≤ 120	<ul style="list-style-type: none"> <li>Letter to DEC re Hunter River Salinity Trading Scheme Annual Report 2005-06</li> </ul>	Noted	No discharges occurred to the Hunter River between November 2005 and November 2006.
Pollutant	Units of measure	100 percentile concentration limit											
pH	pH	6.5 ≤ pH ≤ 9											
Non-filterable residue	mg/litre	NFR ≤ 120											
	<b>Site Water Balance</b>												
4/25	<p><sup>5</sup>Each year, the Applicant shall:</p> <p>(a) review the site water balance for the development against the predictions in the EIS;</p> <p>(b) re-calculate the site water balance for the development; and</p> <p>(c) report the results of this review in the AEMR</p>	<ul style="list-style-type: none"> <li>AEMR 2005-2006</li> </ul>	Yes	The site water balance was recalculated and reported in the AEMR.									
	<b>North Wambo Creek Diversion</b>												

<sup>4</sup> Incorporates DEC GTA

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

4/26	The Applicant shall design, construct, maintain, and rehabilitate the temporary North Wambo Creek Bypass and North Wambo Creek Diversion in consultation with DPI and DNR, and to the satisfaction of the Director-General.	<ul style="list-style-type: none"> <li>• Notice of Modification of Consent, 20 Oct 2006</li> <li>• SEE Wambo Coal Mine Modification – Staged Construction of North Wambo Creek Diversion, Sep 2006</li> </ul>	Noted	The design of the temporary North Wambo Creek Bypass or the North Wambo Creek Diversion had not commenced at the time of this audit. An SEE was submitted to DoP in Sep 2006 in relation to the staged construction of the North Wambo Creek Diversion, a temporary North Wambo Creek pipeline and construction of gas drainage and dewatering infrastructure for the North Wambo Underground Mine. A decision on the modification application had not been received from DoP at the time of the audit.
4/27	Within one month of completing the construction of the temporary North Wambo Creek Bypass and North Wambo Creek Diversion, the Applicant shall submit an as-executed report, certified by a practising registered engineer, to the Director-General	<ul style="list-style-type: none"> <li>• Notice of Modification of Consent, 20 Oct 2006</li> </ul>	Noted	Neither the construction of the temporary North Wambo Creek Bypass or the North Wambo Creek Diversion had commenced at the time of this audit.
4/28	<sup>6</sup> Prior to destroying the original creek line, the Applicant shall demonstrate that the North Wambo Creek Diversion is operating successfully from a hydrological and biological point of view to the satisfaction of DPI and the Director-General	<ul style="list-style-type: none"> <li>• Notice of Modification of Consent, 20 Oct 2006</li> </ul>	Noted	Neither the design or construction of the temporary North Wambo Creek Bypass or the North Wambo Creek Diversion had commenced at the time of this audit.
<b>Monitoring</b>				
4/29	The Applicant shall: <ol style="list-style-type: none"> <li>measure:             <ul style="list-style-type: none"> <li>• the volume of water discharged from the site;</li> <li>• water use on the site;</li> <li>• dam and water structure storage levels,</li> <li>• water transfers across the site; and</li> <li>• water transfers between the site and surrounding mines;</li> </ul> </li> <li>monitor the quality of the surface water:             <ul style="list-style-type: none"> <li>• discharged from the licenced discharge point/s at the development; and</li> <li>• upstream and downstream of the development;</li> </ul> </li> <li>monitor flows in the Wollombi Brook; and North Wambo, South Wambo, and Stony Creeks;</li> <li>monitor the volume and quality of water inflows from each separate source to the underground and open cut workings; and</li> <li>monitor regional ground water levels and quality in the alluvial and overburden aquifers during the development and at least 10 years after mining, and</li> <li>periodically assess groundwater pressure response in the coal measures;</li> <li>to the satisfaction of DEC and the Director-General.</li> </ol>	<ul style="list-style-type: none"> <li>• Letter to DEC re Hunter River Salinity Trading Scheme Annual Report 2005-06</li> <li>• AEMR 2005-06</li> <li>• Dam Water Levels 2005/06</li> <li>• Flow Meters Monthly Readings 2005-06</li> <li>• Pump Meter Readings Jun 2006 to Oct 2006</li> <li>• Water Balance to 2007</li> <li>• Water Quality Wollombi Brook Nov 2005-Oct 2006</li> </ul>	Yes	<ul style="list-style-type: none"> <li>• Water usage is recorded and reported as part of the water balance.</li> <li>• Dam and water structure storage levels are recorded and reported in the AEMR.</li> <li>• Water transferred to United Collieries is recorded in the monthly water balance.</li> <li>• Water quality is monitored upstream and downstream of the development as part of the surface water monitoring program.</li> <li>• Water flows are monitored at two DNR stations on Wollombi Brook; two V-notch weirs with capacitance sensors and data loggers are installed on both Stony Creek and South Wambo Creek; and 3 monitoring stations will be installed as part of the North Wambo Creek diversion. Water flows in North Wambo Creek are sourced from United Collieries flow monitoring stations.</li> <li>• Volume and quality of water inflows to the mine workings are part of the water monitoring programs and water balance.</li> </ul>
<b>Site Water Management Plan</b>				
4/30	Before carrying out any development, the Applicant shall prepare a Site Water Management Plan for the development in consultation with DEC and NSW Fisheries, and to the satisfaction of the Director-General. This	<ul style="list-style-type: none"> <li>• Site Water Balance, April 2006</li> <li>• Letter from DoP re Site Water</li> </ul>	Yes	The various Plans that make up the Site Water Management Plan have been prepared and approved by DoP, except for the North Wambo Creek Diversion Plan. This latter Plan will be prepared when

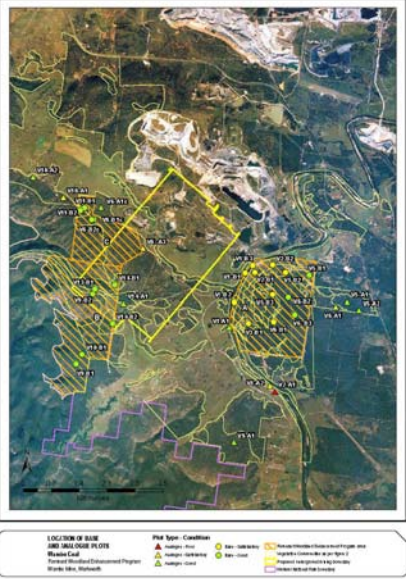
<sup>6</sup> Incorporates NSW Fisheries conditions.

	<p>plan must include:</p> <ul style="list-style-type: none"> <li>(a) the predicted site water balance;</li> <li>(b) the North Wambo Creek Diversion Plan;</li> <li>(c) an Erosion and Sediment Control Plan;</li> <li>(d) a Surface Water Monitoring Program;</li> <li>(e) a Ground Water Monitoring Program;</li> <li>(f) a Surface and Ground Water Response Plan; and</li> <li>(g) a strategy for the decommissioning water management structures on the site</li> </ul>	<p>Balance, 10 Oct 2005</p> <ul style="list-style-type: none"> <li>• Letter from DoP re Site Water Balance, 30 Jun 2006</li> <li>• Erosion and Sediment Control Plan, Mar 2006</li> <li>• Surface Water Monitoring Program, Aug 2005</li> <li>• Groundwater Monitoring Program, Mar 2006</li> </ul>		<p>the decision on the Modification to Consent that has been lodged with DoP to allow staging the construction of the diversion is obtained and detailed design is completed.</p>
4/31	<p>The North Wambo Creek Diversion Plan shall include:</p> <ul style="list-style-type: none"> <li>(a) the detailed design and specifications of the creek diversion, including the flow control bund, cut off wall, and channel;</li> <li>(b) a revegetation program for the channel using a range of suitable native riparian and floodplain species;</li> <li>(c) the detailed design of the system that would return intercepted ground water to the alluvial aquifer downstream of the open cut;</li> <li>(d) a construction program for the creek diversion, describing how the work would be staged, and progressively integrated with the mining operations and the mine waste emplacement drainage system;</li> <li>(e) water quality, ecological and geomorphic performance criteria for the creek diversion;</li> <li>(f) a program to monitor water quality, ecological, and geomorphic integrity of the creek diversion; and</li> <li>(g) a program to inspect and maintain the creek diversion and revegetation works during the development</li> </ul>		Noted	<p>The design of the temporary North Wambo Creek Bypass or the North Wambo Creek Diversion had not commenced at the time of this audit (the detailed design will be completed when the Modification to Consent decision is obtained from DoP).</p>
4/32	<p>Erosion and Sediment Control Plan shall:</p> <ul style="list-style-type: none"> <li>(a) be consistent with the requirements of the Department of Housing’s <i>Managing Urban Stormwater: Soils and Construction</i> manual;</li> <li>(b) identify activities that could cause soil erosion and generate sediment;</li> <li>(c) describe the location, function, and capacity of erosion and sediment control structures; and</li> <li>(d) describe measures to minimise soil erosion and the potential for the migration of sediments to downstream waters.</li> </ul>	<ul style="list-style-type: none"> <li>• Erosion and Sediment Control Plan, Mar 2006</li> <li>• Mining Operations Plan Jul 2005 to Jun 2010</li> <li>• Letter to DPI re Erosion and Sediment Control Plan, 29 Jul 2005</li> <li>• Letter from DEC re Erosion and Sediment Control Plan, 7 Sep 2005</li> <li>• Letter from DoP re Erosion and Sediment Control Plan, 10 Oct 2005</li> <li>• Letter from DoP re Updated Erosion and Sediment Control Plan, 30 Jun 2006</li> </ul>	Yes	<p>The Erosion and Sediment Control Plan was prepared in accordance with the principles for site drainage and sediment control in the Department of Housing’s <i>Managing Urban Stormwater: Soils and Construction</i> manual.</p> <p>The Plan identifies activities that could cause erosion and generate sediment and refers to Figure 1B in the Mining Operations Plan for the location of erosion and sediment control structure on the site.</p> <p>The Plan describes measures to minimise soil erosion and potential for sediment migration to downstream waters in section 3.3.</p> <p>The Erosion and Sediment Control Plan and updates have been approved by DoP.</p>

