COMMERCIAL-IN-CONFIDENCE

FINAL REPORT

Independent Environmental Audit at Whitehaven Coal Mine – Open Cut

Prepared for

Whitehaven Coal Mining Pty Ltd
Boggabri Office
125 Merton Street
PO Box 56
NSW, 2382

7 March 2007

JOB NO. 43177468

URS
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Appendix A  Status of Compliance Against Consent Conditions
1.1 Background

URS Australia Pty Ltd (URS) was engaged by Whitehaven Coal Mining Pty Ltd (WCM) to undertake an independent environmental audit of the open cut coal mining operation at Whitehaven, Gunnedah.

WCM are required to undertake an environmental compliance audit against the requirements of DA 8-1-2005, commissioned by September 2006 and then every three years thereafter. The audit is necessary to meet the requirements of Schedule 5, Condition of Consent No. 6 of DA 8-1-2005.

The audit has been completed according to Development Consent requirements (Ref: DA 8-1-2005, dated 30 June 2005) as detailed in URS’ proposal dated 25 September 2006 and as described in Section 1.3 below.

This is the second independent audit to be undertaken at Whitehaven Coal Mine and is for the period September 2003 to September 2006. This report presents the findings of the audit.

1.2 Scope of Work

The audit was conducted in accordance with the requirements set out in the Development Consent, dated 30 June 2006. The audit requirements are set out in Schedule 5 Condition of Consent No. 6. Condition of Consent No. 6 requires the following to be undertaken:

"By the end of September 2006, and every 3 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, or team, 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 equivalent updated versions of these guidelines;

(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

(f) if necessary, recommend measures or actions to improve the environmental performance of the development, and/or the environmental management and monitoring systems."
1.3 Audit Methodology

The audit methodology comprised:

- A site inspection and interviews with key site personnel nominated by WCM, on 28 November 2006;
- Review of relevant documentation provided by WCM;
- Submission of a Draft Report to WCM outlining the audit findings.

1.4 Personnel and Timing

Michael Woolley, Principal Environmental Engineer and Alison Pilgrim, Associate Environmental Scientist, both with URS Australia Pty Ltd (URS), conducted the audit.

Site visits for the audit were conducted at Whitehaven Coal Mine open cut operations on 28 November 2006.

Michael and Alison are registered by RABQSA as Certified Lead Auditors for Environmental Management, Site Contamination Assessment and Compliance Auditing.

Personnel interviewed comprised:

- Bob Corbett, Group Manager - Environment AMCI Australia Pty Ltd;
- Chris Burgess, Area Manager – Whitehaven Coal Mining Pty Ltd; and
- Colin (Buck) Hulm, Mine Project Manager – Whitehaven Coal Mining Pty Ltd.

1.5 Format of Report

The format of this report is as follows:

- Section 1 is introductory and defines the scope and nature of the audit;
- Section 2 describes the Whitehaven Coal Mine operations as observed during the site inspection;
- Section 3 provides an assessment of the environmental performance of the development and its effects on the surrounding environment;
- Section 4 provides an assessment against the relevant standards, performance measures and statutory requirements. Where findings were found to be in non-compliance, these results have been summarised in this Section (Appendix A provides the results of the assessment against the 73 Conditions of Consent); and
- Section 5 provides a review of the adequacy of the Environmental Management Strategy and Environmental Monitoring Program.
Recommended measures or actions to improve the environmental performance of the development, and/or the environmental management and monitoring systems are provided in Sections 3 to 5 above.
Overview of Operations at the Whitehaven Coal Mine Open Cut

2.1 Whitehaven Coal Mine Open Cut

2.1.1 Site Description and Development

The Whitehaven Coal Mine is located within Narrabri Shire, approximately 30 km north-west of Gunnedah, 16 km east-south-east of Boggabri and immediately north of the former Vickery Coal Mine.

In December 2004, WCM lodged a new development application under Part 2, Schedule 3 of the Environmental Planning and Assessment Act 1979 in which approval was sought for a southward extension of the open cut into an area referred to as the Canyon, and the relocation of facilities including the ROM coal stockpile, crushing plant, coal bin and various support buildings. The Canyon area, covering approximately 46 ha, lies within the confines of ML 1471. When DA 8-1-2005 (signed on 30 June 2005) was approved, it superseded DA 72-3-2000, and became the only consent applicable to the mine.

Over the life of the approved mine, a total area of approximately 150 ha will be disturbed for mining and associated activities within MLs 1464 and 1471.

The external boundary of ML 1471 corresponds to the DA Area referred to in DA 8-1-2005 and covers an area of approximately 417 ha. ML 1464 lies wholly within ML 1471.

The Licensed fee based activities at Whitehaven Coal Mine comprise:

- Crushing, grinding or separating works;
- Coal mining; and
- Coal loading.
Environmental Performance and Effect on Surrounding Environment

This Section fulfils the requirement to assess the environmental performance of the development and its effects on the surrounding environment, as stated in DA 8-1-2005, Schedule 5 Condition of Consent No.6:

"(c) assess the environmental performance of the development, and its effects on the surrounding environment"

The environmental performance of the development has been undertaken through a review of environmental performance data, such as monitoring results presented in the AEMR, for the reporting period (September 2003 to September 2006) and observations made during the site visit on 28th November 2006.

This section provides a review of the environmental performance through consideration of the following:

- Air quality;
- Erosion and sedimentation;
- Waste;
- Surface water pollution;
- Groundwater pollution;
- Contaminated or polluted land and hydrocarbon contamination;
- Threatened flora and fauna;
- Rehabilitation;
- Weeds;
- Blasting;
- Operational noise;
- Visual/light pollution;
- Aboriginal heritage;
- Natural heritage;
- Bushfire management; and
- Feral animal control.
Environmental Performance and Effect on Surrounding Environment

3.1.1 Air Quality

The site's Environment Protection Licence (No.10094) lists nine dust monitoring locations with a requirement to continuously monitor dust deposition (measured in g/m²/month). The site's DA 8-1-2005 provides a maximum total deposited dust level limit of 4 g/m²/month, calculated on an annual averaging period, and a maximum increase in deposited dust levels of 2 g/m²/month.

A review of annual returns to the Environment Protection Authority (EPA), indicates that the site met these requirements during the reporting period.

At the time of the site visit, no significant quantities of dust were observed beyond the boundary of the site, however, it is noted that the site did receive 8 mm of rain the night previous to the audit which would have minimised the potential for dust on that day.

3.1.2 Erosion and Sedimentation

At the time of the site visit no significant areas of erosion were observed on the rehabilitated areas of the mine or at stockpile locations around the site.

It should be noted that the site visit comprised a drive over of the site and not all areas of the site were inspected.

3.1.3 Waste Management

Wastes produced by the open cut coal mining operations (excluding CHPP) include the following:

- general domestic-type and office wastes from on-site buildings and routine maintenance consumables;
- vehicle/equipment maintenance type wastes including batteries, steel and oils and greases;
- sewage from on-site amenities;
- overburden and interburden; and
- mine equipment tyres.

It was reported that wastes (paper, card, plastics, oil, batteries and steel) are recycled as far as practicable. However, documents demonstrating that the reduction of waste is maximised were not available. It is recommended that a waste and/or resource reduction plan be developed and implemented to demonstrate wastes generated and disposed to landfill are minimised.
Environmental Performance and Effect on Surrounding Environment

SECTION 3

3.1.4 Surface Water Pollution

The site’s Environment Protection Licence (EPL No.10094) lists five wet weather discharge points. A review of annual returns from between April 2003 and April 2006 indicates two discharges were reported at EPL Identification No.3, on 16 January 2004 and 30 June 2005 following heavy rainfall.

In both instances, pH and oil and grease were within the Licence limits. Total suspended solids (TSS) were elevated, however, sampling upstream in both cases, indicated a higher level of TSS coming onto the site than leaving the site.

WCM made a request to the DEC (12 February 2004) to amend the site’s EPL to take into account the situation of water with high TSS entering the property. DEC reportedly responded by way of issuing a notice of amendment in which they identified that they would not change TSS limit.

3.1.5 Groundwater

Twelve registered groundwater boreholes are monitored around the site. The standing water level is monitored quarterly, electrical conductivity six monthly and a range of analytes at two bores annually.

The 2004-2005 AEMR reports that the groundwater level in the bore closest to the mining operation has fluctuated but remains within the previously recorded range with groundwater in other bores remaining the same.

It was reported that the water level in GW6 has dropped by 16 m from that recorded over the initial three years of mining and has since been mined through. The water level at GW8 was reported to have dropped by 4 m over the life of the mine. GW8 is located at a property owned by WCM.

The Water Management Plan (WMP), approved by DNR on 25 January 2007, includes a groundwater monitoring program. The WMP includes a requirement that if a trigger level is reached (including a 15% reduction in standing water level, a 15% increase in electrical conductivity or a 15% change in pH), WCM will commission a hydrogeologist to review the data with the outcomes of the review subject to discussions with DNR.

The WMP was approved after the audit by URS and implementation of the WMP has not been included in this audit and an assessment of compliance with trigger levels was not undertaken, nor whether trigger levels had been reached.

3.1.6 Contaminated or Polluted Land and Hydrocarbon Management

No contaminated land was reported by WCM to be within the DA area.

At the time of the site visit no significant areas of contamination were observed by URS. Some minor staining of the compacted hard stand around oil storage areas was observed.
Environmental Performance and Effect on Surrounding Environment

Section 3

Improvements to these areas could include providing a concrete sealed area for storage of drums and IBCs containing hydrocarbons. WCM acknowledge that this area is a potential source of contamination given the unsealed nature of the compound. It was reported that the oil storage area will be subject to assessment at the time of mine decommissioning.

3.1.7 Threatened Flora and Fauna

The AEMR for the period October 2005 to December 2006 provides information on flora and fauna management. No threatened flora species, ROTAP species or Endangered Ecological communities have been identified within the DA area. Some threatened fauna species have been identified in the area, however, none have required relocation as part of the mining operations.

The following sections from the 2005-2006 AEMR provides a summary:

Flora

"Investigations undertaken by Geoff Cunningham Natural Resource Consultants Pty Ltd as part of the Stage 2 Mine EIS identified no Threatened flora species, ROTAP species or Endangered Ecological communities within the DA Area.

Notwithstanding the findings of the flora investigations, procedures were identified in the September 2002 Flora and Fauna Management Plan for further inspections for Threatened flora within the "Womboola" area (in conjunction with native vegetation re-establishment monitoring programmes) on the off-chance that some Threatened species, not previously identified, appear. These studies, which were also extended to incorporate the proposed Canyon extension, similarly identified no Threatened flora species, Endangered Ecological communities, Endangered Flora populations or Critical Habitat within the DA Area."

Fauna

"A series of investigations into the occurrence of Threatened fauna within the DA Area were undertaken by Countrywide Ecological Service as part of the Stage 2 EIS preparation phase, with two Vulnerable microbat species and a Koala having been recorded within open woodland areas within the "Womboola" property.

