

Whitehaven Coal Limited

**Independent Environmental
Compliance Audit
Rocglen Coal Mine**

July 2011



Independent Environmental Compliance Audit Rocglen Coal Mine

Prepared by
Umwelt (Australia) Pty Limited
on behalf of
Whitehaven Coal Limited

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Report No.	2960/R01/Final	Date: July 2011



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TABLE OF CONTENTS

1.0	Introduction	1.1
1.1	Rocglen Coal Mine	1.1
1.2	Independent Environmental Audit	1.1
1.3	Audit Objectives	1.2
1.4	Audit Scope	1.2
1.5	Audit Criteria.....	1.3
1.6	Structure of this Document	1.4
2.0	Audit Methodology	2.1
2.1	Preliminary Document Review	2.1
2.2	Agency Consultation.....	2.1
2.3	Site Interviews and Inspections	2.1
2.3.1	Opening Meeting	2.1
2.3.2	Audit Interviews	2.2
2.3.3	Data Collection and Verification	2.2
2.3.4	Site Inspections	2.2
2.3.5	Closing Meeting.....	2.3
2.4	Reporting	2.3
2.5	Definitions.....	2.3
3.0	Audit Findings	3.1
3.1	Status of Development at Rocglen Coal Mine	3.2
3.2	Agency Consultation.....	3.2
3.3	Previous DoP Audit 2009.....	3.3
3.4	Compliance Issues	3.4
3.4.1	Project Approval 06_0198 (Including Modification 06_0198 _MOD 1)	3.4
3.4.2	Statement of Commitments.....	3.14
3.4.3	Environmental Protection Licence.....	3.25
3.4.4	Mining Lease 1620	3.29
3.5	Environmental Management Plans	3.30
3.5.1	Landscape Management Plan.....	3.31
3.5.2	Air Quality Monitoring Program	3.32
3.5.3	Greenhouse and Energy Efficiency Plan.....	3.32
3.5.4	Flora and Fauna Management Plan.....	3.33
3.5.5	Erosion and Sediment Control Plan	3.33

3.5.6	Transport/Traffic Management Plan.....	3.33
4.0	Environmental Performance.....	4.1
4.1	Site Inspection.....	4.1
4.2	Key Environmental Issues.....	4.2
4.2.1	Water Management.....	4.2
4.2.2	Hydrocarbon and Chemical Management.....	4.4
4.2.3	Noise.....	4.4
4.2.4	Air Quality.....	4.5
4.2.5	Coal Transport.....	4.5
4.2.6	Waste Management.....	4.6
4.3	Whitehaven Compliance Management and Review.....	4.6
5.0	Conclusion.....	5.1

APPENDICES

1	Agency Interview Questions
2	Compliance Assessment PA 06_1098
3	Compliance Assessment Statement of Commitments
4	Compliance Assessment EPL 12870
5	Compliance Assessment ML 1620
6	Photographic Plates

1.0 Introduction

1.1 Rocglen Coal Mine

Whitehaven Coal Limited (Whitehaven) is the leading coal producer in the Gunnedah basin. Whitehaven has one underground and four active open cut mining operations, including the Rocglen Coal Mine which is the subject of this independent environmental compliance audit.

The Rocglen Coal Mine (formerly the Belmont Coal Project) (Project Approval 06_0198) was approved by the Minister for Planning on 15 April 2008 and involves constructing and operating an open cut coal mine and associated facilities, and includes:

- extracting about 12.4 million tonnes of coal by open cut mining methods at a maximum rate of 1.5 million tonnes per annum (mtpa) ;
- crushing and screening coal onsite;
- transporting it by road to the Whitehaven Coal Handling and Preparation Plant (CHPP) at Gunnedah;
- constructing mining-related infrastructure on the site;
- transporting coal by rail to the Port of Newcastle; and
- rehabilitating the mine site.

The Rocglen Mine was approved subject to a range of conditions as specified in the Project Approval. One of those conditions requires a regular program of independent environmental compliance audits to be developed and implemented.

1.2 Independent Environmental Audit

Whitehaven commissioned Umwelt (Australia) Pty Limited (Umwelt) to conduct an independent environmental audit of its Rocglen operations. The audit was conducted in accordance with Condition 6 of Schedule 5 of the Rocglen Coal Mine Approval. The audit assessed the compliance status of Rocglen operations against the Project Approval and other relevant environmental approvals and licences, for operations occurring between August 2008 and May 2011.

The on-site component of the environmental audit was conducted on 12 and 13 May 2011. Some information requested by the audit team but not available on-site at the time of the audit was subsequently provided to the audit team for review. This report provides an outline of the audit methodology and results, and provides recommended actions for achieving full compliance with environmental approvals. The appendices include detailed checklists of the status of compliance with the conditions of the Project Approval, Statement of Commitments, Environment Protection Licence and Mining Lease for the project.

The audit was led by Jenny Ehmsen, Lead Environmental Auditor and Senior Environmental Scientist with the assistance of Jacque Davidson, Environmental Scientist. John Merrell, Associate, was the Project Director and provided strategic direction for the audit and reviewed this report.

1.3 Audit Objectives

Two key objectives were identified for the independent environmental audit for the Rocglen Coal Mine operations as follows:

- to undertake an independent environmental audit as required by Condition 6 of Schedule 5 of the Conditions of Project Approval; and
- to assess the environmental performance of the Rocglen operations and the ability of the Whitehaven environmental management systems and controls to provide for sustainable management of the operations.

1.4 Audit Scope

Condition 2 of Schedule 2 of the Approval provides the Terms of Approval for the project which identifies that the project shall be carried out generally in accordance with the:

- Environmental Assessment (EA);
- Statement of Commitments; and
- Conditions of the Approval.

In order to assess the level of compliance with the terms of the approval, Condition 6 of Schedule 5 requires that an independent environmental audit be carried out.

Specifically, Condition 6 of Schedule 5 of the Rocglen Approval states:

By the end of March 2011, and every 3 years thereafter, unless the Director-General directs otherwise, the proponent shall commission and pay the full cost of an Independent Environmental Audit of the project. This audit must:

- be conducted by a suitably qualified, experienced and independent team of experts whose appointment has been endorsed by the Director-General;
- include consultation with relevant agencies;
- assess the environmental performance of the project and assess whether it is complying with the relevant requirements of this approval and any relevant Mining Lease and EPL (including any strategy, plan or program under these approvals);
- review the adequacy of strategies, plans and/or programs required under these approvals; and, if appropriate,
- recommend measures or actions to improve the environmental performance of the project, and/or any strategy, plan or program required under these approvals.

Notes: This audit team should be led by a suitably qualified auditor, and include experts in the field of ecology and minesite rehabilitation.

As required by the Project Approval, the audit covered the following key areas:

- consultation with relevant agencies;
- the environmental performance of the development, and its effect on the surrounding environment;
- compliance with relevant standards, performance measures and regulatory requirements; and

- the adequacy of the Environmental Management Strategy and environmental management plans/protocols.

1.5 Audit Criteria

Statutory compliance of the Rocglen operations was ascertained with reference to conditions and commitments made in the following documents:

- Project Approval (PA 06_0198) including modification application 06_0198-MOD 1;
- Environmental Assessment (EA) titled Environmental Assessment of the Belmont Coal Project via Gunnedah, (RW Corkery, October 2007);
- Belmont Coal Project, Response to Public and Government Agency Submissions (RW Corkery and Co Pty Limited, February 2008);
- Rocglen Coal Mine Modification – Highwall Stabilisation Works, Environmental Assessment – Rapid Assessment under Section 75W of the EP&A Act 1979 (GSS Environmental, May 2010)
- Environmental Management Strategy for the Rocglen Coal Mine, Edition 1 Revision 0 (April 2008);
- Environmental Monitoring Program for the Rocglen Coal Mine, Edition 1 Revision 1 (June 2009)
- Noise Monitoring Program incorporating a Noise Management Protocol and Noise Monitoring Program for the Rocglen Coal Mine, Edition 1 Revision 0 (April 2008);
- Air Quality Monitoring Program for the Rocglen Coal Mine incorporating an Air Monitoring Protocol, Edition 1 Revision 1 (January 2009);
- Blast Monitoring Program for the Rocglen Coal Mine, Edition 1 Revision 0 (April 2008);
- Rocglen Coal Mine Project, Greenhouse and Energy Efficiency Plan (June 2009);
- Aboriginal and Cultural Heritage Management Plan for the Rocglen Coal Mine, Edition 1 Revision 0 (April 2008);
- Road Noise Management Plan for the Rocglen Coal Mine (November 2008);
- Whitehaven Coal Mining Pty Ltd, Road Closure Management Plan (undated)
- Environmental Protection Licence (No. 12870); and
- Mining Lease No 1620.

Additionally, the following plans were reviewed which were not specifically required by the conditions of the Project Approval but which were prepared by Whitehaven Coal to guide the environmental management of the operations.

- Mining Operations Plan for the Rocglen Coal Mine, via Gunnedah – MOP Amendment No. 1, June 2010.

1.6 Structure of this Document

This report contains the following sections:

- *Section 1.0 – Introduction.* An overview of the Rocglen Coal Mine and purpose and scope of the audit.
- *Section 2.0 – Audit Process.* A detailed description of the audit process.
- *Section 3.0 – Audit Findings.* An overview of the findings of the audit, including detailed descriptions of any non-compliance identified.
- *Section 4.0 – Environmental Performance.* An overview of the environmental performance of the Rocglen operations, including the findings from the site inspection.
- *Section 5.0 – Conclusion.*
- *Appendix 1. Agency Interview Questions.*
- *Appendices 2 to 5.* Checklists of relevant approval documentation including the Project Approval, Statement of Commitments, EPL, and mining lease applying to the project. The checklists provide a detailed review of each compliance condition applying to the project.
- *Appendix 6. Photographic Plates.* Photographs of key site features referred to in this report.

2.0 Audit Methodology

The audit process involved the interview of personnel and relevant regulatory agencies, a review of documentation and samples of records provided by Whitehaven Coal and a site inspection of the Rocglen operations to determine the level of environmental performance and compliance of the project. The audit process is described in more detail in **Sections 2.1 to 2.5**.

2.1 Preliminary Document Review

Prior to the audit, environmental documentation associated with the Rocglen mining operation was reviewed by the auditors. This involved a review of the EA and Project Approval for the project and the management plans that have been prepared to guide the environmental management of the operations.

2.2 Agency Consultation

As part of the audit process, interviews were undertaken with relevant government agency staff with a regulatory role relating to the project. The views of these agencies in relation to the project were determined through phone interviews. These phone interviews consisted of an Umwelt representative asking a standard set of questions which are provided in **Appendix 1**. A summary of the phone interviews is provided in **Section 3.2**.

2.3 Site Interviews and Inspections

2.3.1 Opening Meeting

The opening meeting was held at the Rocglen Coal Mine office commencing at 8.10 am on 12 May 2011. The participants are outlined in **Table 2.1**.

Table 2.1 - Opening Meeting Attendees

Opening Meeting	Organisation	Title
Danny Young	Whitehaven	Group Environmental Manager
Jill Scealy	Whitehaven	Environmental Officer
Chris Thomas	Whitehaven	Environmental Officer
Tony Heinrich	Whitehaven	Project Manager
Chris Stephens	Whitehaven	Manager, Mining Engineering
Jenny Ehmsen	Umwelt	Lead Environmental Auditor
Jacque Davidson	Umwelt	Audit Assistant

The audit team was introduced and the scope of their responsibilities was conveyed to the auditees. The purpose, depth and scope of the audit were outlined. The methods to be used by the team to conduct the audit were explained. It was stated that the audit team would be interviewing personnel, reviewing site management plans, examining records and conducting a site inspection in order to address specific compliance requirements, particularly those related to the relevant approvals and licences for the Rocglen operations.

Following the opening meeting, a preliminary site inspection was undertaken to familiarise the audit team with the site and operations.

2.3.2 Audit Interviews

Audit interviews were conducted with Danny Young (Group Environmental Manager), Jill Scealy (Environmental Officer), Chris Thomas (Environmental Officer), Tony Heinrich (Project Manager) and Mark Latham (Workshop Supervisor) during the site component of the audit on 12 and 13 May 2011.

2.3.3 Data Collection and Verification

Where possible, documents and data collected during the audit process were reviewed on site. A number of documents were provided to the audit team prior to the on-site component of the audit. Several documents that were not available during the on-site component of the audit were provided following the audit.

All information obtained during the audit process was verified by the audit team where possible. For example, statements made by site personnel were verified by viewing documentation and/or site inspections where possible. Where suitable verification could not be provided, this has been identified in the audit findings.

2.3.4 Site Inspections

A detailed site inspection of the key areas of the mine was undertaken as part of the audit. Danny Young, Jill Scealy and Chris Thomas accompanied the audit team during the site inspection. Areas inspected during the inspection included:

- site facilities area;
- workshop and hardstand areas, including washdown areas and hazardous good storage;
- open cut pit;
- waste emplacement areas, including both the northern and western emplacement areas;
- topsoil stockpiles;
- contractor facilities for the scraper crews;
- ROM coal stockpiling and crushing operations, including loading of the crusher receival bin by front end loader;
- product coal stockpiling and loading operations, including use of the load out bin and front end loader loading of trucks;
- water management dams;
- Wean Road relocation and upgrade works; and
- coal transport route, including new private haul road and road upgrades at Bluevale Road and Kamilaroi Highway intersections.

2.3.5 Closing Meeting

The closing meeting was held at the Rocglen Coal Mine office commencing at 11.00 am on 13 May 2011. The participants are outlined in **Table 2.2**.

Table 2.2 - Closing Meeting Attendees

Closing Meeting	Organisation	Title
Danny Young	Whitehaven	Group Environmental Manager
Jill Scealy	Whitehaven	Environmental Officer
Chris Thomas	Whitehaven	Environmental Officer
Tony Heinrich	Whitehaven	Project Manager
Chris Stephens	Whitehaven	Manager, Mining Engineering
Jenny Ehmsen	Umwelt	Lead Environmental Auditor
Jacque Davidson	Umwelt	Audit Assistant

The objectives of this meeting were to discuss any outstanding matters, present preliminary findings and outline the process for finalising the audit report.

2.4 Reporting

Following completion of the site audit, the development consent checklist was completed and audit notes were reviewed in order to compile a list of outstanding matters to be noted in the audit report. This report was prepared to provide an overview of the status of compliance by reference to the relevant compliance documentation and any other observations of the auditors during the site inspections and interviews. This report has been prepared on an exception basis, highlighting any areas where action or improvement is required.

2.5 Definitions

The reporting of results from the compliance audit was determined based on the following definitions.

Compliance

The intent and explicit requirements of the condition have been met. This includes meeting all requirements with respect to consultation (agency or otherwise), timing of actions or activities, the preparation of management plans or other specific requirements of the condition.

The failure to meet any or all of the specific requirements of the condition would result in a non compliance.

Non Compliance

A non compliance occurs when any of the specific requirements of the condition have not been met (i.e. if any sub-component of a requirement is not met (such as timing or consultation), the entire requirement is considered to be non-compliant).

Verification

The inability to provide formal written verification (letter, fax, email, meeting minutes, etc.) that a requirement has been met does not necessarily result in a non compliance. If the auditor is able to verify by other demonstrable means (visual inspection, personal communication, etc.) that a condition has been met then, in most cases, the operation should be considered to be in compliance for that condition.

Area of Concern

The intent of the condition has been met, however it is considered that either:

- the issue has the potential to deteriorate to a non-compliance if not further addressed; or
- further improvement is recommended.

Not Triggered

A condition or requirement has an activation or timing requirement which had not been triggered or completed at the time of the audit and therefore a determination of compliance could not be made. It is recommended that future audits assess compliance of any conditions or requirements that were found to have not been triggered during this audit.

Timing of Environmental Performance

For the purpose of a compliance audit the timeframe for environmental performance against the Environment Protection Licence (EPL) can be divided into two periods:

- the current period which is the time from the beginning of the most recent EPL reporting period to the time the audit is conducted; and
- the historical period, which is the time prior to the most recent EPL reporting period.

3.0 Audit Findings

The detailed findings of the audit are presented in this section. Detailed assessments of compliance with relevant compliance documents are provided in **Appendices 2 to 5**. The findings of this audit are based upon visual observations of the site and its vicinity, interviews with site personnel and our interpretation of the documentation provided by Whitehaven Coal.

Opinions presented herein apply to the site as it existed at the time of the audit and from information provided by site personnel. Any changes to this information of which Umwelt is not aware and has not had the opportunity to evaluate therefore cannot be considered in this report.

A summary of the phone interviews undertaken with agencies with regulatory roles relating to the project is provided in **Section 3.2**. Specific findings of the audit in relation to each approval, lease or licence is discussed in **Section 3.3**. The results of the site inspections undertaken for the project and any other issues identified during the audit are provided in **Section 4.0**.

The audit found that the key non-compliance issue for the Rocglen Coal Mine is the lack of an approved Landscape Management Plan (LMP) for the site. The development of the LMP has been held in abeyance pending the finalisation with OEH and DP&I of the Whitehaven Regional Biodiversity Offset Strategy and the assessment and determination of the Rocglen Extension project, as both of these will have an impact on the existing operations. The lack of certainty with respect to the Offset Strategy and the Extension approval has the potential to impact on the current operations, particularly as they relate to rehabilitation and management of the site.

Rocglen has experienced some environmental performance issues relating to air, noise, blasting and water discharge exceedances. Many of these exceedances were during the early stages of operations and Whitehaven has investigated each incident and modified operations accordingly to minimise the potential for future exceedances.

The assessment of compliance against the Statement of Commitments identified Whitehaven to be non-compliant with a number of commitments. However, it should be noted that the Statement of Commitments is often very poorly worded and/or ambiguous in nature to the point that compliance cannot always be demonstrated.

A summary of the compliance assessment is provided in **Table 3.1**.

Table 3.1 - Summary of Statutory Compliance

Approval/Licence	Not Triggered	Compliance	Non-Compliance	Verification Required	Area of Concern
Project Approval	29	132	67	8	0
Statement of Commitments	12	155	37	44	5
Environmental Protection Licence No. 12870	21	56	7	2	0
Mining Lease 1620	17	28	5	0	0

Note that the numbers refer to the number of conditions and subconditions

3.1 Status of Development at Rocglen Coal Mine

The audit has identified that the operations at the Rocglen Coal Mine are generally being undertaken in accordance with the project approval and associated approval documentation including the EA and Response to Submissions Report, and other permits, such as EPL (No. 12870) and Mining Lease (ML1620). Measures are generally in place to prevent and minimise environmental harm and few community complaints have been received since operations commenced.

Mining has generally taken place in accordance with the approved EA, although production has not yet reached the approved tonnage of 1.5 mtpa. Currently the production rate is at approximately 1 mtpa. Key features of the current operations include:

- operations are approved for 24 hours per day Monday to Saturday, however mining is currently undertaken over two shifts (day and night) with night shift finishing at 2.30 am;
- waste emplacements have been constructed at the western and northern locations, although the western emplacement is almost complete;
- in-pit overburden placement has commenced at the northern end of the pit;
- the site facilities area has been constructed and is operational;
- the workshop and coal processing area have been constructed and are operational;
- the coal transport route to the Whitehaven CHPP has been constructed and intersection upgrades completed; and
- Wean Road has been tar sealed to the southern boundary of the mine and the relocation of a section of the road to the north is almost complete.

3.2 Agency Consultation

Consultation was undertaken with relevant government agencies to identify any particular issues of concern relating to the Rocglen operations. The results of the consultation undertaken are tabled in **Table 3.2**.

Table 3.2 - Agency Consultation

Agency	Person Contacted	Date(s) Contacted	Response
DP&I	Colin Phillips	9/5/11	Rocglen was generally well located with respect to adjacent landowners. An area identified for audit focus was the operation of the surface water management system.
OEH	Jessica Creed	3/5/11	Messages have been left however no response has been received.
Gunnedah Council	Carolyn Hunt (Planning)	3/5/11	Not aware of any particular issues. Council receives a copy of the AEMR and has input through the CCC.
	Wayne Kerr (Engineering)	10/5/11	Message has been left however no response has been received.

Table 3.2 - Agency Consultation (cont)

Agency	Person Contacted	Date(s) Contacted	Response
DTIRIS	Michael Lloyd	10/5/11	Generally a tidy operation. Previous minor issues with workshop and hardstand extension but these had been resolved. Not aware of any outstanding compliance issues or community complaints.
NOW	Fergus Hancock	10/5/11	Identified that mining at Rocglen is getting close to the boundary of the Upper Namoi Alluvium. Groundwater management was identified as an area of focus for the audit – how are Whitehaven monitoring their operations in relation to the alluvium, does groundwater response plan include adequate monitoring and response for impacts to alluvium?

3.3 Previous DoP Audit 2009

In March 2009, DoP representatives undertook an inspection of the Rocglen Mine to evaluate compliance of the mine's operations with the project approval. The inspection focused primarily on the consistency of the operations with the approval, general environmental management, dust management, surface water and groundwater management, noise management and blasting management.

The inspection report letter from DoP (dated 30 March 2009) identified 22 findings and required Whitehaven to develop an action plan to address the inspection findings. Of the 22 findings, 7 were related to requirements of the project approval that had not yet been completed, 9 were findings of potential non-compliance and 6 were identified as opportunities for improvement.

Whitehaven prepared an Action Plan to Address Findings of Department of Planning Audit of Rocglen Mine Undertaken on 10 March 2009 (dated 9 April 2009) and submitted this to DoP. In a letter dated 8 May 2009, DoP reviewed the proposed action plan and requested an update on the status of the actions be provided by 7 July 2009. This update was provided by Whitehaven in July 2009 which identified that only six actions remained outstanding with the others being closed out.

The Rocglen Audit Action Plan Update (excel file dated 18/3/2010) reviewed during the current audit indicated that only one action remains outstanding. This action relates to the development of the Rocglen Landscape Management Plan as required by Schedule 3 Conditions 30 and 31.

All findings of the 2009 DoP audit were reviewed as part of the current independent environmental audit and evidence was sighted to verify the closure of 21 of the findings. The remaining outstanding action which could not be closed out related to the development of the Rocglen Landscape Management Plan. In relation to this issue, Whitehaven personnel advised during the audit that the development of the plan was being held in abeyance pending the finalisation and approval of the Rocglen Extension project which is currently with DP&I for assessment and determination.

3.4 Compliance Issues

The Rocglen Coal Mine was found to be operating generally in compliance with the terms of the relevant approvals and licences applying to it. However, a number of non-compliances were identified where action is required to ensure full compliance is met for some conditions/requirements. A number of verifications were also identified, where full compliance with a condition/requirement could not be determined as either insufficient evidence was available but the auditor felt that the requirement had likely been met, or the determination of compliance was dependent on the outcome of a programmed action being finalised by Whitehaven Coal and there was no specific timing requirement in the condition.

A full compliance assessment against the requirements of relevant approval documents and licences is provided in **Appendices 2 to 5**. A summary of the non-compliances for each approval document is provided below.

3.4.1 Project Approval 06_0198 (Including Modification 06_0198 _MOD 1)

Operations at the Rocglen site are generally being undertaken in a manner that is consistent with the requirements of the Project Approval (PA 06_0198). However, a number of non-compliances were identified where action is required to ensure full compliance. The key non-compliance issue relates to the lack of an approved Landscape Management Plan for the site.

A full compliance checklist against the requirements of the Project Approval was completed as part of the audit and is included as **Appendix 2**. A summary of the non-compliance issues are outlined below.

Schedule 2: Condition 1 – Non-compliance

The Proponent 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 project.

The site inspection and audit of compliance documentation found no significant issues relating to environmental management at the site. However several non-conformances have been identified as documented in the compliance checklists and summarised in this report. Rocglen has experienced some environmental performance issues relating to air, noise, blasting and water discharge exceedances. Many of these exceedances were during the early stages of operations and Whitehaven has investigated each incident and modified operations accordingly to minimise the potential for future exceedances. Environmental Management Plans have been prepared for a range of environmental issues and evidence was sighted that the plans that have been prepared have generally been implemented. It was noted that there is a good level of environmental awareness amongst all staff interviewed as part of the audit. The key compliance issue relates to the lack of an approved Landscape Management Plan for the site.

Schedule 2: Condition 2 (b) – Non-compliance

The Proponent shall carry out the project generally in accordance with the: (b) statement of commitments (see Appendix 3)

A number of non-compliances with the Statement of Commitments were identified during the audit as noted in this report.

Schedule 2: Condition 2 (d) – Non-compliance

**The Proponent shall carry out the project generally in accordance with the:
(c) conditions of this approval.**

A number of non-compliances with the Project Approval were identified during the audit as noted in this report.

Schedule 2: Condition 7 – Non-compliance

The Proponent is permitted to undertake mining operations 24 hours a day, Monday to Saturday, with the exception of public holidays.

During the on-site audit inspection, the Project Manager confirmed that shift lengths are set and no staff are permitted to work beyond the approved hours. However, a review of the complaints register for the project shows that there has been one complaint in relation to works undertaken on a Sunday.

Whitehaven investigated the complaint and found that a contractor had done some work spreading topsoil with a dozer on a Sunday. Records reviewed showed that Whitehaven instructed the contractor that no works were to occur on a Sunday and reinforced that message to all contractors and staff via toolbox talks. There is no evidence of any further non-compliances with this condition.

As the corrective actions undertaken by Whitehaven appear to have addressed the issue and there has been no further non-compliances, no further actions are considered necessary.

Schedule 2: Condition 9 – Non-compliance

With the approval of the Director-General, the Proponent may submit any management plan or monitoring program required by this approval on a progressive basis.

Management plans have been submitted progressively and those prepared and submitted have been approved by DoP, with correspondence and approvals sighted during the audit to verify this. However, the Landscape Management Plan has not yet been finalised or submitted and no evidence was sighted to indicate that DoP had approved a delay to the submission of the plan. This issue is further discussed in **Section 3.5.1**.

Recommendation

Finalise the Landscape Management Plan for the project and submit to DP&I for approval.

Schedule 2: Condition 10 – Non-compliance

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

Certificates sighted include: GSC Approval to Install Septic Tank dated 25/07/2008, GSC Construction Certificate 344174 for construction of workshop and temporary training room, ablutions blocks and offices dated 25/07/2008, GSC Occupation Certificate 344174 for workshop, office, temporary training room and ablutions block dated 17/03/2009, and GSC Notice of Determination of Development Application 425649 for demountable toilet block and demountable training room dated 8/10/2009. However, there is no evidence of an occupation certificate for the demountable toilet block and the demountable training room, although development consent and construction certificate have been obtained.

Recommendation

It is recommended an Occupation Certificate be sought from Gunnedah Shire Council for the demountable toilet block and demountable training room.

Schedule 3: Condition 1 – Non-compliance

Except as may be expressly provided for by an EPL, the Proponent shall not discharge any surface waters from the site.

The EPL approved wet weather discharge locations are:

- Point 11 - Storage Dam 3 (SD3) identified as 'SD3 Wet Weather Discharge Monitor Point Southern Boundary - Site Exit', and
- Point 12 - Northern site boundary labelled as 'Wet Weather Discharge Monitor Point Northern Boundary'.

The AEMR 2009/2010, section 2.8.3 details that there were 8 discharge events recorded in the reporting period from two locations, Storage Dam 3 (SD3) and Sediment Basin (SB18). Whilst there were no exceedances of the pH or oil and grease criteria, there were exceedances of the total suspended solids (TSS) criteria.

The TSS criteria for Points 11 and 12 as set in the EPL is 50 mg/L. However, condition L3.4 of the EPL states:

The Total Suspended Solids concentration limits specified for Points 11 and 12 may be exceeded for water discharged provided that: (a) the discharge occurs solely as a result of rainfall measured at the premises that exceeds 38.4 mm over any consecutive 5 day period immediately prior to the discharge occurring; and (b) all practical measures have been implemented to dewater all sediment dams within 5 days of rainfall such that they have sufficient capacity to store run off from a 38.4 millimetre, 5 day rainfall event.

A review of the wet weather discharge monitoring data identified there were instances where the TSS recorded was >50 mg/L and the rainfall recorded over the preceding five day period was less than 38.4 millimetres. Some examples include: 4 Jan 2010 at SD3 followed 25.2 millimetres rain over the preceding five day period and the TSS level recorded was 1490 mg/L. 15 Jan 2010 at SB18 followed 21.6 millimetres rain over the previous day and TSS level recorded was 1490 mg/L. 31 March 2010 at SD3 followed 16.8 millimetres rain with TSS level recorded 108 mg/L. Therefore there were instances of TSS level exceedances that did not comply with the EPL conditions.

The issue of wet weather discharges is further discussed in **Section 4.2.1**.

Schedule 3: Condition 7 – Non-compliance

The Proponent shall ensure that the noise generated by the project does not exceed the noise impact assessment criteria set out in Table 1 at any residence on privately-owned land, or no more than 25 per cent of any privately-owned land.

There have been several noise exceedance incidents since operations commenced in 2008. In most cases, the exceedances were related to inversion conditions and evidence was sighted to indicate that operations were modified to avoid inversion conditions.

For example, on 8/09/2009 attended noise monitoring was undertaken at "Costa Vale" (N1) and "Surrey" (N2). Spectrum Acoustics reported that noise emissions from the mine exceeded the criterion of 35 dB(A) at "Surrey" during the morning survey (37 dB(A)) and "Costa Vale" during the evening survey (38 dB(A)). At both locations the mine noise was

attributable to engine noise and revs mainly from haul trucks. Whitehaven reviewed the Rocglen weather station data, and determined that a temperature inversion was present at the time of the exceedance at "Surrey". A fault with the weather station during the evening survey, when the "Costa Vale" exceedance was recorded, removed the capacity to assess incidence of temperature inversion at that time.