<p>4/33</p>	<p><sup>7</sup>The Surface Water Monitoring Program shall include:</p> <p>(a) detailed baseline data on surface water flows and quality in the Wollombi Brook, and North Wambo, South Wambo, and Stony Creeks;</p> <p>(b) surface water impact assessment criteria;</p> <p>(c) a program to monitor surface water flows and quality in the Wollombi Brook; and North Wambo, South Wambo, and Stony Creeks;</p> <p>(d) a program to monitor bank and bed stability in North Wambo, South Wambo, and Stony Creeks;</p> <p>(e) a program to monitor the quantity and quality of the vegetation in the riparian zones adjacent to North Wambo, South Wambo, and Stony Creeks; and</p> <p>(f) a program to monitor the effectiveness of the Erosion and Sediment Control Plan</p>	<ul style="list-style-type: none"> <li>• Surface Water Monitoring Program, Aug 2005</li> <li>• Environmental Monitoring Program – Section 8.0 Surface Water, Mar 2006</li> <li>• Letter from DEC re Surface Water Monitoring Program, 7 Sep 2005</li> <li>• Letter from DoP re Surface Water Monitoring Program, 10 Oct 2005</li> </ul>	<p>Yes</p>	<p>The Surface Water Monitoring Program was submitted to DoP and approved in 2005. The monitoring requirements in the program were collated into the Environmental Monitoring Program developed in December 2005 and updated in March 2006.</p>
<p>4/34</p>	<p>The Ground Water Monitoring Program shall include:</p> <p>(a) detailed baseline data on ground water levels and quality, based on statistical analysis, to benchmark the pre-mining natural variation in groundwater levels and quality;</p> <p>(b) ground water impact assessment criteria;</p> <p>(c) a program to monitor the volume and quality of ground water seeping into the open cut and underground mining workings; and</p> <p>(d) a program to monitor regional ground water levels and quality in the alluvial and overburden aquifers.</p> <p>By the end of April 2006, the applicant shall update its Groundwater Monitoring Program, to the satisfaction of the Director-General.</p>	<ul style="list-style-type: none"> <li>• Groundwater Monitoring Program, Mar 2006</li> <li>• Environmental Monitoring Program – Section 7.0 Groundwater, Mar 2006</li> <li>• Letter from DEC re Groundwater Monitoring Program, 7 Sep 2005</li> <li>• Letter from DoP re Groundwater Monitoring Program, 10 Oct 2005</li> <li>• Letter from DoP re Updated Groundwater Monitoring Program, 30 Jun 2006</li> </ul>	<p>Yes</p>	<p>The Groundwater Monitoring Program was submitted to DoP and approved in December 2005 and updated in March 2006 and the monitoring requirements in the program were collated into the Environmental Monitoring Program developed in March 2006.</p> <p>The Groundwater Monitoring Program was updated and submitted to the DoP and approved in June 2006.</p>
<p>4/35</p>	<p>The Surface and Ground Water Response Plan shall include:</p> <p>(a) measures to mitigate any adverse impacts on existing water supply bores or wells;</p> <p>(b) measures to mitigate the loss of surface water flows in the surface water streams or channel on the site;</p> <p>(c) measures to remediate any connective cracking between the underground mine workings and the surface water streams, channel or alluvials;</p> <p>(d) measures to mitigate the long term direct hydraulic connection between the backfilled open cut and the North Wambo Creek alluvium if the potential for an downstream adverse impact is detected;</p> <p>(e) measures to address the decrease in through-flow rates caused by the development within the Wollombi Brook alluvium</p>	<ul style="list-style-type: none"> <li>• Surface and Groundwater Response Plan, Mar 2006</li> <li>• Letter from DEC re Surface and Groundwater Response Plan, 4 Nov 2005</li> <li>• Letter from DoP re Surface and Groundwater Response Plan, 14 Dec 2005</li> <li>• Letter from DoP re Updated Surface and Groundwater Response Plan, 30 Jun 2006</li> </ul>	<p>Yes</p>	<p>The Surface and Groundwater Response Plan was submitted to DoP and approved in December 2005. The Plan was updated and re-submitted to the DoP and approved in June 2006.</p>

<sup>7</sup> Incorporates DEC GTA

	<p>downstream of the open cut;</p> <p>(f) measures to address any reduction in the stability or ecological quality of the North Wambo Creek Diversion below the established performance criteria; and</p> <p>(g) the procedures that would be followed if any unforeseen impacts are detected during the development.</p>			
	<b>Surface &amp; Sub-surface Investigation Program</b>			
4/36	<p>Prior to the commencement of underground mining, the Applicant shall develop and implement a surface and subsurface investigation program to assess the likely fracturing of geological strata and hydraulic property changes above each longwall panel, to the satisfaction of the Director-General. This program shall:</p> <p>(a) 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 and changes in hydraulic properties between panels.;</p> <p>(b) assess the impact on groundwater resources and surface expression resulting from underground mining at varying depths; and</p> <p>(c) be repeated for each coal seam as it is mined.</p>	<ul style="list-style-type: none"> <li>• Surface and Sub-Surface Investigation and Monitoring Plan for LW’s 1 to 6 at the Proposed North Wambo Mine, Strata Engineering, Nov 2005</li> <li>• Letter from DoP re Surface and Sub-Surface Investigation Program, 20 Jan 2006</li> </ul>	Yes	The underground mine is being developed and the commencement of long-wall mine workings is planned for mid-2007. Monitoring and investigation of the geological strata and hydraulic property changes related to the mining of long-wall panels, and assessment of groundwater resources and surface expression resulting from underground mining will occur prior to commencement of the long-wall mining.
	<b>Independent Audit</b>			
4/37	<p>Prior to seeking approval from the DPI for each set of longwall panels (excluding the first set of longwall panels), unless the Director-General directs otherwise, the Applicant shall commission a suitably qualified person, whose appointment has been approved by the Director-General, to conduct an independent audit of the subsidence, surface water, and ground water impacts of the development. This audit shall:</p> <p>(a) review the monitoring data for the development;</p> <p>(b) identify any trends in the monitoring data;</p> <p>(c) examine the subsidence, surface water, and ground water impacts of the development;</p> <p>(d) compare these impacts against the relevant impact assessment criteria and predictions in the EIS; and, if necessary;</p> <p>(e) recommend measures to reduce, mitigate, or remediate these impacts</p>	<ul style="list-style-type: none"> <li>• Surface and Sub-Surface Investigation and Monitoring Plan for LW’s 1 to 6 at the Proposed North Wambo Mine, Nov 2005</li> </ul>	Not Activated	The Surface and Sub-Surface Investigation and Monitoring Plan on long-wall panels 1-6 has been submitted and approved in January 2006. The second set of long-wall panels is planned for 2013, and the Independent Audit of subsidence, surface water and groundwater impacts will be commissioned prior to seeking approval from the DPI.
4/38	<p>If the independent audit determines that the subsidence, surface water, and/or ground water impacts resulting from the underground mining operations are greater than those predicted in the EIS, the Applicant shall:</p> <p>(a) assess the significance of these impacts;</p> <p>(b) investigate measures to minimise these impacts, including modifying subsequent mine plans; and</p> <p>(c) describe what measures would be implemented to reduce, minimise, mitigate or remediate these impacts in the future; to the satisfaction of the Director-General</p>		Not Activated	This condition had not been activated at the time of the November 2006 audit.
	<b>Final Void Strategy</b>			

<p>4/39</p>	<p>At the end of Year 7 of the development, or as directed otherwise by the Director-General, the Applicant shall prepare a Final Void Management Plan for the development, in consultation with the DPI, the Director-General and Council, and to the satisfaction of the Director-General. This Plan must:</p> <ul style="list-style-type: none"> <li>(a) investigate options for the future use of the final void;</li> <li>(b) re-assess the potential groundwater impacts of the development; and</li> <li>(c) describe what actions and measures would be implemented to:             <ul style="list-style-type: none"> <li>• minimise any potential adverse impacts associated with the final void; and</li> <li>• manage, and monitor potential impacts of, final void over time.</li> </ul> </li> </ul>		<p>Not Activated</p>	<p>The Final Void Management Plan will be required to be developed and submitted to the DoP by 14 November 2012.</p>												
<p><b>FAUNA &amp; FLORA - Offset Strategy</b></p>																
<p>4/40</p>	<p>Within the limits of current technology and best practice flora and fauna management, as determined by the Director-General in consultation with the Hunter Coalfield Flora &amp; Fauna Advisory Committee, the Applicant shall implement:</p> <ul style="list-style-type: none"> <li>(a) the offset strategy summarised in Table 16; and</li> <li>(b) any subsequent revisions to the offset strategy, prepared in consultation with the Hunter Coalfield Flora &amp; Fauna Advisory Committee, and approved in writing by the Director-General; to the satisfaction of the Director-General.</li> </ul> <p>Note: The Director-General shall form the Hunter Coalfield Flora &amp; Fauna Advisory Committee to:</p> <ul style="list-style-type: none"> <li>• provide on-going advice on the Flora and Fauna Management Plan; and</li> <li>• monitor and review the performance of the implementation of the Remnant Woodland Enhancement Program.</li> </ul> <table border="1" data-bbox="268 959 869 1166"> <thead> <tr> <th>Area</th> <th>Size</th> </tr> </thead> <tbody> <tr> <td>Remnant Woodland Enhancement Area A</td> <td>424 ha</td> </tr> <tr> <td>Remnant Woodland Enhancement Area B</td> <td>454 ha</td> </tr> <tr> <td>Remnant Woodland Enhancement Area C</td> <td>202 ha</td> </tr> <tr> <td>Open Cut Woodland Revegetation</td> <td>1,570ha</td> </tr> <tr> <td>Other Areas (e.g. Community 15 and the Southern Area)</td> <td>Where practicable</td> </tr> </tbody> </table> <p>Table 16: Broad Targets for Offset Strategy</p>	Area	Size	Remnant Woodland Enhancement Area A	424 ha	Remnant Woodland Enhancement Area B	454 ha	Remnant Woodland Enhancement Area C	202 ha	Open Cut Woodland Revegetation	1,570ha	Other Areas (e.g. Community 15 and the Southern Area)	Where practicable	<ul style="list-style-type: none"> <li>• AEMR 2005 – 2006 Figure 3.20 Remnant Woodland Enhancement Program</li> </ul>	<p>In progress</p>	<p>The Hunter Coalfield Flora and Fauna Advisory Committee had not been formed at the time of the November 2006 audit.</p>  <ul style="list-style-type: none"> <li>(a) Wambo are implementing the offset strategy as outlined in Table 16.</li> <li>(b) No revisions to the offset strategy have been made.</li> </ul>
Area	Size															
Remnant Woodland Enhancement Area A	424 ha															
Remnant Woodland Enhancement Area B	454 ha															
Remnant Woodland Enhancement Area C	202 ha															
Open Cut Woodland Revegetation	1,570ha															
Other Areas (e.g. Community 15 and the Southern Area)	Where practicable															