The EIS investigations also identified the potential occurrence of some Threatened bird, mammal and reptile species within the same area.

Subsequent studies undertaken by Countrywide Ecological Services (CES) as part of the investigation for the proposed Canyon extension of the Whitehaven Coal Mine, also identified the Vulnerable Glossy Black Cockatoo (flying in the distance) and a family of the Vulnerable Grey Crowned Babbler. The Grey Crowned Babbler, though identified in the 1999 survey work, was not listed on the Schedules of the TSC Act at that time. CES did note, however, that the numbers of this species had increased since the 1999"
Environmental Performance and Effect on Surrounding Environment

survey as a consequence of WCM’s land management practices, despite the presence of the mining activity.

During the Reporting Period, pre-clearing inspections of woodland remnants were undertaken by Countrywide Ecological Service (CES) in October 2005, January 2006 and March 2006. Though outside the preferred late summer / early autumn period, CES concluded that there were no fauna issues to prevent the clearing being undertaken. The inspection identified one active native pigeon nest with 2 white eggs, and noted the abundance of Cockatiel roosting in this woodland remnant.

The following Threatened Species were recorded in the subject area. One family of Grey Crowned Babblers containing between 12-14 birds were noted roosting and foraging in the area. As noted above, this species has been co-existing with the mine since the commencement of mining operations. The bat calls of the Yellow-bellied Sheath-tailed Bat suggested they were present in the same numbers as the pre-approval survey. The Greater Long-eared Bat was also recorded. No bat call roosting sequence was recorded and none of the hollows in the subject areas were observed to have active bat roosting or bird nesting activities.

The report recommended that the completion of clearing of the subject area marked should take place before April 2006 in accordance with the approved FFMP. Clearing of the vegetation was undertaken on receipt of advice that there were no Threatened species requiring relocation.

In accordance with the requirements of DA 72-03-2000 and DA 8-1-2005, CES undertakes routine monitoring with the various fauna habitats within WCM’s lease which are undisturbed by mining and of the areas rehabilitated to native vegetation, with the monitoring within the rehabilitated areas being undertaken to assess the effectiveness of the reconstructed ecosystems in providing fauna habitat.

The principal native fauna identified within the rehabilitated areas to date have been limited to skinks within the replaced litter / clearing debris and predatory birds, primarily Kestrels and Australian Ravens. CES advises that absence of other than these animals is not unexpected given the age of the rehabilitation and that with the progressive development of more structure to the rehabilitated areas (through the establishment of planted or naturally regenerated trees and shrubs) a greater diversity of native fauna would be expected to utilize these areas.”

3.1.8 Rehabilitation

Independent rehabilitation monitoring reports (Geoff Cunningham Natural Resource Consultants Pty Ltd) were observed dated February 2005 and May 2006. The February 2005 report indicated good establishment of both annual and perennial species within the quadrats monitored. The May 2006 monitoring report indicated mixed results for each quadrat. An interpretation of the rehabilitation success was not provided in the May 2006 report.

The May 2006 report made the following recommended actions:

• Prevention of Vehicle Damage to Quadrats;
Environmental Performance and Effect on Surrounding Environment

- Permanent Marking of Quadrats;
- Prevention of Grazing; and
- Control of Noxious Weeds.

It is recommended that WCM report progress against these recommendations in the next AEMR. Further detail in the Natural Resource Consultants reports that better define the success or otherwise of rehabilitation efforts would be useful in the context of auditing development consent and other requirements for rehabilitation.

It was reported that external party representatives who have visited the site upon invitation (including DPI, DNR, NSW National Parks) have been complementary of the rehabilitation. It is recommended that these comments are included in the AEMR.

This audit by URS was not an audit of the adequacy, success or completion of rehabilitation at the site. To fully address the adequacy and success of rehabilitation a detailed rehabilitation assessment by qualified persons would be required.

3.1.9 Weeds

Weeds are managed on site by WCM. An assessment of weed management was not undertaken by URS during the audit. A WCM employee is reportedly licensed to undertake noxious weed inspections which are undertaken twice a year across the whole site.

Weeds are addressed in the rehabilitation monitoring reports (Geoff Cunningham Natural Resource Consultants Pty Ltd - GCNRC), however, it appears (from the documents provided) that identification of weeds is restricted to within the monitoring quadrats and not to the whole property. The most recent GCNRC report available (May 2006) stated the following with respect to noxious weeds “A number of noxious weeds occur on the rehabilitated lands and these should be controlled while the levels of infestation are low. These noxious weed species include Lycium ferocissimum* [African Boxthorn], Scleolaena birchii [Galvanised Burr], Opuntia sp.* [Prickly Pear] and Xanthium spinosum* [Bathurst Burr]. These species should be destroyed by spot spraying during regular weed control campaigns. However, Thornapple [Datura sp.], Stinkwort [Ditrichia graveolens] and Mintweed [Salvia reflexa] are also present. While not listed as noxious, these species should continue to be controlled to prevent their spread.”

The GCNRC report recommends that “The noxious weed species listed in Section 5.5 should be destroyed as a matter of urgency to prevent seeding and further infestation of the rehabilitation area. There are generally few of these plants present and so early control will reduce future problems.”

The AEMR 2005 -2006 indicates that one active weed eradication program was carried out at the site, however, it did not indicate if this eradication was restricted to the rehabilitated areas or the whole site, nor if the eradication was successful and addressed the GCNRC recommendations.
Environmental Performance and Effect on Surrounding Environment

It is recommended that WCM demonstrates that GCNRC weed control recommendations are met through documenting weed management records, including which weeds are identified on the property, control/eradication work undertaken, and whether the work is successful and addresses the GCNRC recommendations.

It is recommended that weeds on the rehabilitated areas continue to be addressed during GCNRC monitoring and recommendations carried out.

3.1.10 Blasting

WCM records for blasting events met the requirements of the DA Conditions of Consent.

Refer to Appendix A (DA 8-1-2005 Schedule 3 – Conditions of Consent 12 to 18).

3.1.11 Operational Noise

Noise monitoring requirements are provided in Appendix A (DA 8-1-2005 Schedule 3 – Conditions of Consent 6 and 7). CoC No. 6 states that the Applicant shall ensure that the noise generated by the development does not exceed the noise impact assessment criteria presented in Table 7 (reproduced below) at any residence on, or on more than 25 percent of, any privately-owned land.

<table>
<thead>
<tr>
<th>Day/Evening/Night</th>
<th>Night</th>
</tr>
</thead>
<tbody>
<tr>
<td>( L_{Aeq(15\text{ minute})} )</td>
<td>( L_{A(1\text{ minute})} )</td>
</tr>
<tr>
<td>35</td>
<td>45</td>
</tr>
</tbody>
</table>

Noise monitoring was undertaken in February and September 2005 and February and April 2006.

The noise monitoring data contained in the most recent AEMR (2004 – 2005) was reviewed for February and September 2005 and the noise monitoring reports for February and April 2006 (Global Acoustics).

The February 2005 data indicated that the \( L_{Aeq} \) was reported at the four locations monitored to be between 36 dB(A) and 54 dB(A) (all sources). Noise monitoring associated with the mine exceeded the day/evening/night limit of 35 dB(A) at one non-mine property, Gundawarra.

The September 2005 data indicated that the mine was in compliance with \( L_{Aeq \ 15\text{ minute}} \ 35 \text{ dB(A)} \) at all non-mine sites.

The February and April 2006 reports indicate that the mine was in compliance with the \( L_{Aeq} \ 35 \text{ dB(A)} \) limit.

The requirement to undertake night time monitoring was reported to come into force at the time of surrender of DA 72-3-2000 and therefore be applicable to two monitoring rounds during the audit period.
Environmental Performance and Effect on Surrounding Environment

The L _A_1(minute) was monitored during the second monitoring round and was found to be in compliance with the limit of 45 dB(A). The monitoring was not undertaken during the first round.

It was noted during the audit (letter from DEC 17 May 2004) that Whitehaven Coal Mining Limited has agreements with the “Will-gai” and “Merton” residents which demonstrated that under these agreements the residents would not object to the agreed extended work hours and that they would resolve all noise related issues with the mine. No issues with the agreements have been reported and it is noted that the mining activities are moving further away from these properties.

A noise complaint was recorded (18 March 2004) from the Gundawarra property. No other noise complaints have reportedly been received during the audit period. Following the noise complaint an unattended noise monitoring program was undertaken in May 2004 (Richard Heggie Associates Pty Ltd) at the Gundawarra property over a period of 16 days in order to quantify the overall ambient noise levels. A copy of the report was presented to the residents of Gundawarra and no further noise complaints have reportedly been received.

Since May 2004, it is understood that mining activities have continued to progress in a south-easterly direction away from the Gundawarra property with increasing topographic shielding provided by both natural and constructed land forms.

3.1.12 Visual/light Pollution

WCM reported that views of the mine are limited to six local residences and travellers on Hoad Lane. It was observed that rehabilitation of previously exposed northerly, north-easterly and westerly slopes of the post-mining landform has been undertaken to minimise the visual impacts of the site.

A complaint regarding a single bright light was recorded (18 March 2004) from the Gundawarra property, which was addressed by re-directing the light away from the residence and to the satisfaction of the landowners. No other visual/light complaints have reportedly been received during the audit period.

3.1.13 Aboriginal Heritage

Archaeological investigations undertaken since 1999 have reportedly identified four sites. Two of these are within the mining lease areas, of which one of these sites (Whitehaven 3) was observed by URS during the site visit to have been fenced. A consent to destroy was granted by DEC for the second site which has been subsequently destroyed.

Representatives from the LALC are reportedly present during topsoil stripping and a good relationship between WCM and the LALC is reportedly maintained.
Environmental Performance and Effect on Surrounding Environment

SECTION 3

3.1.14 Natural Heritage

WCM reported that investigations undertaken by Geoff Cunningham Natural Resource Consultants Pty Ltd as part of the Stage 2 Mine EIS identified no Threatened flora species, Rare or Threatened Australian Plants (ROTAP) species or Endangered Ecological communities within the DA Area.

3.1.15 Bushfire Management

A bushfire management plan (BMP) is in place and WCM liaise with the local Bush Fire Brigade. Evidence that the BMP was reviewed by GSC and NSC was not available during the audit. URS did not review the adequacy of the BMP.

3.1.16 Feral Animal Control

Feral animals are reportedly not a significant land management issue at WCM’s landholdings and no program of eradication is undertaken on site or on surrounding properties.

Feral animals are monitored by a WCM employee, resident in one of the site’s farm properties. If required feral animal control would be initiated.
Compliance with Relevant Statutory Requirements

This Section fulfils the requirement to assess whether the development is complying with the relevant standards, performance measures, and statutory requirements, as stated in DA 8-1-2005, Schedule 5 Condition of Consent No.6:

“(d) assess whether the development is complying with the relevant standards, performance measures, and statutory requirements”

The following table identifies the leases, licences and approvals in place for the Whitehaven Coal Mine at the end of the Reporting Period, the issuing / responsible Authority, dates of issue, duration (where limited) and relevant comments. The list is presented chronologically according to the date of issue.