As this result represented the first operational noise exceedance at the "Costa Vale" and "Surrey" properties, Whitehaven proposed to maintain the current noise monitoring arrangements. DoP and DECCW were notified in writing of the exceedances and the proposed continuation of current monitoring arrangements.

Similarly, noise exceedances were also recorded at "Costa Vale" and "Surrey" on 30/7/08 and 18/8/09 during the morning periods. In these cases, monitoring was undertaken throughout the morning and by 9.30 am, noise levels had returned to below criteria.

Whitehaven continues to monitor noise levels in accordance with its approved Noise Monitoring Program and has also acquired a real time noise monitor which has been located at several residences to monitor noise levels as a result of complaints. It is considered that Whitehaven's actions in investigating the noise exceedances and the continued monitoring is appropriate and no further actions are considered to be required.

Schedule 3: Condition 11 – Non-compliance

The Proponent shall ensure that the airblast overpressure level from blasting at the project does not exceed the criteria in Table 3 at any residence on privately-owned land.

A review of the blast results to January 2011 indicated two exceedances of the overpressure level on the 24th and 27th August 2009. DoP and DECCW were notified and an investigation was carried out by Orica Mining Services. In the 12 month period between 1/8/09 and 31/7/10, there were 24 blasts undertaken with two exceedances. The exceedances therefore represent 8.3 per cent of the total number of blasts for that reporting period, being above the allowable 5 per cent of blasts above 115 dB. It was noted that there have been no exceedances of the 120 dB criteria.

Whitehaven continues to monitor blasts in accordance with its approved Blast Monitoring Program and no further exceedances have been identified. It is considered that Whitehaven's actions in investigating the blast exceedances and the continued monitoring is appropriate and no further actions are considered to be required.

Schedule 3: Condition 20 – Non-compliance

If the Proponent receives a written request for a property inspection from any landowner within 2 km of proposed blasting activities, or any other landowner nominated by the Director-General, the Proponent shall within 3 months of receiving this request:

- (a) commission a suitably qualified person, whose appointment has been approved by the Director-General, to inspect the condition of any building or structure on the land, and recommend measures to mitigate any potential blasting impacts;**

Whitehaven appointed a suitably qualified person to undertake the building condition assessments (Kelley Covey Group Pty Ltd), although there is no evidence that this appointment was notified to or approved by the Director-General. However, it is noted that Kelley Covey had been appointed to undertake building condition assessments for other

Whitehaven operations in the Gunnedah area and for those operations had been approved by DoP to conduct the condition assessments.

As the building conditions reports have been completed and issued to landowners, no further action is considered to be required.

Schedule 3: Condition 23 – Non-compliance

The Proponent shall ensure that dust emissions generated by the project does not cause additional exceedances of the criteria listed in Tables 5 to 7 at any residence on privately owned land, or on more than 25 per cent of any privately-owned land.

A review of the air quality monitoring data shows that there have been exceedances of the dust emission criteria specified in the Project Approval. For example, exceedances of the 24-hour PM₁₀ limit were identified at either “Glenroc” or “Surrey” or both on 21/10/09, 20/11/09, 8/12/09 and 14/12/09. Evidence was sighted to indicate that on each occasion, the exceedances were investigated and reported to both DoP and DECCW (for example, letters dated 4/11/09 and 22/7/09).

It was noted during the audit that specific TSP monitoring is not being undertaken. While the approval does not specifically require TSP monitoring to be undertaken, it has specified a criterion. Whitehaven advised that compliance with the TSP criterion is assessed via the interpolation of PM₁₀ monitoring results. It is also noted that while DoP has not confirmed TSP monitoring is not required, it has approved the Air Quality Monitoring Program for the mine which did not include the monitoring of TSP. It was further noted that the EPL for the site does not require TSP to be monitored.

Recommendation

Confirm with DP&I that compliance with the TSP criterion can be assessed via the interpolation of PM₁₀ monitoring results.

Schedule 3: Condition 27 – Non-compliance

The Proponent shall:

(a) implement the Biodiversity Offsets summarised in Table 8 and described in the EA (shown conceptually in Figure 6 in Appendix 4; and

(b) make suitable arrangements to provide appropriate long term security for the offset areas by the end of August 2010, to the satisfaction of the Director General.

WC MPL staff advised that this has not been completed since the onsite offset area is proposed to be removed if the Rocglen Extension project is approved. An offsite offset is proposed in a regional biobank area which is currently pending approval from DECCW.

Whitehaven has been undertaking the preparation of a Regional Biodiversity Strategy to identify and manage appropriate offset areas for their various Gunnedah operations. The proposal was submitted to DECCW in February 2010 and DECCW completed their site inspection in May 2010, however Whitehaven is yet to receive advice as to the determination of the proposal.

Recommendation

Continue negotiations with OEH and DP&I in relation to the Whitehaven Regional Biodiversity Strategy with a view to finalising the Strategy and preparing a Landscape Management Plan for the Rocglen site.

Schedule 3: Condition 28 – Non-compliance

The Proponent is to allocate at least 60 ha of the required offset from the Whitehaven Regional Biodiversity Offset area (offset 5 in Table 8 - also refer to Appendix 5). This must be done in consultation with DECC, and to the satisfaction of the Director-General.

As per Condition 27 above, the Whitehaven Regional Biodiversity Offset Strategy has not yet been finalised.

Recommendation

Continue negotiations with OEH and DP&I in relation to the Whitehaven Regional Biodiversity Strategy with a view to finalising the Strategy and preparing a Landscape Management Plan for the Rocglen site.

Schedule 3: Condition 29 – Non-compliance

The Proponent shall progressively rehabilitate the site in a manner that is generally consistent with the final landform set out in the EA (shown conceptually in Figure 5 in Appendix 4) to the satisfaction of the Director-General and DPI. The final landform shall provide for at least 84 hectares of woodland vegetation, in a manner generally consistent with that shown conceptually in Figure 6 in Appendix 4.

Whilst some rehabilitation is occurring on site (for example, the western side of the western emplacement area), Whitehaven currently has no approved Landscape Management Plan in place, although I&I NSW has approved a MOP for the site which includes the identification of rehabilitation areas and management of the rehabilitation process. A component of the Landscape Management Plan is the Rehabilitation and Offset Management Plan. Whilst satisfaction of the DPI can be demonstrated by the approval of the MOP and findings from recent I&I NSW inspections, given that the Landscape Management Plan has not been finalised or approved, it is not possible to verify if the final landform proposed is generally consistent with the landform shown in Figure 5 of Appendix 4 of the Approval to the satisfaction of the Director-General.

Recommendation

Continue negotiations with OEH and DP&I in relation to the Whitehaven Regional Biodiversity Strategy with a view to finalising the Strategy and preparing a Landscape Management Plan for the Rocglen site.

Schedule 3: Condition 30 – Non-compliance

The Proponent shall prepare and implement a detailed Landscape Management Plan for the site to the satisfaction of the Director-General and DPI. This plan must:

- (a) be prepared in consultation with DWE, DECC and GSC by suitably qualified expert/s whose appointment/s have been approved by the Director-General;
- (b) be submitted to the Director-General for approval by the end of March 2009; and
- (c) include a:
 - Rehabilitation and Offset Management Plan;
 - Final Void Management Plan; and
 - Mine Closure Plan.

The Landscape Management Plan has not been finalised or submitted for approval and no draft of the Plan was available for review during the audit.

Recommendation

Prepare and implement a Landscape Management Plan for the Rocglen site.

Schedule 3: Condition 31 – Non-compliance

The Rehabilitation and Offset Management Plan must include:

- (a) the objectives for rehabilitation of the site and offset areas;
- (b) a strategic description of how the rehabilitation of the site would be integrated with surrounding land use;
- (c) a description of the short and long term measures that would be implemented to:
 - rehabilitate the site;
 - implement the biodiversity offsets;
 - manage the remnant vegetation and habitat on the site and in the offset areas; and
 - maximise effective vegetative linkages for the offset areas and across the valley floor to the Whitehaven Regional Biodiversity Offset area;
- (d) detailed performance and completion criteria for the rehabilitation of the site and the implementation of the biodiversity offsets;
- (e) a detailed description of how the performance of the rehabilitation works and the offset areas would be monitored over time to achieve the stated objectives;
- (f) a detailed description of the measures that would be implemented to rehabilitate the site, including the measures to be implemented for:
 - managing the remnant vegetation and habitat on site;
 - minimising impacts on fauna;
 - minimising visual impacts;
 - conserving and reusing topsoil;
 - controlling weeds, feral pests, and access;
 - managing bushfires; and
 - managing any potential conflicts between the rehabilitation works and/or biodiversity offsets and Aboriginal cultural heritage;
- (g) a description of the potential risks to successful rehabilitation and/or revegetation, and a description of the contingency measures that would be implemented to mitigate these risks; and
- (h) details of who is responsible for monitoring, reviewing and implementing the plan.

The Rehabilitation and Offset Management Plan has not been finalised or submitted for approval and no draft of the Plan was available for review during the audit.

Recommendation

Prepare and implement a Rehabilitation and Offset Management Plan as a component of the Landscape Management Plan for the Rocglen site.

Schedule 3: Condition 32 – Non-compliance

The Final Void Management Plan must:

- (a) justify the final location, configuration and future use of the final void;
- (b) incorporate design criteria and specifications of the final void based on verified groundwater modelling predictions and re-assessment of the post-mining groundwater levels;
- (c) assess the potential interactions between groundwater resources, surface water flows and the final void; and
- (d) describe what actions and measures would be implemented to:
 - minimise any potential adverse impacts associated with the final void; and
 - manage and monitor the potential impact of the final void.

The Final Void Management Plan has not been finalised or submitted for approval and no draft of the Plan was available for review during the audit.

Recommendation

Prepare and implement a Final Void Management Plan as a component of the Landscape Management Plan for the Rocglen site.

Schedule 3: Condition 33 – Non-compliance

The Mine Closure Plan must:

- (a) define the objectives and criteria for mine closure;**
- (b) investigate options for the future use of the site, including the final void;**
- (c) investigate ways to minimise the adverse socio-economic effects associated with mine closure, including reduction in local and regional employment levels;**
- (d) describe the measures that would be implemented to minimise or manage the on-going environmental effects of the project; and**
- (e) describe how the performance of these measures would be monitored over time.**

The Mine Closure Plan has not been finalised or submitted for approval and no draft of the Plan was available for review during the audit.

Recommendation

Prepare and implement a Mine Closure Plan as a component of the Landscape Management Plan for the Rocglen site.

In relation to the non-compliances identified for Conditions 30 to 33, the issue of a Landscape Management Plan is further discussed in **Section 3.5.1**.

Schedule 3: Condition 41 (a) – Non-compliance

The Proponent shall construct the Kamilaroi Highway intersections in consultation with GSC and to the satisfaction of RTA. This intersection must:

- (a) be completed within 18 months of this approval.**

The Project Approval 06_0198 is dated 15/04/2008 and 18 months thereafter was 15/10/2009. Whitehaven advised during the audit that protracted negotiations with the RTA resulted in the intersection upgrade not being completed within the required timeframe. A letter from Constructive Solutions dated 3/02/2011 was sighted requesting practical completion be awarded for the Kamilaroi Highway Intersections on 30/09/2010, when the last activity was undertaken for these works. Email correspondence was sighted from Ben Rossiter of Constructive Solutions dated 6/05/2011 stating the remaining items to seek final close out for the works include: resolution of a defect in the concrete slip lane by Kellers, and installation of lighting.

Recommendation

Finalise outstanding works and seek advice from RTA as to their satisfaction of the upgraded intersections.

Schedule 3: Condition 43 – Non-compliance

By the end of March 2009, the Proponent shall reconstruct and bitumen seal Wean Road from the northern end of the existing tar seal to a point 200 metres north of the proposed light vehicle entry to the site from Wean Road. Additionally, within 3 months of the completion of the proposed diversion of Wean Road to facilitate open cut mining operations, the Proponent shall reconstruct and extend the bitumen seal Wean

Road to a point 200 metres north of the relocated position of Jaeger Lane (see Figure 1 of Appendix 2) in general accordance with GSC's Rural Local Roads Standard, and to the satisfaction of GSC.

During the audit, WCMPL staff advised that Wean Road was not sealed until mid 2010 which is beyond the timeframe required by the Approval. Construction of the Wean Road diversion has been completed (although not yet open to traffic) and tar sealing of the road is programmed to occur in the coming months.

As the roadworks have now been completed to the satisfaction of GSC (letter sighted dated 20/5/11) and tar sealing of the diverted Wean Road section has been programmed, no further action is considered necessary. However, the tar sealing of the northern section of Wean Road should be verified at the next audit.

Schedule 3: Condition 44 – Non-compliance

By the end of September 2008, the Proponent shall review (and implement any approved changes to) the road maintenance agreement between the Proponent and GSC for public roads used as the coal transport route within Gunnedah Shire, to the satisfaction of GSC. If agreement cannot be reached, the matter shall be referred to the Director-General for resolution.

Whitehaven has a road maintenance agreement in place that covers all of its mining operations in the Gunnedah area. This agreement was sighted and reviewed during the audit. Whilst the agreement is in place, it was noted that the agreement was not finalised until 5/8/09 which is beyond the timeframe required by the Approval.

As the Road Maintenance Agreement is now in place, no further action is considered to be necessary.

Schedule 3: Conditions 47 (b), (c), (d), & (e) – Non-compliance

The Proponent shall prepare and implement a Greenhouse and Energy Efficiency Plan for the project to the satisfaction of the Director-General. This plan must:
(b) be submitted to the Director-General for approval by the end of September 2008;

The Greenhouse and Energy Efficiency Plan has been prepared and approved. Documents reviewed during the audit included a letter from DoP dated 10/07/2009 approving the Greenhouse and Energy Efficiency Plan. This letter states the plan was received from Rocglen with the accompanying letter dated 3/07/2009. This is beyond the timeframe required by the Project Approval.

As the Plan has now been submitted and approved, no further action is considered necessary.

(c) include a program to monitor greenhouse gas emissions and energy use generated by the project;
(d) include a framework for investigating and implementing measures to reduce greenhouse gas emissions and energy use at the site; and
(e) describe how the performance of these measures would be monitored over time.

The Greenhouse and Energy Efficiency Plan, section 8.7 states that a useful measure of the energy efficiency performance for the Rocglen Mine Site will be to monitor the key performance indicator of energy usage per tonne Run of Mine (ROM) coal produced and MJ per bank cubic metre total equivalent movement (BCM TEM), however no evidence was sighted during the audit to indicate that this is done. Section 8.9 outlines possible energy

savings measures, however the plan does not specify exactly how greenhouse gas emissions and energy use generated by the project will be monitored and reported. AEMR 2009/2010, section 3.17.3 details the results for the reporting period including: diesel consumption, explosives, and fugitive emissions.

The issues associated with the Greenhouse and Energy Efficiency Plan are further discussed in **Section 3.5.3**.

Schedule 5: Condition 2 – Non-compliance

The Proponent shall prepare and implement an Environmental Monitoring Program for the project to the satisfaction of the Director-General. This program must be submitted to the Director-General by the end of September 2008 and consolidate the various monitoring requirements in schedule 3 of this approval into a single document.

The Environmental Monitoring Program, Edition 1 was prepared 13/01/2009, and revised in June 2009. During the audit, a letter from DoP dated 15/07/2009 was sighted approving the Environmental Monitoring Program. WCMPL staff advised the plan was issued to DoP on 30/06/2009. Whilst the Program has been submitted and approved, it was beyond the timeframe required by the Project Approval. Evidence was sighted during the audit to indicate that the Program is generally implemented.

As the Environmental Monitoring Program has now been submitted and approved, no further action is considered necessary.

Schedule 5: Condition 3 – Non-compliance

Within 24 hours of detecting an exceedance of the limits/performance criteria in this approval, or the occurrence of an incident that causes (or may cause) material harm to the environment, the Proponent shall notify the Department and other relevant agencies of the exceedance/incident.

Evidence was sighted during the audit to indicate that where exceedances of the limits/performance criteria have been detected, these exceedances have been reported to both DoP and DECCW. For example, letters dated 19/3/2010 (wet weather discharges), 22/7/09 (PM₁₀ exceedances), 12/10/2009 (noise exceedances) and 23/9/2010 (blast exceedances). However, the notifications are generally not made within 24 hours of detecting an exceedance.

Recommendation

Whitehaven should implement a process to ensure that notification of exceedances is provided to relevant government agencies within the required timeframe.

Schedule 5: Condition 4 – Non-compliance

Within 6 days of notifying the Department and other relevant agencies of an exceedance/incident, the Proponent shall provide the Department and these agencies with a written report.

Evidence was sighted during the audit to indicate that where exceedances of the limits/performance criteria have been detected, these exceedances have been reported to both DoP and DECCW. For example, letters dated 19/3/2010 (wet weather discharges), 22/7/09 (PM₁₀ exceedances), 12/10/2009 (noise exceedances) and 23/9/2010 (blast exceedances). However, the notifications are generally not made within six days of notifying the Department as required in Condition 3 above.

Recommendation

Whitehaven should implement a process to ensure that notification and reports of exceedances are provided to relevant government agencies within the required timeframe.

Schedule 5: Condition 6 – Non-compliance

By the end of March 2011, and every 3 years thereafter, unless the Director-General directs otherwise, the Proponent shall commission and pay the full cost of an Independent Environmental Audit of the project.

Letter from WCMPL to DoP dated 22/03/2011 sighted which acknowledged that the Rocglen audit was due by the end of March 2011, however requested an extension of the due date to October 2011 to align the audit with the Tarrawonga mine audit. There was no evidence sighted during the audit to indicate that this request was approved by DoP, although Whitehaven advised that a phone message from Colin Phillips from DoP indicated that the outcomes of the audit would be required prior to the determination of the Rocglen Extension project application. Umwelt (Australia) Pty Limited was engaged in April 2011 to conduct the independent compliance audit which is just beyond the timeframe required which was by the end of March 2011.

As the audit has now been completed, no further action is considered to be required for this non-compliance.

3.4.2 Statement of Commitments

A full compliance checklist against the requirements of the Statement of Commitments was completed as part of the audit and is included as **Appendix 3**. A summary of the non-compliance issues are outlined below.

Commitment 3.6 – Non-compliance and Area of Concern

Store potentially hydrocarbon-contaminated water in the oil/water separator for regular removal from site by a licensed contractor.

The MOP, section 3.6.2.3 states that drainage from the washdown bay at the workshop will report to an oil separator with separated oil collected in a separate storage tank which will be collected for disposal by a licensed contractor. The AEMR 2009/2010, section 2.6.3 states that runoff from the concrete vehicle and equipment wash pad was directed to an oil separator and containment system for subsequent pump out and disposal. The oil/water separator was inspected during the audit site inspection.

Although potentially hydrocarbon-contaminated water is stored in the oil/water separator, during the on-site audit inspection it was identified that 'clarified' water from the separator is discharged into a drain which leads to a 'clean water' storage dam (SD3). There was no evidence that the potentially contaminated water is regularly removed from site by a licensed contractor.

This issue was identified as an area of concern and is further discussed in **Section 4.2.1.1**.

Commitment 4.1 – Non-compliance

Prepare a rehabilitation plan addressing each of the Actions 4.5 to 4.11.

A Rehabilitation Plan has not yet been prepared. During the on-site audit inspection, it was verbally advised by WCMPL staff that the Landscape Management Plan would include a Rehabilitation Plan.

This issue was discussed during the on-site audit inspection with the Environmental Manager, who clarified that the Rehabilitation Plan has not been prepared at this stage due to the pending Rocglen Coal Extension Project application currently being processed by DoP. It was verbally confirmed by the Environmental Manager that once the outcome of this project application was determined, the Rehabilitation Plan would be prepared for the modified operations.

Recommendation

Continue negotiations with OEH and DP&I in relation to the Whitehaven Regional Biodiversity Strategy with a view to finalising the Strategy and preparing a Landscape Management Plan for the Rocglen site.

Commitment 4.2 – Non-compliance

Review the progress of rehabilitation and refine the Rehabilitation and Landscape Management Plan reflecting site observations and monitoring.

The Rehabilitation Plan and Landscape Management Plan have not yet been prepared (see comments regarding commitment 4.1 above). However, rehabilitation of completed areas is being undertaken as observed during the audit site inspection (for example, the western side of the western emplacement area). Further evidence of the monitoring of rehabilitation was sighted in the form of the Monthly Environmental Checklist which has a section on monitoring Land Management/Rehabilitation areas.

Even though rehabilitation has commenced, it is not reviewed against the Rehabilitation and Landscape Management Plan as such a plan has not yet been developed.

Recommendation

Prepare and implement a Landscape Management Plan for the Rocglen site.

Commitment 4.3 – Non-compliance

Place attention in the Rehabilitation and Landscape Management Plan upon the final void landform particularly the depth below the long term groundwater level and the diversion of all external water flows around the void – to be prepared in consultation with DWE and DECC.

The Rehabilitation Plan and Landscape Management Plan have not yet been prepared and no draft was provided for review during the audit. Therefore it is not possible to verify if these requirements have been included.

Recommendation

Prepare and implement a Landscape Management Plan for the Rocglen site.

Commitment 4.4 – Non-compliance

Integrate the results of the planning in Actions 4.2 and 4.3 into the comprehensive Mine Closure Plan (see Commitment 18.5).

The Mine Closure Plan, which is a component of the Landscape Management Plan, has not yet been prepared and no draft was provided for review during the audit. Therefore it is not possible to verify if these requirements have been included in the Plan.

Recommendation

Prepare and implement a Mine Closure Plan for the Rocglen site.

Commitment 5.10 – Non-compliance

Undertake all maintenance activities within designated areas of the Project Site facilities area, i.e. maintenance workshop.

This commitment specifically infers that all maintenance activities are to be undertaken in the maintenance workshop. Whilst routine maintenance and servicing is conducted within the maintenance workshop (and a haul truck was observed undergoing maintenance in the workshop at the time of the audit), emergency maintenance of plant and equipment may be undertaken in other areas due to plant breakdown etc.

Although Whitehaven is not specifically complying with this commitment, the practice of in-pit servicing using the designated and specifically equipped service truck is, in the auditor's opinion, a suitable practice for plant breakdowns and no further action is considered to be required.

Commitment 6.7 – Non-compliance

Establish and enhance habitat corridors, linking the vegetation of Vickery State Forest with remnant areas of vegetation on and surrounding the Project Site.

The Landscape Management Plan has not been prepared and no draft was provided for review during the audit. During the audit site inspection, it was noted that there are some existing habitat corridors on the site (e.g. Jaeger Lane and the area in the north west corner of the site), however, there is no evidence that a plan has been developed to enhance these areas or establish new corridors, although evidence was sighted during the audit site inspection that a corridor of trees has been planted on the southern boundary of the ML.

Recommendation

Details of specific habitat corridor planning should be included in the Landscape Management Plan.

Commitment 6.17 – Non-compliance

Incorporate the creation or enhancement of wildlife corridors into a biodiversity offset strategy. This should consider inclusion of recommendations (ix) to (xii) and (xvii) of Countrywide Ecological Service (2007).

The Landscape Management Plan has not been prepared and no draft was provided for review during the audit. During the audit site inspection, it was noted that there are some existing habitat corridors on the site (e.g. Jaeger Lane and the area in the north-west corner of the site), however, there is no evidence to indicate that these have been included into the biodiversity offset strategy.

Recommendation

Details of specific habitat corridor planning should be included in the Landscape Management Plan.

Commitment 6.18 – Non-compliance

Prepare a flora and fauna management plan for those areas of the Project Site not used for ongoing grazing and cropping.

A specific Flora and Fauna Management Plan has not been prepared. This issue is further discussed in **Section 3.5.4**.

Commitment 6.20 – Non-compliance**Include a vertebrate pest control program as part of the mining operation.**

There was no evidence sighted during the audit to indicate that a vertebrate pest control program has been documented or implemented. It was advised that this will form part of the Landscape Management Plan, which is yet to be finalised.

Recommendation

Prepare and implement a Landscape Management Plan for the Rocglen site, including a vertebrate pest control program.

Commitment 6.24 – Non-compliance**Construct suitable fencing around the 42.3ha of woodland vegetation to be retained as an offset (see Figure A).**

During the audit site inspection, it was observed that part of the northern end of the proposed offset area was fenced. Details of the offset area and fencing was to be included in the Landscape Management Plan, however that has not yet been finalised.

Recommendation

Complete the fencing of the area of woodland vegetation to be retained as an offset.

Commitment 6.25 – Non-compliance**Allocate a proportion of the Whitehaven Regional Biodiversity Offset Area (EA Figure 2.15) to offset the areas of native vegetation removed during the mine life – prepared in consultation with DECC.**

The AEMR 2009/2010, section 6.3 states that one continuous improvement goal is to finalise the establishment of the Whitehaven Regional Biodiversity Offset Area, which includes areas set aside as offset against the Rocglen development.

Whitehaven advised during the audit that a section of woodland has been allocated as the biodiversity offset area, however the biodiversity offset area cannot be confirmed until the Whitehaven Regional Biodiversity Offset Strategy is finalised and approved.

Recommendation

Continue negotiations with OEH and DP&I in relation to the Whitehaven Regional Biodiversity Strategy with a view to finalising the Strategy and preparing a Landscape Management Plan for the Rocglen site.

Commitment 6.26 – Non-compliance**Invite DWE and DECC representatives to inspect the root systems of grey box and ironbark vegetation to identify rooting depths, particularly in areas adjoining Vickery State Forest.**

During the on-site audit inspection, the Environmental Manager confirmed that DWE and DECC representatives had not yet been invited to site.

Recommendation

Invite NOW and OEH representatives to inspect the root systems of grey box and ironbark vegetation to identify rooting depths, particularly in areas adjoining Vickery State Forest.

Commitment 7.5 – Non-compliance

Enclose the scarred trees identified within a fenced area of at least 20m radius from the tree with the location and words “Culturally Sensitive Area – Aboriginal Scarred Tree” marked on all mine plans.

During the on-site audit inspection, it was observed that the scarred trees on Wean Road had been fenced off with parawebbing as part of the Wean Road diversion works. Fencing and/or signage of the scarred trees as described in this commitment has not occurred, as it was considered by Whitehaven that these actions could be potentially detrimental by drawing attention to the existence of the artefacts which are within a public road reserve. The auditor concurs with this approach.

Recommendation

It is recommended that Whitehaven liaise with DECCW, DoP and the aboriginal stakeholder groups to obtain their concurrence to the approach of not providing fencing or signage so as not to draw attention to the scarred trees in Wean Road.

Commitment 8.10 – Non-compliance

Comply with the following noise limits.

- LAeq (15 minute) of 35dB(A) during construction and operational stages of the mine.
- LA1 (1 minute) or LAm_{ax} of 45dB(A) at night.

There have been several noise exceedance incidents since operations commenced in 2008. In most cases, the exceedances were related to inversion conditions and evidence was sighted to indicate that operations were modified to avoid inversion conditions.

For example, on 8/09/2009 attended noise monitoring was undertaken at "Costa Vale" (N1) and "Surrey" (N2). Spectrum Acoustics reported that noise emissions from the mine exceeded the criterion of 35 dB(A) at "Surrey" during the morning survey (37 dB(A)) and "Costa Vale" during the evening survey (38 dB(A)). At both locations the mine noise was attributable to engine noise and revs mainly from haul trucks. Whitehaven reviewed the Rocglen weather station data, and determined that a temperature inversion was present at the time of the exceedance at "Surrey".

A fault with the weather station during the evening survey, when the "Costa Vale" exceedance was recorded, removed the capacity to assess incidence of temperature inversion at that time. As this result represented the first operational noise exceedances at the "Costa Vale" and "Surrey" properties, Whitehaven proposed to maintain the current noise monitoring arrangements. DoP and DECCW were notified in writing of the exceedances and the proposed continuation of current monitoring arrangements.

Similarly, noise exceedances were also recorded at "Costa Vale" and "Surrey" on 30/7/08 and 18/8/09 during the morning periods. In these cases, monitoring was undertaken throughout the morning and by 9.30 am, noise levels had returned to below criteria.

Whitehaven continues to monitor noise levels in accordance with its approved Noise Monitoring Program and has also acquired a real time noise monitor which has been located at several residences to monitor noise levels as a result of complaints. It is considered that Whitehaven's actions in investigating the noise exceedances and the continued monitoring is appropriate and no further actions are considered to be required.

Commitment 9.13 – Non-compliance

Ensure all blasts generate airblast overpressure levels at non-project-related residences of <120dB(L) for 100% of blasts and <115dB(L) for 95% of blasts.

A review of the blast results to March 2011 indicated two exceedances of the overpressure level on the 24 and 27 August 2009. DoP and DECCW were notified and an investigation was carried out by Orica Mining Services. In the 12 month period between 1/8/09 and 31/7/10, there were 24 blasts undertaken with two exceedances. The exceedances therefore represent 8.3 per cent of the total number of blasts for that reporting period, being above the allowable 5 per cent of blasts above 115 dB. It was noted that there have been no exceedances of the 120 dB criteria.

Whitehaven continues to monitor blasts in accordance with its approved Blast Monitoring Program and no further exceedances have been identified. It is considered that Whitehaven's actions in investigating the blast exceedances and the continued monitoring is appropriate and no further actions are considered to be required.

Commitment 10.2 – Non-compliance

Outline contingency measures in the Surface Water Management Plan that will accommodate the full range of seasonal conditions likely throughout the mine life.

The Water Management Plan, section 2.2.2 states the waterways were sown following construction to establish a cover crop to further reduce potential for erosion and sedimentation. The seasonal conditions will have a direct influence on the effective operation of the waterways, and in the event that groundcover establishment has been ineffective, alternate options such as rock armouring will be introduced to ensure effective erosion and sediment control. However, there is no specific evidence relating to control measures to accommodate the full range of seasonal conditions. Evidence was sighted that monthly environmental inspections are undertaken and additional actions are identified where necessary in relation to erosion and sedimentation issues. In the auditor's opinion, the management actions currently in place at Rocglen are considered appropriate and no further actions are considered to be required.