<b>Deed of Agreement</b>				
4/41	<p>Within 6 months of the commencement of this consent, the Applicant shall enter into a Deed of Agreement with the Minister. In this agreement, the Applicant shall agree to:</p> <p>(a) conserve and manage the land in the offset strategy in accordance with the Remnant Woodland Enhancement Program (see Condition 0) in the Flora &amp; Fauna Management Plan (see Condition 0),</p> <p>(b) apply to rezone the land in Remnant Woodland Enhancement Area A for the purpose of:</p> <ul style="list-style-type: none"> <li>protecting the land for conservation; and</li> <li>excluding open cut mining;</li> </ul> <p>(c) conserve and manage the land in Remnant Woodland Enhancement Area A in accordance with any Aboriginal cultural heritage conservation agreement;</p> <p>(d) exclude open cut mining in Remnant Woodland Enhancement Areas B and C, unless, in the opinion of the Minister, the Applicant has demonstrated that there is a clear justification for this on social, economic, and/or environmental grounds. To assist the Minister in his decision-making, the Applicant shall:</p> <ul style="list-style-type: none"> <li>establish the coal reserve in Remnant Woodland Enhancement Area Areas B and C;</li> <li>investigate the options for mining this reserve;</li> <li>assess the implications of any open cut coal mining proposal on the offset strategy and broad conservation outcomes; and</li> <li>assess the environmental, economic and social aspects of any open cut mining proposal in the area; and</li> </ul> <p>(e) apply to rezone Remnant Woodland Enhancement Areas B and C, in whole or in part, excluding any lands approved for open-cut mining by the Minister</p>	<ul style="list-style-type: none"> <li>Draft Deed of Agreement between Wambo Coal Pty Ltd and The Minister for Planning, Sparke Helmore Lawyers</li> <li>Letter from DoP re Deed of Agreement, Ref S02/02197, Undated</li> </ul>	In progress	The Deed of Agreement was sent to the Minister for Planning in November 2005. DoP provided a draft letter extending the requirement to enter into a Deed with the Minister until 28 February 2007.
<b>Hunter Coalfield Flora &amp; Fauna Advisory Committee Contribution</b>				
4/42	The Applicant shall contribute a reasonable amount, up to \$20,000, each year towards the operation of the Hunter Coalfield Flora & Fauna Advisory Committee.		Noted	The Hunter Coalfield Flora and Fauna Advisory Committee had not been established prior to the conduct of the November 2006 audit, so no contribution had been made by Wambo.
<b>Strategic Study Contribution</b>				
4/43	If, during the development, the Department commissions a strategic study into the regional vegetation corridor stretching from the Wollemi National park to the Barrington Tops National Park, then the Applicant shall contribute a reasonable amount, up to \$20,000, towards the completion of this study		Noted	The DoP had not commissioned the strategic study into the regional vegetation corridor, so no contribution had been made by Wambo Coal at the time of the November 2006 audit.
<b>Flora &amp; Fauna Management Plan</b>				
4/44	Before carrying out any development, the Applicant shall prepare a Flora and Fauna Management Plan for the development, in consultation with the Hunter Coalfield Flora and Fauna Advisory Committee, and to the	<ul style="list-style-type: none"> <li>Flora and Fauna Management Plan Aug 2005</li> <li>Letter from DIPNR re Flora</li> </ul>	Yes	The Flora and Fauna Management Plan was prepared in accordance with the requirements of the condition and the document was approved by DIPNR in September 2005. The approved Plan included:



	<p>satisfaction of the Director-General. This plan must include:</p> <ul style="list-style-type: none"> <li>(a) a Vegetation Clearance Protocol;</li> <li>(b) a Threatened Species Management Protocol;</li> <li>(c) a Remnant Woodland Enhancement Program;</li> <li>(d) a Flora and Fauna Monitoring Program;</li> <li>(e) strategies to manage any subsidence impacts in the Remnant Woodland Enhancement Areas; and</li> <li>(f) a description of who would be responsible for monitoring, reviewing, and implementing the plan</li> </ul>	<p>and Fauna Management Plan, 13 Sep 2005</p>		<p>Vegetation Clearance Protocol – section 3.1 Threatened Species Management Protocol section 3.2 Remnant Vegetation Enhancement Program section 3.3 Flora and Fauna Monitoring Program section 4.0 Subsidence Management section 4.2.5 Monitoring, review and implementation section 6.0</p>
4/45	<p>The Vegetation Clearance Protocol shall include:</p> <ul style="list-style-type: none"> <li>(a) the delineation of areas of remnant vegetation to be cleared;</li> <li>(b) progressive clearing;</li> <li>(c) pre-clearance surveys;</li> <li>(d) identification of fauna management strategies;</li> <li>(e) collection of seed from the local area;</li> <li>(f) salvage and reuse of material from the site; and</li> <li>(g) control of weeds during clearing activities</li> </ul>	<ul style="list-style-type: none"> <li>• Flora and Fauna Management Plan – Section 3.1 Vegetation Clearance Protocol, Aug 2005</li> </ul>	Yes	<p>The Vegetation Clearance Protocol was developed within the Flora and Fauna Management Plan and addressed each of the requirements of the condition. The Protocol was approved by DIPNR as part of the Flora and Fauna Management Plan.</p>
4/46	<p>The key components of the Threatened Species Management Protocol shall include:</p> <ul style="list-style-type: none"> <li>(a) observations/surveys for threatened species (facilitated by the vegetation clearance surveys and Flora and Fauna Monitoring Program);</li> <li>(b) consultation with regulatory authorities; and</li> <li>(c) threatened species management strategies and reporting.</li> </ul>	<ul style="list-style-type: none"> <li>• Flora and Fauna Management Plan – Section 3.2 Threatened Species Management Protocol, Aug 2005</li> </ul>	Yes	<p>The Threatened Species Management Protocol was developed within the Flora and Fauna Management Plan and addressed each of the requirements of the condition. The Protocol was approved by DIPNR as part of the Flora and Fauna Management Plan.</p>
4/47	<p>The Remnant Woodland Enhancement Program shall include:</p> <ul style="list-style-type: none"> <li>(a) a habitat assessment of Remnant Woodland Enhancement Areas A, B and C to obtain additional information on existing habitat resources and characteristics of each area;</li> <li>(b) investigation of other areas to be included in the Program, including the <i>Acacia anuera</i> Community (Community 15) and the Southern Area;</li> <li>(c) appropriate enhancement strategies to be implemented based on the habitat assessment including: <ul style="list-style-type: none"> <li>• the fencing of remnants to exclude livestock;</li> <li>• control measures to minimise the occurrence of weeds;</li> <li>• control measures to minimise the occurrence of feral pests;</li> <li>• limiting vehicular traffic;</li> <li>• selective planting of native vegetation; and</li> <li>• the provision of roosting/nesting resources for fauna.</li> </ul> </li> </ul>	<ul style="list-style-type: none"> <li>• Flora and Fauna Management Plan – Section 3.3 Remnant Woodland Enhancement Program, Aug 2005</li> </ul>	Yes	<p>The Remnant Woodland Enhancement Program was developed within the Flora and Fauna Management Plan and addressed each of the requirements of the condition. The Protocol was approved by DIPNR as part of the Flora and Fauna Management Plan.</p>
4/48	<p>The Flora and Fauna Monitoring Program shall include:</p> <ul style="list-style-type: none"> <li>(a) a program to monitor revegetation of disturbance areas including: <ul style="list-style-type: none"> <li>• visual monitoring to determine the need for maintenance and/or contingency measures; and</li> <li>• monitoring of the quality of rehabilitation using Ecosystem Function Analysis (or a similar systems based approach) through the assessment of landscape function, vegetation dynamics and habitat complexity; and</li> </ul> </li> </ul>	<ul style="list-style-type: none"> <li>• Flora and Fauna Management Plan – Section 4.0 Flora and Fauna Monitoring Program, Aug 2005</li> <li>• Environmental Monitoring Program – Section 6.0 Flora and Fauna Monitoring, Mar</li> </ul>	Yes	<p>The Flora and Fauna Monitoring Program was developed within the Flora and Fauna Management Plan and addressed each of the requirements of the condition. The Protocol was approved by DIPNR as part of the Flora and Fauna Management Plan.</p>