<table>
<thead>
<tr>
<th>Issuing / Responsible Authority</th>
<th>Type of Lease, Licence, Approval</th>
<th>Date of Issue</th>
<th>Expiry</th>
<th>Comments</th>
</tr>
</thead>
<tbody>
<tr>
<td>Minister for Infrastructure and Planning</td>
<td>Modification MOD-8-2-2003-...</td>
<td>03.09.2003</td>
<td>07.09.2015</td>
<td>Approval granted permitting ROM coal production to increase to 1.25 Mtpa and coarse reject disposal to the mine.</td>
</tr>
<tr>
<td>Department of Mineral Resources</td>
<td>Exploration Licence (EL 4699)</td>
<td>1994</td>
<td>20.09.2010</td>
<td>Last renewed 21.09.2005</td>
</tr>
<tr>
<td>Department of Mineral Resources (now DPI)</td>
<td>Mining Lease (ML) 1464</td>
<td>21.12.1999</td>
<td>21.12.2020</td>
<td>ML 1464 covers the Stage 1 (trial) Mine area and lies wholly within the boundary ML1471</td>
</tr>
<tr>
<td>Department of Land and Water</td>
<td>Water Licence 908L249901</td>
<td>08.09.2000</td>
<td>Nil</td>
<td>Combined allocation of 100 Mtpa.</td>
</tr>
</tbody>
</table>
Compliance with Relevant Statutory Requirements

<table>
<thead>
<tr>
<th>Issuing / Responsible Authority</th>
<th>Type of Licence, Approval</th>
<th>Date of Issue</th>
<th>Expiry</th>
<th>Comments</th>
</tr>
</thead>
<tbody>
<tr>
<td>Conservation (now DNR)</td>
<td>9OBL252067</td>
<td>12.05.2004</td>
<td>Nil</td>
<td></td>
</tr>
<tr>
<td>Department of Mineral Resources (now DoP)</td>
<td>ML1471</td>
<td>07.09.2000</td>
<td>07.09.2021</td>
<td>ML1471 surrounds ML1464</td>
</tr>
</tbody>
</table>

This audit included an assessment of compliance with the Conditions of Consent of DA 8-1-2005, which incorporates the majority of the requirements of the site’s Environment Protection Licence (EPL) (Ref 10094) and the requirements of the Mining Lease (ML) ML.1464 and ML.1471. A review of the two ML requirements and EPL was not undertaken as part of this audit, except where requirements were repeated in DA 8-1-2005.

4.1 Conditions of Consent (CoC) Compliance

The status of WCM performance, during URS’s audit, in respect of each of the Conditions of Consent is presented in Appendix A.

Performance categories in respect of compliance are defined as follows:

- **Compliant** - currently in compliance;
- **Non-compliant** - currently not in compliance;
- **Not applicable** - condition of consent not applicable at time of audit;
- **Indeterminate** - it has not been possible to determine whether compliance exists.

Comments are listed beside each condition to explain aspects of the audit review. Where considered relevant, observations have been made regarding specific compliance issues.

In general, no specific or rigorous assessment of documents required as part of meeting the CoC has been undertaken during the assessment, particularly where they have been signed off by other parties (for example DoP).

A summary of the non-compliance issues identified in the assessment against the consent conditions is provided in Section 4.1.1 below.
4.1.1 Conditions of Consent Assessed as 'Not In Compliance', or Compliance 'Indeterminate'

DoP conditions of consent (CoC) not considered to be in compliance or compliance was indeterminate are listed below in Table 4-1. The basis for lack of compliance is provided in the table. Further details are provided in Appendix A.

Table 4-1 Conditions of Consent Not in Compliance or Compliance is Indeterminate

<table>
<thead>
<tr>
<th>CoC No.</th>
<th>Non Compliant / Indeterminate</th>
<th>Summary of CoC Requirement</th>
<th>Comment</th>
<th>Recommended Action</th>
</tr>
</thead>
<tbody>
<tr>
<td>Schedule 2</td>
<td>Indeterminate</td>
<td>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.</td>
<td>The independent rehabilitation report (Geoff Cunningham Natural Resource Consultants Pty Ltd, February 2005) indicated good establishment of both annual and perennial species within the quadrats monitored. The May 2006 monitoring indicated different results for each quadrat monitored.</td>
<td>Include an interpretation of the rehabilitation monitoring results in future reports so as to obtain 3rd party feedback on the progress and success of rehabilitation strategies and actions across the whole site. This interpretation should not be restricted to rehabilitation success within the quadrats only.</td>
</tr>
<tr>
<td>CoC 1</td>
<td></td>
<td></td>
<td></td>
<td>It is recommended that WCM demonstrates that GCNRC weed control recommendations are met through documenting weed management records, including which weeds are identified on the property, control/eradication work undertaken, and whether the work is successful and addresses the GCNRC recommendations.</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>It is recommended that weeds on the rehabilitated areas continue to be addressed during GCNRC monitoring and recommendations carried out.</td>
</tr>
</tbody>
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## Compliance with Relevant Statutory Requirements

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<tbody>
<tr>
<td>Schedule 3 CoC 6</td>
<td>Non-compliant</td>
<td>The Applicant shall ensure that the noise generated by the development does not exceed the noise impact assessment criteria presented in Table 7 at any residence on, or on more than 25 percent of, any privately-owned land</td>
<td>Night time monitoring was undertaken at one of the two monitoring rounds in which such monitoring was required.</td>
<td>No further action recommended. Continue to undertake night time monitoring in accordance with the CoC.</td>
</tr>
<tr>
<td>Schedule 3 CoC 19</td>
<td>Non-compliant</td>
<td>Except as may be expressly provided by a DEC Licence, the Applicant shall ensure that the discharges from any licensed discharge point comply with the limits in Table 11.</td>
<td>The site’s Environment Protection Licence (EPL No.10094) lists five wet weather discharge points. A review of annual returns from between April 2003 and April 2006 indicates two discharges were reported at EPL Identification No.3, on 16 January 2004 and 30 June 2005 following heavy rainfall. Total suspended solids (TSS) were elevated, however, sampling upstream in both cases indicated a higher level of TSS coming onto the site than leaving the site.</td>
<td>No further action recommended. WCM made a request to the DEC (12 February 2004) to amend the site’s EPL to take into account the situation of water with high TSS entering the property. DEC reportedly responded by way of issuing a notice of amendment in which they identified that they would not change TSS limit.</td>
</tr>
<tr>
<td>Schedule 3 CoC 21</td>
<td>Indeterminate</td>
<td>The Applicant shall implement a range of erosion and sediment controls at the site, in general accordance with the requirements of the Department of Housing’s Managing Urban Stormwater: Soils and Construction manual, to minimise erosion and the discharge of sediment from the site.</td>
<td>Erosion and sediment controls have reportedly been installed by Soil Services (part of DNR) in accordance with the above manual. An audit of the erosion and sediment controls against this manual was not undertaken as part of this audit. There was no documented third party assessment of current controls sighted as part of the audit.</td>
<td>Consider regular documented assessment of works performed by Soil Services against relevant requirements e.g. the Department of Housing’s Managing Urban Stormwater: Soils and Construction manual, and best practice.</td>
</tr>
</tbody>
</table>
## Compliance with Relevant Statutory Requirements

<table>
<thead>
<tr>
<th>CoC No.</th>
<th>Non Compliant / Indeterminate</th>
<th>Summary of CoC Requirement</th>
<th>Comment</th>
<th>Recommended Action</th>
</tr>
</thead>
<tbody>
<tr>
<td>Schedule 3 CoC 40</td>
<td>Indeterminate</td>
<td>The Applicant shall: monitor the amount of waste generated by the development; investigate ways to minimise waste generated by the development; implement reasonable and feasible measures to minimise, reuse and/or recycle waste generated by the development; and report on waste management and minimisation in the AEMR, to the satisfaction of the Director-General.</td>
<td>Waste management is reported in the AEMR. Wastes were reported to be recycled as far as practicable. A waste reduction plan is not in place to demonstrate that waste generated and disposed to landfill is minimised.</td>
<td>It is recommended that a waste and/or resource reduction plan be developed and implemented to demonstrate wastes generated and disposed to landfill are minimised.</td>
</tr>
<tr>
<td>Schedule 3 CoC 41 &amp; 42</td>
<td>Indeterminate</td>
<td>Within 6 months of the consent, the Applicant shall review (and implement any approved changes) the Bushfire Management Plan for the site, to the satisfaction of GSC and NSC.</td>
<td>Evidence that the Bushfire Management Plan was reviewed by GSC and NSC was not available during the audit. URS did not undertake an assessment of bushfire management capabilities.</td>
<td>Provide evidence that the Bushfire Management Plan has been reviewed by GSC and NSC and that the plan meets their requirements.</td>
</tr>
</tbody>
</table>
Review the adequacy of the EMS and EMP

This Section fulfils the requirement to assess the adequacy of the applicants Environmental Management Strategy, as stated in DA 8-1-2005, Schedule 5 Condition of Consent No.6:

   e) review the adequacy of the Applicant’s Environmental Management Strategy and Environmental Monitoring Program.

The Environmental Monitoring Program is awaiting completion upon approval by DoP of the Water Management Plan. The Environmental Monitoring Program was not reviewed as part of this audit.

5.1 Environmental Management Strategy

An Environmental Management Strategy was approved by DoP (letter dated 16 February 2006) for the development.

A brief review of the Environmental Management Strategy was undertaken including an assessment of adequacy of the objectives and key performance outcomes for each environmental issue. The Environmental Management Strategy appears to adequately address the requirements of the Conditions of Consent of DA 8-1-2005 and generally includes the relevant environmental issues observed during the site visit.

The Environmental Management Strategy is a high level document outlining WCMs proposed strategy (objectives and key performance outcomes) to manage environmental issues. The Environmental Management Strategy does not appear to be based upon a risk assessment. Such an assessment may assist WCM prioritise environmental issues and enable management effort to be directed to the higher risk areas.

A formal Environmental Management System does not currently exist for the site, however some elements of an Environmental Management System (according to ISO 14001) are utilised on site. The Environmental Management Strategy includes environmental objectives and key performance outcomes which could form part of an Environmental Management System (to ISO 14001).

It is understood that a corporate EMS is being developed in the future for WCM. This was available for review as part of this audit.

It is recommended that WCM consider the implementation of an environmental management system of a scale and nature suitable to the current operations to further demonstrate that WCM has identified and managed the significant environmental aspects and impacts of its operations through risk assessment and that appropriate levels of control are in place.