Commitment 10.15 – Non-compliance

Maintain a grass coverage of >70% over the Project Site.

The mine plan figures and aerial photos reviewed during the audit indicate that there is not a grass coverage of >70 per cent on the project site. The observations from the audit site inspection would support these findings.

Recommendation

Review the grass coverage across the site and undertake remedial measures if grass cover is less than 70 per cent.

Commitment 10.18 – Non-compliance

Ensure any water discharged from the northern and southern discharge points (Figure B) meets the DECC Environment Protection Licence criteria, expected to be as follows.

- TSS < 50mg/L.
- pH: 6.5 to 8.5.
- Oil & grease < 10mg/L.
- Electrical conductivity < 350µS/cm

The EPL approved wet weather discharge locations are:

- Point 11 - Storage Dam 3 (SD3) identified as 'SD3 Wet Weather Discharge Monitor Point Southern Boundary - Site Exit', and
- Point 12 - Northern site boundary labelled as 'Wet Weather Discharge Monitor Point Northern Boundary'.

The AEMR 2009/2010, section 2.8.3 details that there were 8 discharge events recorded in the reporting period from two locations, Storage Dam 3 (SD3) and Sediment Basin (SB18). Whilst there were no exceedances of the pH or oil and grease criteria, there were exceedances of the total suspended solids (TSS) criteria.

The TSS criteria for Points 11 and 12 as set in the EPL is 50 mg/L. However, condition L3.4 of the EPL states:

The Total Suspended Solids concentration limits specified for Points 11 and 12 may be exceeded for water discharged provided that: (a) the discharge occurs solely as a result of rainfall measured at the premises that exceeds 38.4 mm, over any consecutive 5 day period immediately prior to the discharge occurring; and (b) all practical measures have been implemented to dewater all sediment dams within 5 days of rainfall such that they have sufficient capacity to store run off from a 38.4 millimetre, 5 day rainfall event.

A review of the wet weather discharge monitoring data identified there were instances where the TSS recorded was >50 mg/L and the rainfall recorded over the preceding five day period was less than 38.4 millimetres. Some examples include: 4 Jan 2010 at SD3 followed 25.2 millimetres rain over the preceding five day period and the TSS level recorded was 1490 mg/L. 15 Jan 2010 at SB18 followed 21.6 millimetres rain over the previous day and TSS level recorded was 1490 mg/L. 31 March 2010 at SD3 followed 16.8 millimetres rain with TSS level recorded 108 mg/L. Therefore there were instances of TSS level exceedances that did not comply with the EPL conditions.

The issue of wet weather discharges is further discussed in **Section 4.2.1**.

Commitment 10.19 – Non-compliance

Monitor the quantity and quality of mine inflows and, through comparison against the predictions of RCA (2007).

During the on-site audit inspection it was verbally advised by WCMPL staff that mine inflows are currently measured for quality, however are not being measured for quantity, apart from volume pumped to the pit water dam. This volume of water comprises both groundwater inflow and surface water flows into the open cut pit.

Recommendation

Establish monitoring protocols to monitor the quantity and quality of mine inflows, and compare the results to the predictions of RCA (2007).

Commitment 10.28 – Non-compliance

Implement a 3-phase remedial action plan in the event of a major hydrocarbon spill as follows:

- **Phase 1 – Initial Recovery: Recover as much as possible at the source by pumping free hydrocarbon from the surface and excavating hydrocarbon-contaminated materials.**
- **Phase 2 – Source Control: Begin hydraulic control of the source to prevent spreading of contamination.**

- **Phase 3 – Recovery: If necessary, install boreholes to remove and treat contaminated groundwater.**

The MOP, AEMRs and WMP were reviewed during the audit and none of the documents reviewed included the requirements for remedial action of hydrocarbon spills.

Recommendation

Whitehaven should develop a hydrocarbon spill management plan which documents the proposed approach to managing hydrocarbon spills as outlined in this commitment.

Commitment 11.1 – Non-compliance

Use a maximum of six lighting plants for night-time activities.

AEMR 2009/2010 section 2.4.3 states there are eight lights for evening/night operations. This was confirmed by the mine's Project Manager, who advised during an audit interview that up to eight lighting plants are used.

Recommendation

Whitehaven should review the use of lighting plants for night time activities to ensure that lighting issues can be managed to avoid impacts to adjacent residents.

Commitment 12.7 – Non-compliance

Transport all earthmoving equipment and construction materials from the Whitehaven Mine via Hoad Lane and Shannon Harbour Road.

A review of the CCC meeting minutes dated 22/10/2008 showed a complaint made on 12/08/2008 in regards to trucks transporting demountable buildings to site, overtaking a school bus on Wean Road. Another complaint on 20/08/2008 indicated dust from Wean Road at the "Penryn" residence due to mine related traffic.

Since construction commenced 1/08/2008, these complaints would most likely be in relation to construction materials.

As construction has now been completed, no further action is considered necessary.

Commitment 12.27 – Non-compliance

Construct a height bar above the light vehicle entrance to prevent access to the Belmont Coal Mine for vehicles other than light vehicles.

It was observed during the audit site inspection that there is no height bar above the light vehicle entrance. However, as all heavy vehicles are required to access the site from Bluevale Road and Shannon Harbour Road, and it was observed during the audit that heavy vehicles do access the site via this route, this commitment is somewhat redundant. In the auditor's opinion, no further action is considered to be required.

Commitment 12.29 – Non-compliance

Undertake a research and development program to investigate means by which coal trucks and the road surface can be modified to ensure the DECC sleep criteria can be satisfied.

Whitehaven advised during the audit that the research and development program has not been undertaken. Noise monitoring data to date has not identified any exceedances of the road transport noise criteria which would indicate that sleep criteria are currently being met.

Recommendation

Whitehaven should continue to monitor road traffic noise associated with the operations and if exceedances of the sleep disturbance criteria are detected, then it is recommended that the research and development program be undertaken.

Commitment 12.30 – Non-compliance

Undertake the research and development program in consultation with the residents of “Weroona” and “Brooklyn”.

Whitehaven advised during the audit that the research and development program has not been undertaken.

Recommendation

Whitehaven should continue to monitor road traffic noise associated with the operations and if exceedances of the sleep disturbance criteria are detected, then it is recommended that the research and development program be undertaken.

Commitment 13.3 – Non-compliance

Place higher alkalinity soils over the surface of the overburden emplacement to provide neutralising capacity in the event pockets of acid forming rock are encountered.

During the on-site audit inspection it was verbally advised by WCMPL staff that they are not currently testing for acid forming rock.

Recommendation

Whitehaven should investigate the need to implement a testing program for acid forming rock such that any acid generating potential can be neutralised as described in this commitment.

Commitment 14.18 – Non-compliance

Assess each of the measures recommended in Section 6.7.2 of Heggies (2007) and report on the implementation of those determined to be practicable.

This refers to the Air Quality Assessment completed by Heggies in 2007 as part of the original EA. Section 6.7.2 outlines the greenhouse gas mitigation measures recommended to be implemented. The Air Quality Monitoring Program does not refer to greenhouse gas emissions which are:

Diesel Consumption:

- optimise and schedule vehicle operations to reduce fuel consumption;
- maintain engines according to manufacturers guidelines and keep tyres at optimum pressure to maximise fuel efficiency;
- reduce vehicle idling time;
- consider the optimal location of any on-site refuelling station; and
- consider the use of alternative fuels, such as biodiesel, for mobile plant.

Electricity Consumption:

- ensure that externally-sourced electricity for processing plant is generated by renewable energy technologies, such as wind, solar or biomass; and
- implement solar-powered lighting about site where possible.

On-Site Processing:

- ensure that the most efficient type of crushing plant is linked to the hourly throughput. If less than 500 tonnes per hour are being processed then a Jaw Crusher rather than a Gyratory Crusher may be more efficient;
- optimise size settings on crushers; and
- ensure early rejection of unsaleable material to reduce crusher burden.

The AEMR 2009/2010, section 3.17.3 details the greenhouse gas emissions for the reporting period. No documented evidence could be located of an assessment of each of the GHG measures and their implementation. It should also be noted that no externally-sourced electricity is used on site as all electricity produced is from diesel powered generators. Therefore the conditions in the Heggies report relating to reducing electricity consumption are not considered to be relevant.

Recommendation

Whitehaven should report on the implementation of measures for diesel consumption and on-site processing as part of the AEMR.

Commitment 15.3 – Non-compliance

Provide a local induction kit to any new workers (from outside the district) including contact details for community groups and services throughout the region.

The Environmental Management Strategy (EMS), Table 5.15 states that one socio-economic key performance outcome is: local induction kit provided to new workers including contact details for community groups and services.

During the on-site audit inspection it was verbally advised by WCMPL staff that this was not currently being practiced.

Recommendation

Whitehaven should consider the development and provision of a local induction kit for new workers from outside the local district.

Commitment 16.12 – Non-compliance

Prepare a Bushfire Management Plan for the Project.

A Bushfire Management Plan has not been prepared. During the audit interviews, Whitehaven environmental staff indicated that bushfire management would be a component of the Landscape Management Plan and a stand-alone Bushfire Management Plan was unlikely to be prepared.

Provided that bushfire management is adequately addressed as part of the Landscape Management Plan, the auditor considers that a stand-alone Bushfire Management Plan may be unnecessary.

Recommendation

The need for a separate Bushfire Management Plan should be reviewed once the Landscape Management Plan has been finalised and approved.

Commitment 16.13 – Non-compliance**Regularly liaise with NSW Forests personnel in relation to bushfire hazard posed by Vickery and Kelvin State Forests.**

The AEMR 2009/2010, section 3.15.1 states that the mine maintains firebreaks around both its landholding and the mine area and maintains fire fighting equipment as well as earthmoving equipment, a water truck etc which would be used in the control of fires. Rocglen personnel also liaise with the local (Nandewar) Rural Fire Service, as required.

However, there was no evidence sighted during the audit to indicate that Whitehaven staff regularly liaise with NSW Forests personnel in relation to bushfire hazards.

Recommendation

Whitehaven should commence a program of regular consultation with NSW Forests in relation to bushfire management.

Commitment 17.1 – Non-compliance**Monitor the SWL, saturated thickness and water quality of the following registered bores.**

- **GW050395, GW050166, GW011015 & GW011066 – on the “Glenroc” property.**
- **GW045621 - on the “Yarrowonga” property.**
- **GW044068 & GW044069 - on the “Yarrari” property.**
- **GW022319 - on the “Roseberry” property.**
- **GW13369 on the “Brolga” property.**

WMP section 6.3.1 and AEMR 2009/2010 Table 8 detail the groundwater monitoring locations, which are:

- WB-1 (GW000743) on the “Costa Vale” property
- WB-2 (GW050395) on the “Roseberry” property
- WB-3 (GW050166) on the “Glenroc” property
- WB-4 (GW045621) on the “Yarrowonga” property
- WB-5 (GW011066) on the “Roseberry” property
- WB-6 (GW044068) on the “Yarrari” property
- WB-7 (GW022319) on the “Roseberry” property
- WB-8 (GW052958) on the “Surrey” property
- WB-9 on the “Carlton” property
- WB-10, WB-11 & WB-12 on the “Brolga” property
- MP-1 (GW968533) at the Rocglen Coal Mine
- MP-2 (GW968534) at the Rocglen Coal Mine

- MP-3 (GW968535) on the “Stratford” property
- MP-4 (GW968536) on Surrey Lane
- MP-5 (GW968537) on the “Yarrowonga” property

Monitoring data reviewed during the audit indicates that monitoring is being undertaken at each of these locations. However, the following bores are not listed as being monitored in the WMP or AEMR and no results were available:

- GW011015 (Glenroc)
- GW044069 (Yarrari)
- GW13369 (Brolga)

Recommendation

Whitehaven should review the groundwater monitoring locations to ensure that the monitoring program includes the registered bores as documented in this commitment (where those bores still exist) or alternative locations at each relevant property. The results of the review should be reported in the next AEMR to document where alternate locations were required and why.

Commitment 18.4 – Non-compliance

Prepare the following environmental plans for the Project:

- **Flora and Fauna Management Plan**
- **Transport Management Plan**
- **Rehabilitation and Landscape Management Plan**
- **Bushfire Management Plan**
- **Final Void Design and Management Plan**
- **Prepare a comprehensive Mine Closure Plan (for submission to all relevant authorities)**

There was no evidence sighted during the audit to indicate that the Plans identified above have been prepared. Issues associated with the management plans required to be prepared are further discussed in **Section 3.5**.

3.4.3 Environmental Protection Licence

Whitehaven Coal is required to and does hold an EPL for its Rocglen operation as it conducts an activity that requires a licence under the POEO Act. The EPL outlines Whitehaven Coal’s responsibilities and the environmental performance standards it is required to meet, being:

- operating conditions;
- monitoring and recording conditions; and
- reporting conditions.

Whitehaven Coal reports its performance against the above responsibilities and environmental performance status via the submission of its Annual Return.

The licence reviewed as part of this audit has a review date of 18 August 2014.

A full compliance checklist against the requirements of EPL 12870 was completed as part of the audit and is included as **Appendix 4**. A summary of the non-compliance issues are outlined below.

Condition L1.1 – Non-compliance

Except as may be expressly provided in any other condition of this licence, the licensee must comply with section 120 of the Protection of the Environment Operations Act 1997.

Section 120 of this Act 'Prohibition of pollution of waters', states:

- (1) A person who pollutes any waters is guilty of an offence.
- (2) In this section:
"pollute" waters includes cause or permit any waters to be polluted.

There were exceedances of TSS levels recorded from water discharged offsite on several occasions during the 2009/2010 reporting period, which did not comply with the EPL conditions. These have been previously discussed under Project Approval condition no. 3-1 and Statement of Commitment item no. 10.8.

Condition L3.1 – Non-compliance

For each monitoring/discharge point or utilisation area specified in the tables below (by a point number), the concentration of a pollutant discharged at that point, or applied to that area, must not exceed the concentration limits specified for that pollutant in the table.

and

Condition L3.4 (a) – Non-compliance

The Total Suspended Solids concentration limits specified for Points 11 and 12 may be exceeded for water discharged provided that:

(a) the discharge occurs solely as a result of rainfall measured at the premises that exceeds 38.4 millimetres over any consecutive 5 day period immediately prior to the discharge occurring.

The EPL approved wet weather discharge locations are:

- Point 11 - Storage Dam 3 (SD3) identified as 'SD3 Wet Weather Discharge Monitor Point Southern Boundary - Site Exit', and
- Point 12 - Northern site boundary labelled as 'Wet Weather Discharge Monitor Point Northern Boundary'.

The AEMR 2009/2010, section 2.8.3 details that there were 8 discharge events recorded in the reporting period from two locations, Storage Dam 3 (SD3) and Sediment Basin (SB18). Whilst there were no exceedances of the pH or oil and grease criteria, there were exceedances of the total suspended solids (TSS) criteria.

The TSS criteria for Points 11 and 12 as set in the EPL is 50 mg/L. However, condition L3.4 of the EPL states:

The Total Suspended Solids concentration limits specified for Points 11 and 12 may be exceeded for water discharged provided that: (a) the discharge occurs solely as a result

of rainfall measured at the premises that exceeds 38.4 mm over any consecutive 5 day period immediately prior to the discharge occurring; and (b) all practical measures have been implemented to dewater all sediment dams within 5 days of rainfall such that they have sufficient capacity to store run off from a 38.4 millimetre, 5 day rainfall event.

A review of the wet weather discharge monitoring data identified there were instances where the TSS recorded was >50 mg/L and the rainfall recorded over the preceding five day period was less than 38.4 millimetres. Some examples include: 4 Jan 2010 at SD3 followed 25.2 millimetres rain over the preceding five day period and the TSS level recorded was 1490 mg/L. 15 Jan 2010 at SB18 followed 21.6 millimetres rain over the previous day and TSS level recorded was 1490 mg/L. 31 March 2010 at SD3 followed 16.8 millimetres rain with TSS level recorded 108 mg/L. Therefore there were instances of TSS level exceedances that did not comply with the EPL conditions.

The issue of wet weather discharges is further discussed in **Section 4.2.1**.

Condition L6.1 (a) – Non-compliance

Noise from the premises must not exceed:

(a) an LAeq (15 minute) noise emission criterion of 35 dB(A) at all times (day, evening and night time periods).

There have been several noise exceedance incidents since operations commenced in 2008. In most cases, the exceedances were related to inversion conditions and evidence was sighted to indicate that operations were modified to avoid certain activities during inversion conditions.

For example, on 8/09/2009 attended noise monitoring was undertaken at "Costa Vale" (N1) and "Surrey" (N2). Spectrum Acoustics reported that noise emissions from the mine exceeded the criterion of 35 dB(A) at "Surrey" during the morning survey (37 dB(A)) and "Costa Vale" during the evening survey (38 dB(A)). At both locations the mine noise was attributable to engine noise and revs mainly from haul trucks. Whitehaven reviewed the Rocglen weather station data, and determined that a temperature inversion was present at the time of the exceedance at "Surrey". A fault with the weather station during the evening survey, when the "Costa Vale" exceedance was recorded, removed the capacity to assess incidence of temperature inversion at that time. As this result represented the first operational noise exceedance at the "Costa Vale" and "Surrey" properties, Whitehaven proposed to maintain the current noise monitoring arrangements. DoP and DECCW were notified in writing of the exceedances and the proposed continuation of current monitoring arrangements.

Similarly, noise exceedances were also recorded at "Costa Vale" and "Surrey" on 30/7/08 and 18/8/09 during the morning periods. In these cases, monitoring was undertaken throughout the morning and by 9.30am, noise levels had returned to below criteria.

Whitehaven continues to monitor noise levels in accordance with its approved Noise Monitoring Program and has also acquired a real time noise monitor which has been located at several residences to monitor noise levels as a result of complaints. It is considered that Whitehaven's actions in investigating the noise exceedances and the continued monitoring is appropriate and no further actions are considered to be required.

Condition L7.1 – Non-compliance

The overpressure level from blasting operations at the premises must not exceed 115dB (Lin Peak) for more than five per cent of the total number of blasts over each

reporting period. Error margins associated with any monitoring equipment used to measure this are not to be taken into account in determining whether or not the limit has been exceeded.

A review of the blast results to March 2011 indicated two exceedances of the overpressure level on the 24 and 27 August 2009. DoP and DECCW were notified and an investigation was carried out by Orica Mining Services. In the 12 month period between 1/8/09 and 31/7/10, there were 24 blasts undertaken with two exceedances. The exceedances therefore represent 8.3 per cent of the total number of blasts for that reporting period, being above the allowable 5 per cent of blasts above 115 dB. It was noted that there have been no exceedances of the 120 dB criteria.

Whitehaven continues to monitor blasts in accordance with its approved Blast Monitoring Program and no further exceedances have been identified. It is considered that Whitehaven's actions in investigating the blast exceedances and the continued monitoring is appropriate and no further actions are considered to be required.

Condition R2.1 – Non-compliance

Note: The licensee or its employees must notify the EPA of incidents causing or threatening material harm to the environment as soon as practicable after the person becomes aware of the incident in accordance with the requirements of Part 5.7 of the Act.

Notifications must be made by telephoning the Environment Line service on 131 555.

Evidence was sighted during the audit to indicate that where exceedances of the limits/performance criteria have been detected, these exceedances have been reported to both DoP and DECCW. For example, letters dated 19/3/2010 (wet weather discharges), 22/7/09 (PM₁₀ exceedances), 12/10/2009 (noise exceedances) and 23/9/2010 (blast exceedances). However, the notifications are generally not made within 24 hours of detecting an exceedance and there was no evidence that they were reported via the Environment Line service.

Recommendation

Whitehaven should implement a process to ensure that notification of exceedances is provided to relevant government agencies within the required timeframe.

Condition R2.2 – Non-compliance

The licensee must provide written details of the notification to the EPA within 7 days of the date on which the incident occurred.

Evidence was sighted during the audit to indicate that where exceedances of the limits/performance criteria have been detected, these exceedances have been reported to both DoP and DECCW. For example, letters dated 19/3/2010 (wet weather discharges), 22/7/09 (PM₁₀ exceedances), 12/10/2009 (noise exceedances) and 23/9/2010 (blast exceedances). However, the notifications are generally not made within 7 days of the date on which the incident occurred.

Recommendation

Whitehaven should consider implementing a process to ensure that notification and reports of exceedances are provided to relevant government agencies within the required timeframe.

3.4.4 Mining Lease 1620

A full compliance checklist against the requirements of ML 1609 was completed as part of the audit and is included as **Appendix 5**.

Condition 2 – Non-compliance

Environmental Harm:

The proponent 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.

The site inspection and audit of compliance documentation found no significant ongoing issues relating to environmental management at the site. However several non-conformances have been identified as documented in the compliance checklists and summarised in this report. Rocglen has experienced some environmental performance issues relating to air, noise, blasting and water discharge exceedances. Many of these exceedances were during the early stages of operations and Whitehaven has investigated each incident and modified operations accordingly to minimise the potential for future exceedances. Environmental Management Plans have been prepared for a range of environmental issues and evidence was sighted that the plans that have been prepared have generally been implemented. It was noted that there is a good level of environmental awareness amongst all staff interviewed as part of the audit. The key compliance issue relates to the lack of an approved Landscape Management Plan for the site.

Condition 5 (a) – Non-compliance

The EMR must:

a) report against compliance with the MOP.

A review of the AEMR's produced to date (2008/2009 and 2009/2010) indicated that the AEMR reports against compliance with the EPL, Project Approval and Mining Lease, but not specifically the MOP.

Recommendation

Whitehaven should commence reporting on compliance with the MOP as part of the next AEMR.

Condition 15 (b) – Non-compliance

Blasting:

(b) Blast Overpressure: The lease holder must ensure that the blast overpressure noise level generated by any blasting within the lease area does not exceed 115 dB (linear) in more than 5% of the total number of blasts over a period of 12 months, at any dwelling or occupied premises as the case may be, unless determined otherwise by the Department of Environment and Climate Change.

A review of the blast results to March 2011 indicated two exceedances of the overpressure level on the 24 and 27 August 2009. DoP and DECCW were notified and an investigation was carried out by Orica Mining Services. In the 12 month period between 1/8/09 and 31/7/10, there were 24 blasts undertaken with two exceedances. The exceedances therefore represent 8.3 per cent of the total number of blasts for that reporting period, being above the allowable 5 per cent of blasts above 115 dB. It was noted that there have been no exceedances of the 120 dB criteria.

Whitehaven continues to monitor blasts in accordance with its approved Blast Monitoring Program and no further exceedances have been identified. It is considered that Whitehaven's actions in investigating the blast exceedances and the continued monitoring is appropriate and no further actions are considered to be required.

Condition 17 (a) – Non-compliance

Exploratory Drilling:

(a) At least twenty eight days prior to commencement of drilling operations the lease holder must notify the relevant Department of Water and Energy Regional Hydrogeologist of the intention to drill exploratory drill holes together with information on the location of the proposed holes.

Whitehaven personnel indicated that exploratory drilling had been undertaken within the ML area as part of the Rocglen Extension project investigations. No evidence was sighted during the audit to indicate that Whitehaven has notified the Regional Hydrogeologist prior to undertaking exploration drilling.

Recommendation

Whitehaven should undertake the required notification and consider implementing a process (e.g. a checklist) to ensure that notification occurs in the future as required.

Condition 19 – Non-compliance

Transmission lines, Communication lines and Pipelines:

Operations must not interfere with or impair the stability or efficiency of any transmission line, communication line, pipeline or any other utility on the lease area without the prior written approval of the Director-General and subject to any conditions he may stipulate.

When the Belmont homestead was demolished during the construction phase of the project, the electricity lines servicing the house were removed. Whilst consultation and negotiation was undertaken with Country Energy (as the service provider responsible for the lines), there was no evidence sighted during the audit to indicate that prior written approval of the Director-General was obtained as required by this condition.

Recommendation

Whitehaven should implement a process (eg a checklist) to ensure that notification occurs as required.

3.5 Environmental Management Plans

Whitehaven Coal has developed a number of environmental management plans and monitoring programs for the project in accordance with relevant requirements of the Project Approval. These documents address specific impacts associated with the project, such as noise, and reflect the requirements detailed in the Project Approval and statement of commitments. The plans and programs required to be prepared include:

- Noise Monitoring Program;
- Air Quality Monitoring Program;
- Blast Monitoring Program;
- Water Management Plan, including:

- Site Water Balance
- Erosion Sediment Control Plan;
- Surface Water Monitoring Program;
- Groundwater Monitoring Program;
- Surface and Groundwater Response Plan;
- Aboriginal and Cultural Heritage Management Plan;
- Greenhouse and Energy Efficiency Plan;
- Road Noise Management Plan;
- Road Closure Management Plan;
- Landscape Management Plan, including:
 - Rehabilitation and Offset Management Plan;
 - Final Void Management Plan; and
 - Mine Closure Plan;
- Environmental Management Strategy; and
- Environmental Monitoring Program.

Additionally, the following plans were reviewed which were not specifically required by the conditions of the Project Approval but which were prepared by Whitehaven Coal to guide the environmental management of the operations.

- Mining Operations Plan for the Rocglen Coal Mine, via Gunnedah – MOP Amendment No. 1, June 2010.

Condition 6(c) of Schedule 5 of the Project Approval requires that the audit assess the environmental performance of the project against any plan or program made under the Project Approval or other approval. Condition 6(d) also requires that the audit review the adequacy of any plan or program made under an approval document.

The audit found that the management plans and programs that had been prepared for the project were generally adequate and prepared in accordance with the relevant compliance requirements. Whitehaven Coal were found to be generally operating in accordance with those management plans that had been prepared. However, one of the key non-compliance issues in relation to the Rocglen operations is the lack of an approved Landscape Management Plan for the site. This issue is discussed further in **Section 3.5.1**.

Key issues in relation to the adequacy of the documents reviewed and their implementation on-site are discussed in the following sections.

3.5.1 Landscape Management Plan

The major non-compliance issue for the Rocglen operations is the lack of an approved Landscape Management Plan (LMP) for the operations including a Rehabilitation and Offset Management Plan, Mine Closure Plan and Final Void Management Plan. The LMP was required to be submitted by the end of March 2009 and was to be prepared in consultation with (then) DWE, DECC and GSC.

Whitehaven personnel have advised that the development of the LMP has been held in abeyance pending the completion of the Whitehaven Regional Biodiversity Offset Strategy and the assessment and approval of the Rocglen Extension project, both of which will have implications for the development of the LMP.

To date the Plan has not been submitted for approval and no drafts of the Plan were provided for review during the audit. It is understood that Whitehaven has been in negotiation with DECCW and DoP in relation to the Regional Biodiversity Offset Strategy and the Rocglen Extension project, however there was no evidence sighted during the audit to indicate that an extension of time to complete the LMP has been sought or granted.

Although some rehabilitation has commenced on the western side of the western emplacement area, the lack of an approved LMP is identified as an area of concern.

Recommendation

It is suggested that Whitehaven liaise with DoP to obtain approval to submit a staged Plan such that rehabilitation objectives and criteria can be developed for rehabilitation of the existing stages of mining.

3.5.2 Air Quality Monitoring Program

The Air Quality Monitoring Program identifies the locations for air quality monitoring stations in the areas surrounding the mining operations. The EA and the original monitoring program identified that dust deposition and PM₁₀ monitoring would be conducted at eight locations including the "Costa Vale" property. In November 2008, the owner of the "Costa Vale" property requested that monitoring be removed from his property and the PM₁₀ monitor was subsequently moved to the "Glenroc" property. It was noted during the audit that both the EPL and the Air Quality Monitoring Program had been amended to reflect this change in monitoring locations.

Similarly in 2009, the owner of the "Surrey" property requested that the PM₁₀ monitor be removed from his property and the monitor was subsequently relocated to the "Roseberry" property. It was noted during the audit that although the EPL had been amended to reflect the change in monitoring location from "Surrey" to "Roseberry", the Air Quality Monitoring Program had not been amended.

Recommendation

Update the Air Quality Monitoring Program to reflect the changes in monitoring locations.

3.5.3 Greenhouse and Energy Efficiency Plan

The Greenhouse and Energy Efficiency Plan was prepared in July 2008. A review of the Plan showed that generally it has been prepared in accordance with the Guidelines for Energy Savings Action Plans (DEUS, 2005).

It was noted by the auditors that DECCW advised Whitehaven in an email dated 1/9/08, in relation to the Narrabri and Sunnyside projects, that it would not be reviewing or providing comment on the draft Plans and that reporting under the DEUS guidelines was not required by DECCW for these projects. This was confirmed by DoP in a letter dated 3/8/10. However, the exemption granted by DoP from reporting under the DEUS guidelines did not alter the requirements of the remainder of the project approval condition relating to the development and implementation of the Greenhouse and Energy Efficiency Plan.

A specific requirement of the Plan included the development of a program to monitor the effectiveness of measures to reduce energy use on site. Whilst some information was

provided in Table 15 of the Plan, it does not specify what measures would be used to minimise energy use on site, nor what measures would be utilised to monitor the effectiveness of the energy reduction measures.

Recommendation

It is recommended that the Greenhouse and Energy Efficiency Plan be revised to include the development of an effective monitoring program to monitor energy use, and outlines a program for using the energy monitoring data to identify any further options for reducing energy usage on site.

3.5.4 Flora and Fauna Management Plan

The Statement of Commitments for Rocglen Coal Mine commits Whitehaven to the development and implementation of a Flora and Fauna Management Plan. This Plan has not been prepared, however, Whitehaven personnel interviewed during the audit indicated that flora and fauna management would be included in the Landscape Management Plan, particularly in the Rehabilitation Management Plan.