	<p>(b) a program to monitor the effectiveness of offset strategy in accordance with the description in Table 17.</p> <table border="1" data-bbox="268 358 869 992"> <thead> <tr> <th data-bbox="268 358 443 402">Monitoring Component</th> <th data-bbox="443 358 869 402">Monitoring Description</th> </tr> </thead> <tbody> <tr> <td data-bbox="268 402 443 532">Flora</td> <td data-bbox="443 402 869 532">A number of permanent flora survey quadrats (of varying sizes to survey tree, shrubs and ground cover) should be established in woodland enhancement areas to obtain quantitative data on plant species diversity and abundance.</td> </tr> <tr> <td data-bbox="268 532 443 683">Habitat Complexity</td> <td data-bbox="443 532 869 683">Habitat complexity should be monitored using a number of permanent transects established within woodland enhancement areas. Habitat complexity parameters such as canopy cover, shrub cover, ground vegetation cover, the amount of litter, fallen logs and rocks should be surveyed.</td> </tr> <tr> <td data-bbox="268 683 443 834"></td> <td data-bbox="443 683 869 834">Terrestrial fauna surveys should be conducted to monitor the usage of enhancement areas by vertebrate fauna. Monitoring may include fauna species diversity and abundance or, alternatively, the use of indicator species to measure the effectiveness of enhancement measures.</td> </tr> <tr> <td data-bbox="268 834 443 922"></td> <td data-bbox="443 834 869 922">Freshwater macro-invertebrate monitoring, including an assessment of SIGNAL A values and water quality (e.g. temperature, pH, and salinity).</td> </tr> <tr> <td data-bbox="268 922 443 992"></td> <td data-bbox="443 922 869 992">Monitoring of specific enhancement initiatives (e.g. the provision of nesting/roosting boxes, weed control or feral animal control).</td> </tr> </tbody> </table> <p>Table 17: Flora &amp; Fauna Monitoring Program</p>	Monitoring Component	Monitoring Description	Flora	A number of permanent flora survey quadrats (of varying sizes to survey tree, shrubs and ground cover) should be established in woodland enhancement areas to obtain quantitative data on plant species diversity and abundance.	Habitat Complexity	Habitat complexity should be monitored using a number of permanent transects established within woodland enhancement areas. Habitat complexity parameters such as canopy cover, shrub cover, ground vegetation cover, the amount of litter, fallen logs and rocks should be surveyed.		Terrestrial fauna surveys should be conducted to monitor the usage of enhancement areas by vertebrate fauna. Monitoring may include fauna species diversity and abundance or, alternatively, the use of indicator species to measure the effectiveness of enhancement measures.		Freshwater macro-invertebrate monitoring, including an assessment of SIGNAL A values and water quality (e.g. temperature, pH, and salinity).		Monitoring of specific enhancement initiatives (e.g. the provision of nesting/roosting boxes, weed control or feral animal control).	2006		
Monitoring Component	Monitoring Description															
Flora	A number of permanent flora survey quadrats (of varying sizes to survey tree, shrubs and ground cover) should be established in woodland enhancement areas to obtain quantitative data on plant species diversity and abundance.															
Habitat Complexity	Habitat complexity should be monitored using a number of permanent transects established within woodland enhancement areas. Habitat complexity parameters such as canopy cover, shrub cover, ground vegetation cover, the amount of litter, fallen logs and rocks should be surveyed.															
	Terrestrial fauna surveys should be conducted to monitor the usage of enhancement areas by vertebrate fauna. Monitoring may include fauna species diversity and abundance or, alternatively, the use of indicator species to measure the effectiveness of enhancement measures.															
	Freshwater macro-invertebrate monitoring, including an assessment of SIGNAL A values and water quality (e.g. temperature, pH, and salinity).															
	Monitoring of specific enhancement initiatives (e.g. the provision of nesting/roosting boxes, weed control or feral animal control).															
	<b>Annual Review</b>															
4/49	<p>The Applicant shall:</p> <p>(a) review the performance of the Flora and Fauna Management Plan annually, in consultation with the Hunter Coalfield Flora &amp; Fauna Advisory Committee; and</p> <p>(b) revise the document as necessary to take into account any recommendations from the annual review.</p>		Yes	The Flora and Fauna Management Plan was being reviewed by HLA-Envirosciences at the time of the November 2006 audit, without consultation with the Hunter Coalfield Flora and Fauna Advisory Committee that had not yet been formed (see comment on MCoA section 3.3 )												
	<b>Independent Audit</b>															
4/50	Within 5 years of the date of this consent, and every 5 years thereafter, unless the Director-General directs otherwise, the Applicant shall commission, and pay the full cost of, an Independent Audit of the offset		Noted	The Independent Audit of the offset strategy will be due to be undertaken by the 4 February 2009.												

	<p>strategy. This audit must:</p> <p>(a) be conducted by a suitably qualified, experienced, and independent person whose appointment has been endorsed by the Director-General;</p> <p>(b) assess the performance of the offset strategy;</p> <p>(c) review the adequacy of the Flora &amp; Fauna Management Plan; and, if necessary,</p> <p>(d) recommend actions or measures to improve the performance of the offset strategy, and the adequacy of the Flora &amp; Fauna Management Plan</p>			
	<b><sup>8</sup>ABORIGINAL CULTURAL HERITAGE</b>			
	<b>Conservation Agreement</b>			
4/51	<p>Within 12 months of the commencement of this consent, the Applicant shall develop a conservation agreement (as part of the Deed of Agreement with the Minister referred to in condition 41 above) for the management of Aboriginal cultural heritage in Remnant Woodland Enhancement Area A in consultation with the Aboriginal Communities and DEC.</p>	<ul style="list-style-type: none"> <li>• Draft Deed of Agreement between Wambo Coal Pty Ltd and The Minister for Planning, Sparke Helmore Lawyers</li> <li>• Letter from DoP re Deed of Agreement, Ref S02/02197, Undated</li> </ul>	In progress	<p>The Deed of Agreement was sent to the Minister for Planning in November 2005. DoP provided a draft letter extending the requirement to enter into a Deed with the Minister until 28 February 2007.</p>
	<b>Salvage</b>			
4/52	<p>Before making application for section 90 consents under <i>the National Parks &amp; Wildlife Act 1974</i>, the Applicant shall develop a targeted, strategic salvage program for the development in consultation with DEC and the Aboriginal communities.</p>	<ul style="list-style-type: none"> <li>• Application for Permit under Section 87 and Consent under Section 90 of National Parks and Wildlife Act 1974, Apr 2005</li> <li>• Attachment 3 Research Design and Study Plan, Section 87/90 Application, Apr 2005</li> <li>• Letters to Hunter Valley Aboriginal Groups re Section 87 and Section 90 Consents, 3 Mar 2005</li> <li>• Section 90 Permit No. 2085, 14 Dec 2004</li> <li>• Section 87 and 90 Consent No.2222, 20 Jun 2005</li> </ul>	Yes	<p>Letters were sent to the Upper Hunter Wonnarua Council, Lower Wonnarua Tribal Consultancy, Wanaruah Local Aboriginal Land Council, Combined Council Aboriginal Corporation, Hunter Valley Cultural Consultants, Yarrowalk Enterprises, Ungooroo Aboriginal Corporation, Wattaka Wonnarua CCS, Wonnarua Nation Aboriginal Corporation, Upper Hunter Heritage Consultants, Wonnarua Consultants in relation to consultation on the Wambo application for section 87 and section 90 consents under the National Parks and Wildlife Act 1974. The consultation was conducted with the Aboriginal groups prior to the Application being submitted.</p>
4/53	<p>Before the commencement of salvage operations, the Applicant shall ensure that a keeping place is established to house objects recovered from the salvage program.</p>	<ul style="list-style-type: none"> <li>• AEMR 2005-2006</li> </ul>	Yes	<p>Wambo have established a keeping place for the salvaged objects, until the Aboriginal community selects an alternative location.</p>
4/54	<p>The Applicant shall house the objects recovered during the salvage program in the keeping place established for the purpose.</p>	<ul style="list-style-type: none"> <li>• AEMR 2005-2006</li> </ul>	Yes	

<sup>8</sup> Incorporates DEC GTAs

	<b>Further Investigations</b>			
4/55	The Applicant shall: (a) investigate the cultural significance of the corridors A – Southern and B – Middle (see map in appendix 3) in consultation with the Aboriginal Communities; (b) examine the possible pathways between Remnant Woodland Enhancement Area A (which includes the camp ground associated with the bora) and Wollemi National Park to the east; and (c) investigate the feasibility of reserving from future mining operations, those areas identified as being of cultural significance to the Aboriginal Communities in consultation with DEC.		Not Activated	
	<b>Trust Fund Contribution</b>			
4/56	Before carrying out the development, or as agreed otherwise by the Director-General, the Applicant shall contribute \$50,000 to the Hunter Aboriginal Cultural Heritage Trust Fund for further investigations into Aboriginal cultural heritage, as defined by the Trust Deed.	<ul style="list-style-type: none"> <li>Receipt for \$50,000 contribution to Aboriginal Heritage Trust No.1, Public Trustee, 7 Nov 2005</li> </ul>	Yes	
	<sup>9</sup> <b>WAMBO HOMESTEAD COMPLEX</b>			
	<b>Section 60 Approval</b>			
4/57	An application under section 60 of the Heritage Act must be submitted to and approved by the Heritage Council prior to the commencement of any development on land within the State Heritage Register listing boundary for the Wambo Homestead Complex. In this regard a mine management plan shall be required to accompany the application which demonstrates that the proposed underground mining shall not have adverse heritage impacts on the WHC due to land subsidence	<ul style="list-style-type: none"> <li>Wambo Homestead Curtilage Orthophotomap, Geospectrum</li> </ul>	Not activated	No disturbance by Wambo within the area of the Wambo Homestead Complex had occurred at the time of this audit and was not planned to occur until 2010. The Section 60 application under the Heritage Act is planned to be submitted prior to the commencement of any development within the Wambo Homestead curtilage.
	<b>Conservation Measures</b>			
4/58	Within 12 months of the commencement of this consent, the Applicant shall prepare a conservation management plan for the Wambo Homestead Complex in accordance with Heritage Office guidelines for the consideration of the Heritage Council of NSW.	<ul style="list-style-type: none"> <li>Wambo Homestead Conservation Management Plan, Jun 2006</li> <li>Letter to NSW Heritage Office re Wambo Homestead Conservation Management Plan, 9 Nov 2006</li> </ul>	Yes	The Wambo Homestead Conservation Management Plan was prepared within 12 of the commencement of the consent (i.e. 14 November 2005) and submitted to the NSW Heritage Office for review on 9 November 2006.
4/59	The conservation policies and an interpretation strategy contained in the conservation management plan are to be implemented in accordance with a timetable to be contained in the conservation management plan.	<ul style="list-style-type: none"> <li>Wambo Homestead Conservation Management Plan, Jun 2006</li> </ul>	Yes	Conservation measures are being implemented in accordance with the draft plan.
4/60	A suitably qualified and experienced consultant is to be engaged by the applicant to record an oral history of the Wambo Homestead Complex having regard to the strong associations of members of the local	<ul style="list-style-type: none"> <li>Wambo Homestead Conservation Management Plan – Section 3 Historical</li> </ul>	Yes	EJE Heritage consultants prepared a history of the Wambo Homestead complex as part of the development of the Conservation Management Plan.