An Environmental Management System could also be used as a tool to demonstrate continuous environmental improvement, as stated as an objective in WCM’s environmental policy.
5.2 Environmental Monitoring Program (EMP)

The Environmental Monitoring Program (EMP) was not complete as site were still to obtain approval by DoP of the Water Management Plan. Therefore the EMP was not reviewed as part of this audit. Since the audit was undertaken DNR approved the Storm Water Management Plan and the EMP is being prepared.

It is recommended that the EMP be reviewed during the next audit once final approval of the EMP has been received by DoP.
Limitations

URS Australia Pty Ltd (URS) has prepared this report for the use of Whitehaven Coal Mining Pty Ltd in accordance with the usual care and thoroughness of the consulting profession. It is based on generally accepted practices and standards at the time it was prepared. No other warranty, expressed or implied, is made as to the professional advice included in this report. It is prepared in accordance with the scope of work and for the purpose outlined in the Proposal dated 25 September 2006.

The methodology adopted and sources of information used by URS are outlined in this report. URS has made no independent verification of this information beyond the agreed scope of works and URS assumes no responsibility for any inaccuracies or omissions. No indications were found during our investigations that information contained in this report as provided to URS was false.

This report was prepared between November 2006 and February 2007 and is based on the information available at the time of the site inspections and information provided between September 2006 and January 2007. URS disclaims responsibility for any changes that may have occurred after this time.

This report should be read in full. No responsibility is accepted for use of any part of this report in any other context or for any other purpose or by third parties. This report does not purport to give legal advice. Legal advice can only be given by qualified legal practitioners.

The audit findings are based upon a limited one day site visit including a half day site tour and a review of documentation made available to URS by WCM.
Appendix A

Status of Compliance with Conditions of Consent
Development Consent
Section 80 of the Environmental Planning and Assessment Act 1979

I, the Minister for Infrastructure and Planning, approve the development application referred to in schedule 1, subject to the conditions in schedules 2 to 5.

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

Craig Knowles MP
Minister for Infrastructure and Planning
Minister for Natural Resources

SIGNED BY MINISTER KNOWLES 30 JUNE 2005
Sydney 2005

SCHEDULE 1


Applicant: Whitehaven Coal Mining Pty Ltd.

Consent Authority: Minister for Infrastructure and Planning.

Land: See Appendix 1.

Proposed Development: Open cut mining operations at the Whitehaven coal mine, which includes:
• completing the mining operations approved by the Minister on 10 October 2000 (DA 73-3-2000);
• extending mining operations to the south of the approved mining pit;
• relocating and operating the existing infrastructure complex at the mine about 900 metres to the south of its current location;
• producing up to 1.25 million tonnes of run-of-mine coal a year;
• transporting coal from the mine via public roads to the Whitehaven Siding coal handling and preparation plant;
• extracting, stockpiling, and transporting gravel from the mine to local markets; and
• rehabilitating the mine.

State Significant Development: The proposal is classified as State significant development under section 76A(7) of the Environmental Planning and Assessment Act 1979 as it is coal mining-related development that is associated with the Minister’s previous approval for the mine (DA 73-03-2000). Consequently, it satisfies the criteria in the Minister’s declaration of 29 June 2001.

Integrated Development: The proposal is classified as integrated development under section 91 of the Environmental Planning and Assessment Act 1979 as it requires additional approvals under the:
• Protection of the Environment Operations Act 1997; and
• Water Act 1912.
Notes:
• To find out when the consent becomes effective, see section 83 of the Environmental Planning and Assessment Act 1979 (EP&A Act);
• To find out when this consent is liable to lapse, see section 95 of the EP&A Act; and
• To find out about appeal rights, see section 97 of the EP&A Act.
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   - Surface & Ground Water:
   - Flora & Fauna:
   - Cultural Heritage:
   - Traffic & Transport:
   - Visual Impact:
   - Greenhouse Gas Emissions:
   - Waste Management:
   - Bushfire Management:
   - Mine Closure Strategy:

4. **ADDITIONAL PROCEDURES FOR AIR QUALITY & NOISE MANAGEMENT:**

5. **ENVIRONMENTAL MANAGEMENT, MONITORING, AUDITING & REPORTING:**
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   - Environmental Monitoring Program:
   - Annual Reporting:
   - Independent Environmental Audit:
   - Community Consultative Committee:
   - Access to Information:

6. **APPENDIX 1: SCHEDULE OF LAND:**

7. **APPENDIX 2: INDEPENDENT DISPUTE RESOLUTION PROCESS:**
DEFINITIONS

AEMR  Annual Environmental Management Report
ANZECC  Australian and New Zealand Environment Consultative Council
Applicant  Whitehaven Coal Mining Pty Ltd
BCA  Building Code of Australia
Canyon extension  The area depicted as the Canyon extension in Figure 2.1 of the SEE for the
Canyon extension, dated December 2004
CCC  Community Consultative Committee
CHPP  Coal Handling and Preparation Plant
DA  Development Application
Day  Day is the period from 7 am to 6 pm on Monday to Saturday, and 8 am to 6
pm on Sundays and public holidays
DEC  The Department of Environment and Conservation
Department  The Department of Infrastructure, Planning and Natural Resources
Director-General  Director-General of Department of Infrastructure, Planning and Natural
Resources, or delegate
DPI  The Department of Primary Industries
EIS  Environmental Impact Statement
EP&A Act  Environmental Planning and Assessment Act 1979
EP&A Regulation  Environmental Planning and Assessment Regulation 2000
EPL  Environment Protection Licence
Evening  Evening is the period from 6 pm to 10 pm
GSC  Gunnedah Shire Council
GTA  General Term of Approval
Land  Land means the whole of a lot, or contiguous lots owned by the same
landowner, in a current plan registered at the Land Titles Office at the date
of this consent
Minister  Minister for Infrastructure and Planning, or delegate
ML  Mining Lease
MOP  Mining Operations Plan
NSC  Narrabri Shire Council
Night  Night is the period from midnight to 7 am and 10 pm to midnight Monday to
Saturday and midnight to 8 am and 10 pm to midnight on Sundays and
public holidays
NP&W Act  National Parks and Wildlife Act 1974
PCA  Principal Certifying Authority appointed under Section 109E of the EP&A Act
Privately-owned land  Land that is not owned by a public agency, a mining company or its
subsidiary; or where relevant, land that is not covered by a private
agreement between the Applicant and the land owner that specifically allows
for variances to criteria for environmental performance in this consent.
ROM coal  Run-of-mine coal
RTA  Roads and Traffic Authority
SEE  Statement of Environmental Effects
Site  Land to which the DA applies (ML 1464 & ML 1471)
SCHEDULE 2
ADMINISTRATIVE CONDITIONS

Obligation to Minimise Harm to the Environment

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

Evidence sighted:

At the time of the site visit the applicant appeared to have implemented practical measures to prevent and/or minimise harm to the environment. This was observed through implementation of various management plans approved for the development.

Independent rehabilitation monitoring reports (Geoff Cunningham Natural Resource Consultants Pty Ltd) were observed dated February 2005 and May 2006. The February 2005 report indicated good establishment of both annual and perennial species within the quadrats monitored. The May 2006 report reported mixed results for each quadrant. An interpretation of the rehabilitation success was not provided in the May 2006 report. Recommendations for vehicle and livestock access restrictions, quadrat marking and weed control were provided.

It was reported that the water level in GW6 has dropped by 16 m from that recorded over the initial three years of mining and has since been mined through. The water level at GW8 was reported to have dropped by 4 m over the life of the mine. GW8 is located at a property owned by WCM.

The Water Management Plan (WMP), approved by DNR on 25 January 2007, includes a groundwater monitoring program. The WMP includes a requirement that if a trigger level is reached (including a 15% reduction in standing water level, a 15% increase in electrical conductivity or a 15% change in pH), WCM will commission a hydrogeologist to review the data with the outcomes of the review subject to discussions with DNR.

The WMP was approved after the audit by URS and implementation of the WMP has not been included in this audit and an assessment of compliance with trigger levels was not undertaken, nor whether trigger levels had been reached.

Compliance status:

Indeterminate.

Recommended action:

Include an interpretation of the rehabilitation monitoring results in future reports so as to obtain 3rd party feedback on the progress and success of rehabilitation strategies and actions across the whole site. This interpretation should not be restricted to rehabilitation success within the quadrats only.

It is recommended that WCM demonstrates that GCNRC weed control recommendations are met through documenting weed management records, including which weeds are identified on the property, control/eradication work undertaken, and whether the work is successful and addresses the GCNRC recommendations.

It is recommended that weeds on the rehabilitated areas continue to be addressed during GCNRC monitoring and recommendations carried out.

Terms of Approval

2. The Applicant shall carry out the development generally in accordance with the:
   (a) DA No. 8-1-2005;
   (c) Statement of Environmental Effects to Support an Application to Modify Consent, dated 28 January 2003, and prepared by Whitehaven Coal Mining Pty Ltd;
   (d) SEE titled Proposed Canyon Extension to the Whitehaven Coal Mine, dated December 2004, and prepared by Whitehaven Coal Mining Pty Ltd; and
   (e) conditions of this consent.

Evidence sighted:

The Development has reportedly been carried out generally in accordance with the above documents. During
the site visit, observations confirmed this to be the case.
URS did not complete a detailed compliance assessment against all documents.

**Compliance Status:**
Compliant.

3. If there is any inconsistency between the above, the most recent document or the conditions of this consent shall prevail to the extent of the inconsistency.

**Evidence sighted:**
Noted.

**Compliance status:**
Not applicable.

4. The Applicant shall comply with any reasonable requirement/s of the Director-General arising from the Department’s assessment of:
(a) any reports, plans or correspondence that are submitted in accordance with this consent; and
(b) the implementation of any actions or measures contained in these reports, plans or correspondence.

**Evidence sighted:**
Noted.

**Compliance Status:**
Not applicable.

**Surrender of Consent**

5. Within 6 months of the date of this consent, the Applicant shall surrender all previous development consents for the Whitehaven mine to the satisfaction of the Director-General.

**Evidence sighted:**
A letter from Narrabri Shire Council dated 14 March 2006 indicated acceptance of surrender of the former DA 72-03-2000.
A letter informing DoP of the surrender of DA 72-03-2000 was observed dated 29 December 2005 with follow-up correspondence provided from land owners.
WCM reportedly received confirmation from DoP that they accepted the surrender.

**Compliance Status:**
Compliant

**Limits on Approval**

6. This consent lapses on 7 September 2015.

**Evidence sighted:**
Noted.

**Compliance Status:**
Not applicable.

7. The Applicant shall not transport more than 1.25 million tonnes of material (coal and gravel) a year from the Whitehaven mine by public road, without the written approval of the Director-General.

**Evidence sighted:**
The site is currently producing approximately 80,000 tonnes per month (~960,000 T/year). This is below the limit specified. A review of information provided in AEMRs indicates that the limit has not been exceeded during the reporting period.