As discussed in **Section 3.5.1** above, the finalisation of the Landscape Management Plan for the site has been held in abeyance pending the assessment and determination of the Rocglen Extension Project which is currently with DP&I. No draft of the Landscape Management Plan was available for review during the audit, therefore the inclusion of flora and fauna management in the Landscape Management Plan could not be verified at this time. This should be verified at the next audit.

3.5.5 Erosion and Sediment Control Plan

The Statement of Commitments commits Whitehaven to the preparation of an Erosion and Sediment Control Plan (ESCP). No details for the preparation of the plan were provided with the commitment. A stand alone ESCP has not been prepared. However, during the review of the Water Management Plan for the site, it was noted that erosion and sediment control was addressed in Chapter 4 of the Plan. The controls identified in Chapter 4 were observed to have been generally implemented in works around the site (for example sediment fencing on the downslope side of the newly constructed northern discharge dam).

In the auditor's opinion, the preparation of an ESCP for the site has been adequately addressed through the provisions contained in Chapter 4 of the Water Management Plan.

3.5.6 Transport/Traffic Management Plan

Commitments 12.1, 12.23 and 18.4 commit Whitehaven to the preparation of transport/traffic management plans to manage traffic during construction activities associated with the coal transportation route and the Wean Road realignment.

Construction works were undertaken by a contractor managed by Whitehaven's Project Manager for Road Construction. During the audit, no evidence was sighted on site to indicate Whitehaven had retained copies of any traffic management plans that may have been prepared for the works. As the road construction works have now been completed, it is not possible to verify whether or not such plans were prepared and implemented.

4.0 Environmental Performance

4.1 Site Inspection

As described in **Section 2.4**, inspections of the project site and associated infrastructure were undertaken on 12 and 13 May 2011. Areas inspected during the site inspection included the site facilities area, workshop and hardstand, coal crushing and stockpiling, open cut pit, waste emplacements, water management structures, and coal transport route.

The site was found to be operating with environmental management controls in place and Whitehaven personnel were found to have a very good understanding of key environmental management issues. In particular, Whitehaven personnel were found to have a good understanding of dust, noise, and water management issues and overall, indicated a genuine belief that minimising off-site environmental impacts is critical to the success and community acceptance of mining operations in the area.

Key observations made during the site inspection included:

- existing environmental management measures described by Whitehaven personnel during the audit interviews were verified during the inspection;
- all equipment was observed to be well maintained, with no maintenance issues being noted with equipment or vehicles, however it was noted that the service truck (No. SER708) did not have a spill kit on board;
- coal transport trucks were observed to be covered prior to leaving the site;
- the coal transportation route to the Whitehaven CHPP was generally observed to be well maintained and free of spilt coal;
- intersection upgrades along the coal transport route were observed to have appropriate turning lanes and signage;
- Wean Road was observed to be tar sealed to the southern boundary of the Rocglen site, with the Wean Road relocation under construction immediately to the north of the tar sealed section;
- an oily water separator was observed in operation at the workshop. The oil is skimmed to the waste oil tank, however water from the separator is discharged along an overland flow path to SD3 which is the designated and licensed discharge point from the mine site. This issue is discussed further in **Section 4.2.1**;
- hydrocarbon storage and handling was noted to be generally well managed with almost all facilities observed being bunded. However, the following issues were noted during the inspection and are discussed further in **Section 4.2.2**:
 - evidence of hydrocarbon spillage was observed on the gravel area outside of the waste oil storage container at the workshop (**Plate 1 in Appendix 6**);
 - hydrocarbon storage at the contractor facilities for the scraper crew was not contained within an impervious secondary containment (**Plate 2 in Appendix 6**);
- water sprays were observed in operation on the coal crushing plant and associated conveyor belts with very little dust noted at the time of the inspection;

- a blast was observed during the site inspection with the blast being only faintly audible from the site facilities area (approximately 700 metres from the blast site) and no discernable ground vibration;
- Whitehaven generally proactively manage wastes generated on-site. Waste bins are clearly defined and located around the site, however there was evidence of some waste dumping on the western emplacement area (**Plate 3 in Appendix 6**). This issue is further discussed in **Section 4.2.6**; and
- rehabilitation has commenced on the western side of the western emplacement area where reshaping and preparation for tree planting has been undertaken.

4.2 Key Environmental Issues

4.2.1 Water Management

4.2.1.1 Contaminated Water Management

Whitehaven has an approved Water Management Plan and generally the controls identified in the Plan are being implemented. The Plan identifies four classes of water to be managed:

- clean water;
- dirty water;
- contaminated water; and
- pit water.

Contaminated water is considered to be surface water which could potentially contain hydrocarbons. Section 2.1 of the Water Management Plan identifies:

To ensure the treatment and separation of “contaminated” water from the workshop and wash bay area by diversion to an oil separating unit, with clarified water reporting to sediment basins.

As described in the management plan, the environmental controls at the workshop include the use of an oily water separator. Oil skimmed from the separator is piped to the waste oil tank. However, water from the separator, which could potentially contain hydrocarbons and therefore be considered contaminated water, is discharged to a drainage line directly connecting to SD3 which is the licensed water discharge point from the site under the provisions of the EPL.

Whilst the site has not recorded any oil and grease exceedances from the discharge point, this issue is identified as an area of concern as the potential exists for the water from the oily water separator to contain hydrocarbons which could be inadvertently discharged in contravention of the conditions of the EPL.

Recommendation

Review the operation of the oily water separator and consider diverting the clarified water to a sediment basin rather than the discharge dam SD3.

4.2.1.2 Surface Water Discharges

Rocglen experienced a period of heavy and prolonged rainfall in late 2010 which resulted in several uncontrolled discharges being recorded from the licensed discharge points. Generally, the discharge water quality criteria for pH and oil and grease were met, however, TSS exceedances were reported. The EPL specifies that where more than 38.4 millimetres of rainfall had occurred over the previous five days, the TSS criteria could be exceeded. Despite this there were still TSS exceedances identified as these rainfall levels were not exceeded. All instances of discharge during this period were reported to both (then) DoP and DECCW.

The capacity and operation of the sediment basins and storage dams was raised as an area for audit focus by DP&I during the agency consultation undertaken for the audit. Based on a survey plan prepared by Horizon Surveying Pty Ltd (dated 19/4/09), the storage dams and sediment basins have been constructed to the capacities nominated in the approved water management plan, with the exception of SB1 which was constructed with an increased capacity.

Due to the prolonged wet weather and the uncontrolled discharges that were occurring, Whitehaven began experimenting with flocculating agents to treat and release water under controlled conditions, prior to capacities being exceeded at the discharge dams. The use of 'Floc Blocks' appears to have been successful and should result in Whitehaven being able to manage its surface water discharges more effectively. However, this should be verified at the next audit.

Recommendation

If wet weather discharges continue to exceed the EPL criteria, then it is suggested that Whitehaven consider an independent review of the water management system capacities and the ability of the system to cope with the rainfall intensity as stated in the EPL conditions.

4.2.1.3 Groundwater Management & Monitoring

The issue of the mine's potential to impact on the alluvial systems to the south of the site was raised as an area for audit focus by the OEH officer interviewed by phone as part of the agency consultation for the audit.

Commitment 5.7 of the Rocglen Statement of Commitments requires Whitehaven to:

Ensure sufficient monitoring bores are present to monitor any impacts upon the alluvial system south of the mine site.

The Rocglen Water Management Plan identifies that the groundwater monitoring program includes a total of thirteen registered bores where groundwater levels, saturated thickness and quality are measured. In addition to these sites, five piezometers have been installed (MP1 to MP5). A review of the monitoring data shows that two of the piezometers (MP3 & MP4) have remained consistently dry. The two dry piezometers are both located to the south of the mine site between the mine and the alluvial system, and therefore are not currently providing any data on the mine's potential impact on the alluvial system.

During an audit interview with the Whitehaven Group Environmental Manager, it was acknowledged by Whitehaven that they currently have limited information on the boundary of the alluvial system and whether or not the mine is having any impact. Whitehaven are considering deepening the boreholes at MP3 and MP4 and further investigations are being undertaken with respect to the alluvial systems as part of the Rocglen Extension project.

This is raised as an area of concern as currently the mine has no effective process in place to monitor the alluvial systems to detect any potential for impacts from the mining operations.

Recommendation

It is recommended that Whitehaven address this issue as a matter of priority by reviewing the groundwater monitoring borehole locations and monitoring frequencies in consultation with NOW.

4.2.2 Hydrocarbon and Chemical Management

Hydrocarbons including oils and greases were generally observed to be stored in impervious bunded areas at the workshop area (**Plates 4 and 5 in Appendix 6**). The bunded areas observed at the workshop during the audit would generally provide suitable secondary containment in the event of a spill with spill kits noted to be available in each bunded area. The main diesel storage tanks sighted at the workshop during the audit were self bunded containers with appropriate vehicle collision protection and impervious bunded areas for refuelling.

Waste oil is stored within an impervious metal bund inside a shipping container (**Plate 6 in Appendix 6**). However, there is evidence of oil staining on the dirt and gravel hardstand area immediately outside of the container (**Plate 1 in Appendix 6**). The source of the oil staining is not known but given that waste oil is pumped out of the metal bund, there is the potential for oil to be spilt during pumping operations.

The hydrocarbon storage practices observed to be in use by the scraper contractor would not be considered best practice and are not in keeping with the OEH (formerly DECCW) guidelines for the storage of liquid substances. For example, there were eight drums of oil and lubricants that were being stored in an area off the main scraper haul road. The area had been partially bunded with earth (**Plate 2 in Appendix 6**), however the bunding would not be considered impervious and may not provide adequate secondary containment in the event of a spill. This is identified as an area of concern.

Recommendation

*It is recommended that Whitehaven review their hydrocarbon and chemical storage practices, including those of their subcontractors, using the **Technical Considerations in Appendix 2 of the "Storage and Handling Liquids: Environmental Protection, Participant's Manual"** (DECC, 2007) as a guide.*

4.2.3 Noise

Whitehaven has established a noise monitoring program with both attended and non-attended monitoring undertaken. A review of the monitoring data shows that noise exceedances have been recorded.

The 2009/2010 AEMR states that on 8/09/2009 attended noise monitoring was undertaken at "Costa Vale" (N1) and "Surrey" (N2). Spectrum Acoustics reported that noise emissions from the mine exceeded the criterion of 35 dB(A) at "Surrey" during the morning survey (37 dB(A)) and "Costa Vale" during the evening survey (38 dB(A)). At both locations the mine noise was attributable to engine noise and revs mainly from haul trucks. The AEMR also states that on review of the Rocglen weather station data, it was determined that a temperature inversion was present at the time of the exceedance at "Surrey". A fault with the weather station during the evening survey, when the "Costa Vale" exceedance was recorded, removed the capacity to assess incidence of temperature inversion at that time. As this result represented the first operational noise exceedance at the "Costa Vale" property,

Whitehaven proposed to maintain the current noise monitoring arrangements. DoP and DECCW were notified in writing of the exceedances and the proposed continuation of current monitoring arrangements.

Similarly, noise exceedances were also recorded at "Costa Vale" and "Surrey" on 30/7/08 and 18/8/09 during the morning periods. In these cases, monitoring was undertaken throughout the morning and by 9.30 am, noise levels had returned to below criteria.

A review of the complaints records for the Rocglen operations over the last four years shows that noise has been raised as an issue on several occasions. In response to the complaints, Whitehaven has acquired a real time noise monitor which has been positioned at the residences of complainants to assess the level of noise at each premises and the level of compliance with the project approval conditions.

The actions taken by Whitehaven in responding to both the identified exceedances and the complaints from the community, in the auditors opinion, demonstrate a pro-active and positive approach to managing noise issues associated with the operations.

4.2.4 Air Quality

Whitehaven has an approved Air Quality Monitoring Program in place for the Rocglen operations and evidence was sighted during the audit to indicate that the approved plan is generally being implemented. For example, water carts were in operation at the time of the audit, watering access roads around the site, and coal transport trucks were covered prior to leaving site. Dust levels were observed to be well managed during the site inspection, with staff interviews indicating a high level of environmental awareness, particularly in relation to dust control.

The audit found that there have been recorded exceedances of PM₁₀ criteria at the Rocglen operations and that Whitehaven has undertaken an investigation whenever such an exceedance is recorded. When exceedances have occurred, Whitehaven has notified both DoP and DECCW and provided a report on the investigations and the probable cause of the exceedance. The management practices in place at the mine are considered to minimise the potential for ongoing exceedances.

4.2.5 Coal Transport

Coal transportation was observed to be undertaken along the nominated coal transport route to the Whitehaven CHPP. Intersection upgrades had been completed at Bluevale Road/Hoad Land and at Kamilaroi Highway. Both of these intersection upgrades were inspected during the audit and found to have turning lanes, line marking and signage generally as specified in the design.

The coal transport route was generally noted to be free of spilt coal. Loaded trucks observed leaving the site during the audit, and travelling along the coal transport route, had their loads covered. At the time of the audit, no coal reject was being backloaded from the CHPP to the Rocglen Pit.

Whitehaven has a Road Maintenance Agreement in place with Gunnedah Shire Council for the maintenance of local roads used for the transportation of coal to its Gunnedah CHPP. This Road Maintenance Agreement includes maintenance of the roads associated with the Rocglen operations, including Bluevale Road and Shannon Harbour Road.

Noise monitoring of the road transport operations is being undertaken in accordance with the approved Road Noise Management Plan and to date no exceedances have been recorded.

4.2.6 Waste Management

Waste management on site was generally noted to be undertaken in a manner consistent with the approved Statement of Commitments. Waste bins were sighted at various locations around the site and were observed to be mostly well utilised. In the workshop area, bins were available for oily rags and used filters and waste oils were pumped to the waste oil tank.

However, during the inspection of the western emplacement area, it was noted that some domestic garbage had been dumped at the top of the emplacement, with an item of whitegoods (possibly a freezer) noted to be dumped further down the emplacement (**Plate 3** in **Appendix 6**). This may be indicative of the need for Whitehaven to reinforce its waste management policies with both staff and contractors.

Recommendation

Reinforce the Whitehaven waste management policies and procedures with staff and contractors.

4.3 Whitehaven Compliance Management and Review

Evidence was sighted during the audit to indicate that Whitehaven is generally aware of its compliance obligations. Requirements from Project Approval conditions and commitments identified in the Statement of Commitments have generally been translated into the various management plans and monitoring programs for the site operations.

It was also observed that Whitehaven is attempting to track its level of compliance. For example, Appendix 3 of the 2009-2010 AEMR provides a compliance review against the PA, EPL and ML. However, the level of detail in the AEMR compliance review may not be enough to ensure a suitable level of compliance. For example, the Whitehaven review in the 2009-2010 AEMR indicates that Condition 19 of the Mining Lease had been complied with. This condition requires Whitehaven to seek prior written approval from the Director General of the DPI before interfering with any electricity transmission lines on the site. Despite the Whitehaven review indicating compliance with this condition, the auditor could find no evidence that such written approval had been sought or granted in relation to the removal of electricity lines from the Belmont homestead which was demolished at the commencement of the project.

In terms of assessing their environmental performance, the Whitehaven site Environmental Officer conducts monthly site inspections using a standard checklist and reviews the monthly environmental monitoring data. Using this data, the Group Environmental Manager prepares monthly reports that are provided to senior management to review the environmental performance of the operations.

Where exceedances have been reported, evidence was sighted to indicate that notification of the exceedances to (then) DoP and DECCW has been undertaken. However these notifications are not always provided within the timeframes required by the conditions of the EPL.

Whilst there is evidence of internal compliance assessment and management review, compliance management is identified as an area of concern and an area where improvements could be achieved with a more systematic compliance management process.

5.0 Conclusion

Whitehaven Coal has implemented comprehensive environmental management and monitoring systems at its Rocglen Coal Mine, including environmental management controls for both construction and operation. Whitehaven Coal's management team and environmental personnel have shown considerable commitment to environmental performance at the site. This is reflected through the overall positive responses received from government agencies interviewed for the audit and the general compliance with environmental performance found as part of this audit.

The audit found a number of non-compliances with the relevant approvals and licences that apply to the project which generally related to the following issues:

- the lack of an approved Landscape Management Plan for the site;
- exceedance of specific environmental performance criteria relating to noise, air quality, blasting and surface water; and
- secondary requirements for documents or actions required under the Project Approval, such as gaining formal approval from DoP or submitting management plans within a required timeframe.

Several of the non-compliances identified during the audit, particularly those related to secondary requirements for documents or actions under the Project Approval, are considered unlikely to affect Whitehaven's ability to effectively manage environmental issues in accordance with the relevant approvals and licences that apply to the project. For the non-compliances identified that were associated with exceedances of performance criteria, Whitehaven was found to be addressing the issues that have arisen in a satisfactory manner and reporting exceedances to relevant government agencies as required under the Project Approval and Environment Protection Licence, although such notifications are not always undertaken within the required timeframes.

APPENDIX 1

Agency Interview Questions

**Rocglen Environmental Audit – May 2011
Agency Questions**

Agency:		Time:	
Representative(s):		Location:	
Date:			

1. What is your agency's role in relation to the Rocglen mining operations?
•
2. What is your specific role within the agency, particularly relating to your involvement with the Rocglen mining operations?
•
3. What aspects of your agency's statutory role relate to the Rocglen mining operations?
•
4. In relation to the Rocglen mining operations compliance with statutory requirements administered by your agency:
4.1. Are you satisfied with the Rocglen mining operations reporting of compliance status (including monitoring results)?
•
4.2. Are you aware of any past or current compliance issues (including fines, notices etc.)? If so please provide details.
•
4.3. What actions were taken to resolve these compliance issues (e.g. programs developed, activities modified etc.) and were you satisfied with these actions?
•
4.4. Are you aware of any currently outstanding compliance issues or actions?
•
5. Are you aware of any outstanding community complaint issues in relation to the Rocglen mining operations?
•
6. Are you satisfied with the way in which community complaints have been managed by the Rocglen mining operations?
•
7. Do you have any other specific environmental or community issues in relation to the Rocglen mining operations that need to be addressed?
•

APPENDIX 2

Compliance Assessment PA 06_1098

Project Approval No: 06_0198 (including modification 06_0198_MOD 1)

Approval dated 15 April 2008, Modification 1 approval dated 27 May 2010



Schedule	Condition No.	Requirement	Compliance Y/N/NT/V/NA	Evidence	Comments
2	ADMINISTRATIVE CONDITIONS				
	Obligation to Minimise Harm to the Environment				
	1	The Proponent 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 project.	N	The site inspection and audit of compliance documentation found no significant issues relating to environmental management at the site. However several non-conformances have been identified as documented in the compliance checklists and summarised in this report. Rocglen has experienced some environmental performance issues relating to air, noise, blasting and water discharge exceedances. Many of these exceedances were during the early stages of operations and Whitehaven has investigated each incident and modified operations accordingly to minimise the potential for future exceedances. Environmental Management Plans have been prepared for a range of environmental issues and evidence was sighted that the plans that have been prepared have generally been implemented. It was noted that there is a good level of environmental awareness amongst all staff interviewed as part of the audit. The key compliance issue relates to the lack of an approved Landscape Management Plan for the site.	
Terms of Approval					
	2	The Proponent shall carry out the project generally in accordance with the:			
		a) EA;	Y	Generally in accordance with the EA prepared by R.W. Corkery & Co. Pty Limited dated October 2007.	
		b) statement of commitments;	N	Non-compliances identified.	
		c) modification application 06_0198-MOD 1 and the accompanying Environmental Assessment prepared by GSS Environmental and dated May 2010; and	Y	Generally in accordance with the modification application 06-0198 MOD1 and the EA prepared by GSS Environmental dated May 10.	
		d) the conditions of this approval.	N	Non-compliances identified.	
		<i>Notes: The general layout of the project is shown in Figures 1 and 2 of Appendix 2; and The statement of commitments is reproduced in Appendix 3.</i>			
	3	If there is any inconsistency between the above documents, the latter document shall prevail to the extent of the inconsistency. However, the conditions of this approval shall prevail to the extent of any inconsistency.	Y	Inconsistency between Project Approval and Statement of Commitments. Project Approval conditions have prevailed.	
	4	The Proponent shall comply with any reasonable and feasible requirements of the Director-General arising from the Department's assessment of:			
		(a) any reports, plans, programs, strategies or correspondence that are submitted in accordance with the conditions of this approval; and	Y	Whitehaven has addressed DoP comments and issues from their review of the draft management plans.	
		(b) the implementation of any actions or measures outlined in these reports, plans, programs, strategies or correspondence.	NT		
Limits on Approval					
	5	Mining operations may take place on the site for 12 years from the grant of the mining lease for the project <i>Note: Under this Approval, the Proponent is required to rehabilitate the site to the satisfaction of the Director-General and DPI. Consequently this approval will continue to apply in all other respects other than the right to conduct mining operations until the site has been rehabilitated to a satisfactory standard.</i>	Y	Mining Lease 1620 dated 10 June 2008 sighted with 21 year term. Based on average production rate of 1.5Mt/ya, the mine life is approximately 8 to 10 years (AEMR 2009/2010 & MOP). Coal production commenced 2008 (WCML website).	
	6	The Proponent shall not extract more than 1.5 million tonnes of ROM coal a year from the site.	Y	The AEMR 2009/2010 states that total production of ROM Coal (t) for the period up to 31/07/09 was 631,113 and for the period 1/08/09 to 31/07/10 was 956,535. Daily production reports were reviewed and no exceedances on the extraction limit were recorded up to April 2011.	

Schedule	Condition No.	Requirement	Compliance Y/N/NT/V/NA	Evidence	Comments
Hours of Operation					
	7	The Proponent is permitted to undertake mining operations 24 hours a day, Monday to Saturday, with the exception of public holidays. <i>Note: This condition does affect the operation of conditions 13 and 40 of schedule 3 in relation to blasting and coal transportation hours.</i>	N	During the on-site audit inspection, the Project Manager confirmed that shift lengths are set and no staff are permitted to work beyond the approved hours. However, a review of the complaints register for the project shows that there has been one complaint in relation to works undertaken on a Sunday. Whitehaven investigated the complaint and found that a contractor had done some work spreading overburden with a dozer on a Sunday. Records reviewed showed that Whitehaven instructed the contractor that no works were to occur on a Sunday and reinforced that message to all contractors and staff via toolbox talks. There is no evidence of any further non-compliances with this condition.	
	8	The Proponent is only permitted to undertake construction activities between the hours of: a) 6am to 8pm, Monday to Saturday; b) 6am to 5pm, Sunday; and c) at no time on public holidays.	Y	AEMR 2008/2009 section 2.3 states all construction and set up works were undertaken during the reporting period in accordance with details set out in the MOP. AEMR 2008/2009 section 2.4.4 states construction activities were undertaken between the hours of 6am to 8pm Monday to Saturday and 6am to 5pm on Sundays. Construction did not occur on public holidays. AEMR 2009/2010 states that no construction occurred during this reporting period.	As construction has been completed, this is not possible to verify further at this time.
Management Plans/Monitoring Programs					
	9	With the approval of the Director-General, the Proponent may submit any management plan or monitoring program required by this approval on a progressive basis.	N	Management plans have been submitted progressively and those prepared and submitted have been approved by DoP (correspondence and approvals sighted). However, the Landscape Management Plan has not yet been finalised or submitted and no evidence was sighted to indicate that DoP had approved a delay to the submission of the plan.	
Structural Adequacy					
	10	The Proponent shall ensure that all new buildings and structures, and any alterations or additions to existing buildings and structures, are constructed in accordance with the relevant requirements of the BCA. <i>Notes:</i> • Under Part 4A of the EP&A Act, the Proponent is required to obtain construction and occupation certificates for the proposed building works. • Part 8 of the EP&A Regulation sets out the requirements for the certification of the project.	N	Certificates sighted include: GSC Approval to Install Septic Tank dated 25/07/2008, GSC Construction Certificate 344174 for construction of workshop and temporary training room, ablutions blocks and offices dated 25/07/2008, GSC Occupation Certificate 344174 for workshop, office, temporary training room and ablutions block dated 17/03/2009, and GSC Notice of Determination of Development Application 425649 for demountable toilet block and demountable training room dated 8/10/2009. However, there is no evidence of an occupation certificate for the demountable toilet block and the demountable training room, although development consent has been obtained.	It is recommended an Occupation Certificate be sought from Gunnedah Shire Council for the demountable toilet block and demountable training room.
Demolition					
	11	The Proponent shall ensure that all demolition work is carried out in accordance with <i>Australian Standard AS 2601-2001: The Demolition of Structures</i> , or its latest version.	V	There is no written evidence of demolition work carried out. During the on-site audit inspection it was verbally advised by WCMPL staff that the "Belmont" residence and sheds were demolished in accordance with <i>Australian Standard AS 2601-2001: The Demolition of Structures</i> , or its latest version.	
Operation of Plant and Equipment					
	12	The Proponent shall ensure that all plant and equipment used on site is: (a) maintained in a proper and efficient manner; and	Y	During the on-site audit inspection, the Workshop Manager was interviewed regarding processes and procedures. Maintenance records were reviewed including: Dump Truck 500hr Service Sheet (no. 777/785 unit no. RDT605, dated 8/04/2011), Drill Rig Prestart Checklist (no. 728 dated 4/04/2011), and Defects Report (run date 11/04/2011).	Whitehaven maintains good records for maintenance of its plant and equipment. Systems are in place for reporting and repair of defects and plant hours are regularly monitored for routine servicing requirements.

Schedule	Condition No.	Requirement	Compliance Y/N/NT/V/NA	Evidence	Comments
		(b) operated in a proper and efficient manner.	Y	Training records were reviewed during the on-site audit inspection which indicated operators are required to have the appropriate training and tickets to operate plant efficiently. One example reviewed was WHC_FRM_Employee-Contractor Details for Garry Joyce, Truck Driver, Daracon - copies of licences and induction certificates sighted.	
3	SPECIFIC ENVIRONMENTAL CONDITIONS				
	SOIL AND WATER				
	<i>Note: These conditions should be read in conjunction with sections 4, 5, 10, 13 and 17 of the Statement of Commitments.</i>				
	Discharge				
	1	Except as may be expressly provided for by an EPL, the Proponent shall not discharge any surface waters from the site.	N	EPL condition L3.4, states that 'The Total Suspended Solids concentration limits specified for Points 11 and 12 may be exceeded for water discharged provided that: (a) the discharge occurs solely as a result of rainfall measured at the premises that exceeds 38.4 ml over any consecutive 5 day period immediately prior to the discharge occurring; and (b) all practical measures have been implemented to dewater all sediment dams within 5 days of rainfall such that they have sufficient capacity to store run off from a 38.4 millimetre, 5 day rainfall event. AEMR 2009/2010 section 2.8.3 details the wet weather discharge events that occurred during the reporting period. During the 2009/2010 reporting period there were instances where the TSS recorded was > 50mg/L and the rainfall recorded over the preceding 5 day period was less than 38.4ml. Some examples include: 4 Jan 2010 at SD3 followed 25.2mm rain over the preceding 5 day period and the TSS level recorded was 1490mg/L; 15 Jan 2010 at SB18 followed 21.6mm rain over the previous day and TSS level recorded was 1490mg/L; 31 March 2010 at SD3 followed 16.8mm rain with TSS level recorded 108mg/L. Therefore there were instances of TSS level exceedances that did not comply with the EPL conditions.	The EPL approved wet weather discharge locations are: Point 11 - Storage Dam 3 (SD3) identified as 'SD3 Wet Weather Discharge Monitor Point Southern Boundary - Site Exit', and Point 12 - Northern site boundary labelled as 'Wet Weather Discharge Monitor Point Northern Boundary'. AEMR 2009/2010, section 2.83 details there were 8 discharge events recorded in the reporting period from two locations, Storage Dam 3 (SD3) and Sediment Basin (SB18). It is clear that SD3 is an approved discharge point as per the EPL, however further investigation was required to determine the validity of the discharge point SB18, since it is not listed as an approved EPL discharge point. WMP, Figure 5a shows the Surface Water Monitoring Locations. This figure indicates that SB18 is located towards the northern boundary in the Northern Soil Stockpile Area, however the figure indicates the Discharge Monitoring Point is at a different location on the northern boundary. During the on-site audit inspection, it was clarified that water flows from SB18 to the northern boundary discharge point, therefore the only recorded discharges for the reporting period were from the approved EPL discharge points. The water quality is measured in SB18, prior to being discharged via the northern boundary discharge point.
	Water Management Plan				
	2	The Proponent shall prepare and implement a Water Management Plan for the project to the satisfaction of the Director-General. This plan must:	Y	Water Management Plan, Edition 1 2008, Revision 1 Aug 2009. Evidence was sighted to indicate that the Plan is generally implemented.	
		a) be prepared in consultation with DWE and DECC by a suitably qualified expert/s whose appointment/s have been approved by the Director-General;	Y	Letter from Whitehaven to DoP dated 13/5/08 requesting approval of experts to prepare Plan. Letter of approval of experts from DoP dated 15/5/08. Email correspondence sighted from Danny Young (WMCPL) to Rod Browne (DWE) dated 17/04/2008 attaching the Site Water Management Plan, seeking review. Response letter sighted from Rod Browne (DWE) dated 5/06/2008 detailing recommendations following review of the Site Water Management Plan. Email correspondence dated 3/06/2008 sighted between Danny Young (WMCPL) and Stephen O'Donoghue (DECC) in relation to revising elements of the Water Management Plan.	
		b) be submitted to the Director General prior to the commencement of construction activities (not including construction of the Kamilaroi Highway and Hoad Lane intersections or sections 1 and 2 of the road transport route); and	Y	Water Management Plan approval letter from DoP dated 16/06/2008 sighted which was prior to commencement of construction.	WCMPL staff advised that the Project Manager confirmed (from diary notes) that Northpower removed the powerlines to the old residence on the 31 July 2008 and construction of pads for buildings commenced 1 August 2008.
		c) include a:			
		Site Water Balance;	Y	Included in Water Management Plan, Section 3.	
		Erosion and Sediment Control Plan;	Y	Included in Water Management Plan, Section 4.	
		Surface Water Monitoring Plan;	Y	Included in Water Management Plan, Section 5.	
		Groundwater Monitoring Program;	Y	Included in Water Management Plan, Section 6.	
		Surface and Groundwater Response Plan, setting out the procedures for:			
		• investigating, and if necessary mitigating, any exceedances of the surface or groundwater assessment criteria (see below); and	Y	Included in Water Management Plan, Section 7.	
		• responding to any unforeseen impacts of the project.	Y	Included in Water Management Plan, Section 7.	