<sup>9</sup> Incorporates NSW Heritage Council GTA

	community with the site.	Context, EJE Heritage Consultants, Apr 2006		
4/61	In circumstances where safe access to the Wambo Homestead Complex is able to be provided, opportunities are to be offered to the local community to visit the site during and after its conservation.		Yes	A site visit was arranged for the Singleton Historical Society on July 2006.
4/62	Prior to the commencement of mining operations, and then at yearly intervals prior to the approved structural engineer’s inspections, a photographic record is to be prepared of all elevations of all structures within the Wambo Homestead Complex. The photographs are to be of archival quality in accordance with the Heritage Office guidelines, <i>How to Prepare Archival Records of Heritage Items 1994</i> , and <i>Guidelines for Photographic Recording of Heritage Items, 1994</i> . The photographic record is to be lodged with the NSW Heritage Office, the Department and the Council.	<ul style="list-style-type: none"> <li>Wambo Homestead Archival Photographic Record, EJE Heritage, Dec 2005</li> <li>Letters to NSW Heritage Office, DoP and Singleton Council re Submission of Archival Record of Wambo Homestead Complex, 12 Jan 2006</li> </ul>	Yes	The Archival Photographic Record for Wambo Homestead was prepared by EJE Group in accordance with the guideline “How to Prepare Archival Records of Heritage Items” 1998 and Guidelines for Photographic Recording of Heritage Items” 2004 as issued by the NSW Heritage Office. A full set of archival photographs were submitted to DoP, Council and NSW Heritage Office in January 2006.
	<b>Blasting</b>			
4/63	Ground vibration and air blast levels are to be monitored and recorded at a blast monitoring station to be established within the Wambo Homestead Complex for each blast within 2 km of the Wambo Homestead Complex.	<ul style="list-style-type: none"> <li>Blast Monitoring Results 1 Nov 2005 to 19 Oct 2006</li> </ul>	Yes	A blast overpressure and vibration monitor has been established within the Wambo Homestead Complex. Of the 150 blasts monitored from 1 November 2005 to 19 October 2006, 7 blasts exhibited results greater than 115db and nil greater than 120dB.
4/64	A suitably qualified and experienced structural engineer, with expertise in vibration and blast monitoring is to be appointed to examine all monitoring records from the Wambo Homestead Complex blast monitoring station. The appointment of the structural engineer is to be approved in writing by the Director of the NSW Heritage Office.	<ul style="list-style-type: none"> <li>Letter from NSW Heritage Office re Approval of Appointment of Structural Engineer, 30 Nov 2005</li> </ul>	Yes	Mr Bill Jordan of Bill Jordan and Associates was approved by the Director of NSW Heritage Office to examine monitoring records from the Wambo Homestead Complex blast monitor.
4/65	Ground vibration and air blast levels experienced at the Wambo Homestead Complex blast monitoring station are not to exceed the structural damage assessment criteria prescribed by <i>Australian Standard AS 2187.2-1993 “Explosives – Storage Transport and Use” for Sensitive and Heritage Structures</i> to prevent damage to the heritage items.	<ul style="list-style-type: none"> <li>AS 2187.2-2006 Explosives – Storage and Use Part 2: Use of Explosives</li> </ul>	Noted	See condition 4/66 comments.
4/66	The approved structural engineer is to report to the Applicant on the monitoring results each month for blasting within 2 km of the Wambo Homestead Complex and 6 monthly for the remainder of the open cut mining operation and make recommendations to ensure the conservation and prevention of damage to the significant heritage structures. Copies of these reports are to be forwarded to the NSW Heritage Office.	<ul style="list-style-type: none"> <li>Letter from Bill Jordan &amp; Associates re Blast Monitoring Nov 2005 to Feb 2006, 14 Mar 2006</li> <li>Letter from Bill Jordan &amp; Associates re Blast Monitoring Mar 2006, 13 Apr 2006</li> </ul>	Yes	The reports from Bill Jordan & Associates note that all results fall below 5mm/sec peak particle velocity. The reports also note that many authorities consider that 2mm/sec should be the limit for historic, fragile buildings and that this limit has been exceeded on a number occasions. As a result an inspection was conducted in April 2006 which found there was no evidence of any blast damage to the homestead. Peak particle velocity greater than 2mm/sec were recorded on 8 occasions between 1 November 2005 and 19 October 2006, from 150 blast events.
4/67	The approved structural engineer is to inspect the Wambo Homestead Complex structures annually and as soon as practical, but no later than 3 days after blasting monitoring which exceeds the structural damage assessment criteria prescribed by AS 2187.2-1993. During the period between blasting monitoring being recorded which exceeds the criteria in	<ul style="list-style-type: none"> <li>Structural Assessment of Wambo Homestead Buildings, Bill Jordan &amp; Associates, Nov 2005</li> <li>Letter from NSW Heritage</li> </ul>	Yes	The Structural Assessment Report prepared in November 2005 concluded that damage noted during the inspection was considered to be almost entirely due to causes other than ground vibration. Foundation movement due to dry ground conditions and termite damage were identified as the causes of structural damage observed

	AS 2187.2-1993 and the engineer’s inspection, ground vibration from blasting is to be limited to a level which will prevent further blasting damage. The structural engineer is to advise the applicant and the NSW Heritage Office of any action required to repair the damage.	Office re Compliance with Conditions of Consent, 12 Jan 2006 <ul style="list-style-type: none"> <li>Letter from Wambo to NSW Heritage Office re Compliance with Conditions of Consent, 18 Jan 2006</li> </ul>		during the inspection in November 2005.
4/68	The approved structural engineer is to make an assessment of whether blasting within 2km of the Wambo Homestead Complex is to cease or be managed in order to stabilise or repair the damage, and so advise the applicant and the Director of the NSW Heritage Office. If blasting has been required to cease, it is not to resume until the damage has been stabilised or repaired, and the written approval for resumption has been issued by the Director of the NSW Heritage Office	<ul style="list-style-type: none"> <li>Letter from Bill Jordan &amp; Associates re Blast Monitoring Nov 2005 to Feb 2006, 14 Mar 2006</li> <li>Letter from Bill Jordan &amp; Associates re Blast Monitoring Mar 2006, 13 Apr 2006</li> </ul>	Yes	The reports from Bill Jordan & Associates note that all results fall below 5mm/sec peak particle velocity. The blast monitoring report prepared in March 2006 recommended an inspection of the buildings be undertaken as a number of the blasts exceeded 2mm/sec. The inspection conducted in April 2006 found there was no evidence of any blast damage to the homestead. No events have occurred that require blasting to cease or be managed in order to stabilise or repair the damage.
	<b>Rehabilitation</b>			
4/69	Following the cessation of the use of the coal haulage road which traverses the Wambo Homestead Complex property, the land is to be returned to its former condition (pre1999) and the half palisade fence on the southern alignment of the mounting yard, which was removed, is to be reinstated as required by the approval of the Heritage Council for the construction of the road on 12 Feb 1999.		Noted	The haulage road on site was still in use at the date of this audit for access to the Wollemi Offices and underground operations.
	<b>Movable Heritage Items</b>			
4/70	The Applicant shall liaise with the Power House Museum and Museums and Galleries Foundation regarding the significance of movable heritage which shall be displaced by the proposed open cut mining and suitable repositories for the conservation and storage of any significant items.	<ul style="list-style-type: none"> <li>Wambo Homestead Conservation Management Plan, Jun 2006</li> <li>Letter to NSW Heritage Office re Wambo Homestead Conservation Management Plan, 9 Nov 2006</li> </ul>	Noted	The Conservation Management Plan has been submitted to the NSW Heritage Office for review and no response had been received by Wambo at the time of the November audit. Discussions with the Power House Museum, other Museums and Galleries Foundation will commence when comments are received from NSW Heritage Office and Plan is approved.
	<b>TRAFFIC &amp; TRANSPORT</b>			
	<b>New Access Intersection Note:</b> <i>The Applicant requires RTA approval under the Roads Act 1993 for the new intersection.</i>			
4/71	<sup>10</sup> The Applicant shall design and construct the proposed new access intersection with the Golden Highway to the satisfaction of the RTA.		Noted	The intersection with the Golden Highway has not been affected by the Wambo development. Pinegrove Road is not currently impacted and is not required to be closed so the new intersection has not been constructed at this time.
	<b><sup>11</sup>Road Closure</b>			
4/72	Prior to closing Pinegrove Road, the Applicant shall prepare and	<ul style="list-style-type: none"> <li>EIS Wambo Development</li> </ul>	Noted	The closure of Pinegrove Road is planned to occur in Year 5 (i.e.

<sup>10</sup> Incorporates RTA GTA

<sup>11</sup> Incorporates Council GTA

	implement a Road Closure Management Plan in consultation with the affected landowners, and to the satisfaction of Council. This plan must describe the alternate access arrangements for any affected landowners.	Project, Resource Strategies, Jul 2003		2010). The Road Closure Management Plan will be prepared prior to the de-gazettal and closure.
	<b>Parking</b>			
4/73	The Applicant shall provide sufficient parking on-site for all mine-related traffic to the satisfaction of the Director-General.	<ul style="list-style-type: none"> <li>Email to DoP re On-site Vehicle Parking at Wambo, 10 Feb 2006</li> <li>Email from DoP re On-site Vehicle Parking, 10 Feb 2006</li> </ul>	Yes	<p>Parking available on-site at the Wambo Mine includes:</p> <ul style="list-style-type: none"> <li>Wambo Opencut facilities – 115 parking spaces</li> <li>North Wambo Underground Mine – 77 parking spaces</li> <li>Wambo Coal Preparation Plant – 35 parking spaces</li> </ul> <p>DoP advised on 10 February 2006 it was generally satisfied that is sufficient car parking spaces available for mine related traffic.</p>
	<b>Coal Haulage</b>			
4/74	<p>The Applicant shall not transport more than 3 million tonnes of product coal a year from the site until a rail coal loader is commissioned in the vicinity of the site.</p> <p><i>Note: The Applicant has submitted a separate development application to the Minister for the Wambo “Rail and Train Loading Infrastructure” (DA 306-7-2003)</i></p>	<ul style="list-style-type: none"> <li>AEMR 2005-2006</li> </ul>	Yes	<p>From 1 November 2005 to 30 June 2006, approximately 2.2Mt of clean coal was hauled from Wambo Coal to the Mount Thorley Coal Loader by road transport.</p> <p>The coal loader was commissioned in May 2006 and officially commenced operation in June 2006.</p>
4/75	The Applicant shall cease all coal haulage on public roads as soon as a rail coal loader is commissioned in the vicinity of the site, except in an emergency, and as agreed by the Director-General in consultation with Council.		Yes	Road haulage of coal ceased from Wambo in June when the Wambo rail loader was commissioned.
4/76	If no rail loader is commissioned in the vicinity of the site within 2 years of the commencement of this consent, the Applicant shall submit a report to the Director-General outlining the alternatives to road haulage, and describing the proposed arrangements for transporting coal from the site.		Not applicable	See above.
4/77	The Applicant shall ensure that all loaded coal haulage vehicles entering or leaving the site are covered.		Not applicable	
4/78	The Applicant shall pay Council 0.5 cents for each tonne of product coal hauled along Council roads to the Mount Thorley Coal Loader, in accordance with Council’s Section 94 Contribution Plan.		Noted	Singleton Council had not submitted an invoice for the road haulage levy to June 2006, at the time of the November audit.
	<b>Monitoring</b>			
4/79	<p>The Applicant shall keep records of the:</p> <ul style="list-style-type: none"> <li>amount of coal transported from the site each year; and</li> <li>number of coal haulage truck movements generated each day by the development; and</li> <li>include these records in the AEMR.</li> </ul>	<ul style="list-style-type: none"> <li>AEMR 2005-2006 Table 2.3 and Appendix 1</li> <li>Daily Truck Movements to MTCL 2005-2006</li> </ul>	Yes	Truck movements from Wambo to Mount Thorley Coal Loader have been recorded on a daily basis and amount of coal transported by road was reported in the AEMR Table 2.3.
	<b>Traffic Management Plan</b>			
4/80	The Applicant shall prepare and implement a Traffic Management Plan in consultation with Council, and to the satisfaction of the RTA for the proposed blasting activities that require the temporary periodic closure of	<ul style="list-style-type: none"> <li>Draft Traffic Management Plan, Mar 2005</li> </ul>	Noted	Closure of the Golden Highway for blasting is currently not required by Wambo. When closure of the Highway becomes necessary the Traffic Management Plan will be finalised and submitted to the