**Compliance Status:**
Compliant.

8. The Applicant shall not transport more than 1.25 million tonnes of material (coal and gravel) a year from the Whitehaven mine by public road, without the written approval of the Director-General.
Evidence sighted:
As above for CoC No.7

Compliance Status:
Compliant.

Structural Adequacy

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

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

Evidence sighted:
A letter from Narrabri Shire Council dated 5 August 2004 indicting that there requirements had been met.

Compliance Status:
Compliant.

Demolition

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

Evidence sighted:
No buildings have reportedly been demolished.

Compliance Status:
Not applicable.

Operation of Plant and Equipment

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

Evidence sighted:
Plant is owned by WCM and is reportedly serviced regularly. Maintenance agreements are in place with CAT and Terex. Checks include daily checks and 500, 1,000 and 2,000 hour services, depending upon the type of equipment.
No evidence environmental impact was sighted as a result of poor maintenance or operation of equipment.

Compliance Status:
Compliant.
SCHEDULE 3
SPECIFIC ENVIRONMENTAL CONDITIONS

AIR QUALITY

Impact Assessment Criteria

1. The Applicant shall ensure that dust emissions generated by the development do not cause additional exceedances of the air quality criteria listed in Tables 1, 2 and 3 at any residence on, or on more than 25 percent of, any privately-owned land.

<table>
<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/m³</td>
</tr>
<tr>
<td>Particulate matter &lt; 10 µm (PM₁₀)</td>
<td>Annual</td>
<td>30 µg/m³</td>
</tr>
</tbody>
</table>

Table 1: Long-term Impact Assessment Criteria for Particulate Matter

<table>
<thead>
<tr>
<th>Pollutant</th>
<th>Averaging period</th>
<th>Criterion</th>
</tr>
</thead>
<tbody>
<tr>
<td>Particulate matter &lt; 10 µm (PM₁₀)</td>
<td>24 hour</td>
<td>50 µg/m³</td>
</tr>
</tbody>
</table>

Table 2: Short-term Impact Assessment Criterion for Particulate Matter

<table>
<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>Deposited dust</td>
<td>Annual</td>
<td>2 g/m²/month</td>
<td>4 g/m²/month</td>
</tr>
</tbody>
</table>

Table 3: Long-term Impact Assessment Criteria for Deposited Dust

Note: Deposited dust is assessed as insoluble solids as defined by Standards Australia, 1991, AS 3580.10.1-1991: Methods for Sampling and Analysis of Ambient Air - Determination of Particulates - Deposited Matter - Gravimetric Method.

Evidence sighted:
As stated in Schedule 3, CoC No.5, only deposited dust is currently required to be monitored. This requirement is reflected in the site’s Environment Protection Licence.

The site’s Environment Protection Licence (No.10094) lists nine dust monitoring locations with a requirement to continuously monitor dust deposition (in g/m²/month). A review of annual returns to the Environment Protection Authority (EPA), indicated that the site has met these requirements during the reporting period.

At the time of the site visit, no significant quantities of dust were observed beyond the boundary of the site, however, it is noted that the site did receive 8mm of rain the night previous to the audit.

Compliance Status:
Compliant.

Land Acquisition Criteria

2. If the dust emissions generated by the development exceed the criteria in Tables 4, 5 and 6 at any residence on, or on more than 25 percent of, 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 6-8 of schedule 4.
Table 4: Long-term Land Acquisition Criteria for Particulate Matter

<table>
<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^3</td>
</tr>
<tr>
<td>Particulate matter &lt; 10 µm (PM_{10})</td>
<td>Annual</td>
<td>30 µg/m^3</td>
</tr>
</tbody>
</table>

Table 5: Short-term Land Acquisition Criteria for Particulate Matter

1. Based on the number of block 24 hour averages in an annual period.
2. 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.
3. Background PM_{10} concentrations due to all other sources plus the incremental increase in PM_{10} concentrations due to the mine alone.
4. Incremental increase in PM_{10} concentrations due to the mine alone.

<table>
<thead>
<tr>
<th>Pollutant</th>
<th>Averaging period</th>
<th>Criterion</th>
<th>Percentile</th>
<th>Basis</th>
</tr>
</thead>
<tbody>
<tr>
<td>Particulate matter &lt; 10 µm (PM_{10})</td>
<td>24 hour</td>
<td>150 µg/m^3</td>
<td>99³</td>
<td>Total²</td>
</tr>
<tr>
<td>Particulate matter &lt; 10 µm (PM_{10})</td>
<td>24 hour</td>
<td>90 µg/m^3</td>
<td>98.8³</td>
<td>Increment²</td>
</tr>
</tbody>
</table>

Table 6: Long-term Land Acquisition Criteria for Deposited Dust

Note: Deposited dust is assessed as insoluble solids as defined by Standards Australia, 1991, AS 3580.10.1-1991: Methods for Sampling and Analysis of Ambient Air - Determination of Particulates - Deposited Matter - Gravimetric Method.

Evidence sighted:
No land has been acquired during this reporting period – September 2003 to September 2006.

Compliance Status:
Not applicable.

Operating Conditions

3. The Applicant shall carry out the development in a way that prevents and/or minimises the air pollution generated by the development.

Evidence sighted:
The site minimises air pollution through a number of management practices. Some of these are as follows:

- Use of water trucks;
- Ceasing crushing during windy conditions;
- Monitoring of dust emissions;
- Maintenance of equipment.

Refer to CoC No. 2 above.

No complaints relating to air pollution have been reported during the audit period.

Compliance Status:
Compliant.

4. The Applicant shall:
   (a) ensure any visible air pollution generated by the development is assessed regularly, and that mining operations are relocated, modified, and/or stopped as required to minimise air quality impacts on privately-owned land;
(b) ensure that trucks entering and leaving the site carrying loads are covered at all times; and
(c) implement all practicable measures to minimise the off-site odour and fume emissions generated by
any spontaneous combustion or blasting at the development, to the satisfaction of the Director-
General.

**Evidence sighted:**

a) A water truck is used during dusty conditions.
b) Trucks are required to have dust covers. At the time of the site visit the trucks observed did have such
covers.
c) There has reportedly been no spontaneous combustion during the audit period. There have been no
reports of odour complaints during the audit period.

**Compliance Status:**

Compliant.

**Monitoring**

5. Within 6 months of this consent, the Applicant shall prepare and implement a detailed Air Quality Monitoring
Program in consultation with the DEC, and to the satisfaction of the Director-General. This program shall
include an air quality monitoring protocol for evaluating compliance with the air quality impact assessment
and land acquisition criteria in this consent.

*Note: Initially, this program should concentrate on monitoring the dust deposition impacts of the development.
However, in time, it may be expanded to include other pollutants.*

**Evidence sighted:**

An Air Quality Monitoring Program was approved by NSW DoP (letter dated 16 February 2006).

**Compliance Status:**

Compliant.

3. **NOISE**

**Noise Impact Assessment Criteria**

6. The Applicant shall ensure that the noise generated by the development does not exceed the noise impact
assessment criteria presented in Table 7 at any residence on, or on more than 25 percent of, any privately-
owned land.

**Evidence sighted:**

The monitoring data contained in the most recent AEMR (2004 – 2005) was reviewed for February and
September 2005 and noise monitoring reports for February and April 2006 (Global Acoustics).

The February 2005 data indicated that the $L_{Aeq}$ was reported at the four locations monitored to be between 36
dB(A) and 54 dB(A). Noise monitoring associated with the mine exceeded 35 dB(A) at one non-mine property,
Gundawarra.

The September 2005 data indicated that the mine was in compliance with $L_{Aeq}$ 35 dB(A) at all non-mine sites.

The February and April 2006 reports indicate that the mine was in compliance with the $L_{Aeq}$ 35 dB(A).

The requirement to undertake night time monitoring was reported to come into force at the time of surrender of
DA 72-3-2000 and therefore be applicable to two monitoring rounds during the audit period. The $L_{A1[10min]}$ was
monitored during the second monitoring round and was found to be in compliance with the limit of 45 dB(A).
The monitoring was not undertaken during the first round.

It was noted during the audit (letter from DEC 17 May 2004) that Whitehaven Coal Mining Pty Ltd has
agreements with the "Will-gai" and "Merton" residents which demonstrated that under these agreements the
residents would not object to the agreed extended work hours and that they would resolve all noise related
issues with the mine. No issues with the agreements have been reported and it is noted that the mining
activities are moving further away from these properties.

A noise complaint was recorded (18 March 2004) from the Gundawarra property. No other noise complaints
have reportedly been received during the audit period. Following the noise complaint an unattended noise
monitoring program was undertaken in May 2004 (Richard Heggie Associates Pty Ltd) at the Gundawarra
property over a period of 16 days in order to quantify the overall ambient noise levels. A copy of the report was
presented to the residents of Gundawarra and no further noise complaints have reportedly been received.
Since May 2004, it is understood that mining activities have continued to progress in a south-easterly direction
away from the Gundawarra property with increasing topographic shielding provided by both natural and
constructed land forms.
Compliance Status:
Non-compliant.

Recommended Action:
No further action recommended. Continue to undertake night time monitoring in accordance with the CoC.

7.

<table>
<thead>
<tr>
<th>Day/Evening/Night</th>
<th>Night</th>
</tr>
</thead>
<tbody>
<tr>
<td>$L_{A\text{eq}(15 \text{ min})}$</td>
<td>$L_{A1(1 \text{ min})}$</td>
</tr>
<tr>
<td>35</td>
<td>45</td>
</tr>
</tbody>
</table>

Table 7: Noise Impact Assessment Criteria dB(A)

Notes:
- Noise from the development is to be measured at the most affected point or within the residential boundary, or at the most affected point within 30 metres of a dwelling (rural situations) where the dwelling is more than 30 metres from the boundary.
- To determine compliance with the $L_{A\text{eq}(15 \text{ min})}$ noise limits in the above table, where it can be demonstrated that direct measurement of noise from the development is impractical, the DEC may accept alternative means of determining compliance (see Chapter 11 of the NSW Industrial Noise Policy). The modification factors in Section 4 of the NSW Industrial Noise Policy shall also be applied to the measured noise levels where applicable.
- Noise from the development is to be measured at 1 metre from the dwelling façade to determine compliance with the $L_{A1(1 \text{ min})}$ noise limits in the above table.
- The noise emission limits identified in the above table apply under meteorological conditions of:
  - wind speeds of up to 3 m/s at 10 metres above ground level; or
  - temperature inversion conditions of up to 5°C/100m, and wind speeds of up to 2 m/s at 10 metres above ground level.

2 Incorporates DEC GTA
3 Incorporates DEC GTA

Land Acquisition Criteria

8. If the noise generated by the development exceeds the criteria in Table 8 at any residence on, or on more than 25 percent of any privately-owned land, the Applicant shall acquire the land in accordance with the procedures in conditions 6-8 of schedule 4.