Schedule	Condition No.	Requirement	Compliance Y/N/NT/V/NA	Evidence	Comments
Site Water Balance					
	3	The Site Water Balance must:			
		a) include details of:			
		• sources and security of water supply;	Y	WMP, section 3.1 states: The capture of dirty water is maximised such that clean water captured and used by the mine remains within the maximum harvestable right for the mine site. Section 3.2 states: Operational water needs are preferentially sourced from the on-site sediment basins and surface and groundwater flows into the open cut. Any shortfall is supplemented by storage dams on site as well as through surface water harvesting from adjacent properties owned by WCMPL. Table 3.2 details the annual catchment yields of both dirty and clean water.	During the on-site inspection, the sources of water supply were confirmed.
		• water use on site;	Y	WMP, section 3.2 outlines the site water requirements, with the predicted annual requirements of 73-84ML. The WMP does not indicate actual usage for that reporting period, only predicted. Section 3.2 states: Water requirements on the mine site will vary over the life of the operation. The majority of water will be used for dust suppression throughout the life of the mine. Section 3.3.3 states the average site water requirements is 80ML/yr.	
		• water management on site;	Y	Site water management is outlined in Section 2 of the WMP.	
		• any off-site water transfers;	Y	WMP, section 3.3.3 states that off-site water storages SD4, SD7 and SD2 will capture some of the clean water runoff generated by the eastern catchment, with excess water directed via WW2 through the south-east corner of the mine site as per the natural drainage path through to the southern drainage channel.	During the on-site audit inspection, it was verbally advised by WCMPL staff that water can be pumped from SD7 if required. However, no water is transferred off-site
		b) describe measures to minimise water use by the project; and	Y	WMP, section 3.3.3 states WCMPL is committed to maximising water use from the dirty water system. Only supplementary water requirements are obtained from clean water storages. On-site water requirements will be monitored each year and opportunities investigated for any improved water efficiency, particularly in terms of dust suppression.	
		c) be reviewed and recalculated each year in the light of the most recent water monitoring data.	Y	WMP prepared 2008 and revised Aug 2009 to incorporate updated dam locations, water balance and wet weather discharge locations; however the Site Water Balance does not appear to have been reviewed and recalculated each year in light of the most recent water monitoring data.	During the on-site audit inspection, it was verbally advised by WCMPL staff that the plan was reviewed as part of the project extension application and will be updated following the project approval outcome. It is recommended that the Water Management Plan be reviewed following the determination of the Rocglen Extension project.
Erosion and Sediment Control					
	4	The Erosion and Sediment Control Plan must:			
		(a) be consistent with the requirements of <i>Managing Urban Stormwater: Soils and Construction</i> manual (Landcom, 2004), or its latest version;	Y	WMP, section 4 states that the Erosion and Sediment Control Plan is consistent with the requirements of the Department of Housing's <i>Managing Urban Stormwater: Soils and Construction Manual</i> (Landcom, 2004).	
		(b) identify activities that could cause soil erosion and generate sediment;	Y	WMP, section 4.2 Sources of Erosion and Sedimentation.	
		(c) describe measures to minimise soil erosion and the potential for transport of sediment to downstream waters;	Y	WMP, section 4.4 Erosion and Sediment Control Management.	
		(d) describe the location, function, and capacity of erosion and sediment control structures;	Y	WMP, section 4.3 Erosion and Sediment Control Structures.	
		(e) describe what measures would be implemented to monitor and maintain the structures over time.	Y	WMP, section 4.4 Erosion and Sediment Control Management. This section states that the structures will be inspected monthly, or after a rainfall event of >25mm/24hr, to assess their success in preventing erosion, identify signs of potential erosion and determine the retained capacity especially within the sediment basins. Section 4.4 also states that the structures will be cleaned of accumulated sediment (or extended or replaced) as soon as 25% capacity is lost due to the accumulation of material such that the specified capacities are maintained.	

Schedule	Condition No.	Requirement	Compliance Y/N/NT/V/NA	Evidence	Comments
Surface Water Monitoring Program					
	5	The Surface Water Monitoring Program must include: (a) detailed baseline data on surface water flows and quality in creeks and other waterbodies that could be affected by the project;	Y	WMP, Section 5 - Surface Water Monitoring Program, states that due to the intermittent nature of the unnamed drainage channel and Driggle Draggie Creek adjacent to the project site, limited data has been collected for the provision of baseline water quality information.	WMP, Table 5.1 provides water quality data from a sample obtained from the central drainage channel within the Rocglen site in 2002, together with samples from Driggle Draggie Creek taken prior to the Canyon Mine development. The results indicate a similarity in water quality in Driggle Draggie Creek and the drainage line within the Rocglen site which is not unexpected given the similarity in catchments, land use and geology.
		(b) surface water impact assessment criteria;	Y	WMP, Section 5.3 - Surface Water Assessment Criteria states that the assessment criteria for surface water are only relevant to water actually discharged from the mine site and are TSS, grease and oil, and pH.	
		(c) a program to monitor the impact of the project on surface water flows and quality; and	Y	WMP, Section 5 - Surface Water Monitoring Program. Section 5.2 states that sampling will occur during water flow events at points along Driggle Draggie Creek to the north and the unnamed drainage depression to the south over the life of the mine, and during discharge events for ongoing water quality monitoring. Section 5.4 identifies the monitoring points whilst Section 5.5 identifies the monitoring parameters and frequency of monitoring.	WMP, Section 5.2 states there is limited information currently available in terms of catchment flows, and the impact of the mine on reduced or increased catchment flows and its impact on water quality. In order to improve current knowledge of existing catchment flows, and the impact of the mine on future catchment flows, WCMPL has established flow monitoring devices, in conjunction with DWE, at the Driggle Draggie Creek monitoring point and southern drainage channel monitoring point to enable data collection and analysis.
		(d) procedures for reporting the results of this monitoring.	Y	WMP, Section 5.6 - Reporting of Monitoring Results. WCMPL collates surface water analysis data and maintains an up to date record of analysis results both in hard copy (laboratory reports) and electronic (results) format. The results are reported in the AEMR and made available to CCC members as part of the Environmental Monitoring Process, as well as to Gunnedah Shire Council.	
Groundwater Monitoring Program					
	6	The Groundwater Monitoring Program must include:			
		(a) further development of the regional and local groundwater model;	Y	WMP, Section 6.2 - Groundwater Model, states that a hydrogeological model was developed for the project site by RCA Australia as part of the initial EA and that the monitoring program being undertaken by WCMPL will provide the opportunity to utilise the data obtained for assessment against the initial model, which will enable updates to be made to the groundwater model. No modification has been undertaken to date.	It is noted that further development of the groundwater model was undertaken during the investigations for the Rocglen Extension project.
		(b) detailed baseline data to benchmark the natural variation in groundwater levels, yield and quality (including at any privately owned bores in the vicinity of the site);	Y	WMP, Section 6.3.2 - Monitoring Parameters, Frequency and Procedures. This section states that baseline monitoring of water chemistry, SWL, available drawdown and yield was conducted at all bores and identified above prior to the commencement of mining. Table 6.1 lists the parameters monitored.	
		(c) groundwater impact assessment criteria;	Y	WMP, Section 6.3.2 Monitoring Parameters, Frequency and Procedures. Table 6.1 lists the parameters to be measured, frequency of monitoring and sampling method.	
		(d) a program to monitor the impact of the project on groundwater levels, yield and quality; and	Y	WMP, Section 6.3.2 - Monitoring Parameters, Frequency and Procedures. This section states that groundwater levels will be monitored at quarterly intervals, with data loggers downloaded at quarterly intervals. Assessment of conductivity and pH at the identified sites will be undertaken quarterly, with yield and other chemical parameters assessed on a six monthly basis. Table 6.1 lists the parameters to be measured.	
		(e) procedures for reporting the results of this monitoring.	Y	WMP, Section 6.3.3 - Assessment and Reporting. Monitoring results will be reported in the AEMR and made available to CCC members and Gunnedah Shire Council.	

Schedule	Condition No.	Requirement	Compliance Y/N/NT/V/NA	Evidence	Comments										
NOISE															
<i>Note: These conditions should be read in conjunction with sections 8 and 17 of the Statement of Commitments.</i>															
Impact Assessment Criteria															
	7	<p>The Proponent shall ensure that the noise generated by the project does not exceed the noise impact assessment criteria set out in Table 1 at any residence on privately-owned land, or no more than 25 percent of any privately-owned land.</p> <table border="1"> <thead> <tr> <th>Location</th> <th>Day L_{Aeq(15min)}</th> <th>Evening L_{Aeq(15min)}</th> <th>Night L_{Aeq(15min)}</th> <th>Night L_{Aeq(15min)}</th> </tr> </thead> <tbody> <tr> <td>All privately owned residences</td> <td>35</td> <td>35</td> <td>35</td> <td>45</td> </tr> </tbody> </table> <p><i>Table 1: Impact assessment criteria dB(A)</i></p> <p>Notes:</p> <ul style="list-style-type: none"> To determine compliance with the L_{Aeq(15min)} noise limits, noise from the project is to be measured at the most affected point 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. Where it can be demonstrated that direct measurement of noise from the project is impractical, the Department and DECC 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. These limits apply under the relevant meteorological conditions outlined in the assessment procedures in Chapter 5 of the NSW Industrial Noise Policy. To determine compliance with the L_{Aeq(15min)} noise limits, noise from the project is to be measured at 1 metre from the dwelling façade. Where it can be demonstrated that direct measurement of noise from the project is impractical, the Department and DECC may accept alternative means of determining compliance (see Chapter 11 of the NSW Industrial Noise Policy). 	Location	Day L _{Aeq(15min)}	Evening L _{Aeq(15min)}	Night L _{Aeq(15min)}	Night L _{Aeq(15min)}	All privately owned residences	35	35	35	45	N	<p>AEMR 2009/2010, section 3.10.3.2 states that on 8/09/2009 attended noise monitoring was undertaken at "Costa Vale" (N1) and "Surrey" (N2). Spectrum Acoustics reported that noise emissions from the mine exceeded the criterion of 35 dB(A) at "Surrey" during the morning survey (37 dB(A)) and "Costa Vale" during the evening survey (38 dB(A)). At both locations the mine noise was attributable to engine noise and revs mainly from haul trucks. Section 3.10.3.2 also states that on review of the Rocglen weather station data, it was determined that a temperature inversion was present at the time of the exceedance at "Surrey". A fault with the weather station during the evening survey, when the "Costa Vale" exceedance was recorded, removed the capacity to assess incidence of temperature inversion at that time, and as such the incident was considered an exceedance. As these results represented the first operational noise exceedance at the "Costa Vale" property, Whitehaven proposed to maintain the current noise monitoring arrangements. DoP and DECCW were notified in writing of the exceedances and the proposed continuation of current monitoring arrangements.</p>	<p>AEMR 2008/2009, section 3.10.3.2 states that on 30 July 2008, LAeq noise levels (all sources) were 37 dB(A) at 7:36am "Costa Vale" and 40 dB(A) at 8:10am at "Surrey". Mine noise was below the criterion with 34 dB at "Costa Vale", however an exceedance of 3 dB was recorded at "Surrey". The noise was audible as general haul truck engine revs, shovel and dozer noise and modulated frequency reverse alarms. AEMR 2008/2009, section 3.10.3.3 states that on 18 Aug 2009, LAeq noise levels (all sources) at "Costa Vale" was 39 dB(A) at 7:36am and 35 dB(A) at 9:12am. Mine noise exceeded the criterion at 7:36am (38 dB) but below the criterion at 9:12am (27 dB). It was noted that the audible noise was related to general haul truck engine revs, excavator noise and modulated frequency reverse alarms. LAeq noise levels (all sources) at "Surrey" was 39 dB(A) at 7:34am and 43 dB(A) at 8:38am. Mine noise was below the noise criterion on both occasions (31 dB and barely audible, respectively).</p>
Location	Day L _{Aeq(15min)}	Evening L _{Aeq(15min)}	Night L _{Aeq(15min)}	Night L _{Aeq(15min)}											
All privately owned residences	35	35	35	45											
		<p>However, if the Proponent has a written negotiated noise agreement with any landowner and a copy of this agreement has been forwarded to the Department and DECC, then the Proponent may exceed the noise limits in Table 1 in accordance with the negotiated noise agreement.</p>	Y	<p>Private agreement sighted dated 12/02/2008 from WCMLP to Messrs. R. & G. Rennick, landowners of the "Roseberry" property regarding noise and dust tolerances, which states that '...the residence at "Roseberry" is project related and as such no monitoring of dust or noise is required. However, in the interest of harmonious relations between the Company and yourselves, the Company hereby sets out a commitment to a procedure to be followed in the unlikely event that monitoring indicates set levels have been exceeded in the case of: <u>noise</u> - by more than 5dBA above the 35dBA set as the background level in the Environmental Assessment'. The agreement includes a statement of commitment that sets out the procedure to be followed in the event that a complaint is received.</p>	<p>A copy of the agreement was appended to the Noise Management Plan approved by agencies.</p>										
Road Traffic Impact Assessment Criteria															
	8	<p>The Proponent shall ensure that the cumulative noise generated by road traffic associated with the project, Canyon (Whitehaven) and Tarrawonga mines on public roads does not exceed the criteria in Table 2.</p> <table border="1"> <thead> <tr> <th>Day L_{Aeq(1 hour)}</th> <th>Evening L_{Aeq(1 hour)}</th> <th>Night L_{Aeq(1 hour)}</th> <th>Location</th> </tr> </thead> <tbody> <tr> <td>60</td> <td>60</td> <td>50</td> <td>Any residence on privately-owned land.</td> </tr> </tbody> </table> <p><i>Table 2: Road Traffic Noise Criteria dB(A)</i></p>	Day L _{Aeq(1 hour)}	Evening L _{Aeq(1 hour)}	Night L _{Aeq(1 hour)}	Location	60	60	50	Any residence on privately-owned land.	Y	<p>AEMR 2009/2010, Section 3.10.3.6 - December 2009 Road Noise Monitoring, states no exceedances recorded. Section 3.10.3.7 - June 2010 Road Noise Monitoring, states no exceedances recorded. Appendix 9 - Road Noise Monitoring was reviewed, road haulage noise monitoring was conducted by Spectrum Acoustics in Dec 2009, March 2010 and June 2010 - no exceedances were recorded. AEMR 2008/2009, Appendix 9 Cumulative Road Haulage Noise Monitoring for Dec 2008 to June 2009 reported no exceedances.</p>			
Day L _{Aeq(1 hour)}	Evening L _{Aeq(1 hour)}	Night L _{Aeq(1 hour)}	Location												
60	60	50	Any residence on privately-owned land.												
Continuous Improvement															
	9	<p>The proponent shall:</p> <p>(a) Implement all reasonable and feasible best practice noise mitigation measures;</p>	Y	<p>Noise Monitoring Program (NMP), Section 4.4 - Best Practice Methodology. This section states there are no specific noise mitigation measures in the EA that require engineering design and that the NMP incorporates best practice techniques of identifying potential noise related impacts, avoiding certain adverse times and weather conditions and field verification of predicted noise levels early in the life of the project. This section also states that the community liaison program, complaints register and response methods and regular monitoring as identified in Section 6 and Appendix 1 of the NMP are all best practice procedures in the mining industry.</p>	<p>A review of the complaints register for Rocglen shows that Whitehaven are generally proactive in responding to noise complaints.</p>										

Schedule	Condition No.	Requirement	Compliance Y/N/NT/V/NA	Evidence	Comments						
		(b) Investigate ways to reduce the noise generated by the project, including off-site road and rail noise and maximum noise levels which may result in sleep disturbance; and	Y	AEMR 2009/2010, section 3.10.2 details the noise control measures utilised to minimise noise from the project. This section also states that Whitehaven also regularly liaises with the majority of the surrounding neighbours to seek feedback not only on noise, but on all mining activities. Any issues raised are investigated and appropriate measures are implemented to alleviate further impacts. Whilst mine noise and off-site road noise are considered, off-site rail noise is not considered. Rocglen does not have a rail line on site and all coal is trucked to the Whitehaven CHPP where it is then railed to Newcastle. The CHPP operates under its own approvals and was considered beyond the scope of this audit.	AEMR 2009/010 section 3.10.3.2 states that noise from mine must not exceed 45 dB(A) L1 (1 min) between the hours of 10 pm and 7 am. This is to minimise the potential for sleep disturbance as a result of individual loud noises from the mine. Appendix 9 Noise Monitoring Results indicate that there were no exceedances of the night monitoring for attended noise monitoring.						
		(C) report on these investigations and the implementation and effectiveness of these measures in the AEMR,	V	During the on-site audit inspection, WCMPL staff advised that these investigations were not reported in AEMR 2009/2010 as this initiative occurred after the last AEMR submission, and will be reported in the next AEMR. To be confirmed at next audit.							
		to the satisfaction of the Director-General.	Y	The DoP audit undertaken in 2009 indicated compliance with this condition which is considered an indication of the satisfaction of the Director-General.							
Monitoring											
	10	The Proponent shall prepare and implement a Noise Monitoring Program for the project to the satisfaction of the Director-General. This program must:	Y	Noise Monitoring Program, Edition 1, Rev 0, dated 24/04/2008. Approval letter from DoP sighted dated 27 May 2008.							
		(a) be prepared in consultation with DECC;	Y	Email correspondence sighted between Danny Young (WCMPL) and Colin Phillips (DoP) dated 22/05/2008 regarding the NMP, along with correspondence between Danny Young (WCMPL) and Stephen O'Donoghue (DECC) dated 28/03/2008 and 22/05/2008.							
		(b) be submitted to the Director-General for approval prior to the commencement of construction activities (not including the construction of the Kamlaroi Highway and Hoad Lane intersections and sections 1 and 2 of the coal transport route); and	Y	Noise Monitoring Plan approval letter from DoP dated 27/05/2008 sighted.	WCMPL staff advised that the Project Manager confirmed (from diary notes) that Northpower removed the powerlines to the old residence on the 31 July 2008 and construction of pads for buildings commenced 1 August 2008.						
		(C) use attended noise monitoring measures to monitor the performance of the project; and	Y	NMP, Section 5.1 - Noise Monitoring Programs. This section states that ongoing compliance monitoring will be undertaken by both attended and unattended monitoring on a 3 monthly basis at the "Costa Vale" and "Surrey" residences.							
		(d) include a protocol to establish whether the project is complying with the noise impact assessment criteria in Tables 1 and 2	Y	NMP, Section 5.4 outlines the Noise Monitoring Procedures for attended and unattended noise monitoring.							
BLASTING AND VIBRATION											
<i>Note: These conditions should be read in conjunction with sections 9 and 17 of the Statement of Commitments.</i>											
Airblast Overpressure Impact Assessment Criteria											
	11	The Proponent shall ensure that the airblast overpressure level from blasting at the project does not exceed the criteria in Table 3 at any residence on privately-owned land.	N	AEMR 2009/2010, section 3.9 details the blasting results in comparison to the compliance criteria and Appendix 8 lists the Blast Monitoring Results. AEMR 2009/2010, section 3.9.2 indicates that during the reporting period, a total of 25 blasts were initiated. Two blasts exceeded the 115 dBL limit, recording 119.9 dBL at "Costa Vale" on the 24th August 2009 and 116.9 dBL at "Costa Vale" on the 27th August 2009. In accordance with consent conditions, an allowance of 5% of blasts between 115-120 dBL is allowed over a 12 month reporting period. The two exceedances have resulted in Rocglen not complying with this allowance the two exceedances represent 8% of blasts for that 12 month period). Blast monitoring commenced at "Brolga" in June 2009 following reports from the landholder that the property was being affected by blasting. The monitoring event in June 2009 recorded a ground vibration of 0.71 mm/s and a peak overpressure of 104.5 dBL which were both well below the criteria. Subsequent blasts did not trigger the blast monitoring equipment at "Brolga" and on this basis monitoring at the property ceased in August 2009.							
		<table border="1"> <thead> <tr> <th>Airblast overpressure level (dB(Lin Peak))</th> <th>Allowable exceedance</th> </tr> </thead> <tbody> <tr> <td>115</td> <td>5% of the total number of blasts in a 12 month period</td> </tr> <tr> <td>120</td> <td>0%</td> </tr> </tbody> </table> <p><i>Table 3. Airblast overpressure impact assessment criteria</i></p> <p><i>Note: The overpressure values in Table 3 apply when the measurements are performed with equipment having a lower cut-off frequency of 2 Hz or less. If the instrumentation has a higher cut-off frequency a correction of 5 dB should be added to the measured value. Equipment with a lower cut-off frequency exceeding 10 Hz should not be used.</i></p>	Airblast overpressure level (dB(Lin Peak))	Allowable exceedance	115	5% of the total number of blasts in a 12 month period	120	0%			
Airblast overpressure level (dB(Lin Peak))	Allowable exceedance										
115	5% of the total number of blasts in a 12 month period										
120	0%										

Schedule	Condition No.	Requirement	Compliance Y/N/NT/V/NA	Evidence	Comments						
Ground Vibration Impact Assessment Criteria											
	12	The Proponent shall ensure that the ground vibration level from blasting, or any other activity at the project does not exceed the criteria in Table 4 at any residence on privately-owned land. <table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="text-align: center;">Peak particle velocity (mm/s)</th> <th style="text-align: center;">Allowable exceedance</th> </tr> </thead> <tbody> <tr> <td style="text-align: center;">5</td> <td style="text-align: center;">5% of the total number of blasts in a 12 month period</td> </tr> <tr> <td style="text-align: center;">10</td> <td style="text-align: center;">0%</td> </tr> </tbody> </table> <p><i>Table 4: Ground vibration impact assessment criteria</i></p>	Peak particle velocity (mm/s)	Allowable exceedance	5	5% of the total number of blasts in a 12 month period	10	0%	Y	Blasting Monitoring Program (BMP), Section 4 - Monitoring Locations. This section indicates that ground vibration will be measured at three locations for all blasts throughout the life of the mine by Orica as the Blasting Contractor. Results of the monitoring will be forwarded to WCMPL on the day of each blast. AEMR 2009/2010, Section 3.9 - Blasting. This section details the ground vibration blasting results in comparison to the compliance criteria and Appendix 8 lists the Blast Monitoring Results. AEMR 2009/2010, Section 3.9.2 indicates that the maximum recorded ground vibration during the reporting period was 1.39 mm/s recorded at "Costa Vale" on the 8th October 2009. This is well inside the consent criteria of 5 mm/s. Blast monitoring commenced "Brolga" in June 2009 following reports from the landholder that the property was being affected by blasting. The monitoring event in June 2009 recorded a ground vibration of 0.71 mm/s which was well below the criteria.	
Peak particle velocity (mm/s)	Allowable exceedance										
5	5% of the total number of blasts in a 12 month period										
10	0%										
Blasting Hours											
	13	The Proponent shall carry out blasting on site between 9 am and 5 pm Monday to Saturday.	Y	AEMR 2009/2010, Section 2.4.4 states that blasting activities were carried out between 9.00am and 5.00pm Monday to Saturday. A review of the blast monitoring results confirmed that blasts have been carried within the required timeframes.							
Blasting Frequency											
	14	The Proponent may carry out:									
		(a) a maximum of 2 blasts a day;	Y	Blast Monitoring Program, Section 1 states there will be a maximum of 2 blasts per day. A review of blast monitoring results confirms that no more than 2 blasts have been undertaken per day. Two blasts per day have only been undertaken on two occasions to date - blasts 59 and 60 which occurred on 28/10/10 and blasts 69 and 70 which occurred on 18/3/11.							
		(b) 5 blasts a week, averaged over a 12 month period;	Y	Blast Monitoring Program, Section 1 states there will be a maximum of 5 blasts per week, averaged over a 12 month period. A review of the blasting results indicates that a maximum of 27 blasts have occurred in a 12 month period which is well within the limit of 5 blasts per week.							
		on site without the written approval of the Director-General									
Operating Conditions											
	15	During mining operations on site, the Proponent shall implement best blasting practice to:									
		(a) protect the safety of people, property, public infrastructure, and livestock;	Y	Blast Monitoring Program, Section 6 outlines the blasting procedures. Section 6.1 indicates that all aspects of blast monitoring will be undertaken by Orica Explosives in accordance with AS 2187.2-1993-Storage, Transport and Use - Use of Explosives, a copy of which will be retained at the Rocglen Coal Mine Site Office.	A blast was observed during the audit on 13 May 2011. No issues were observed for that blast and observation confirmed the blasting practices were being implemented.						
		(b) minimise the dust and fume emissions from blasting at the mine site,	Y	AEMR 2009/2010, Section 3.9.1.2 outlines the control procedures for blasting and states that flyrock, air vibration, ground vibration and dust from blasting are controlled using a combination of design and operational methods which are detailed in the MOP and/or documented blasting procedures. MOP, section 7.2.1 outlines the procedures for drilling and blasting activities.	A blast was observed during the audit on 13 May 2011. No issues were observed for that blast and observation confirmed the blasting practices were being implemented.						
		to the satisfaction of the Director-General.									
	16	The Proponent shall not undertake blasting within 500 metres of any privately-owned land, unless suitable arrangements have been made with the landholder and any tenants to minimise the risk of flyrock-related impact to the property to the satisfaction of the Director-General.	NT	During the on-site audit inspection, WCMPL staff verbally confirmed that blasting is not currently carried out within 500m of privately-owned land, however it will be in the future and that this is currently being monitored.							

Schedule	Condition No.	Requirement	Compliance Y/N/NT/V/NA	Evidence	Comments
Road closure					
	17	Prior to blasting within 500 metres of any public road, the Proponent shall prepare and implement a Road Closure Management Plan for the project to the satisfaction of GSC and DPI.	Y	Road Closure Management Plan sighted on WCMPL website. Gunnedah Shire Council approval letter dated 9/02/2009 sighted and DPI approval letter sighted, however, the letter from DPI is in pdf format and is unsigned and not dated. It is recommended that Whitehaven followup with DPI to obtain a signed and dated copy of the letter.	Blasting Monitoring Program, Section 3 states that WCMPL will prepare and implement a road closure management plan to the satisfaction of Gunnedah Shire Council and the DPI for blasting activities required within 500 metres of a public road. This will ensure appropriate safeguards are in place for the control of traffic on those public roads during blasting times. A notification board will be placed on the northern and southern side of the mine site along Wean Road advising of blasting times for notification of road users. A detailed procedure for mine site staff will be included in the road closure management plan as to the activities required in relation to temporary closure of Wean Road during blasting.
Public Notice					
	18	During mining operations on site, the Proponent shall: (a) notify any person who registers an interest in being notified about the blasting schedule at the mine;	Y	BMP, Section 3 states that WCMPL will provide specific notification of individual blasts to any person who registers an interest in being notified about the blasting schedule at the mine. Notification will involve: a letter, nominating a planned blast date, will be hand delivered on the day before each blast. The letter would provide the indicative time for the blast; and a telephone call during the morning of the blast to confirm the blast will proceed at the nominated (or varied) time.	During the on-site audit inspection, Blasting Notification Checklists were sighted dated 12/04/2011 for blast no. 72 and 16/04/2011 for blast no. 73, which detailed notification to landowners at Brolga, Roseberry, Surrey, Yarrari, and Penryn.
		(b) operate a Blasting Hotline, or alternate system agreed to by the Director-General, to enable the public to get up-to-date information on the blasting schedule at the project;	Y	Blast notification signs sighted which provided the phone number 6740 7000. The full wording on the signs is: CAUTION POTENTIAL SHORT DELAYS MAY OCCUR DUE TO BLASTING AT ROCGLLEN COAL MINE WEEK DAYS FROM 9AM TO 3PM PH: 6740 7000	
		(c) advertise the blasting hotline number in a local newspaper each year; and	Y	During the on-site audit inspection, copies of newspaper advertisements were sighted.	
		(d) provide signage, with updated details of proposed blasting times, immediately to the north and south of the mine site on Wean Road, to the satisfaction of the Director-General.	Y	Blast notification signs sighted on Wean Road. Details of the sign include: BLASTING BOARD, DATE: 13/05/2011, TIME: 12:00PM, SLEEPING SHOT:	Whilst blast notification signs are in place at the northern and southern ends of the mine site on Wean Road, it was observed that the signs are parallel with the road and located on the property boundary which is set approximately 5 to 10 metres from the road. In order to see the signs, a driver needs to turn their head to the left or stop. It is suggested that Whitehaven consider realigning the signs to be perpendicular to the property boundary and more visible to road users along Wean Road.
Property Inspections					
	19	Before carrying out any blasting, the Proponent shall advise the owners of "Costa Vale", "Surrey" and "Brolga", all landowners within 2 km of proposed blasting activities, and any other landowner nominated by the Director-General, that they are entitled to a property inspection.	Y	Blasting Monitoring Program, Section 2 states that the owners of "Costa Vale", "Surrey" and "Brolga", all landowner residences within a 2km radius of the planned blasting activity (other than those owned by WCMPL) have been advised in writing of their entitlement to a property inspection prior to the commencement of blasting activities. Section 3 states that WCMPL will provide written notification, at least 2 weeks prior to the commencement of blasting, on the following: the Company's proposed blasting timetable and duration; a plan showing Blast Monitoring Locations; the procedure for reporting possible blasting related damage to a residence or other vibration infrastructure (such as water supply or underground irrigation mains), and the entitlement of any landowner within a 2km of proposed blasting activities, to an investigation of the damage claims; and the disputes resolution procedure of WCMPL. Property inspection reports sighted for "Brolga" dated July 2008, "Dunmohr" dated Aug 2009, and "Surrey" dated July 2008.	WCMPL staff advised that the only non-project owned property within 2km was Roseberry. The owner was verbally offered an inspection but refused. Inspections conducted at Surrey and Brolga initially and then Dunmohr later on, however these were outside the 2km radius. All communication was verbal (Tony Jones - Community Liaison Officer). No building inspection report was undertaken for "Costa Vale". During the on-site audit inspection, it was verbally confirmed that WCMPL offered to inspect the "Costa Vale" property, however the landowners declined the offer.