	the Golden Highway. This plan shall ensure that adequate warning is given to road users prior to blasting, and that follow up inspections are made to ensure that public roads are safe and clear of debris.			Singleton Council for comment and the RTA for comment and approval.
	<b>VISUAL IMPACT - Visual Amenity</b>			
4/81	The Applicant shall implement measures to mitigate visual impacts including: (a) design and construction of development infrastructure in a manner that minimises visual contrasts; and (b) progressive rehabilitation of mine waste rock emplacements (particularly outer batters), including partial rehabilitation of temporarily inactive areas.	<ul style="list-style-type: none"> <li>• AEMR 2005-2006, P 62-63</li> </ul>	Ongoing	Design and construction of the development at Wambo has included non-reflective materials and colours to blend in with the environment with natural vegetation retained where practicable to screen the development. Total area of rehabilitation at the Wambo site is 273.5ha, with ongoing rehabilitation of the rock emplacements resulting in 44ha rehabilitated during 2005-2006.
4/82	The Applicant shall investigate and where feasible implement the following measures at locations assessed in the EIS as having a high potential visual impact: (a) implement landscaping works in consultation with affected rural residents (see Condition 0); and/or (b) place and maintain visual screens between development infrastructure and the viewing location.		In progress	A visual screen has been designed and will be constructed to screen the Fisher, Muller and other Jerry’s Plains residences from the mine operations.
4/83	If a landowner of any dwelling assessed in the EIS as having a high potential visual impact requests the Applicant in writing to investigate ways to minimise the visual impact of the development on his/her dwelling, the Applicant shall: (a) within 14 days of receiving this request, commission a suitably qualified person whose appointment has been approved by the Director-General, to investigate ways to minimise the visual impacts of the development on the landowner’s dwelling; and (b) give the landowner a copy of the visual impact mitigation report within 14 days of receiving this report.  If both parties agree on the measures that should be implemented to minimise the visual impact of the development, then the Applicant shall implement these measures to the satisfaction of the Director-General. If the Applicant and the landowner disagree on the measures that should be implemented to minimise the visual impact of the development, then either party may refer the matter to the Director-General for resolution. If the matter cannot be resolved within 21 days, the Director-General shall refer the matter to an Independent Dispute Resolution Process (see Appendix 2).		Not Activated	No requests were received from landowners for visual impact investigation under the mine consent during 2005-2006.
	<b>Overburden Dumps</b>			
4/84	The Applicant shall construct the overburden emplacements generally in accordance with the EIS, and to the satisfaction of <b>DPI</b> .	<ul style="list-style-type: none"> <li>• EIS Wambo Development Project, Resource Strategies, Jul 2003</li> <li>• AEMR 2005-2006</li> <li>• Mining Operations Plan 2005-</li> </ul>	Ongoing	The rehabilitation of the site is generally in accordance with Figure 2.5 of the EIS – General Arrangement – Year 2. Progress on the construction of the overburden emplacements are reported in the AEMR Section 5.



		2010		
<b>Lighting Emissions</b>				
4/85	The Applicant shall take all practicable measures to mitigate off-site lighting impacts from the development.	<ul style="list-style-type: none"> <li>• Environmental Complaint Form No.2 Ross Hawkes “Springwood” Lighting from CHPP</li> <li>• Environmental Complaint Form No.2 Ron Fenwick Lighting complaint</li> <li>• Email to Ross Hawkes re action on lighting complaint, 14 Jul 2006</li> </ul>	Yes	One complaint was received in relation to lighting from the site: 11 July 2006 - Lighting tower at the CHPP resulted in a complaint from Hawkes at “Springwood” Wallaby Scrub Road.
4/86	All external lighting associated with the development shall comply with <i>Australian Standard AS4282 (INT) 1995 – Control of Obtrusive Effects of Outdoor Lighting.</i>		Noted	
<b>GREENHOUSE GAS</b>				
4/87	Before carrying out any underground mining operations, the Applicant shall identify and assess options for reducing the greenhouse gas emissions of the development to the satisfaction of the Director-General.	<ul style="list-style-type: none"> <li>• Greenhouse Gas Assessment (GGA), Wambo Development Project, Nov 2005</li> <li>• Letter from DoP re GGA, 20 Jan 2006</li> <li>• Letter to DoP re Extension to Submission Date for GGA, 21 Jun 2006</li> <li>• Letter from DoP re Extension to GGA Submission, 17 Jul 2006</li> <li>• Letter to DoP re Extension of Submission Date for GGA, 26 Sep 2006</li> <li>• Letter from DoP re Approval of Extended Submission Date for GGA, 16 Nov 2006</li> </ul>	In progress	A Greenhouse Gas Assessment was submitted to DoP in November 2005, and DoP responded with some required amendments to the document. Wambo requested extension to the submission date for the GGA to finalise a Co-operative Agreement with the Australian Greenhouse Office and then to enable the assessment to be prepared in a time frame that took account of the development of the North Wambo Underground Mine. DoP agreed to the extended submission date for submission to 30 December 2006.
<b>WASTE MINIMISATION</b>				
4/88	The Applicant shall minimise the amount of waste generated by the development to the satisfaction of the Director-General	<ul style="list-style-type: none"> <li>• Draft Waste Management Procedure</li> </ul>	In progress	Wambo have prepared a draft Waste Management Procedure that will be used as the basis for developing a total waste management contract for the project.  Currently Wambo segregate metal, waste oil and batteries for collection by a waste management contractor for recycling.
<b>HAZARDS MANAGEMENT</b>				
<b>Spontaneous Combustion</b>				

4/89	The Applicant shall: (a) take the necessary measures to prevent, as far as is practical, spontaneous combustion on the site; and (b) manage any spontaneous combustion on-site to the satisfaction of DPI.	<ul style="list-style-type: none"> <li>Insurance Risk Survey, Opencut, Underground and CHPP Final Report pages 36 and 72, Hawcroft Consulting International Pty Ltd Jul 2006</li> </ul>	Yes	The insurance risk survey report provides the controls to be implemented by Wambo to reduce the potential for spontaneous combustion at the mine.
	<b>Dangerous Goods</b>			
4/90	The Applicant shall ensure that the storage, handling, and transport of: (a) dangerous goods is done in accordance with the relevant <i>Australian Standards</i> , particularly <i>AS1940</i> and <i>AS1596</i> , and the <i>Dangerous Goods Code</i> ; and (b) explosives are managed in accordance with the requirements of DPI.	<ul style="list-style-type: none"> <li>Security Plan Wambo Coal Pty Ltd, Aug 2006</li> <li>Dangerous Goods Licence No. 35/020750</li> </ul>	Yes	The Security Plan provides detail of the requirements for secure storage, stock control, and transport of explosives and dangerous substances on the site, in accordance with the relevant Australian Standards. Dangerous goods licence is current for storage of Class 1B, 1D, 2.1, 3, C1, and 5.1 products in approved depots.
4/91	Before carrying out any development, the Applicant shall update the Safety Management System covering all operations on the site, including the safe storage of ammonium nitrate, to the satisfaction of the Director-General.	<ul style="list-style-type: none"> <li>Security Plan Wambo Coal Pty Ltd, Aug 2006</li> </ul>	Yes	There are separate safety management systems in place for the open-cut, underground and CHPP facilities at the Wambo Mine operations.
	<b>BUSHFIRE MANAGEMENT</b>			
4/92	The Applicant shall: (a) ensure that the development is suitably equipped to respond to any fires on-site; and (b) assist the Rural Fire Service and emergency services as much as possible if there is a fire on-site during the development.		Yes	Wambo has plant and equipment that may assist in fire response including water carts, dozers and graders. Wambo Coal Pty Ltd is responsible for fire suppression on the mine site with the Hunter Valley Area Rural Fire Service available as a support brigade.
4/93	Before carrying out any development, the Applicant shall prepare a Bushfire Management Plan for the site, to the satisfaction of Council and the Rural Fire Service.	<ul style="list-style-type: none"> <li>Bushfire Management Plan, Apr 2005</li> <li>Letter from NSW Rural Fire Service re Bushfire Management Plan, 18 May 2005</li> <li>Email from Singleton Council re Bushfire Management Plan, 7 Jul 2005</li> </ul>	Yes	A Bushfire Management Plan was prepared by Wambo in April 2005 and submitted to Singleton Council and the Rural Fire Service. Both organisations provided written approval of the plan.