<table>
<thead>
<tr>
<th>Day/Evening/Night</th>
<th>Night</th>
</tr>
</thead>
<tbody>
<tr>
<td>$L_{A\text{eq}(15 \text{ min})}$</td>
<td></td>
</tr>
<tr>
<td>40</td>
<td></td>
</tr>
</tbody>
</table>

Table 8: Land Acquisition Criteria dB(A)

Note: Noise generated by the development is to be measured in accordance with the notes presented below Table 7.

Evidence sighted:
No land has been reportedly been acquired during the audit period.

Compliance Status:
Not applicable.

Operating Hours

9. The Applicant:
   (a) shall carry out the development at the site between 7 am to 10 pm Monday to Saturday, excluding public holidays;
   (b) may undertake overburden and interburden removal and emplacement operations below natural ground level, and the dust suppression activities associated with these operations, between 7am and midnight, Monday to Saturday and midnight and 2 am, Tuesday to Saturday;
   (c) may undertake highwall mining operations at any time, excluding public holidays; and
   (d) shall only transport coal or gravel on public roads between 7 am and 10pm Monday to Saturday, excluding public holidays.
Evidence sighted:
The site reported to comply with the operating hour requirements. Some examples of staff timesheets were reviewed and observed to comply with these operating hours. No highwall mining operations are being undertaken.

Compliance Status:
Compliant.

Operating Conditions

10. The Applicant shall ensure that all reversing alarms fitted to vehicles on the site are of a mid-high frequency broadband type.

Evidence sighted:
Suitable reversing alarms have reportedly been fitted to vehicles that require them.

Compliance Status:
Compliant.

Monitoring

10. Within 6 months of this consent, the Applicant shall prepare a Noise Monitoring Program for the development in consultation with the DEC, and to the satisfaction of the Director-General. This program shall include a noise monitoring protocol for evaluating compliance with the noise impact assessment and land acquisition criteria in this consent.

Evidence sighted:
A Noise Monitoring Program was approved by NSW DoP (letter dated 16 February 2006).

Compliance Status:
Compliant.

METEOROLOGICAL MONITORING

11. Within 6 months of this consent, the Applicant shall ensure that there is a suitable meteorological station operating in the vicinity of the development in accordance with the requirements in Approved Methods for Sampling of Air Pollutants in New South Wales, and to the satisfaction of the DEC and the Director-General.

Evidence sighted:
A letter from DEC dated 5 September 2005 states that the DEC are satisfied with the meteorological station location. The meteorological station was observed at the time of the site visit.

Compliance Status:
Compliant.

Blasting & Vibration

Airblast Overpressure Limits

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

<table>
<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 in a 12 month period</td>
</tr>
<tr>
<td>120</td>
<td>0%</td>
</tr>
</tbody>
</table>

Table 9: Airblast Overpressure Impact Assessment Criteria
Evidence sighted:
The blasting records reviewed (2 July 2003 to 12 October 2006) indicated that airblast overpressure recorded did not exceed the criteria in Table 9 during the audit period.

Compliance Status:
Compliant.

Ground Vibration Impact Assessment Criteria

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

<table>
<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 in a 12 month period</td>
</tr>
<tr>
<td>10</td>
<td>0%</td>
</tr>
</tbody>
</table>

Table 10: Ground Vibration Impact Assessment Criteria

Evidence sighted:
The blasting records reviewed (2 July 2003 to 12 October 2006) indicated that peak ground pressure recorded did not exceed the criteria in Table 10 during the audit period.

Compliance Status:
Compliant.

Blasting Hours

14. The Applicant shall only carry out blasting at the development between 9 am and 5 pm Monday to Saturday. No blasting is allowed on Sundays, public holidays, or any other time without the written approval of the DEC.

Evidence sighted:
The blasting records reviewed (2 July 2003 to 12 October 2006) indicated that blasting has been undertaken within the required time.

Compliance Status:
Compliant.

Blasting Frequency

15. The Applicant shall not carry out more than 1 blast a day at the site without the written approval of the DEC.

Evidence sighted:
The blasting records reviewed (2 July 2003 to 12 October 2006) indicate that only one blast a day has been undertaken.

Compliance Status:
Not applicable.

Monitoring

16. Within 6 months of this consent, the Applicant shall prepare and implement a detailed Blasting Monitoring Program for the development in consultation with the DEC, and to the satisfaction of the Director-General.

Evidence sighted:
A Blasting Monitoring Program was approved by NSW DoP (letter dated 16 February 2006).

Compliance Status:
Compliant.

Public Notice
17. During the life of the development, the Applicant shall:
   (a) operate a blasting notification system agreed to by the Director-General, to provide the public with up-to-date information on blasting operations at the development; and
   (b) notify the landowner/occupier of any privately-owned land within 4 km of the development about this system on an annual basis.

<table>
<thead>
<tr>
<th>Evidence sighted:</th>
</tr>
</thead>
<tbody>
<tr>
<td>A blasting notification program was approved by NSW DoP (letter dated 25 August 2005).</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Compliance Status:</th>
</tr>
</thead>
<tbody>
<tr>
<td>Not applicable.</td>
</tr>
</tbody>
</table>

**Property Investigations**

18. If any landowner within 2 km of the development, or any other landowner nominated by the Director-General, claims that his/her property, including infrastructure such as water supply or underground irrigation mains, has been damaged as a result of blasting at the development, the Applicant shall within 3 months of receiving this request:

   (a) commission a suitably qualified person whose appointment has been approved by the Director-General to investigate the claim; and
   (b) give the landowner a copy of the property investigation report.

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

If the Applicant or landowner disagrees with the findings of the independent property investigation, then either party may refer the matter to the Director-General for resolution.

If the matter cannot be resolved within 21 days, the Director-General shall refer the matter to an Independent Dispute Resolution Process (see Appendix 2).

<table>
<thead>
<tr>
<th>Evidence sighted:</th>
</tr>
</thead>
<tbody>
<tr>
<td>No requests were reported within the audit period (June 2004 to June 2006).</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Compliance Status:</th>
</tr>
</thead>
<tbody>
<tr>
<td>Not applicable.</td>
</tr>
</tbody>
</table>

4 **SURFACE & GROUND WATER**

**Discharge Limits**

19. Except as may be expressly provided by a DEC Licence, the Applicant shall ensure that the discharges from any licensed discharge point comply with the limits in Table 11.

<table>
<thead>
<tr>
<th>Pollutant</th>
<th>Units of measure</th>
<th>50 percentile concentration limit</th>
<th>90 percentile concentration limit</th>
<th>100 percentile concentration limit</th>
</tr>
</thead>
<tbody>
<tr>
<td>pH</td>
<td></td>
<td></td>
<td></td>
<td>6.5 ≤ pH ≤ 8.5</td>
</tr>
<tr>
<td>Total Suspended Solids</td>
<td>mg/L</td>
<td>20</td>
<td>35</td>
<td>50</td>
</tr>
<tr>
<td>Grease &amp; Oil</td>
<td>mg/L</td>
<td></td>
<td></td>
<td>10</td>
</tr>
</tbody>
</table>

*Table 11: Discharge Limits*

*Note: This condition does not authorise the discharge or emission of any other pollutants.*

<table>
<thead>
<tr>
<th>Evidence sighted:</th>
</tr>
</thead>
<tbody>
<tr>
<td>The site’s Environment Protection Licence (EPL No.10094) lists five wet weather discharge points. A review of annual returns from between April 2003 and April 2006 indicates two discharges were reported at EPL Identification No.3, on 16 January 2004 and 30 June 2005 following heavy rainfall. In both instances, pH and oil and grease were within the Licence limits. Total suspended solids (TSS) were elevated; however, sampling upstream in both cases, indicated a higher level of TSS coming onto the site than leaving the site.</td>
</tr>
</tbody>
</table>

WCM made a request to the DEC (12 February 2004) to amend the site’s EPL to take into account the situation of water with high TSS entering the property. DEC reportedly responded by way of issuing a notice of amendment in which they identified that they would not change TSS limit.
Compliance Status:
Non-compliant.

Recommended Action:
No action recommended.

Site Water Balance

20. The Applicant shall:
(a) prepare a detailed site water balance for all the development site;
(b) measure water use on site;
(c) review the site water balance for the development annually; and
(d) report the results of this review in the AEMR, to the satisfaction of the Director-General.

Evidence sighted:
Site water use and storage is reported in the AEMRs.

Compliance Status:
Compliant.

Erosion and Sediment Control

21. The Applicant shall implement a range of erosion and sediment controls at the site, in general accordance with the requirements of the Department of Housing’s Managing Urban Stormwater: Soils and Construction manual, to minimise erosion and the discharge of sediment from the site.

Evidence sighted:
Erosion and sediment controls have reportedly been installed by Soil Services (part of DNR) in accordance with the above manual. However, an audit of the erosion and sediment controls against this manual was not undertaken as part of this audit.
There was no documented third party assessment of current controls sighted as part of the audit.

Compliance Status:
Indeterminate.

Recommended Action:
Consider regular documented assessment of works performed by Soil Services against relevant requirements e.g. the Department of Housing’s Managing Urban Stormwater: Soils and Construction manual, and best practice.

Surface Water Monitoring

22. The Applicant shall monitor:
(a) the volume and quality of water discharged from the site; and
(b) report the results of this monitoring in the AEMR.

Evidence sighted:
The information required by this CoC is reported in the AEMR.

Compliance Status:
Compliant.

Groundwater Monitoring

23. The Applicant shall regularly monitor:
(a) groundwater levels and quality at bores and piezometers which are representative of the areas that are likely to be impacted within and around the development;
(b) impacts of groundwater movement from the final void of the Canyon extension on the adjacent groundwater and surface water resources; and
(c) post-mining watertable levels and water quality.

Evidence sighted:
a) Groundwater level and quality is reported in the AEMRs.
b) The NSW DNR commented on the groundwater monitoring program contained within the site Water Management Plan (in Memorandum to DoP dated 11 January 2006) and provided recommendations for monitoring impact of the future void. The Water Management Plan reviewed appeared to have been updated to include these recommendations. A letter has been sent to DNR (dated 13 July 2006) requesting suggestions for additional well locations. It was understood that a response was still to be received at the time.
of URS’ site inspection.
c) Not applicable to date.

Compliance Status:
Compliant.

Water Management Plan

24. Within 6 months of this consent, the Applicant shall prepare and implement a Water Management Plan for the mine, to the satisfaction of the Director-General. This plan must include:
(a) the site water balance;
(b) an Erosion and Sediment Control Plan;
(c) a Groundwater Monitoring Program;
(d) a Surface and Groundwater Response Plan to address any potential adverse impacts associated with the development; and
(e) provision for a review of collected data and monitoring requirements 5 years after the cessation of mining, or as otherwise agreed by the Director-General.

Evidence sighted:
A Water Management Plan was issued to NSW DoP. The DoP replied (in letter dated 16 February 2006) that they would consider the plan after consultation with the DEC and DNR was completed. DoP approved the Water Management Plan on 25 January 2007.