Schedule	Condition No.	Requirement	Compliance Y/N/NT/V/NA	Evidence	Comments
	20	If the Proponent receives a written request for a property inspection from any landowner within 2 km of proposed blasting activities, or any other landowner nominated by the Director-General, the Proponent shall within 3 months of receiving this request:			
		(a) commission a suitably qualified person, whose appointment has been approved by the Director-General, to inspect the condition of any building or structure on the land, and recommend measures to mitigate any potential blasting impacts; and	N	BMP, Section 2 states that in the event a written request is made by any of the contacted landowners/residents, WCMPL will: identify a suitably qualified person to undertake the inspection and forward details of the referred inspectors qualifications and experience to the Director-General of the Department of Planning for approval; commission the completion of the property inspection; and provide a copy of the inspection report to the relevant landowner/resident. Copies of the building condition assessments were reviewed during the audit.	Whitehaven appointed a suitably qualified person to undertake the building condition assessments (Kelley Covey Group Pty Ltd), although there is no evidence that this appointment was notified to or approved by the Director-General. However, it is noted that Kelley Covey had been appointed to undertake building condition assessments for other Whitehaven operations in the Gunnedah area and for those operations had been approved by DoP to conduct the condition assessments.
		(b) give the landowner a copy of this property inspection report.	V	The BMP identifies that the inspection and report will be completed within 3 months of receiving the written request for the property inspection. WCMPL staff advised that copies of reports were hand delivered to owners. No letters available.	
Property Investigations					
	21	If any landowner within a 2 km of proposed blasting activities, or any other landowner nominated by the Director-General, claims that any building or structure on his/her property, including vibration-sensitive infrastructure such as water supply or underground irrigation mains, has been damaged as a result of blasting at the project, the Proponent shall within 3 months of receiving this request:	NT	No claims have been lodged to date. However, BMP, Section 3 states that in addition to notification to each landowner regarding their entitlement to a property inspection, WCMPL will provide written notification, at least 2 weeks prior to the commencement of blasting the procedure for reporting possible blasting related damage to a residence or other vibration infrastructure (such as water supply or underground irrigation mains), and the entitlement of any landowner within a 2km of proposed blasting activities, to an investigation of the damage claims.	Whilst no claims have been made to date, it is noted that Whitehaven has procedures in place to deal with this issue should it arise.
		(a) commission a suitably qualified person whose appointment has been approved by the Director-General to investigate the claim; and	NT	No claims have been made to date. However the BMP, Section 2 states that in the event a written request is made by any of the contacted landowners / residents, WCMPL will identify a suitably qualified person to undertake the inspection and forward details of the preferred inspectors qualifications and experience to the Director-General of the Department of Planning for approval; commission the completion of the property inspection; and provide a copy of the inspection report to the relevant landowner/resident.	
		(b) give the landowner a copy of the property investigation report.	NT	See above	
		If this independent investigation confirms the landowner's claim, and both parties agree with these findings, then the Proponent shall repair the damages to the satisfaction of the Director-General. If the Proponent or landowner disagrees with the findings of the independent property investigation, then either party may refer the matter to the Director-General for resolution.	NT	No claims to date but BMP, Section 3 indicates the disputes resolution procedure of WCMPL would be utilised in this situation.	
Monitoring					
	22	Prior to the commencement of blasting, the Proponent shall prepare and implement a detailed Blasting Monitoring Program for the project in consultation with DECC, and to the satisfaction of the Director-General.	Y	Blasting Monitoring Program for the Rocglen Coal Mine, Edition 1, Rev 0 dated 24/4/08. Email correspondence sighted dated 28/03/2008 from Danny Young, Environmental Manager WCMPL to Stephen O'Donoghue of DECC seeking input to the draft Blasting Monitoring Program. Letter from DoP dated 27/5/08 approving blast management plan. AEMR 2009/2010, Appendix 8, Blast Monitoring Results, indicates the first blast occurred on 18 August 2008.	

Schedule	Condition No.	Requirement	Compliance Y/N/NT/V/NA	Evidence	Comments																							
AIR QUALITY																												
Impact Assessment Criteria																												
	23	The Proponent shall ensure that dust emissions generated by the project does not cause additional exceedances of the criteria listed in Tables 5 to 7 at any residence on privately owned land, or on more than 25 percent of any privately-owned land.	N	Air Quality Monitoring Program (AQMP), section 3.2 states that WCML will ensure that dust and other particulate matter generated on the mine site does not result in exceedances of the criteria listed in Table 1 at any residence on privately owned land, or on more than 25 percent of any privately-owned land. Table 1 lists the air quality compliance criteria as per this condition requirement. AEMR 2009/2010, section 3.1 details several PM10 exceedances at both "Glenroc" and "Roseberry" properties (Table 7). A review of the monitoring data confirmed this. AEMR 2009/2010, Section 3.1 states there were no exceedances for deposited dust. There is no evidence that TSP is monitored or recorded.	Specific TSP monitoring is not being undertaken. While the approval does not specifically require TSP monitoring to be undertaken, it has specified a criterion. Whitehaven advised that compliance with the TSP criterion is assessed via the interpolation of PM10 monitoring results. It is also noted that while DoP has not confirmed TSP monitoring is not required, it has approved the Air Quality Monitoring Program for the mine which did not include the monitoring of TSP. It was also noted that the DoP audit in 2009 did not indicate any issues with this condition.																							
		<table border="1"> <thead> <tr> <th>Pollutant</th> <th>Averaging period</th> <th>Criterion</th> </tr> </thead> <tbody> <tr> <td>Total suspended particulate (TSP) matter</td> <td>Annual</td> <td>90 µg/m³</td> </tr> <tr> <td>Particulate matter < 10 µm (PM₁₀)</td> <td>Annual</td> <td>90 µg/m³</td> </tr> </tbody> </table> <p>Table 5: Long term impact assessment criteria for particulate matter</p> <table border="1"> <thead> <tr> <th>Pollutant</th> <th>Averaging period</th> <th>Criterion</th> </tr> </thead> <tbody> <tr> <td>Particulate matter < 10 µm (PM₁₀)</td> <td>24 hour</td> <td>50 µg/m³</td> </tr> </tbody> </table> <p>Table 6: Short term impact assessment criteria for particulate matter</p> <table border="1"> <thead> <tr> <th>Pollutant</th> <th>Averaging period</th> <th>Maximum increase in deposited dust level</th> <th>Maximum total deposited dust level</th> </tr> </thead> <tbody> <tr> <td>Deposited dust</td> <td>Annual</td> <td>2 g/m²/month</td> <td>4 g/m²/month</td> </tr> </tbody> </table> <p>Table 7: Long term impact assessment criteria for deposited dust</p> <p>Note: Deposited dust is assessed as insoluble solids as defined by Standards Australia, 1991, AS/NZS 3800.10.1-2003. Methods for Sampling and Analysis of Ambient Air - Determination of Particulates - Deposited Matter - Gravimetric Method.</p>	Pollutant	Averaging period	Criterion	Total suspended particulate (TSP) matter	Annual	90 µg/m ³	Particulate matter < 10 µm (PM ₁₀)	Annual	90 µg/m ³	Pollutant	Averaging period	Criterion	Particulate matter < 10 µm (PM ₁₀)	24 hour	50 µg/m ³	Pollutant	Averaging period	Maximum increase in deposited dust level	Maximum total deposited dust level	Deposited dust	Annual	2 g/m ² /month	4 g/m ² /month			
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Monitoring																												
	24	The Proponent shall prepare and implement an Air Quality Monitoring Program for the project in consultation with DECC, and to the satisfaction of the Director-General. This program must:	Y	Air Quality Monitoring Program for the Rocglen Coal Mine incorporating and Air Monitoring Protocol, Edition 1, Rev 1 dated 9/1/2009. Evidence was sighted during the audit to indicate that the plan is generally implemented (eg. Use of water cart, water sprays on conveyors etc).	The AQMP was updated to reflect the discontinuation of PM10 monitoring at Costa Vale but has not been updated with the change in monitoring location from Surrey to Roseberry. It was noted, however, that the EPL had been varied to reflect both changes. It is recommended that the Air Quality Monitoring Program be updated to reflect the current monitoring locations.																							
		(a) be submitted to the Director-General prior to the commencement of construction activities (not including the Kamilaroi Highway and Hoad Lane intersections and sections 1 and 2 of the coal transport route);	Y	During the on-site audit inspection, WCML staff advised that construction activities commenced on 1 Aug 2008. AQMP approval letter from DoP dated 27/05/2008 sighted which confirmed Plan was approved prior to construction																								
		(b) be prepared in consultation with the DECC; and	Y	Email correspondence sighted dated 21/05/2008 from Danny Young of WCML to Stephen O'Donoghue of DECC seeking input to the draft Air Quality Management Plan.																								
		(c) use a combination of high volume samplers and dust deposition gauges to monitor the performance of the project.	Y	Air Quality Monitoring Program includes use of dust deposition gauges and PM10 high volume air samplers. Review of monitoring results shows that both dust deposition and PM10 are being monitored as scheduled. AEMR 2009/2010 and AQMP indicate procedures and monitoring locations for both PM10 high volume air samplers and dust deposition gauges.																								
METEOROLOGICAL MONITORING																												
	25	During the project, the Proponent shall ensure there is a suitable meteorological station on site that complies with the requirements in <i>Approved Methods for Sampling of Air Pollutants in New South Wales</i> (DECC, 2007), or its latest version.	Y	AEMR 2009/2010, Section 3.22 Meteorological Monitoring states that a new meteorological station for the Rocglen Mine was commissioned in April 2009 at the "Glenroc" property north of the mine site. The previous weather station was located at "Belmont" (installed 2002) and relocated to "Glenroc" in January 2008. The station has been operating continuously since April 2009 recording 15 minute wind speed, wind direction, temperatures, humidity and rainfall. An inspection of the met station site confirmed that it generally complies with the requirements of the DECC publication. Meteorological data sighted from Aug 2009 to July 2010.	Data collection during the 2009/2010 reporting period had been plagued with battery failure on a regular basis (ie. every couple of months). Whitehaven engaged Boztek Solutions Pty Ltd in June 2009 to service the weather station and determine the cause of the battery issues. It was identified that the super capacitor (which stores electricity generated from the solar panel) needed replacing and connecting to the weather console. This allows the batteries to only be used as a backup, thereby ensuring their longevity. A review of the meteorological data shows that the station appears to be functioning as intended with no battery issues since the repairs were effected.																							

Schedule	Condition No.	Requirement	Compliance Y/N/NT/V/NA	Evidence	Comments
SUBSIDENCE					
Subsidence Impact Limits					
	26	The Proponent shall ensure that subsidence of the land surface caused by auger coal mining does not result in vertical subsidence of greater than 20 mm.	NT	No auger mining has been undertaken at Rocglen to date.	
LANDSCAPE					
<i>Note: These conditions should be read in conjunction with sections 4, 6, 11, 13 and 16 of the Statement of Commitments.</i>					
Biodiversity Offsets					
	27	The Proponent shall: (a) implement the Biodiversity Offsets summarised in Table 8 and described in the EA (shown conceptually in Figure 6 in Appendix 4); and (b) make suitable arrangements to provide appropriate long term security for the offset areas by the end of August 2010 to the satisfaction of the Director General.	N	AEMR 2009/2010, section 3.6 states that Whitehaven had anticipated completion of a Landscape Management Plan (LMP) during the reporting period, pending the outcome of the regional Biodiversity Offset Strategy proposal. The proposal was submitted to DECCW in February 2010 and DECCW completed their site inspection in May 2010 however Whitehaven is yet to receive advice as to the determination of the proposal. The outcomes are expected to vary slightly from those originally planned due to the proposed Rocglen Extension.	WC MPL staff advised that this has not completed since the onsite offset area is proposed to be removed in the project extension application. Offsite offset is in regional biobank area which is pending approval from DECCW.
	28	The Proponent is to allocate at least 60 ha of the required offset from the Whitehaven Regional Biodiversity Offset area (offset 5 in Table 8 - also refer to Appendix 5). This must be done in consultation with DECC, and to the satisfaction of the Director-General.	N	The Biodiversity Offset Strategy not finalised.	
Rehabilitation					
	29	The Proponent shall progressively rehabilitate the site in a manner that is generally consistent with the final landform set out in the EA (shown conceptually in Figure 5 in Appendix 4) to the satisfaction of the Director-General and DPI. The final landform shall provide for at least 84 hectares of woodland vegetation, in a manner generally consistent with that shown conceptually in Figure 6 in Appendix 4.	N N	The Landscape Management Plan has not been finalised, which will detail rehabilitation for the site. The Landscape Management Plan has not been finalised, which will detail rehabilitation for the site.	
Landscape Management Plan					
	30	The Proponent shall prepare and implement a detailed Landscape Management Plan for the site to the satisfaction of the Director-General and DPI. This plan must: (a) be prepared in consultation with DWE, DECC and GSC by suitably qualified expert/s whose appointment/s have been approved by the Director-General; (b) be submitted to the Director-General for approval by the end of March 2009; and (c) include a: • Rehabilitation and Offset Management Plan; • Final Void Management Plan; and • Mine Closure Plan. <i>Note: The Department accepts that the initial Landscape Management Plan may not include the detailed Final Void Management Plan and Mine Closure Plan. However, if this occurs, the Applicant will be required to seek approval from the Director-General for an alternative timetable for the completion and approval of the Final Void Management Plan and Mine Closure Plan.</i>	N N N N N N N N	AEMR 2009/2010, section 3.6 states that Whitehaven had anticipated completion of a Landscape Management Plan (LMP) during the reporting period, pending the outcome of the regional Biodiversity Offset Strategy proposal. The proposal was submitted to DECCW in February 2010 and DECCW completed their site inspection in May 2010 however Whitehaven is yet to receive advice as to the determination of the proposal. The outcomes are expected to vary slightly from those originally planned due to the proposed Rocglen Extension. The Landscape Management Plan has not been finalised yet. The Landscape Management Plan has not been finalised yet. The Landscape Management Plan has not been finalised yet. The Landscape Management Plan has not been finalised yet. The Landscape Management Plan has not been finalised yet. The Landscape Management Plan has not been finalised yet. The Landscape Management Plan has not been finalised yet.	
Rehabilitation and Offset Management Plan					
	31	The Rehabilitation and Offset Management Plan must include: (a) the objectives for rehabilitation of the site and offset areas;	N N	The Rehabilitation and Offset Management Plan has not been finalised. The Rehabilitation and Offset Management Plan has not been finalised.	

Schedule	Condition No.	Requirement	Compliance Y/N/NT/V/NA	Evidence	Comments
		(b) a strategic description of how the rehabilitation of the site would be integrated with <u>surrounding land use</u> ;	N	The Rehabilitation and Offset Management Plan has not been finalised.	
		(c) a description of the short and long term measures that would be implemented to:	N	The Rehabilitation and Offset Management Plan has not been finalised.	
		• rehabilitate the site;	N	The Rehabilitation and Offset Management Plan has not been finalised.	
		• implement the biodiversity offsets;	N	The Rehabilitation and Offset Management Plan has not been finalised.	
		• manage the remnant vegetation and habitat on the site and in the offset areas; and	N	The Rehabilitation and Offset Management Plan has not been finalised.	
		• maximise effective vegetative linkages for the offset areas and across the valley floor to the <u>Whitehaven Regional Biodiversity Offset area</u> ;	N	The Rehabilitation and Offset Management Plan has not been finalised.	
		(d) detailed performance and completion criteria for the rehabilitation of the site and <u>the implementation of the biodiversity offsets</u> ;	N	The Rehabilitation and Offset Management Plan has not been finalised.	
		(e) a detailed description of how the performance of the rehabilitation works and the offset areas would be monitored over time to achieve the stated objectives;	N	The Rehabilitation and Offset Management Plan has not been finalised.	
		(f) a detailed description of the measures that would be implemented to rehabilitate <u>the site, including the measures to be implemented for</u> :	N	The Rehabilitation and Offset Management Plan has not been finalised.	
		- managing the remnant vegetation and habitat on site;	N	The Rehabilitation and Offset Management Plan has not been finalised.	
		- minimising impacts on fauna;	N	The Rehabilitation and Offset Management Plan has not been finalised.	
		- minimising visual impacts;	N	The Rehabilitation and Offset Management Plan has not been finalised.	
		- conserving and reusing topsoil;	N	The Rehabilitation and Offset Management Plan has not been finalised.	
		- controlling weeds, feral pests, and access;	N	The Rehabilitation and Offset Management Plan has not been finalised.	
		- managing bushfires; and	N	The Rehabilitation and Offset Management Plan has not been finalised.	
		- managing any potential conflicts between the rehabilitation works and/or biodiversity offsets and <u>Aboriginal cultural heritage</u> ;	N	The Rehabilitation and Offset Management Plan has not been finalised.	
		(g) a description of the potential risks to successful rehabilitation and/or revegetation, and a description of the contingency measures that would be implemented to mitigate <u>these risks</u> ; and	N	The Rehabilitation and Offset Management Plan has not been finalised.	
		(h) details of who is responsible for monitoring, reviewing and implementing the plan.	N	The Rehabilitation and Offset Management Plan has not been finalised.	
Final Void Management Plan					
	32	The Final Void Management Plan must:	N	The Final Void Management Plan has not been finalised.	
		(a) justify the final location, configuration and future use of the final void;	N	The Final Void Management Plan has not been finalised.	
		(b) incorporate design criteria and specifications of the final void based on verified groundwater modelling predictions and re-assessment of the post-mining groundwater levels;	N	The Final Void Management Plan has not been finalised.	
		(c) assess the potential interactions between groundwater resources, surface water flows and the final void; and	N	The Final Void Management Plan has not been finalised.	
		(d) describe what actions and measures would be implemented to:	N	The Final Void Management Plan has not been finalised.	
		- minimise any potential adverse impacts associated with the final void; and	N	The Final Void Management Plan has not been finalised.	
		- manage and monitor the potential impact of the final void.	N	The Final Void Management Plan has not been finalised.	
Mine Closure Plan					
	33	The Mine Closure Plan must:	N	The Mine Closure Plan has not been finalised.	
		(a) define the objectives and criteria for mine closure;	N	The Mine Closure Plan has not been finalised.	
		(b) investigate options for the future use of the site, including the final void;	N	The Mine Closure Plan has not been finalised.	
		(c) investigate ways to minimise the adverse socio-economic effects associated with mine closure, including reduction in local and regional employment levels;	N	The Mine Closure Plan has not been finalised.	
		(d) describe the measures that would be implemented to minimise or manage the <u>ongoing environmental effects of the project</u> ; and	N	The Mine Closure Plan has not been finalised.	
		(e) describe how the performance of these measures would be monitored over time.	N	The Mine Closure Plan has not been finalised.	

Schedule	Condition No.	Requirement	Compliance Y/N/NT/V/NA	Evidence	Comments
HERITAGE					
<i>Note: These conditions should be read in conjunction with section 7 of the Statement of Commitments.</i>					
Destruction of Aboriginal Sites					
	34	The Proponent may destroy sites B1, B2 and B3, and undertake salvage of the artefacts contained in these sites, to the satisfaction of DECC. Representatives of the local Aboriginal community may, subject to the conditions of a Care and Control permit, relocate some or all of the artefacts contained in these sites to the Cumbo Gunerah Keeping Place.	Y	AEMR 2009/2010, Section 3.12.1 states that sites B1, B2 and B3 were salvaged by Archaeological consultant, Mr John Appleton, together with representatives of the Red Chief Local Aboriginal Land Council, Bigundi Biame Traditional People, Gunida Gunya and Min Min Aboriginal Corporation August 2008. The GPS coordinates for each artefact have been recorded. Application for a Care Agreement for Aboriginal Artefacts was made for the keeping of the Artefacts at the Cumbo Gunerah Keeping Place in accordance with Section 85a of the NP&W Act. A report regarding salvage of the artefacts was prepared by Mr John Appleton and copies of the report were provided to each of the representative Aboriginal groups and to the then DECC. Aboriginal and Cultural Heritage Management Plan (ACHMP), Section 3.2.2 includes further details of the salvage of these sites.	
Aboriginal Cultural Heritage Management Plan					
	35	The Proponent shall not destroy any known Aboriginal objects (as defined in the <i>National Parks and Wildlife Act 1974</i>), except in accordance with condition 34, without the written approval of the Director-General.	Y	WCMLP staff advised that none have knowingly been destroyed. There are procedures in place to address this issue if required. ACHMP, Section 4.2 states that In the event that an Aboriginal artefact or site is identified, and in accordance with the procedure documented in Section 3.4, a site register card will be completed and forwarded to the DECC for entry onto the AHIMS database. Any artefacts to be transferred in accordance with a s85 permit under the NP&W Act 1979 will also be undertaken in accordance with the procedure identified in Section 3.2.2 of the ACHMP.	
	36	The Proponent shall prepare and implement an Aboriginal Cultural Heritage Management Plan for the project to the satisfaction of the Director-General. This plan must:	Y	Whitehaven Coal Mining Pty Limited, Aboriginal and Cultural Heritage Management Plan for the Rocglen Coal Mine, Edition 1 Rev 0 dated 24/4/2008. Letter from DoP dated 5/06/2008 sighted approving the ACHMP. Evidence was sighted during the audit to indicate that the Plan is generally implemented.	
		(a) be submitted the Director-General prior to the commencement of construction activities (not including the construction of the Kamilaroi Highway and Hoard Lane intersections);	Y	Letter from DoP dated 5/06/2008 sighted approving the ACHMP. WCMLP staff advised that the Project Manager confirmed (from diary notes) that Northpower removed the powerlines to the old residence on the 31 July 2008 and construction of pads for buildings commenced 1 August 2008.	
		(b) be prepared in consultation with the DECC, Red Chief Local Aboriginal Land Council, Gunida Gunyah Aboriginal Corporation, Min Min Aboriginal Corporation and Bigundi Gunnedarr Traditional People;	Y	Letter from WCMLP dated 29/04/2008 to DECC attaching ACHMP seeking advice/input sighted. Letter to Bigundi Biame Gunnedarr Traditional People, Gunida Gunyah Aboriginal Corporation, Min Min Aboriginal Corporation, and Red Chief Local Aboriginal Land Council, each dated 17/03/2008 seeking input to the ACHMP sighted. Response letters from Gunida Gunyah, Min Min and Red Chief sighted.	
		(c) include a protocol for the ongoing consultation and involvement of Aboriginal communities in the conservation and management of Aboriginal heritage on site;	Y	ACHMP, Section 4.1 details the consultation protocol with the local Aboriginal community, one protocol is that the Mine Manager will contact the Manager's of the above Aboriginal groups on a monthly basis to advise of the mine's progress and program for the ensuing period and all consultation will be diarised. Section 4.2 states that in addition, the results of monitoring undertaken on the mine site will be summarised in each relevant AEMR, with the local Aboriginal community kept informed as to developments by virtue of the ongoing consultation with the four nominated Aboriginal groups. Evidence was sighted during the audit to indicate that consultation with aboriginal groups is occurring.	
		(d) make provision for the local Aboriginal community to monitor works at the project site that occur in areas considered by the local Aboriginal community to be culturally sensitive;	Y	ACHMP, Section 4.1 states that prior to any topsoil stripping campaign, the Mine Manager will notify the Managers of the above Aboriginal groups or, if so directed by the Managers, the nominated Sites Officers advising of the extent, location, timing and expected duration of the planned campaign and invite representative to monitor the topsoil stripping activities.	

Schedule	Condition No.	Requirement	Compliance Y/N/NT/V/NA	Evidence	Comments
		(e) describe the measures that would be implemented to protect Aboriginal objects and traditional resources (such as Wild Orange - <i>Capparis mitchellii</i>) on site, or if any new Aboriginal objects or skeletal remains are discovered during the project; and	Y	ACHMP, Section 4.1 states that in the event that an Aboriginal artefact or site is identified, and in accordance with the procedure documented in Section 3.4, a site register card will be completed and forwarded to the DECC for entry onto the AHIMS database. Any artefacts to be transferred in accordance with a s85 permit under the NP&W Act 1979 will also be undertaken in accordance with the procedure identified in	
		(f) describe the cultural heritage awareness and protection training program to be undertaken by all employees and contractors.	Y	ACHMP, Section 3.3 states that Prior to any person undertaking work on the mine site, they will undergo a Cultural Awareness induction training program as designed by WHCM in consultation with the identified Aboriginal groups and delivered in the general mine site induction. Any person undertaking soil stripping activities will also undertake additional training in the recognition of Aboriginal artefacts as provided by the nominated Aboriginal monitors during soil stripping campaigns. A copy of the information that will be included in the Cultural Awareness induction training program is provided in Appendix 4 of the Plan and includes the procedures to be adopted in the event of a discovery of a potential site or artefact.	
TRANSPORT					
<i>Note: These conditions should be read in conjunction with sections 12 and 17 of the Statement of Commitments.</i>					
Monitoring of Coal Transport					
	37	The Proponent shall keep records of the amount of coal transported from the mine site, and number of coal truck movements each year, and include these records in the AEMR.	Y	AEMR 2009/2010, Section 2.11 Product Transport. This section states that during the reporting period, all sized (<200 mm) ROM coal from the mine was delivered directly to the Whitehaven CHPP, with all product coal destined for the export market transported by train to the Port Waratah or Kooragang Island ship loaders at the Port of Newcastle. 1,031,775 tonnes of coal was transported from the mine during the reporting period. This equated to an approximate average of 86 truckloads of coal being transported per haulage day from the mine to the Whitehaven CHPP. Daily Production Reports reviewed during the audit indicate that appropriate information is being recorded.	
Coal Haul Road					
	38	Prior to coal being transported from the site, the Proponent shall ensure the coal transport route from the Belmont mine site to the Whitehaven Siding coal handling and preparation plant is constructed and tar sealed, to the satisfaction of GSC. If agreement cannot be reached, the matter shall be referred to the Director-General for resolution.	V	During the on-site audit inspection, WCMPL staff advised that the first coal haulage was on 8/12/2008. The coal transport route has been constructed and was inspected during the audit. Whitehaven advised that the works were completed prior to the first transport of coal, however formal approval of the works from Council was not obtained prior to coal transport. Letter from Gunnedah Shire Council sighted dated 20/05/2011 confirming that Council's requirements with regard to the roadworks on its local road network associated with the Rocglen Coal Mine's development have been completed to Council's satisfaction; being Wean Road reconstruction and sealing and the Shannon Harbour Road reconstruction and sealing including its intersection with the Bluevale Road.	The coal transport route has been constructed and tar sealed to the satisfaction of GSC, however the road works were not formally approved until after this date.
	39	The Proponent shall transport all coal from the site to the Whitehaven Siding coal handling and preparation plant by use of the road transport route shown in Figure 3 of Appendix 2, unless otherwise approved by the Director-General.	Y	WCMPL staff confirmed that all coal is being transported from the site to the Whitehaven Siding coal handling and preparation plant by use of the road transport route shown in Figure 3 of Appendix 2. This was verified during the audit site inspection by direct observation of coal trucks leaving the Rocglen site and travelling along the nominated transport route to the Whitehaven CHPP. No coal trucks were observed on other routes (eg no coal trucks were sighted on Wean Road).	