REHABILITATION				
4/94	The Applicant shall: (a) rehabilitate all mining areas in accordance with the requirements of any mining lease granted by the Minister for Mineral Resources, having regard to the <i>Synoptic Plan – Integrated Landscapes for Mine Site Rehabilitation</i> ; and (b) ensure that the progressive rehabilitation is carried out to the satisfaction of the <b>DPI</b>	<ul style="list-style-type: none"> <li>• Opencut Mining Operations Plan, Jul 2005 to Jun 2010</li> <li>• Underground Mining Operations Plan 2005-2012</li> <li>• AEMR 2005-2006</li> </ul>	Yes	The approved open cut Mining Operations Plan developed for the site includes rehabilitation of the mining areas. Progressive rehabilitation is reported in the AEMR providing the current total area affected or rehabilitated, the current area and estimated area for the next 12 months that will be affected/rehabilitated.
MINE EXIT STRATEGY				
4/95	The Applicant shall work with the Council to investigate the minimisation of adverse socio-economic effects of a significant reduction in local employment levels and closure of the development at the end of its life.		Noted	The mine life is 21 years and mine closure is not planned to occur prior to 2026, so no planing for closure has commenced.
SCHEDULE 5 ADDITIONAL PROCEDURES FOR AIR QUALITY & NOISE MANAGEMENT				
Notify Landowners				
5/1	If the air dispersion and/or noise model predictions in the documents listed in condition 2 of schedule 3 identify that the air pollution and/or noise generated by the development are likely to be greater than the air quality and/or noise impact assessment criteria in conditions of schedule 4, then the Applicant shall notify the relevant landowners and/or existing or future tenants (including tenants of mine-owned properties) accordingly before it carries out any development.	<ul style="list-style-type: none"> <li>• Letters to Kannar, Hawkes, Lambkin, Skinner, Kelly, Henderson and Haynes re noise and air impacts, 20 Jul 2005</li> </ul>	Yes	Residents within the area of affectation identified in the EIS have been notified in writing of the potential impacts and the avenues open to them in relation to acquisition of their properties.
5/2	If the results of the air quality and/or noise monitoring required in schedule 4 identify that the air pollution and/or noise generated by the development are greater than the air quality and/or noise impact assessment criteria in schedule 4, then the Applicant shall notify the relevant landowners and/or existing or future tenants (including tenants of mine-owned properties) at the end of each quarter.		Ongoing	Communication with the relevant landholders within the areas of affectation in relation to air quality and noise monitoring and their rights under the acquisition conditions.
5/3	<i>Before carrying out any development, the Applicant shall develop a procedure in consultation with DEC and NSW Health and approved by the Director-General, for notifying landowners and tenants referred to in condition 0. This procedure must ensure that:</i> (a) all existing and future tenants are advised in writing about: <ul style="list-style-type: none"> <li>• air quality impacts likely to occur at the residence during the operational life of the mine; and</li> <li>• likely health and amenity impacts associated with exposure to particulate matter;</li> </ul> (b) the written advice in (a) is based on current air quality monitoring data, dispersion modelling results, research and literature; and there is an ongoing process for providing current air quality monitoring data, dispersion modelling results, research and literature to the tenants	<ul style="list-style-type: none"> <li>• Landowner Notification Procedure – Air Quality, Aug 2005</li> <li>• Fact Sheet – Air Quality – Particulate Matter and Health</li> <li>• Letters to Residents re Fact Sheet, 4 Nov 2005</li> <li>• Letter from DoP re Landowner Notification Procedure, 13 Sep 2005</li> <li>• Letter from DEC re Landowner Notification Procedure, 7 Sep 2005</li> </ul>	Yes	The Landowner Notification Procedure was prepared and submitted to DEC, DoP and NSW Health for review. NSW Health advised that they would produce a NSW Health endorsed brochure for distribution to the community.
Independent Review				

<p>5/4</p>	<p>If a landowner considers the development to be exceeding the air quality and/or noise impact assessment criteria listed in schedule 4 at his/her dwelling, or at any proposed dwelling on his/her vacant land, then he/she may ask the Applicant for an independent review of the air pollution and/or noise impacts of the development on his/her dwelling, or proposed dwelling.</p> <p>If the Director-General is satisfied that an independent review is warranted, the Applicant shall:</p> <p>(a) consult with the landowner to determine his/her concerns; and</p> <p>(b) commission a suitably qualified person – whose appointment has been approved by the Director-General – to conduct air quality and/or noise monitoring at the relevant dwelling to determine whether the development is complying with the relevant impact assessment criteria, and identify the source(s) and scale of any air quality and/or noise impact at the dwelling, and the development’s contribution to this impact.</p> <p>Within 14 days of receiving the results of this independent review, the Applicant shall give a copy of these results to the Director-General and landowner.</p>			<p>No independent review had been requested by the Director-General at the time of this audit.</p>
<p>5/5</p>	<p>If the independent review (referred to in condition 4) determines that the development is complying with the relevant impact assessment criteria listed in schedule 4 at the dwelling, then the Applicant may discontinue the independent review with the approval of the Director-General.</p>		<p>Not activated</p>	
<p>5/6</p>	<p>If the independent review (referred to in condition 4) determines that the development is not complying with the relevant impact assessment criteria listed in schedule 4 at the dwelling, and that the development is primarily responsible for this non-compliance, then the Applicant shall:</p> <p>(a) take all practicable measures, in consultation with the landowner, to ensure that the development complies with the relevant impact assessment criteria; and conduct further air quality and/or noise monitoring at the dwelling to determine whether these measures ensure compliance; or</p> <p>(b) secure a written agreement with the landowner to allow exceedances of the air quality and/or noise impact assessment criteria listed in schedule 4.</p> <p>If the additional monitoring referred to above subsequently determines that the development is complying with the relevant impact assessment criteria listed in schedule 4 at the dwelling, then the Applicant may discontinue the independent review with the approval of the Director-General.</p> <p>If the measures referred to in (a) do not ensure compliance with the air quality and/or noise land acquisition criteria listed in schedule 4 at the dwelling, and the Applicant cannot secure a written agreement with the landowner to allow exceedances of the air quality and/or noise impact assessment criteria listed in schedule 4, then the Applicant shall, upon</p>		<p>Not activated</p>	

	receiving a written request from the landowner, acquire all or part of the landowner’s land in accordance with the procedures in conditions 9-11 below			
5/7	<p><i>If the independent review determines that the development is not complying with the air quality and/or noise impact assessment criteria listed in schedule 4 at the dwelling, but that several mines are responsible for this non-compliance, then the Applicant shall , with the agreement of the landowner and other mine(s) prepare and implement a Cumulative Air Quality and/or Noise Impact Management Plan for the land to the satisfaction of the Director-General. This plan must provide the joint approach to be adopted by the Applicant and other mine(s) to manage cumulative air quality and/or noise impacts at the landowner’s dwelling, and the acquisition of any land.</i></p> <p>If the Applicant is unable to finalise an agreement with the landowner and/or other mine(s), and/or prepare a Cumulative Air Quality and Noise Impact Management Plan, then the Applicant or landowner may refer the matter to the Director-General for resolution.</p> <p>If the matter cannot be resolved within 21 days, the Director-General shall refer the matter to an Independent Dispute Resolution Process.</p> <p>If, following the Independent Dispute Resolution Process, the Director-General decides that the Applicant shall acquire all or part of the landowner’s land, then the Applicant shall acquire this land in accordance with the procedures in conditions 9-11 below.</p>		Not activated	
5/8	<p><i>If the landowner disputes the results of the independent review (referred to in condition 4), either the Applicant or the landowner may refer the matter to the Director-General for resolution.</i></p> <p>If the matter cannot be resolved within 21 days, the Director-General shall refer the matter to an Independent Dispute Resolution Process</p>		Not activated	
	<b>Land Acquisition</b>			
5/9	<p>Within 6 months of receiving a written request from the landowner, the Applicant shall pay the landowner:</p> <p>(a) the current market value of the landowner’s interest in the land at the date of this written request, as if the land was unaffected by the development the subject of the DA, having regard to the:</p> <ul style="list-style-type: none"> <li>• existing and permissible use of the land, in accordance with the applicable planning instruments at the date of the written request; and</li> <li>• presence of improvements on the land and/or any approved building or structure which has been physically commenced at the date of the landowner’s written request, and is due to be completed subsequent to that date;</li> </ul> <p>(b) the reasonable costs associated with:</p> <ul style="list-style-type: none"> <li>• relocating within the Singleton local government area, or to any</li> </ul>	<ul style="list-style-type: none"> <li>• Letter from Smith Dunlop Lawyers re Kannar Estate, 1096 and 1138 Jerrys Plains Road and 92 High Road Warkworth, 23 Sep 2005</li> <li>• Letter from M Webb Bros Pty Ltd re Receipt of Cheque for Kannar Estate, 1096 and 1138 Jerrys Plains Road and 92 High Road Warkworth, 10 Nov 2005</li> <li>• Letter from CEC M Hawkes Pty Ltd re Land Acquisition</li> </ul>	Yes In Progress	<p>Written requests were received by Wambo between September 2005 and November 2006 for the acquisition of properties owned by Haynes, Kannar and Hawkes.</p> <p>Haynes property was purchased in September 2006 in accordance with the consent conditions.</p> <p>Kannar property – deposit for purchase lodged 10 November 2006.</p> <p>Hawkes property – agreement has not been reached and an independent valuer has been appointed by the NSW Division of Australian Property Institute to consider submissions from Hawkes and Wambo.</p>

	<p>other local government area determined by the Director-General;</p> <ul style="list-style-type: none"> <li>obtaining legal advice and expert advice for determining the acquisition price of the land, and the terms upon which it is required; and</li> </ul> <p>(c) reasonable compensation for any disturbance caused by the land acquisition process.</p> <p>However, if within 6 months of receiving this written request, the Applicant and landowner cannot agree on the acquisition price of the land, and/or the terms upon which the land is to be acquired, then either party may refer the matter to the Director-General for resolution.</p> <p>Upon receiving such a request, the Director-General shall request the President of the Australian Institute of Valuers and Land Economists to appoint a qualified independent valuer or Fellow of the Institute, to consider submissions from both parties, and determine a fair and reasonable acquisition price for the land, and/or terms upon which the land is to be acquired.</p> <p>If either party disputes the independent valuer’s determination, then the independent valuer must refer the matter back to the Director-General.</p> <p>Upon receiving such a referral, the Director-General shall appoint a panel to determine a fair and reasonable acquisition price for the land, and/or the terms upon which the land is to be acquired, comprising the:</p> <ol style="list-style-type: none"> <li>appointed independent valuer,</li> <li>Director-General or nominee, and</li> <li>President of the Law Society of NSW or nominee.</li> </ol> <p>Within 14 days of receiving the panel’s determination, the Applicant shall make a written offer to purchase the land at a price not less than the panel’s determination.</p> <p>If the landowner refuses to accept this offer within 6 months of the date of the Applicant’s offer, the Applicant’s obligations to acquire the land shall cease, unless otherwise agreed by the Director-General.</p>	<p>“Springwood”, 21 Nov 2005</p> <ul style="list-style-type: none"> <li>Letter from Wambo re Land Acquisition “Springwood”, 21 Dec 2005</li> <li>Letter from Wambo re Offer for Acquisition “Springwood”, 7 Apr 2006</li> <li>Letter to DoP re Status of Acquisition “Springwood”, 28 Jun 2006</li> <li>Letter form Prince Property Valuers Land Acquisition “Springwood”, 22 Sep 2006</li> <li>Letter from Curtis Delaney Gray re Acquisition of Haynes Property at 50 High Road Warkworth, 23 Jan 2006</li> <li>Letter to Curtis Delaney Gray re Acquisition of Haynes Property at 50 High Road Warkworth, 25 Jan 2006</li> <li>Letter to Curtis Delaney Gray re Acquisition of Haynes Property at 50 High Road Warkworth, 2 May 2006</li> <li>Letter from Curtis Delaney Gray re Acquisition of Haynes Property at 50 High Road Warkworth, 21 Jul 2006</li> </ul>		
5/10	The Applicant shall bear the costs of any valuation or survey assessment requested by the independent valuer, panel, or the Director-General and the costs of determination referred to in Condition 9.		Yes	Wambo paid for the valuations of the properties referred to in MCoA 5/9.
5/11	If the Applicant and landowner agree that only part of the land should be acquired, then the Applicant shall pay all reasonable costs associated with obtaining Council approval for any plan of subdivision, and registration of the plan at the Office of the Registrar-General		Not applicable	Properties negotiated have not been subdivided.
<b>SCHEDULE 6 - ENVIRONMENTAL MANAGEMENT, MONITORING, AUDITING &amp; REPORTING</b>				
<b>ENVIRONMENTAL MANAGEMENT STRATEGY</b>				