Compliance Status:
Compliant.

Final Void Management

25. At least 6 months before the cessation of mining, the Applicant shall prepare and implement a final Void Management Plan for the site, in consultation with the DPI, and to the satisfaction of the Director-General. This plan must:
(a) investigate options for the future use of the final void;
(b) assess the potential interactions between the final void and the adjacent groundwater and surface water resources; and
(c) describe what actions and measures would be implemented to:
• minimise any potential adverse impacts with the final void; and
• manage and monitor the potential impacts of the final void over time.

Evidence sighted:
Not applicable for this audit period.

Compliance Status:
Not applicable.

FAUNA & FLORA

Offset Strategy

26. The Applicant shall implement the offset strategy described in section 2.4.8 and depicted in Figure 2.4 of the SEE for the proposed Canyon extension, or a refined version of this offset strategy that has been approved by the Director-General, to the satisfaction of the Director-General.

Evidence sighted:
A request to delay the offset strategy until 30 June 2007 was accepted by the NSW DoP (letter dated 18 July 2006).

Compliance Status:
Compliant.

27. Within 12 months of this consent, the Applicant shall implement suitable arrangements to provide long-term security for the offset, to the satisfaction of the Director-General.

Evidence sighted:
A request to delay the offset strategy until 30 June 2007 was accepted by the NSW DoP (letter dated 18 July 2006).

**Compliance Status:**
Compliant.

**Flora and Fauna Management Plan**

28. Within 6 months of this consent, the Applicant shall prepare and implement a detailed Flora and Fauna Management Plan for the site, to the satisfaction of the Director-General. This plan must include:
   (a) a description of the offset strategy in broad terms, including its objectives and its relationship to the rehabilitation of the mine over time;
   (b) completion criteria for the offset strategy;
   (c) a description of what actions and measures will be implemented over the next 3 years;
   (d) a flora and fauna monitoring program that is based on sound statistical principles; and
   (e) a description of the procedures that would be implemented to:
      • salvage and reuse material from the site;
      • clear vegetation on site;
      • collect and propagate seed from the local area;
      • control weeds and feral pests (particularly fox control); and
      • control access to the offset area.

**Evidence sighted:**
A Flora and Fauna Management Plan was approved by NSW DoP (letter dated 16 February 2006).

**Compliance Status:**
Compliant.

**Review and Reporting**

29. The Applicant shall:
   (a) review the performance of the offset strategy and Flora and Fauna Management Plan annually; and
   (b) report on this review in the AEMR to the satisfaction of the Director-General.

**Evidence sighted:**
An annual review of the Flora (Geoff Cunningham Natural Resource Consultants Pty Ltd) and Fauna (Countrywide Ecological Service) has been undertaken and reported in the AEMRs. The AEMRs have been accepted by DoP.
The offset strategy has been delayed with approval.

**Compliance Status:**
Compliant.

**Audit**

30. At least 6 months prior to the cessation of mining, unless the Director-General directs otherwise, the Applicant shall commission, and pay the full cost of, an Independent Audit of the offset strategy. This audit shall:
   (a) be conducted by a suitably qualified, experienced, and independent person whose appointment has been approved by the Director-General;
   (b) assess the performance of the offset strategy and Flora and Fauna Management Plan; and if necessary
   (c) recommend actions or measures to improve the performance of the offset strategy.

**Evidence sighted:**
Not applicable for this audit period.

**Compliance Status:**
Not applicable.

31. 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.

**Evidence sighted:**
Not applicable for this audit period.

**Compliance Status:**
Not applicable.
CULTURAL HERITAGE

Archaeology and Cultural Heritage Management Plan

32. Within 6 months of this consent, the Applicant shall review the approved Archaeology and Cultural Management Plan for the site in consultation with the Red Chief Local Aboriginal Land Council and DEC, and to the satisfaction of the Director-General.

Evidence sighted:
The Revised Archaeological and Cultural Heritage Management Plan was approved by DoP (letter dated 28 September 2006), and by the Red Chief LALC (letter no date).
No correspondence from the DEC in response to the Plan was provided to Whitehaven.

Compliance Status:
Compliant.

TRAFFIC & TRANSPORT

33. The Applicant shall ensure:
(a) coal from the mine is only transported along Hoads Lane, Blue Vale Road, and the Kamilaroi Highway to the Whitehaven Siding coal handling and preparation plant, unless an alternate route is approved by the Director-General;
(b) trucks travelling to and from the mine do not exceed 40 kilometres per hour when the school bus is operating on Hoads Lane;
(c) appropriate warning signs are in place advising of the turning movements of heavy vehicles at the intersection of the mine access road and Hoads Lane, to the satisfaction of NSC;
(d) an investigation of road safety and traffic management is undertaken for the Kamilaroi Highway and junctions with Blue Vale and Whitehaven Siding Access Roads, within 6 months of this consent, to the satisfaction of the Roads and Traffic Authority; and
(d) spillage from coal haulage vehicles is minimised and that sediment-laden runoff from roads is effectively managed to prevent harm to the environment.

Evidence sighted:
The site appeared to comply with the requirements of this CoC. Only those roads listed are used, signs indicating speed limits were noted, an investigation of road safety has reportedly been prepared and is with the RTA for approval. The roads used are sealed.

Compliance Status:
Compliant.

Road Noise Management Plan

34. Within 6 months of this consent, the Applicant shall review (and implement any approved changes to) the Road Noise Management Plan for traffic associated with the development, in consultation with NSC and GSC, and to the satisfaction of the Director-General.

Evidence sighted:
NSW DoP approved the Revised Road Noise Management Plan (letter dated 16 February 2006). GSC approved the RNMP (letter dated 13 January 2006) and NSC approved the RNMP (letter dated 9 November 2006).

Compliance Status:
Compliant.

Road Maintenance

35. Within 6 months of this consent, the Applicant shall review (and implement any approved changes to) the road maintenance agreements between the Applicant and NSC and GSC for roads within Narrabri and Gunnedah Shires respectively, that are used by traffic associated with the development, to the satisfaction of the respective Council. If agreement cannot be reached the matter shall be referred to the Director-General for resolution.

Evidence sighted:
NSC confirmed that a maintenance agreement was in place (in accordance with this CoC) (letter dated 21 December 2005) between NSC and Whitehaven.
A road maintenance agreement was observed between Whitehaven and GSC.

Compliance Status:
Compliant.

Monitoring

36. The Applicant shall:
   (a) keep records of the:
      • amount of gravel transported from the site each year;
      • amount of coal transported from the site each year;
      • destination of coal and gravel transported from the site each year; and
      • number of truck movements generated by the development; and
   (b) include these records in the AEMR.

Evidence sighted:
No gravel is reportedly transported.
The amount of coal and destination reported in the AEMR. The number of truck movements is recorded but have not been reported in the AEMR to date as this was not a requirement of the previous DA. This information will be included in future AEMRs.

Compliance Status:
Compliant.

VISUAL IMPACT

37. The Applicant shall carry out the development in a way that prevents and/or minimises the visual impacts of the development, including the design and construction of infrastructure in a manner that minimises visual contrasts, to the satisfaction of the Director-General.

Evidence sighted:
Whitehaven reported that the following is undertaken to minimise visual impact:
   • Removal of as little vegetation as possible
   • Undertake rehabilitation as quickly as possible
A complaint regarding a single bright light was recorded (18 March 2004) from the Gundawarra property, which was addressed by re-directing the light away from the residence and to the satisfaction of the landowners. No other visual/light complaints have reportedly been received during the audit period.

Compliance Status:
Compliant.

Lighting Emissions

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

Evidence sighted:
Lights are reported to be positioned to minimise light impacts.

Compliance Status:
Compliant.

GREENHOUSE GAS EMISSIONS

39. The Applicant shall:
   (a) monitor the greenhouse gas emissions generated by the development;
   (b) investigate ways to reduce greenhouse gas emissions generated by the development; and
   (c) report on greenhouse gas monitoring and abatement measures in the AEMR,
   to the satisfaction of the Director-General.

Evidence sighted:
This CoC was reportedly included in this DA in 2005. Greenhouse gases are reported to be estimated. Estimation began in December 2005 and will be reported in the first AEMR applicable to this CoC for 2005/2006.
It was not confirmed if greenhouse gas emissions have been estimated to date.
WASTE MANAGEMENT

40. The Applicant shall:
(a) monitor the amount of waste generated by the development;
(b) investigate ways to minimise waste generated by the development;
(c) implement reasonable and feasible measures to minimise, reuse and/or recycle waste generated by the development; and
(d) report on waste management and minimisation in the AEMR, to the satisfaction of the Director-General.

Evidence sighted:
Waste management is reported in the AEMR. Wastes were reported to be recycled as far as practicable. However a waste reduction plan does not appear to be in place to demonstrate that waste generated by the development and disposed to landfill is minimised.

Compliance Status:
Indeterminate.

Recommended Action:
It is recommended that a waste and/or resource reduction plan be developed and implemented to demonstrate wastes generated and disposed to landfill are minimised.

BUSHFIRE MANAGEMENT

41. 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.

Evidence sighted:
The site is understood to have a Bushfire Management Plan, however a copy was not observed during the audit.
Fire fighting equipment is maintained on site. Training is undertaken with local bushfire brigade and contact is maintained.
URS did not undertake an assessment of bushfire management capabilities.

Compliance Status:
Refer to CoC No.42 below.

42. Within 6 months of the consent, the Applicant shall review (and implement any approved changes) the Bushfire Management Plan for the site, to the satisfaction of GSC and NSC.

Evidence sighted:
Evidence that the Bushfire Management Plan was reviewed by GSC and NSC was not available during the audit.

Compliance Status:
Indeterminate.

Recommended Action:
Provide evidence that the Bushfire Management Plan has been reviewed by GSC and NSC and that the plan meets their requirements.

MINE CLOSURE STRATEGY

43. At least 6 months prior to the cessation of mining, the Applicant shall prepare a Mine Closure Strategy for the development, in consultation with the DPI, GSC and NSC, and to the satisfaction of the Director-General.

Evidence sighted:
Not applicable for this audit period.
Compliance Status:
Not applicable.
SCHEDULE 4
ADDITIONAL PROCEDURES FOR AIR QUALITY & NOISE MANAGEMENT

Notification of Landowners

1. If the results of the air quality and/or noise monitoring required in schedule 3 identify that the air pollution and/or noise generated by the development is greater than any of the air quality and/or noise criteria in schedule 3, then the Applicant shall notify the Director-General and the affected landowners and/or existing or future tenants (including tenants of mine-owned properties) accordingly, and provide quarterly monitoring results to each of these parties until the results show that the development is complying with the air quality and/or noise criteria in schedule 3.