Schedule	Condition No.	Requirement	Compliance Y/N/NT/V/NA	Evidence	Comments
Coal Transportation Hours					
	40	The Proponent shall only dispatch coal from the site by road between the hours of:			
		(a) 7 am to 9.15 pm, Monday to Friday;	Y	AEMR 2009/2010, section 2.4.4 states that coal transportation from the mine site is undertaken between the hours of 7:00am to 9:15pm Monday to Friday and 7:00am to 5:15pm on Saturdays. These times ensure that all coal trucks are off the public road network by 10:00pm Monday to Friday and 6:00pm Saturdays. Coal transportation is not permitted on Sundays and public holidays. The Rocglen Project Manager confirmed that coal transport hours are set out in the road haulage contract documents for both Toll and Daracon and are as per the approval requirements.	
		(b) 7 am to 5.15 pm Saturday; and	Y		
		(c) at no time on Sundays and public holidays.	Y		
Kamilaroi Highway Intersections					
	41	The Proponent shall construct the Kamilaroi Highway intersections in consultation with GSC and to the satisfaction of RTA. This intersection must:	Y	Construction Completion Certificate sighted dated 16/02/2011 from Constructive Solutions confirming the Kamilaroi Highway Access Improvements have been completed in accordance with RTA requirements. Letter from Gunnedah Shire Council sighted dated 20/05/2011 confirming that Council's requirements with regard to the roadworks on its local road network.	
		(a) be completed within 18 months of this approval;	N	Project approval 06_0198 dated 15/04/2008, 18 months thereafter was 15/10/2009. Letter from Constructive Solutions dated 3/02/2011 requesting that practical completion be awarded for the Kamilaroi Highway Intersections on 30/09/2010 when the last activity was undertaken for these works. Email sighted from Ben Rossiter of Constructive Solutions dated 6/05/2011 stating the remaining items to seek final close out for the works include: resolution of a defect in the concrete slip lane by Kellers, and installation of lighting.	The Kamilaroi Highway intersection was not completed within 18 months of this approval.
		(b) be constructed in accordance with a Traffic Management Plan approved by GSC and RTA; and	V	The construction works were undertaken by a contractor under the direction of Whitehaven's Road Construction Manager. Whilst Whitehaven staff advised that a traffic management plan was prepared in accordance with RTA specification G10, Rocglen did not retain a copy of the approved plan.	Based on the auditor's experience with RTA projects, the submission of a traffic management plan under RTA specification G10 is a hold point prior to the commencement of construction, therefore, in the auditor's opinion, a traffic management plan was likely to have been prepared.
		(c) include appropriate signage and illumination of the intersections.	V	Signage observed at intersection, lighting to be upgraded as per email from Constructive Solutions described in (a) above)	
Hoad Lane Intersection					
	42	Prior to coal being transported from the site, the Proponent shall construct the Hoad Lane intersection in general accordance with the design shown in Figure 4 of Appendix 1, and to the satisfaction of GSC	V	WCMLP staff advised that the first coal haulage was on 8/12/2008. Letter from Gunnedah Shire Council sighted dated 20/05/2011 confirming that Council's requirements with regard to the roadworks on its local road network associated with the Rocglen Coal Mine's development have been completed to Council's satisfaction; being Wean Road reconstruction and sealing and the Shannon Harbour Road reconstruction and sealing including its intersection with the Bluevale Road (Hoad Lane).	The Hoad Lane intersection has been constructed to the satisfaction of GSC and Whitehaven advised that works were completed prior to the first transport of coal, however the road works were not formally approved until after this date.
Wean Road					
	43	By the end of March 2009, the Proponent shall reconstruct and bitumen seal Wean Road from the northern end of the existing tar seal to a point 200 metres north of the proposed light vehicle entry to the site from Wean Road. Additionally, within 3 months of the completion of the proposed diversion of Wean Road to facilitate open cut mining operations, the Proponent shall reconstruct and extend the bitumen seal Wean Road to a point 200 metres north of the relocated position of Jaeger Lane (see Figure 1 of Appendix 2) in general accordance with GSC's Rural Local Roads Standard, and to the satisfaction of GSC.	N	WCMLP staff advised that Wean Road was not sealed until early-mid 2010 and the Wean Road diversion is not complete. Letter from Gunnedah Shire Council sighted dated 20/05/2011 confirming that Council's requirements with regard to the roadworks on its local road network associated with the Rocglen Coal Mine's development have been completed to Council's satisfaction; being Wean Road reconstruction and sealing and the Shannon Harbour Road reconstruction and sealing including its intersection with the Bluevale Road (Hoad Lane).	
Road Maintenance Agreement					
	44	By the end of September 2008, the Proponent shall review (and implement any approved changes to) the road maintenance agreement between the Proponent and GSC for public roads used as the coal transport route within Gunnedah Shire, to the satisfaction of GSC. If agreement cannot be reached, the matter shall be referred to the Director-General for resolution.	N	Road Maintenance Agreement is now in place and was sighted during the audit, however it was not finalised until mid 2009.	

Schedule	Condition No.	Requirement	Compliance Y/N/NT/V/NA	Evidence	Comments
Road Noise Management Plan					
	45	Prior to the transport of any coal from the mine site, the Proponent shall produce and implement a combined Road Noise Management Plan for the project, Canyon (Whitehaven) and Tarrawonga mines, including a noise monitoring program and full consideration of the combined impacts of traffic associated with these mines, in consultation with GSC, and to the satisfaction of the Director-General.	Y	Road Noise Management Plan reviewed on WCMPL website, prepared by Spectrum Acoustics Pty Ltd dated Nov 2008 Ref No 06261/2808. Email dated 28/10/08 confirming copy of Plan sent to GSC for review. Approval letter from DoP dated 17/11/2008 sighted. WCMPL staff advised the first coal haulage was on 8/12/2008.	
VISUAL					
<i>Note: These conditions should be read in conjunction with section 11 of the Statement of Commitments.</i>					
	46	The Proponent shall:			
		(a) ensure no outdoor lights shine above the horizontal;	V	Environmental Management Strategy (EMS), Section 5.11 Visibility. Table 5.11 - Objective (h) states that to ensure that all external lighting associated with the mine complies with Australian Standard AS4282 1997 – Control of Obtrusive Effects of Outdoor Lighting, i.e. wherever possible, all mine lighting is directed downward. AEMR 2009/2010, Section 3.11 Visual, Light. This section does not specify any specific requirements regarding the positioning of lights (i.e. above the horizontal). This section states that management/minimisation of local and more distant visual impacts are achieved by sympathetic positioning and direction of lights, when possible, to avoid impacting on local residences. Section 3.11.2 states that Whitehaven received two complaints, on consecutive nights, from the “Surrey” property residents regarding light impacts from the mine site. The complaints prompted discussions with the Open Cut Examiners (OCEs) to ensure placement of lighting is appropriate to minimise impacts on surrounding residences. The complainant’s were provided with the night shift OCE mobile phone number to allow direct contact should this problem persist. Whitehaven staff advised that all practicable measures are taken to minimise impacts on surrounding landholders, whilst ensuring safe operations at the mine site, and Whitehaven will endeavour to address any issues or concerns which may be raised by landholders in the future.	It is recommended that Whitehaven include the requirement of this condition (no outdoor lights to shine above the horizontal) into relevant management plans and training programs.
		(b) ensure that all external lighting associated with the project complies with <i>Australian Standard AS4282 (INT) 1995 – Control of Obtrusive Effects of Outdoor Lighting</i> ;	Y	Environmental Management Strategy (EMS), Section 5.11 Visibility. Table 5.11 - Objective (h) states that to ensure that all external lighting associated with the mine complies with Australian Standard AS4282 1997 – Control of Obtrusive Effects of Outdoor Lighting, i.e. wherever possible, all mine lighting is directed downward.	
		(c) take all practicable measures to mitigate off-site lighting impacts from the project; and	Y	Environmental Management Strategy (EMS), Section 5.11 Visibility. Table 5.11 lists objectives and key performance outcomes to minimise visibility impacts. Objective (e) states to use screens / bunds to minimise the visibility of equipment and impact of lights on mobile equipment. Objective (g) states that all practical measures to mitigate off-site lighting impacts from the mine site are taken, especially in relation to the Siding Springs Dark Skies Region. Key performance outcome (v) states that equipment / facility lighting obscured or directed away from residences / roadways.	
		(d) minimise the visual impacts of the project,	Y	Environmental Management Strategy (EMS), Section 5.11 Visibility. This section states that various visual control measures will be implemented to minimise visual impacts of the mine, and will include the following: progressive rehabilitation to minimise any cleared or non-vegetated areas; overburden emplacements have been designed to, as much as possible, replicate existing topographic features; minimise land disturbance/clearing in advance of mining; implementation of air quality controls; maintaining the mine and other areas of disturbance in a clean and tidy condition at all times; in addition to the natural screening provided by the roadside vegetation of local road easements, a roadside stockpile will be established along the eastern boundary.	
		to the satisfaction of the Director-General.			

Schedule	Condition No.	Requirement	Compliance Y/N/NT/V/NA	Evidence	Comments
GREENHOUSE & ENERGY EFFICIENCY					
<i>Note: These conditions should be read in conjunction with section 14 of the Statement of Commitments.</i>					
	47	The Proponent shall prepare and implement a Greenhouse and Energy Efficiency Plan for the project to the satisfaction of the Director-General. This plan must:	Y	Greenhouse and Energy Efficiency Plan (GEEP) on WCMPL website, dated June 2009, Version 2. Letter from DoP dated 10/07/2009 sighted confirming approval of the plan.	The issues associated with the Greenhouse and Energy Efficiency Plan are further discussed in Section 3.5.4 of the Audit Report.
		(a) be prepared in consultation with DECC and generally in accordance with the <i>Guidelines for Energy Savings Action Plans</i> (DEUS 2005, or its latest version);	Y	Letter from WCMPL dated 3/07/2009 to DECC attaching the Greenhouse and Energy Efficiency Plan sighted. The Greenhouse and Energy Efficiency Plan states that it was prepared in accordance with the <i>Guidelines for Energy Savings Action Plans</i> .	
		(b) be submitted to the Director-General for approval by the end of September 2008;	N	Letter from DoP dated 10/07/2009 sighted approving the Greenhouse and Energy Efficiency Plan. This letter states the plan was received from Rocglen with the accompanying letter dated 3/07/2009.	The plan was not submitted until July 2009.
		(c) include a program to monitor greenhouse gas emissions and energy use generated by the project;	N	The Greenhouse and Energy Efficiency Plan, section 8.7 states that a useful measure of the energy efficiency performance for the Rocglen Mine Site will be to monitor the key performance indicator of energy usage per tonne Run of Mine (ROM) coal produced and MJ per bank cubic metre total equivalent movement (BCM TEM). However, no evidence was sighted during the audit to indicate that this is undertaken. Section 8.9 outlines possible energy savings measures, however the plan does not specify exactly how greenhouse gas emissions and energy use generated by the project will be monitored and reported. AEMR 2009/2010, section 3.17.3 details the results for the reporting period including: diesel consumption, explosives, and fugitive emissions. WCMPL staff advised that electricity is not sourced from the grid but from on-site diesel generators..	The Greenhouse and Energy Efficiency Plan should be updated to reflect current operations (i.e. remove references to reducing electricity usage since electricity is not sourced from the grid but is generated on site).
		(d) include a framework for investigating and implementing measures to reduce greenhouse gas emissions and energy use at the site; and	N	As above	
		(e) describe how the performance of these measures would be monitored over time.	N	As above	
WASTE					
<i>Note: These conditions should be read in conjunction with section 3 of the Statement of Commitments.</i>					
Waste Minimisation					
	48	The Proponent shall:			
		(a) monitor the amount of waste generated by the project;	Y	EMS, Section 5.10 Waste. This section outlines the type of waste that will be generated by the project and refers to the Waste Management Strategy for the mine. Table 5.10 lists the objectives and key performance outcomes for non-production waste management. AEMR 2009/2010, section 2.6 details the waste materials that were generated by the project during the reporting period, but does not specify the amounts of waste. However volumes of waste are recorded on the pickup docket and invoices from the waste collection contractor allowing the volumes of waste to be monitored (eg . invoice 4033 from Northern Lubequip dated 3/11/09 for removal of 2 full bins of waste oil filters).	
		(b) investigate ways to reuse, recycle, or minimise the waste generated by the project;	Y	EMS, Section 5.10 Waste. Table 5.10 lists the objectives and key performance outcomes for non-production waste management. AEMR 2009/2010 section 2.6.2 states that during the previous reporting period, Rocglen established a recycling program for office and general recyclables (paper, cardboard, bottles, cans etc) at the site office and crib room. The program has continued to work effectively with collections occurring once a week.	
		(c) implement reasonable and feasible measures to minimise waste generated by the project;	Y	AEMR 2009/2010, Section 2.2, Table 2 details the Production and Waste Summary for the reporting period. Section 2.6 Waste Management - details the procedures for waste management.	
		(d) ensure irrigation of treated wastewater is undertaken in accordance with <i>Environmental Guidelines: Use of Effluent by Irrigation</i> (DEC, 2004), or its latest version; and	Y	During the on-site audit inspection, WCMPL staff confirmed that a septic tank with trench is used for wastewater treatment. The septic tank was observed during the audit with no obvious issues being noted.	

Schedule	Condition No.	Requirement	Compliance Y/N/NT/V/NA	Evidence	Comments
		(a) take all reasonable and feasible measures, in consultation with the landowner, to ensure that the relevant criteria are complied with; and	NT		
		(b) conduct further monitoring to determine whether these measures ensure compliance; or	NT		
		(c) secure a written agreement with the landowner and other relevant projects to allow exceedances of the criteria in schedule 3,	NT		
		to the satisfaction of the Director-General.	NT		
		If the additional monitoring referred to above subsequently determines that the projects are complying with the relevant criteria in schedule 3, then the Proponent may discontinue the independent review with the approval of the Director-General.	NT		
	5	If the landowner disputes the results of the independent review, either the Proponent or the landowner may refer the matter to the Director-General for resolution.	NT	No independent reviews have been requested to date.	
		If the matter cannot be resolved within 21 days, the Director-General shall refer the matter to an Independent Dispute Resolution Process (see Appendix 6).	NT		
5	ENVIRONMENTAL MANAGEMENT, MONITORING, AUDITING AND REPORTING				
	Environmental Management Strategy				
	1	The Proponent shall prepare and implement an Environmental Management Strategy for the project to the satisfaction of the Director-General. This strategy must be submitted to the Director-General prior to the commencement of construction activities (not including the construction of the Kamlaroi Highway and Hoad Lane intersections and sections 1 and 2 of the road transport route), and:	Y	Environmental Management Strategy, Edition 1, Rev 0, dated 24/04/2008. Email from Danny Young (WCMPL) to Colin Phillips (DoP) dated 22/05/2008 sighted attaching EMS. Approval letter from DoP dated 27/05/2008 sighted. WCMPL staff advised construction commenced 1 Aug 2008.	
		(a) provide the strategic framework for environmental management of the project;	Y	EMS, Introduction states this Environmental Management Strategy which forms part of the integrated Mine Management System, describes the overall framework for environmental management on the mine site and for the entire transport route to the Whitehaven Coal Handling and Preparation Plant (CHPP).	
		(b) identify the statutory requirements that apply to the project;	Y	EMS, section 3 - Statutory Requirements.	
		(c) describe in general how the environmental performance of the project would be monitored and managed;	Y	EMS, section 5 - Environmental Performance - Management and Monitoring.	
		(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 project;	Y	EMS, section 6 - Information, Dissemination, Complaints Management and Dispute Resolution.	
		· receive, handle, respond to, and record complaints;	Y	EMS, section 6 - Information, Dissemination, Complaints Management and Dispute Resolution.	
		· resolve any disputes that may arise during the course of the project;	Y	EMS, section 6 - Information, Dissemination, Complaints Management and Dispute Resolution.	
		· respond to any non-compliance;	Y	EMS, section 6 - Information, Dissemination, Complaints Management and Dispute Resolution.	
		· manage cumulative impacts; and	Y	EMS, section 6 - Information, Dissemination, Complaints Management and Dispute Resolution.	
		· respond to emergencies; and	Y	EMS, section 6 - Information, Dissemination, Complaints Management and Dispute Resolution.	
		(e) describe the role, responsibility, authority and accountability of all key personnel involved in the environmental management of the project.	Y	EMS, section 4 - Environmental Management Responsibility, Personnel and Roles.	
	Environmental Monitoring Program				
	2	The Proponent shall prepare and implement an Environmental Monitoring Program for the project to the satisfaction of the Director-General. This program must be submitted to the Director-General by the end of September 2008 and consolidate the various monitoring requirements in schedule 3 of this approval into a single document.	N	Environmental Monitoring Program, Edition 1, prepared 13/01/2009, revised June 2009. DoP approval letter sighted dated 15/07/2009. WCMPL staff advised the plan was issued to DoP on 30/06/2009.	The EMP was prepared but not submitted within the required timeframe.

Schedule	Condition No.	Requirement	Compliance Y/N/NT/V/NA	Evidence	Comments
REPORTING					
Incident Reporting					
	3	Within 24 hours of detecting an exceedance of the limits/performance criteria in this approval, or the occurrence of an incident that causes (or may cause) material harm to the environment, the Proponent shall notify the Department and other relevant agencies of the exceedance/incident.	N	Exceedances have been reported, however not within the required timeframe. Copies of exceedance/incident notifications sighted.	
	4	Within 6 days of notifying the Department and other relevant agencies of an exceedance/incident, the Proponent shall provide the Department and these agencies with a written report that:	N	Exceedances have been reported, however not within the required timeframe. Copies of exceedance/incident notifications sighted.	
		(a) describes the date, time, and nature of the exceedance/incident;	Y	Exceedance notifications sighted.	
		(b) identifies the cause (or likely cause) of the exceedance/incident;	Y	Exceedance notifications sighted.	
		(c) describes what action has been taken to date; and	Y	Exceedance notifications sighted.	
		(d) describes the proposed measures to address the exceedance/incident.	Y	Exceedance notifications sighted.	
Annual Reporting					
	5	By the end of March 2009, and annually thereafter, the Proponent shall submit an AEMR to the Director-General and to all relevant agencies. This report must:	Y	AEMR 2008/2009 and AEMR 2009/2010 reviewed. Rocglen requested extension of time from DoP to prepare 2008/2009 AEMR and it was submitted 16/9/09. Sighted letter from DoP approving the 2008/2009 AEMR dated 23/9/09. Sighted letter from DPI dated 20/7/10 approving the 2008/2009 AEMR.	
		(a) identify the standards and performance measures that apply to the project;	Y	AEMR 2008/2009 and AEMR 2009/2010 reviewed.	
		(b) describe the works carried out in the last 12 months;	Y	AEMR 2008/2009 and AEMR 2009/2010 reviewed.	
		(c) describe the works that would be carried out in the next 12 months;	Y	AEMR 2008/2009 and AEMR 2009/2010 reviewed.	
		(d) include a summary of the complaints received during the past year, and compare this to the complaints received in previous years;	Y	AEMR 2008/2009 and AEMR 2009/2010 reviewed.	
		(e) include a summary of the monitoring results for the project during the past year;	Y	AEMR 2008/2009 and AEMR 2009/2010 reviewed.	
		(f) include an analysis of these monitoring results against the relevant:	Y	AEMR 2008/2009 and AEMR 2009/2010 reviewed.	
		- impact assessment criteria/limits;	Y	AEMR 2008/2009 and AEMR 2009/2010 reviewed.	
		- monitoring results from previous years; and	Y	AEMR 2008/2009 and AEMR 2009/2010 reviewed.	
		- predictions in the EA;	Y	AEMR 2008/2009 and AEMR 2009/2010 reviewed.	
		(g) identify any trends in the monitoring results over the life of the project;	Y	AEMR 2008/2009 and AEMR 2009/2010 reviewed.	
		(h) identify any non-compliance during the previous year; and	Y	AEMR 2008/2009 and AEMR 2009/2010 reviewed.	
		(i) describe what actions were, or are being, taken to ensure compliance.	Y	AEMR 2008/2009 and AEMR 2009/2010 reviewed.	
Independent Environmental Audit					
	6	By the end of March 2011, and every 3 years thereafter, unless the Director-General directs otherwise, the Proponent shall commission and pay the full cost of an Independent Environmental Audit of the project. This audit must:	N	Letter from WCMLP to DoP dated 22/03/2011 sighted which acknowledged that the Rocglen audit was due by the end of March, however requested an extension of the due date to October 2011 to be in alignment with the Tarrawonga mine audit. There is no evidence that this request was approved by DoP, although Whitehaven advised that a phone message from Colin Phillips from DoP indicated that the outcomes of the audit would be required prior to the determination of the Rocglen Extension project application. Umwelt (Australia) Pty Ltd was engaged in April 2011 to conduct the independent compliance audit.	
		(a) be conducted by suitably qualified, experienced and independent team of experts whose appointment has been endorsed by the Director-General;	Y	Letter from DoP dated 12/04/2011 from David Kitto to Danny Young (WCMLP) confirming the appointment of Umwelt (Australia) Pty Ltd to undertake the independent compliance audit.	
		(b) include consultation with the relevant agencies;	Y	Agencies consulted include Gunnedah Shire Council, DoP, NSW Office of Water, Department of Industry and Investment, and DECCW.	
		(c) assess the environmental performance of the project and assess whether it is complying with the relevant requirements in this approval and any associated EPL or Mining Lease (including any strategy, plan or program required under these approvals);	Y	Refer to this audit report.	
		(d) review the adequacy of strategies, plans or programs required under these approvals; and, if appropriate,	Y	Refer to this audit report.	
		(e) recommend measures or actions to improve the environmental performance of the project, and/or any strategy, plan or program required under these approvals.	Y	Refer to this audit report.	

Schedule	Condition No.	Requirement	Compliance Y/N/NT/V/NA	Evidence	Comments
		<i>Note: This audit team must be led by a suitably qualified auditor and include experts in the fields of ecology and minesite rehabilitation.</i>		Umwelt audit team led by RABQSA certified Lead Environmental Auditor and included experts in ecology and minesite rehabilitation as approved by DoP (letter dated 12/4/11).	
	7	Within 6 weeks of the completing of this audit, or as otherwise agreed by the Director-General, the Proponent shall submit a copy of the audit report to the Director-General, together with its response to any recommendations contained in the audit report.	NT		
	8	Within 3 months of submitting the audit report to the Director-General, the Proponent shall review, and if necessary revise the strategies/plans/programs required under this approval to the satisfaction of the Director-General.	NT		
Community Consultative Committee					
	9	By the end of September 2008, or other date agreed by the Director-General, the Proponent shall establish a Community Consultative Committee (CCC) for the project to the satisfaction of the Director-General. This CCC must be established and operated in general accordance with the <i>Guidelines for Establishing and Operating Community Consultative Committees for Mining Projects (Department of Planning, 2007, or its latest version)</i> to the satisfaction of the Director-General.	Y	AEMR 2009/2010 section 4.3 states Community Consultation Committee (CCC) was formed in July 2008. Letter from DoP to Whitehaven dated 22/7/08 sighted which confirmed appointment of members to the committee. Letters sent from Whitehaven to CCC members confirming appointment on 31/7/08 (sighted). Meeting minutes from 22 October 2008 to 11 May 2011 reviewed (available on WCMPL website).	
		<i>Note: The CCC is an advisory committee. The Department and other relevant agencies are responsible for ensuring that the Proponent complies with this consent.</i>			
Access to Information					
	10	Within 3 months of the approval of any strategy/plan/ program required under this approval (or any subsequent revision of these strategies/plans/ programs), or the completion of the audits or AEMRs required under this approval, the Proponent shall:			
		(a) provide a copy of the relevant document/s to the relevant agencies and CCC; and	Y	Copies of AEMRs are distributed to the relevant agencies and at CCC meetings. Evidence sighted (various letters) that this is undertaken within 3 months of approval of the plans.	
		(b) put a copy of the relevant document/s on its website.	Y	The following plans are available on WCMPL's website: Aboriginal and Cultural Heritage Management Plan Air Quality Monitoring Program Blasting Monitoring Program Environmental Management Strategy Environmental Monitoring Program Greenhouse and Energy Efficiency Plan Noise Monitoring Program Road Closure Management Plan Road Noise Management Plan Water Management Plan	
	11	From the end of September 2008, and thereafter during the project, the Proponent shall:			
		(a) provide a copy of this approval as may be modified from time to time on its website;	Y	WCMPL website contains this project approval (PA 06_0198) and project approval modification (PA 06_0198 MOD 1).	
		(b) provide a comprehensive, running summary of monitoring results required under this approval on its website; and	Y	WCMPL website contains AEMR 2009/2010 and all monitoring results as appendices.	AEMR 2008/2009 is not currently available on WCMPL website.
		(c) update these results on a regular basis (at least every three months).	Y	Monitoring results are available on WCMPL website.	

APPENDIX 3

Compliance Assessment Statement of Commitments

Statement of Commitments



No.	Requirement	Compliance Y/N/NT/V/NA	Evidence	Comments
1	Area of Activities			
1.1	Survey and mark the boundaries of the areas of disturbance on the ground.	V	Construction has generally been completed. Therefore, it is not possible to verify if the disturbance boundaries were marked out beforehand. However, it was noted that the pit extent had been marked in the areas <i>currently being worked</i> .	A review of the approved plans and comparison to the actual facilities constructed shows that construction has been undertaken within the approved boundary - this would indicate that areas were most likely <i>marked out beforehand</i> .
1.2	Survey and peg the centre line of the Mine Access Road.	V	The mine access road has been completed, therefore it is not possible to verify if the centreline was pegged.	
1.3	Peg the centre line of the constructed section of the transport route, specifically within the easement of Shannon Harbour Road where a meander is to be created to avoid the majority of mature native trees.	V	The coal transport road has been completed, therefore it is not possible to verify if the centreline was pegged. However, it was noted during the site inspection of the coal transport route that the road alignment avoided the <i>large stands of mature trees</i> .	
2	Operating Hours			
2.1	Undertake on-site construction within the hours of: 6.00am to 8.00pm / Monday to Saturday, 8.00am to 5.00pm / Sunday.	V	MOP section 3.4.6 and table 3.8 indicates the hours of operation for on-site establishment construction are Monday to Saturday 6.00am to 8.00pm and Sunday 8.00am to 5.00pm. Construction has generally been completed. Therefore, it is not possible to verify the working hours at this point in time.	
2.2	Undertake transport route construction within the hours of: 7:00am to 8:00pm / Monday to Saturday, 8.00am to 5.00pm / Sunday.	V	MOP section 3.4.6 and table 3.8 indicates the hours of operation for transport route construction are Monday to Saturday 7.00am to 8.00pm and Sunday 8.00am to 5.00pm. Construction has generally been completed. Therefore, it is not possible to verify the working hours at this point in time.	
2.3	Undertake open cut mining, coal processing and maintenance activities 24 hours per day / Monday to Saturday.	Y	The AEMR 2009/2010, section 2.4.4 states that Rocglen is permitted to undertake mining operations 24 hours a day, Monday to Saturday, with the exception of public holidays. Rocglen has two production shifts on weekdays which are day shift (7:00am to 5:00pm) and afternoon shift (4:30pm to 2:30am), and generally an 8 hour overtime production shift on Saturday.	Project Approval Condition 7 states the Proponent is permitted to undertake mining operations 24 hours a day, Monday to Saturday, with the exception of public holidays.
2.4	Undertake coal transportation 7:00am to 10:00pm, Monday to Friday and 7:00am to 6:00pm Saturday – subject to outcome of research and development program (see Commitments 12.29 to 12.32).	Y	The AEMR 2009/2010, section 2.4.4 states that Coal transportation from the mine site is undertaken between the hours of 7:00am to 9:15pm Monday to Friday and 7:00am to 5:15pm on Saturdays. These times ensure that all coal trucks are off the public road network by 10:00pm Monday to Friday and 6:00pm Saturdays. Coal transportation is not permitted on Sundays and public holidays.	The research and development program (commitments 12.29 to 12.32) has not been undertaken. In any event, the conditions of the project approval would override the Statement of Commitments and would restrict the hours available for coal transport.
2.5	Undertake rehabilitation and auger mining between 7:00am to 10:00pm / Monday to Saturday.	V	No specific evidence sighted. Whitehaven Environmental Officer advised during on-site audit that rehabilitation is undertaken during the hours of 7:00am to 10:pm, Monday to Saturday.	It was verbally confirmed that no auger mining has been undertaken to date at Rocglen. The Environmental Officer interviewed is responsible for participating in and checking the rehabilitation of the site.
2.6	Undertake drilling between 7:00am and 10:00pm / Monday to Saturday	V	No specific evidence sighted. Verbally confirmed by Environmental Officer during on-site audit that drilling activities are undertaken during the hours of 7:00am to 10:pm, Monday to Saturday.	
2.7	Undertake blasting between 9:00am and 5:00pm / Monday to Friday.	Y	The AEMR 2009/2010, section 2.4.4 states that blasting activities were carried out between 9:00am and 5:00pm Monday to Saturday. Blast Monitoring spreadsheet was reviewed and all blast times listed were between the appropriate hours.	

No.	Requirement	Compliance Y/N/NT/V/NA	Evidence	Comments
3	Waste Management			
3.1	Place all paper and general wastes originating from the Site Facilities Area, together with routine maintenance consumables from the daily servicing of equipment in garbage bins located adjacent to the various buildings.	A	The AEMR 2009/2010, section 2.6.2 states that all general wastes were collected on-site and placed into large storage receptacles on a daily basis. An industrial waste collector generally collected this waste on a fortnightly basis. The waste collection and disposal practices were reviewed on site and were generally found to be operating as described. Waste records were reviewed to confirm disposal practices. However, it was noted during the site inspection that a small amount of general waste, including an item of whitegoods had been dumped on the western waste emplacement. This is identified as an area of concern as continuation of this practice could result in a breach of the conditions of approval and of the EPL for the site.	It is recommended that Whitehaven consider reinforcing the Whitehaven waste management policies and procedures with staff and contractors.
3.2	Collect general waste bins daily and place contents in large waste skip bins positioned adjacent to the heavy vehicle maintenance building to await removal by licensed contractor.	Y	MOP, section 3.6.2.1 states that all paper and general wastes originating from the Site Facilities Area, together with routine maintenance consumables from the daily servicing of equipment, such as grease cartridges, will be disposed of in 205L drums and 240L mobile garbage bins located adjacent to the various buildings. Industrial waste collection will be undertaken fortnightly, or more frequently, if required by a licensed contractor. During the on-site audit inspection, it was observed that general wastes were being placed in the large waste skip bins adjacent to the heavy vehicle maintenance building. Disposal of wastes is undertaken by licenced contractor (eg . invoice 4033 from Northern Lubequip dated 3/11/09 for removal of 2 full bins of waste oil filters; waste data form 1604 from Northern Lubequip dated 9/4/11 for removal of 3000L of waste oil; and invoice 1995 from Commercial Waste Services for the disposal of solid waste from skip bins).	
3.3	Organise the regular collection of industrial wastes.	Y	Waste removal records were reviewed during the audit with the review confirming that wastes are collected by licensed contractors on a regular basis. Disposal of wastes is undertaken by licenced contractor (eg . invoice 4033 from Northern Lubequip dated 3/11/09 for removal of 2 full bins of waste oil filters; waste data form 1604 from Northern Lubequip dated 9/4/11 for removal of 3000L of waste oil; and invoice 1995 from Commercial Waste Services for the disposal of solid waste from skip bins).	
3.4	Store waste oils and grease at the maintenance workshop for collection by a licensed waste recycling contractor.	Y	AEMR 2009/2010, section 2.6.3 states that waste oils from maintenance activities were pumped from equipment to bulk storage tanks banded in accordance with EPA requirements (also see Section 2.8.2). When breakdown maintenance was undertaken away from the workshop, oil was pumped from the equipment to a tank on the service truck from which it was subsequently transferred to the bulk storage tank. Waste oil stored at the maintenance workshop was collected and disposed of by a licensed contractor approximately once every three months. Runoff from the concrete vehicle and equipment wash pad was directed to an oil separator and containment system for subsequent pump out and disposal. During the audit site inspection, these practices were confirmed. Waste oils were observed to be stored in a banded container, with waste greases stored in grease pods. Waste disposal records were reviewed to confirm that waste oils and greases are collected regularly by a licensed contractor.	MOP, section 3.6.2.3 states that routine maintenance of mining and earthmoving equipment will generally be undertaken in the maintenance workshop within the mine facilities area, or at equipment maintenance facilities away from the mine. Within the maintenance workshop, waste oils and grease will be collected and pumped to bulk storage tanks by oil evacuation pumps. All parts and packaging will be collected for disposal or recycling. Waste oils and grease will be stored in a banded area at the maintenance workshop and collected by a licensed waste recycling contractor approximately once every two months for recycling. Drainage from the washdown bay at the Workshop will report to an oil separator with separated oil collected in a separate storage tank which will be collected for disposal by a licensed contractor. During the audit site inspection, these practices were confirmed.
3.5	Collect all parts and packaging and transfer to the maintenance workshop for disposal or recycling.	Y	MOP, section 3.6.2.1 states that routine maintenance consumables from the daily servicing of equipment, such as grease cartridges, will be disposed of in 205L drums and 240L mobile garbage bins located adjacent to the various buildings. Industrial waste collection will be undertaken fortnightly, or more frequently, if required by a licensed contractor. Waste management practices observed on site generally confirmed these practices with waste disposal records indicating that wastes are regularly collected by licensed contractors.	