6/1	<p>Before carrying out any development, the Applicant shall prepare and implement an Environmental Management Strategy for the development to the satisfaction of the Director-General. This strategy must:</p> <ul style="list-style-type: none"> <li>a) provide the strategic context for environmental management of the development;</li> <li>b) identify the statutory requirements that apply to the development;</li> <li>c) describe in general how the environmental performance of the development would be monitored and managed during the development;</li> <li>d) describe the procedures that would be implemented to;</li> <li>e) keep the local community and relevant agencies informed about the operation and environmental performance of the development;</li> <li>f) receive, handle, respond to, and record complaints;</li> <li>g) resolve any disputes that may arise during the course of the development;</li> <li>h) respond to any non-compliance;</li> <li>i) manage cumulative impacts; and</li> <li>j) respond to emergencies; and</li> <li>k) describe the role, responsibility, authority, and accountability of all the key personnel involved in environmental management of the development.</li> </ul>	<ul style="list-style-type: none"> <li>• Environmental Management Strategy, Dec 2005</li> <li>• Letter from DoP re Environmental Management Strategy, 10 Oct 2005</li> </ul>	Yes	An Environmental Management Strategy was prepared for the project in accordance with the requirements of the condition and the Strategy was approved by DoP on 10 October 2005.
6/2	<p>Within 14 days of the Director-General’s approval, the Applicant shall:</p> <ul style="list-style-type: none"> <li>(a) send copies of the approved strategy to the relevant agencies, Council, and the CCC; and</li> <li>(b) ensure the approved strategy is publicly available during the development.</li> </ul>	<ul style="list-style-type: none"> <li>• Letters to Singleton Council, DPI and Members of the CCC re Environmental Management Strategy, 16 Dec 2005</li> </ul>	Yes	
	<b>ENVIRONMENTAL MONITORING PROGRAM</b>			
6/3	<p>Before carrying out any development, the Applicant shall prepare an Environmental Monitoring Program for the development in consultation with the relevant agencies, and to the satisfaction of the Director-General. This program must consolidate the various monitoring requirements in schedule 4 of this consent into a single document.</p>	<ul style="list-style-type: none"> <li>• Environmental Monitoring Program, Mar 2006</li> <li>• Environmental Monitoring Program Revised Apr 2006</li> </ul>	Yes	An Environmental Monitoring Program has been prepared and consolidates the monitoring requirements from all the relevant management plans. The Environmental Monitoring Program was reviewed as part of this audit and was also reviewed and updated by Wambo in April 2006.
6/4	<p>The Applicant shall regularly review, and if necessary update, this program in consultation with the Director-General.</p>	<ul style="list-style-type: none"> <li>• Environmental Monitoring Program Mar 2006</li> <li>• Environmental Monitoring Program Apr 2006</li> </ul>	Yes	The Environmental Monitoring Program was reviewed and resubmitted to the DoP in April 2006. The Environmental Monitoring Program was also reviewed as part of this audit.
	<b>ANNUAL REPORTING</b>			
6/5	<p>The Applicant shall submit an AEMR to the Director-General and the relevant agencies. This report must:</p> <ul style="list-style-type: none"> <li>(a) identify the standards and performance measures that apply to the development;</li> <li>(b) include a summary of the complaints received during the past year, and compare this to the complaints received in the previous 5 years;</li> <li>(c) include a summary of the monitoring results on the development</li> </ul>	<ul style="list-style-type: none"> <li>• AEMR 2005-2006</li> <li>• Letters to DoP, DPI, DEC, NPWS, SC and CCC members re Annual Environmental Management Report 2005-2006, 30 Aug 2006</li> </ul>	Yes	The AEMR was prepared for the period 1 July 2005 to 30 June 2006 and addressed the requirements of the condition. Copies of the AEMR were provided to the DoP, DPI, DEC, NPWS, SC and CCC members.

	<p>during the past year,</p> <p>(d) include an analysis of these monitoring results against the relevant:</p> <ul style="list-style-type: none"> <li>• impact assessment criteria;</li> <li>• monitoring results from previous years; and</li> <li>• predictions in the EIS;</li> </ul> <p>(e) identify any trends in the monitoring over the life of the development;</p> <p>(f) identify any non-compliance during the previous year; and</p> <p>(g) describe what actions were, or are being, taken to ensure compliance</p>			
<b>INDEPENDENT ENVIRONMENTAL AUDIT</b>				
6/6	<p>At the end of Year 1 of the development, and every 5 years thereafter, unless the Director-General directs otherwise, the Applicant shall commission and pay the full cost of an Independent Environmental Audit of the development. This audit must:</p> <p>(g) be conducted by a suitably qualified, experienced, and independent person whose appointment has been endorsed by the Director-General;</p> <p>(h) be consistent with <i>ISO 19011:2002 – Guidelines for Quality and/or Environmental Systems Auditing</i>, or updated versions of these guideline;</p> <p>(i) assess the environmental performance of the development, and its effects on the surrounding environment;</p> <p>(j) assess whether the development is complying with the relevant standards, performance measures, and statutory requirements;</p> <p>(k) review the adequacy of the Applicant's Environmental Management Strategy and Environmental Monitoring Program; and, if necessary,</p> <p>(l) recommend measures or actions to improve the environmental performance of the development, and/or the environmental management and monitoring systems.</p>	<ul style="list-style-type: none"> <li>• Letter to DoP re Independent Environmental Auditor, 21 Sep 2006</li> <li>• Letter from DoP re Approval of the Independent Environmental Audit, 16 Nov 2006</li> </ul>	Yes	<p>This report is the Independent Environmental Audit required after the end of Year 1 of the Wambo Development Project.</p> <p>DoP endorsed Trevor Brown to undertake the Independent Environmental Audit.</p> <p>The Independent Environmental Audit was conducted by Trevor Brown of Trevor Brown &amp; Associates on 20-22 November 2006.</p>
6/7	<p>Within 3 months of commissioning this audit, the Applicant shall submit a copy of the audit report to the Director-General, with a response to any of the recommendations contained in the audit report</p>		Noted	
<b>COMMUNITY CONSULTATIVE COMMITTEE</b>				
6/8	<p>Before carrying out any development, the Applicant shall establish a new Community Consultative Committee to oversee the environmental performance of the development. This committee shall:</p> <p>(a) be comprised of:</p> <ul style="list-style-type: none"> <li>• 2 representatives from the Applicant, including the person responsible for environmental management at the mine;</li> <li>• 1 representative from Council; and</li> <li>• at least 3 representatives from the local community,</li> </ul>	<ul style="list-style-type: none"> <li>• Letter from DoP re CCC Chair, 20 Jun 2006</li> <li>• Letter from DoP re Nominations for the CCC, 1 Dec 2005</li> <li>• CCC Minutes 28 Sep 2005</li> <li>• CCC Minutes 13 Mar 2006</li> </ul>	Yes	<p>Members of the CCC are:</p> <p><u>Chairperson</u> - Mrs Margaret MacDonald-Hill</p> <p><u>Wambo Coal Representatives</u></p> <p>Mr Bill Dean General Manager</p> <p>Mrs Sarah Withell Environmental Manager</p> <p>Ms Julie Thomas Environmental Officer</p>



	<p>whose appointment has been approved by the Director-General in consultation with the Council;</p> <p>(b) be chaired by the representative from Council or by a third party as approved by the Director-General;</p> <p>(c) meet at least twice a year; and</p> <p>(d) review and provide advice on the environmental performance of the development, including any construction or environmental management plans, monitoring results, audit reports, or complaints.</p>	<ul style="list-style-type: none"> <li>• CCC Minutes 7 Aug 2006</li> <li>• CCC Minutes 9 Oct 2006</li> </ul>		<p>Mr Nathan Cooper Hansen Consulting (for Wambo Coal)</p> <p><u>Singleton Council</u></p> <p>Mr Brian Thomas</p> <p>Cr Paul Nichols</p> <p><u>Residents</u></p> <p>Mr Ron Fenwick</p> <p>Mr Laurie Kelly</p> <p>Mrs Helen Holt</p> <p>Four CCC Meetings have been held between September 2005 and October 2006.</p>
6/9	<p>The Applicant shall, at its own expense:</p> <p>(a) ensure that 2 of its representatives attend the Committee's meetings;</p> <p>(b) provide the Committee with regular information on the environmental performance and management of the development;</p> <p>(c) provide meeting facilities for the Committee;</p> <p>(d) arrange site inspections for the Committee, if necessary;</p> <p>(e) take minutes of the Committee's meetings;</p> <p>(f) make these minutes available to the public for inspection within 14 days of the Committee meeting, or as agreed to by the Committee;</p> <p>(g) respond to any advice or recommendations the Committee may have in relation to the environmental management or performance of the development;</p> <p>(h) forward a copy of the minutes of each Committee meeting, and any responses to the Committee's recommendations to the Director-General within a month of the Committee meeting.</p>	<ul style="list-style-type: none"> <li>• CCC Minutes 28 Sep 2005</li> <li>• CCC Minutes 13 Mar 2006</li> <li>• CCC Minutes 7 Aug 2006</li> <li>• CCC Minutes 9 Oct 2006</li> </ul>	Yes	<p>CCC Meetings have been held in the Wambo Coal Pty Ltd – Administration Board Room.</p> <p>The CCC is provided with information on performance (e.g. AEMR presentation).</p> <p>Site inspections have been arranged as required (e.g. rail loading facility site inspection).</p> <p>The CCC Minutes provide a summary of matters discussed and highlight action items that are to be covered for the next meeting.</p> <p>Copies of the CCC Minutes are provided to each member of the CCC within 14 days and a copy of the Minutes is provided to DoP.</p>