<table>
<thead>
<tr>
<th>Evidence sighted:</th>
<th>Reportedly not applicable during the reporting period.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Compliance Status:</td>
<td>Not applicable.</td>
</tr>
</tbody>
</table>

Independent Review

<table>
<thead>
<tr>
<th>Evidence sighted:</th>
<th>An independent review was not required during this reporting period.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Compliance Status:</td>
<td>Not applicable.</td>
</tr>
</tbody>
</table>

2. If a landowner considers the development to be exceeding the air quality and/or noise criteria in schedule 3, then he/she may ask the Applicant in writing for an independent review of the air pollution and/or noise impacts of the development on his/her land.

   If the Director-General is satisfied that an independent review is warranted, the Applicant shall within 3 months of the Director-General advising that an independent review is warranted:
   (a) consult with the landowner to determine his/her concerns;
   (b) commission a suitably qualified, experienced and independent person, whose appointment has been approved by the Director-General, to conduct air quality and/or noise monitoring on the land, to determine whether the development is complying with the relevant air quality and/or noise criteria in schedule 3, and identify the source(s) and scale of any air quality and/or noise impact on the land, and the development’s contribution to this impact;
   (c) give the Director-General and landowner a copy of the independent review.

3. If the independent review determines that the development is complying with the relevant air quality and/or noise criteria in schedule 3, then the Applicant may discontinue the independent review with the approval of the Director-General.

4. If the independent review determines that the development is not complying with the relevant air quality and/or noise criteria in schedule 3, and that the development is primarily responsible for this non-compliance, then the Applicant shall:
   (a) take all practicable measures, in consultation with the landowner, to ensure that the development complies with the relevant air quality and/or noise criteria; and
   (b) conduct further air quality and/or noise monitoring to determine whether these measures ensure compliance; or
   (c) secure a written agreement with the landowner to allow exceedances of the air quality and/or noise criteria in schedule 3, to the satisfaction of the Director-General.

   If the additional monitoring referred to above subsequently determines that the development is complying with the relevant air quality and/or noise criteria in schedule 3, then the Applicant may discontinue the independent review with the approval of the Director-General.

   If the measures referred to in (a) do not achieve compliance with the air quality and/or noise land acquisition criteria in schedule 3, and the Applicant cannot secure a written agreement with the landowner to allow these exceedances within 3 months, then the Applicant shall, upon receiving a written request from the landowner, acquire the landowner’s land in accordance with the procedures in conditions 6-8 below.
5. If the landowner disputes the results of the independent review, either the Applicant or the landowner may refer the matter to the Director-General for resolution.

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

**Land Acquisition**

<table>
<thead>
<tr>
<th>Evidence sighted:</th>
</tr>
</thead>
<tbody>
<tr>
<td>Not applicable to this audit period.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Compliance Status:</th>
</tr>
</thead>
<tbody>
<tr>
<td>Not applicable.</td>
</tr>
</tbody>
</table>

6. Within 3 months of receiving a written request from a landowner with acquisition rights, the Applicant shall make a binding written offer to the landowner based on:

(b) the current market value of the landowner’s interest in the property at the date of this written request, as if the property was unaffected by the development the subject of the DA, having regard to the:

- existing and permissible use of the land, in accordance with the applicable planning instruments at the date of the written request; and
- presence of improvements on the property and/or any approved building or structure which has been physically commenced at the date of the landowner’s written request, and is due to be completed subsequent to that date;

(c) the reasonable costs associated with:

- relocating within the Narrabri or Gunnedah local government areas, or to any other local government area determined by the Director-General;
- obtaining legal advice and expert advice for determining the acquisition price of the land, and the terms upon which it is required; and

(b) reasonable compensation for any disturbance caused by the land acquisition process.

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

Upon receiving such a request, the Director-General shall request the President of the NSW Division of the Australian Property Institute to appoint a qualified independent valuer or Fellow of the Institute, to consider submissions from both parties, and determine a fair and reasonable acquisition price for the land, and/or terms upon which the land is to be acquired.

If either party disputes the independent valuer’s determinations, then the independent valuer should refer the matter back to the Director-General.

Upon receiving such a referral, the Director-General shall appoint a panel comprising the:

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

to consider submissions from both parties, including meeting with the parties individually if requested, and to determine a fair and reasonable acquisition price for the land, and/or the terms upon which the land is to be acquired.

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

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

7. 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 above.

8. If the Applicant and landowner agree that only part of the land shall be acquired, then the Applicant shall pay all reasonable costs associated with obtaining Council approval for any plan of subdivision, and registration of the plan at the Office of the Registrar-General.
SCHEDULE 5
ENVIRONMENTAL MANAGEMENT, MONITORING, AUDITING AND REPORTING

ENVIRONMENTAL MANAGEMENT STRATEGY

1. Within 6 months of this consent, the Applicant shall prepare and subsequently 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.

   **Evidence sighted:**
   An Environmental Management Strategy was approved by DoP (letter dated 16 February 2006).

   **Compliance Status:**
   Compliant.

2. Within 3 months of the completion of the Independent Environmental Audit (see condition 6 below), the Applicant shall review, and if necessary revise, the Environmental Management Strategy to the satisfaction of the Director-General.

   **Evidence sighted:**
   Noted.

   **Compliance Status:**
   Not applicable.

ENVIRONMENTAL MONITORING PROGRAM

3. Within 7 months of the date of this consent, the Applicant shall prepare an Environmental Monitoring Program for the development in consultation with relevant agencies, and to the satisfaction of the Director-General. This program must consolidate the various monitoring requirements in schedule 3 of this consent into a single document.

   **Evidence sighted:**
   To have been completed by December 2006 once the Water Management Plan has been approved by DoP.

   **Compliance Status:**
   Not applicable.

4. Within 3 months of the completion of the Independent Environmental Audit (see condition 6 below), the Applicant shall review, and if necessary revise, the Environmental Monitoring Program to the satisfaction of the Director-General.

   **Evidence sighted:**
   Not applicable for this audit period.

   **Compliance Status:**
   Not applicable.

ANNUAL REPORTING

5. Each year, the Applicant shall prepare an AEMR to the satisfaction of the Director-General. This report must:
   (a) identify the standards and performance measures that apply to the development;
   (b) include a summary of the complaints received during the past year, and compare this to the complaints received in the previous 5 years;
(c) include a summary of the monitoring results on the development during the past year,
(d) include an analysis of these monitoring results against the relevant:
   • limits/criteria in this consent;
   • monitoring results from previous years; and
   • predictions in the EIS and SEE prepared for the development;
(e) identify any trends in the monitoring over the life of the development;
(f) identify and discuss any non-compliance during the previous year; and
(g) describe what actions were, or are being, taken to ensure compliance.

Evidence sighted:
An AEMR was observed for 2003-2004 and 2004-2005 and to have been approved by the DPI in letters dated 8 March 2006 and 2 June 2006, respectively. Comments provided by DPI in letter dated 2 June 2006 to be actioned in AEMR 2005-2006. Written comment was also received from DoP on the 2004-2005 AEMR and verbal comment on 2003-2004 AEMR.

Compliance Status:
Compliant.

INDEPENDENT ENVIRONMENTAL AUDIT

6. By the end of September 2006, and every 3 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, or team, 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 equivalent updated versions of these guidelines;
   (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
   (f) if necessary, recommend measures or actions to improve the environmental performance of the development, and/or the environmental management and monitoring systems.

Evidence sighted:
This audit fulfils the requirements of this CoC.

Compliance Status:
Compliant.

7. 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.

Evidence sighted:
Noted

Compliance Status:
Not applicable.

COMMUNITY CONSULTATIVE COMMITTEE

8. The Applicant shall ensure that there is a Community Consultative Committee to oversee the environmental performance of the development. This committee shall:
   (a) be comprised of:
      • 2 representatives from the Applicant, including the person responsible for environmental management at the mine;
      • 1 representative each from GSC and NSC, and
      • 4 representatives from the local community, whose appointment has been approved by the Director-General in consultation with the GSC and NSC;
   (b) be chaired by the representative from either GSC or NSC, as agreed by the Councils;
   (c) meet at least four times a year, or as determined by the Director-General; and
   (d) review and provide advice on the environmental performance of the development, including any construction or environmental management plans, monitoring results, audit reports, or complaints.
Evidence sighted:
DoP approved a reduction in the number of meetings to at least once a year (letter dated 5 April 2006).

Compliance Status:
Compliant.

9. Applicant shall, at its own expense:
   (a) ensure that 2 of its representatives attend the committee’s meetings;
   (b) provide the committee with regular information on the environmental performance and management of the development;
   (c) provide meeting facilities for the committee;
   (d) arrange site inspections for the committee, if necessary;
   (e) take minutes of the committee’s meetings;
   (f) make these minutes available at GSC and NSC within 14 days of the committee meeting, or as agreed to by the committee;
   (g) respond to any advice or recommendations the committee may have in relation to the environmental management or performance of the development; and
   (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.

Evidence sighted:
Whitehaven appeared to comply with the requirements of this CoC. Examples of minutes were observed with evidence of their distribution.

Compliance Status:
Compliant.

ACCESS TO INFORMATION

10. Within 1 month of the approval of any management plan/strategy or monitoring program required under this consent (or any subsequent revision of these management plans/strategies or monitoring programs), the completion of the independent audits required under this consent (see conditions 30 of schedule 3 and condition 6 of schedule 5), or the completion of the AEMR (see condition 5 of schedule 5), the Applicant shall:
   (a) provide a copy of the approved document/s to NSC, GSC, relevant agencies and the CCC; and
   (b) ensure that a copy of the relevant documents is made publicly available at NSC and GSC offices, to the satisfaction of the Director-General.

Evidence sighted:
Evidence that the Management Plans approved by DoP on 28 February 2006 were distributed to the above listed was observed in the form of a distribution register and covering letters.
A distribution list at the front of the AEMRs indicates distribution to the above agencies.

Compliance Status:
Compliant.

11. During the life of the development, the Applicant shall;
   (a) make the results of the monitoring required under this consent publicly available at NSC and GSC offices; and
   (b) update these results on a regular basis,
to the satisfaction of the Director-General.

Evidence sighted:
Whitehaven are aware of this requirement and reportedly provide updates to the Councils. The AEMRs are provided to the Councils and contain the results of monitoring.

Compliance Status:
Compliant.
APPENDIX 1
SCHEDULE OF LAND

Freehold Land

<table>
<thead>
<tr>
<th>DESCRIPTION</th>
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</thead>
<tbody>
<tr>
<td>Lot 138 DP 754926</td>
</tr>
<tr>
<td>Lot 2 DP 1038308</td>
</tr>
<tr>
<td>Lot 1 DP 1015797</td>
</tr>
</tbody>
</table>

Crown Land Descriptions

Council Roads
Approximately 750 metres of Shire road or Road Reserve.

Crown Roads
Approximately 1.15 kilometres of Crown Road Reserve.

All land is within the County of Nandewar and Shire of Narrabri.
APPENDIX 2
INDEPENDENT DISPUTE RESOLUTION PROCESS