No.	Requirement	Compliance Y/N/NT/V/NA	Evidence	Comments
3.6	Store potentially hydrocarbon-contaminated water in the oil/water separator for regular removal from site by a licensed contractor.	A	MOP section 3.6.2.3 states that drainage from the washdown bay at the workshop will report to an oil separator with separated oil collected in a separate storage tank which will be collected for disposal by a licensed contractor. AEMR 2009/2010, section 2.6.3 states that runoff from the concrete vehicle and equipment wash pad was directed to an oil separator and containment system for subsequent pump out and disposal. Although potentially hydrocarbon-contaminated water is stored in the oil/water separator, during the on-site audit inspection it was identified that the clarified water is discharged via a pipe and overland flow path into a 'clean water' storage dam (SD3). This was identified as an area of concern. There was no evidence sighted that the potentially contaminated water is regularly removed from site by a licensed contractor, although there is evidence that the waste oil is removed by licensed contractor.	It is recommended that Whitehaven review the operation of the oily water separator and consider diverting the clarified water to a sediment basin rather than the discharge dam SD3.
3.7	Install adequate toilet and ablution facilities within the mine facilities area for the site workforce and visitors.	Y	MOP section 6.2.4 states that adequate shower, toilet and hand washing facilities will be installed within the Site Facilities Area for the use by the site workforce, contractors and visitors. The envirocycle septic sewage system (approval from Gunnedah Shire Council sighted) was observed on site with the effluent irrigated within a designated waste water utilisation area on the mine site. Toilet and ablution facilities were observed in the main site offices area and at the workshop.	
3.8	Direct sewage to one or a combination of a bio-cycle (or equivalent system) with effluent irrigation to land or septic systems which would be pumped out by a licensed waste collection & disposal contractor.	Y	Sewage from the toilets and ablution facilities is directed to an envirocycle septic system which utilises irrigation to land for the treated effluent.	
4	Rehabilitation			
4.1	Prepare a rehabilitation plan addressing each of the Actions 4.5 to 4.11.	N	A Rehabilitation Plan has not yet been prepared. During the on-site audit inspection, it was verbally advised by WCMLP staff that the Landscape Management Plan would include a Rehabilitation Plan. AEMR 2009/2010, section 3.6 states that Whitehaven had anticipated completion of a Landscape Management Plan (LMP) during the reporting period, pending the outcome of the regional Biodiversity Offset Strategy proposal. The proposal was submitted to DECCW in February 2010 and DECCW completed their site inspection in May 2010 however Whitehaven is yet to receive advice as to the determination of the proposal. The outcomes are expected to vary slightly from those originally planned due to the proposed Rocglen Extension.	This issue was discussed during the on-site audit inspection with the Environmental Manager, who clarified that the Rehabilitation Plan has not been prepared at this stage due to the pending Rocglen Coal Extension Project application currently being processed by DoP. The status of this project application as at 18/05/2011 is 'Proponent Reviewing Submissions' (DoP website). It was verbally confirmed by the Environmental Manager that once the outcome of this project application was determined, the Rehabilitation Plan would be prepared based on the determined project area and operations.
4.2	Review the progress of rehabilitation and refine the Rehabilitation and Landscape Management Plan reflecting site observations and monitoring.	N	The Rehabilitation Plan and Landscape Management Plan have not yet been prepared (see comments regarding commitment 4.1 above). However, rehabilitation of completed areas is being undertaken - evidence of this was from a site inspection of the areas currently undergoing rehabilitation and sighting the Monthly Environmental Checklist which has a section on monitoring Land Management/Rehabilitation areas. Rehabilitation that has occurred on site includes planting of approximately 200 tubestock along the site access road to provide a future screening of the site from Riorden Road. These tubestock were sighted during the audit site inspection and were found to be well established.	Even though rehabilitation has commenced, it is not reviewed against the Rehabilitation and Landscape Management Plan as such a plan has not yet been developed.
4.3	Place attention in the Rehabilitation and Landscape Management Plan upon the final void landform particularly the depth below the long term groundwater level and the diversion of all external water flows around the void – to be prepared in consultation with DWE and DECC.	N	Rehabilitation Plan and Landscape Management Plan have not yet been prepared. During the on-site audit inspection, it was advised by WCMLP staff that the Landscape Management Plan will incorporate a Final Void Management Plan.	Whitehaven staff advised that preparation of the Landscape Management Plan is pending the outcome of the Rocglen Coal Extension Project application currently being processed by DoP.
4.4	Integrate the results of the planning in Actions 4.2 and 4.3 into the comprehensive Mine Closure Plan (see Commitment 18.5).	N	Mine Closure Plan has not yet been prepared.	Preparation of this plan is ending outcome of the Rocglen Coal Extension Project application.
4.5	Adopt a progressive approach to rehabilitation to ensure that completed areas are quickly shaped and vegetated to provide a stable landform.	Y	Rehabilitation of completed areas is currently being undertaken - evidence of this was from a site inspection of the areas currently undergoing rehabilitation and sighting the Monthly Environmental Checklist which has a section on monitoring Land Management/Rehabilitation areas.	

No.	Requirement	Compliance Y/N/NT/V/NA	Evidence	Comments
4.6	Stabilise earthworks, drainage lines and disturbed areas no longer required for mine-related activities.	Y	Rehabilitation of completed areas are currently being undertaken - evidence of this was from a site inspection of the areas currently undergoing rehabilitation and sighting the Monthly Environmental Checklist which has a section on monitoring Land Management/Rehabilitation areas.	
4.7	Create and improve habitat corridors on and adjacent to the Project Site and transport route.	V	Tree plantings have been undertaken on the southern boundary as per the Approved Modified Mine Layout figure (GSS Figure 5).	It was verbally confirmed that the Rehabilitation Plan will contain details of other potential habitat corridors that may be established pending the outcome of the Rocglen Coal Extension Project application.
4.8	Progressively re-establish native vegetation on an area of 84ha on the mine site.	V	MOP section 5.2.3 states that overall, it is proposed that 84.4ha of the disturbed area of the mine site will be rehabilitated as native vegetation with the remaining 152.6ha returned to agricultural land. Progressive rehabilitation has commenced with the rehabilitation area on the western side of the western waste emplacement inspected during the audit site inspection.	
4.9	Blend the created landforms with the surrounding land fabric.	Y	During the audit site inspection, it was noted that the overburden emplacement is quite high and just in line with the ridge of the Vickery State Forest. AEMR 2009/2010 section 3.11.1 states that as mining has progressed, the southern waste emplacement has developed to be close to maximum height which has resulted in the site being visible from locations further to the south and east. The MOP was reviewed during the audit and evidence was sighted (Section 5.1 and 5.2 of MOP) that the created landforms will be designed to blend with the surrounding landforms.	AEMR 2009/2010, section 3.21 states that on completion of all mining activities, the successful rehabilitation of areas of disturbance and the relinquishment of the mining lease, the land affected by mining within the Project Approval area will, in the main, be returned to a classification similar to that prior to mining. AEMR 2009/2010 section 5.2 details the rehabilitation works carried out to date.
4.10	Utilise native tree, shrub and grass species and / or pasture species comparable with either the existing vegetation communities or those which occurred in the area prior to mining and agriculture-related disturbance.	Y	MOP section 5.1 states the additional works associated with the 75W modification approval and MOP Amendment 1 will not alter the final landuse outcome as identified in the original MOP. The only change in outcome will relate to the height above natural surface of the northern emplacement and the extension of the northern emplacement into that area previously identified for soil stockpiling. The area will still be returned to rehabilitated pasture with targeted plantings of native tubestock to provide visual enhancement of the area.	During the on-site audit inspection, the Environmental Officer confirmed verbally that they are only using native plant species as specified in the EA for rehabilitation works.
4.11	Retain cleared trees and branches for use in stabilising slopes identified for rehabilitation with native woodland communities.	Y	MOP section 3.2.2.2 states that once felled, logs and branches <300mm in diameter or exhibiting hollows will be cut or broken into manageable lengths and placed on areas designated for the reestablishment of native woodland vegetation, or in stockpiles for subsequent replacement as part of WCM's ongoing rehabilitation program. These practices were confirmed by observation during on-site audit inspection.	
5	Groundwater			
5.1	Consult with DWE to clarify licensing requirements for groundwater management under the <i>Water Management Act (2000)</i> and <i>Water Act 1912</i> .	Y	Email correspondence sighted from Danny Young to Rod Browne of DWE dated 14/04/2008 attaching the Site Water Management Plan, seeking review. Response letter sighted from Rod Browne of DWE dated 5/06/2008 detailing recommendations following review of the Site Water Management Plan including information regarding licensing.	
5.2	Prepare a Groundwater Management Plan in consultation with DWE and DECC to ensure all <u>necessary contingency and mitigation measures are adequately covered in the plan.</u>	Y	Water Management Plan for the Rocglen Coal Mine Edition 1 Rev 1 dated August 2009 - includes Groundwater Monitoring Program.	
5.3	Identify in the contingency plan the triggers to initiate remedial action for the relevant groundwater bores on surrounding non-project related land.	Y	WMP, Section 7 - Surface and Groundwater Response Plan. Section 7.1 details the groundwater contingency measures in terms of groundwater quantity on non-project related properties, and if there are groundwater quality exceedances.	WMP, section 6.3.3 states that the monitoring results will provide the capacity for WCMPL to assess any impacts of the mining operation on background levels. In the event that monitoring confirms a significant shift in water quality parameters, or water depth and yield of adjacent bore sites, then WCMPL will liaise with DWE with regard to restorative measures at these sites, and in accordance with the Groundwater Contingency Plan. There is no actual 'Groundwater Contingency Plan', there is however Section 7 'Surface and Groundwater Response Plan', which includes groundwater contingency measures.

No.	Requirement	Compliance Y/N/NT/V/NA	Evidence	Comments
5.4	Undertake remedial action if the available drawdown attributable to the mine for the existing groundwater users is reduced by over 10%. The remedial actions that may be appropriate include the deepening of bores or replacement of bores to accommodate deeper, high lift pumps.	NT	Remedial action has not been required to date based on the monitoring data available. However, WMP, Section 7 - Surface and Groundwater Response Plan. Section 7.1 details the groundwater contingency measures in terms of groundwater quantity on non-project related properties.	
5.5	Prepare a groundwater monitoring program in consultation with the DWE and DECC.	Y	WMP, Section 6 - Groundwater Monitoring Program. Correspondence sighted between Danny Young (Whitehaven) and Rod Browne (DWE) seeking input into the WMP, and between Danny Young (Whitehaven) and Stephen O'Donoghue (DECC).	
5.6	Undertake a program of additional baseline groundwater monitoring.	Y	WMP, Section 6.3.2 states that baseline monitoring of water chemistry, SWL, available drawdown and yield was conducted at all bores identified above prior to the commencement of mining. This will provide a basis for comparison with future monitoring events to be undertaken as mining progresses. AEMRs include Groundwater Monitoring Data which is continually recorded.	
5.7	Ensure sufficient monitoring bores are present to monitor any impacts upon the alluvial system south of the mine site.	A	WMP, Section 6.3.1 states that the GWMP applies to a total of thirteen registered bores where groundwater levels, saturated thickness and quality are measured. In addition to these sites, five piezometers have been installed. Two of the piezometers (MP3 & MP4) have remained consistently dry. The two dry piezometers are both located to the south of the mine site between the mine and the alluvial system, and therefore are not currently providing any data on the mine's potential impact on the alluvial system. During an audit interview with the Whitehaven Group Environmental Manager, it was acknowledged by Whitehaven that they currently have limited information on the boundary of the alluvial system and whether or not the mine is having any impact. Whitehaven are considering deepening the boreholes at MP3 and MP4 and further investigations are being undertaken with respect to the alluvial systems as part of the Rocglen Extension project.	This issue was raised as an area for audit focus by the OEH officer interviewed by phone as part of the agency consultation for the audit. It is raised as an area of concern as currently the mine has no effective process in place to monitor the alluvial systems to detect any potential for impacts from the mining operations. It is recommended that Whitehaven review the groundwater monitoring program and consider installing new monitoring bores or undertaking remedial works on the existing bores to allow monitoring of the impacts upon the alluvial system to the south of the mine.
5.8	Securely store all hydrocarbon products within designated and bunded areas.	A	Hydrocarbons including oils and greases were generally observed to be stored in impervious bunded areas at the workshop area. These bunded areas were considered to provide adequate secondary containment in the event of a spill and spill kits were observed to be located adjacent to each storage area. Waste oil is stored within an impervious metal bund inside a shipping container. However, there is evidence of oil staining on the dirt and gravel hardstand area immediately outside of the container. The hydrocarbon storage practices observed to be in use by the scraper contractor would not be considered best practice and are not in keeping with the OEH (formerly DECCW) guidelines for the storage of liquid substances. For example, there were eight drums of oil and lubricants that were being stored in an area off the main scraper haul road. The area had been partially bunded with earth, however the bunding would not be considered impervious and may not provide adequate secondary containment in the event of a spill. It is recommended that Whitehaven review their hydrocarbon and chemical storage practices, including those of their subcontractors, using the Technical Considerations in Appendix 2 of the "Storage and Handling Liquids: Environmental Protection, Participant's Manual" (DECC, 2007) as a guide.	AEMR 2009/2010, section 3.17.2 states that The DPI (now I&I NSW) undertook a site visit in July 2009 and identified that hydrocarbon management activities at the workshop required improvements. Additional concrete bunding has since been installed at the re-fuelling bay, oil/water separator and hydrocarbon storage areas to reduce the likelihood of soil and water contamination. A steel bollard has also been erected adjacent to the northern end of the fuel tank, following a suggestion from the then DPI in July 2009 that the fuel tank should be protected from approaching vehicles. The issues identified from the DI&I inspection were observed to have been addressed by Whitehaven and were closed out.
5.9	Refuel all of the mining fleet within designated areas of the Project Site.	V	During the on-site audit inspection, the Workshop Manager advised that generally the mining fleet was refuelled at the designated refuelling bay, however occasionally vehicles were refuelled on other areas of the site.	During the on-site audit inspection the refuelling bay was sighted. The refuelling truck was sighted, however it did not contain a spill kit on board.

No.	Requirement	Compliance Y/N/NT/V/NA	Evidence	Comments
5.10	Undertake all maintenance activities within designated areas of the Project Site facilities area, ie. maintenance workshop.	N	This commitment specifically infers that all maintenance activities are to be undertaken in the maintenance workshop. Whilst routine maintenance and servicing is conducted within the maintenance workshop (and a haul truck was observed undergoing maintenance in the workshop at the time of the audit), emergency maintenance of plant and equipment may be undertaken in other areas due to plant breakdown etc.	Although Whitehaven is not specifically complying with this commitment, the practice of in-pit servicing using the designated and specifically equipped service truck is, in the auditors opinion, a suitable practice for plant breakdowns.
5.11	Direct all water from wash-down areas and workshops to oil/water separators and containment systems.	Y	During the on-site inspection conducted during the audit, it was observed that the maintenance workshop area, including the washdown area and the hydrocarbon and chemical storage areas, had a concrete floor which drained to a sump that connected to an oil/water separator. Waste oil from the separator is pumped to the waste oil tank for disposal by contractor.	
5.12	Ensure all storage tanks are either self-bunded tanks or bunded with an impermeable surface and a capacity to contain a minimum 110% of the largest storage tank capacity.	Y	The main diesel storage tanks sighted at the workshop during the audit were self bunded containers with appropriate vehicle collision protection and impervious bunded areas for refuelling.	
6	Flora and Fauna			
6.1	Design the out-of-pit overburden emplacements to avoid, as far as practicable, remnant stands of vegetation.	Y	AEMR 209/2010, section 3.6 states the mine contains a remnant of the Brigalow within the Brigalow Belt South, Nandewar and Darling Riverine Plains Bioregions Endangered Ecological Community. This community was recorded on the 'Glenroc' property in the northern section of the mine. The design for the mine allows this to remain intact meaning it would not be subject to any significant impact under the current approved operation. During the audit site inspection, it was observed that the northern and western emplacements have generally avoided the stands of remnant vegetation.	
6.2	Construct the transport route to avoid disturbance to native vegetation and minimise the number of mature trees that require removal by aligning it either through cleared paddocks or along a meandering alignment within the Shannon Harbour Road reserve.	Y	It was noted during the site inspection of the coal transport route that the road alignment avoided the large stands of mature trees within the Shannon Harbour road reserve.	
6.3	Minimise clearing and consistent with operational requirements.	Y	MOP section 3.2.2.1 states that Vegetation clearing to be undertaken during the term of this MOP will include initial clearing of the areas designated for mining lease infrastructure, ie. internal roads, coal processing and mine facilities areas, and soil stockpile areas, followed by annual (or more frequent) campaigns sufficient for the subsequent year of mine development. During the audit site inspection it was noted that clearing and stripping was in progress in an area to the east of the current pit in readiness for the next 12 months of mining as identified on the mining sequence plans.	
6.4	Clearly define all areas to be cleared and conduct all soil stripping would be undertaken in campaigns on an as-needs basis.	Y	MOP section 3.2.2.2 outlines the clearing procedures which includes clearly defining the area of vegetation to be cleared (using marking/tagging of individual trees if necessary) and pre-start ecological inspections prior to any clearing campaign. During the audit site inspection it was noted that clearing and stripping was in progress in a defined area to the east of the current pit in readiness for the next 12 months of mining as identified on the mining sequence plans.	
6.5	Construct any additional internal roads required on the cleared lands well away from stands of native vegetation.	Y	A review of aerial photos from the original EA and the from the Rocglen Extension EA shows that the stands of native vegetation to the north of the site and along the Jaeger Lane road reserve have been retained. Internal roads have generally avoided stands of native vegetation.	

No.	Requirement	Compliance Y/N/NT/V/NA	Evidence	Comments
6.6	Control noxious weeds at all times.	Y	AEMR 2009/2010 section 3.8.1 states that weed management within the ML involves general observations as well as six monthly targeted inspections to determine levels of weed infestation. AEMR 2009/2010 section 3.8.2 states that Rocglen has not experienced any major weed issues during the reporting period. Minor ongoing weed management comprised spot spraying of weeds such as African Boxthorn, Bathurst Burr, Galvanised Burr, Prickly Pear and Noogoora Burr. Noxious Weeds Property Inspection Report sighted prepared by Gunnedah Shire Council inspected on 14/12/2010. Noxious weeds were not observed to be a significant issue during the site inspection.	
6.7	Establish and enhance habitat corridors, linking the vegetation of Vickery State Forest with remnant areas of vegetation on and surrounding the Project Site.	N	The Landscape Management Plan (which will incorporate a Rehabilitation Plan) has not been prepared. The AEMR 2009/2010, section 2.4.2 states the timbered area to the north-west of the pit as well as the stand of trees along the former Jaeger Lane, both form part of the biodiversity offset under the current approval.	The timbered area to the north-west of the pit could be considered a habitat corridor linking the Vickery State Forest, however details of specific habitat corridor planning should be included in the Landscape Management Plan.
6.8	Align the relocations of Wean Road and Jaeger Lane through cleared paddocks to minimise further removal of native vegetation.	Y	The Wean Road relocation was observed during the site inspection and was noted to have been aligned to avoid the stands of native vegetation within and to the east of the existing Wean Road alignment.	
6.9	Carry out, where possible, tree removal, especially the mature trees in late spring and early autumn to avoid spring nesting birds and over-wintering bats.	V	MOP section 3.2.2.2 states that prior to each clearing campaign, an inspection of trees will be undertaken to identify if any Koalas, nesting birds or roosting bats are present, given the occurrence of isolated White Box (Eucalyptus albens) and Bimble Box (Eucalyptus populnea ssp. Bimble), ie. listed Koala feed tree species, within areas of native vegetation to be disturbed. Pre-start inspections will be arranged with an appropriately qualified ecologist prior to annual clearing requirements to ensure minimal impact on fauna species. Section 3.2.2.2 also states that when practicable, the clearing campaigns, particularly the removal of trees, will be scheduled for the autumn period prior to any area being required for mine-related activities. Pre-start inspections have been undertaken and reports were reviewed during the audit. The inspection reports (eg report sighted dated 12/13 April 2011 carried out by Countrywide Ecological Service) confirm that Whitehaven attempts to conduct tree clearing in late spring to early autumn.	
6.10	Undertake inspections of mature trees for nesting birds and roosting bats prior to each clearing campaign.	Y	Ecological pre-start inspection report sighted dated 12/13 April 2011 carried out by Countrywide Ecological Service provided recommendations to minimise the impact of the clearing on local fauna, one of which was to undertake the clearing no more than 2 weeks after the date of the inspection.	
6.11	Relocate any nesting and roosting hollows, as well as nests, used by listed threatened species to appropriate locations nearby.	NT	No relocations have been required to date. AEMR 2009/2010 section 3.7 states that Investigations into the occurrence of threatened fauna within the Project Approval Area were undertaken by Countrywide Ecological Service as part of the Environment Assessment, following surveys conducted during the period 2001-2007. These investigations identified that the proposed development was unlikely to significantly affect any of the threatened species, fauna populations or communities found or likely to occur in or around the mine site.	
6.12	Place all branches and tree trunks <300mm in diameter or containing hollows over the areas of the final landform designated for the re-establishment of native vegetation. No less than 50% in volume of fallen timber and logs suitable for farm use and firewood should be left on the ground.	NT	Mine has not reached the stage of final landform in any areas. However, MOP section 3.2.2.2 states that once felled, logs and branches <300mm in diameter or exhibiting hollows will be cut or broken into manageable lengths and placed on areas designated for the reestablishment of native woodland vegetation, or in stockpiles for subsequent replacement as part of WCM's ongoing rehabilitation program.	
6.13	Prohibit the burial or burning of fallen timber, stags, logs or vegetation debris from any vegetation clearing for the proposed mining activity.	V	During the on-site audit inspection, it was verbally advised by WCML staff that any fallen timber, stags, logs or vegetation debris are not buried or burned, but rather used for stockpiles. Logs from vegetation clearing were observed stockpiled in an area between the pit and Wean Road.	

No.	Requirement	Compliance Y/N/NT/V/NA	Evidence	Comments
6.14	Commence progressive rehabilitation of the open cut area as soon as possible to re-establish the connectivity of habitat corridor along Jaeger Lane and Wean Road.	NT	Mining operations are not yet at a stage to enable progressive rehabilitation of the pit. However, AEMR 2009/2010 section 5.2.1 states that one of the objectives for rehabilitation of disturbed land is to increase the area of land allocated to nature conservation through the revegetation of 77.5ha of those areas disturbed by the mine and the long-term conservation of 51.3ha of remnant and degraded native vegetation and/or habitat corridors on the mine site. EMS table 5.13 indicates one rehabilitation objective is to provide habitat for fauna and corridors for fauna movement within the final landform.	Rehabilitation of some areas of the site, including the western emplacement, has commenced, however there is no specific evidence that habitat corridors have been established along Jaeger Lane and Wean Road. Details of this should be included in the Landscape Management Plan.
6.15	Rehabilitate the Western Emplacement to a community that is consistent with the adjoining Vickery State Forest.	V	Rehabilitation has commenced in the western emplacement area - visual site inspection and Monthly Inspection Checklist dated 30/12/2010 sighted. However, without a documented Landscape Management Plan, including a Rehabilitation Plan, it is difficult to confirm whether the proposed rehabilitation will be to a community that is consistent with the Vickery State Forest.	
6.16	Rehabilitate the final void and long-term water management structures to include appropriately designed post-mining wetland areas to replace the loss of the creek gallery habitat.	NT	Mining has not progressed to the point of rehabilitation of the final void. However, it is noted that a Mine Closure Plan and a Final Void Management Plan are required to be prepared, although to date neither Plan has been finalised or approved.	
6.17	Incorporate the creation or enhancement of wildlife corridors into a biodiversity offset strategy. This should consider inclusion of recommendations (ix) to (xii) and (xvii) of Countrywide Ecological Service (2007).	N	The Landscape Management Plan has not been prepared and no draft was provided for review during the audit. During the audit site inspection, it was noted that there are some existing habitat corridors on the site (eg Jaeger Lane and the area in the north west corner of the site), however, there is no evidence to indicate that these have been included into the biodiversity offset strategy.	AEMR 2009/2010 section 3.6 states that Whitehaven had anticipated completion of a Landscape Management Plan (LMP) during the reporting period, pending the outcome of the regional Biodiversity Offset Strategy proposal.
6.18	Prepare a flora and fauna management plan for those areas of the Project Site not used for ongoing grazing and cropping.	N	Flora and Fauna Management Plan has not been prepared.	During the on-site audit inspection, it was verbally advised that the Landscape Management Plan would incorporate flora and fauna management of the site.
6.19	Reduce speed limits to 60km/hr along the Shannon Harbour Road section of the transport route.	Y	Road signs displaying speed limit to 60km/hr were sighted along the Shannon Harbour Road transport route.	
6.20	Include a vertebrate pest control program as part of the mining operation.	N	A vertebrate pest control plan has not been documented. It was advised that this will form part of the Landscape Management Plan, which is yet to be finalised.	
6.21	Design causeways to ensure that natural creek flows are not interfered with.	Y	MOP section 7.7 states that causeways will be constructed across site roads to ensure that natural creek flows are not interfered with.	
6.22	Avoid the clearing of native vegetation along the road shoulders where the transport route utilises public roads.	Y	During the on-site audit inspection, the coal transport route was travelled. There was no evidence that any clearing had taken place on the public road sections of the route.	
6.23	Preserve any existing vermin-proof fence along the constructed section of the transport route.	V	Section 4B.2.3.3.3 of the EA (Corkery, 2007) lists one of the transport route safeguard measures states: (v) Any existing vermin-proof fence along the northern section of the transport route would be preserved and/or replaced to discourage native fauna from running onto the road from areas of habitat cover. During the on-site audit inspection, it was observed there is stock-fencing along the constructed section of the transport route. It is not clear whether there was any 'vermin-proof' fencing there initially.	
6.24	Construct suitable fencing around the 42.3ha of woodland vegetation to be retained as an offset (see Figure A).	N	During the on-site audit inspection, it was observed that part of the northern end of the proposed offset area was fenced. Details of the offset area and fencing was to be included in the Landscape Management Plan, however that has not yet been finalised.	
6.25	Allocate a proportion of the Whitehaven Regional Biodiversity Offset Area (EA Figure 2.15) to offset the areas of native vegetation removed during the mine life – prepared in consultation with DECC.	N	AEMR 2009/2010 section 6.3 states that one continuous improvement goal is to finalise the establishment of the Whitehaven Regional Biodiversity Offset Area, which includes areas set aside as offset against the Rocglen development.	A section of woodland has been allocated as the biodiversity offset area, however Whitehaven advised that the biodiversity offset area cannot be confirmed until the outcome of the current project approval application is determined.
6.26	Invite DWE and DECC representatives to inspect the root systems of grey box and ironbark vegetation to identify rooting depths, particularly in areas adjoining Vickery State Forest.	N	During the on-site audit inspection, the Environmental Manager confirmed that this item did not take place.	

No.	Requirement	Compliance Y/N/NT/V/NA	Evidence	Comments
7	Aboriginal Heritage			
7.1	Provide for and manage the salvage of Aboriginal artefacts for relocation to the Cumbo Gunerah Keeping Place.	Y	Aboriginal Cultural Heritage Management Plan (ACHMP), section 3.2.2 states that in consultation with the relevant Aboriginal groups Aboriginal objects from sites B1, B2 and B3 will be salvaged in accordance with various protocols, including that within 21 days of removing the artefacts from the site, the archaeologist will hand the bagged artefacts and copies of the recording forms to the representative of the Cumbo Gunerah Keeping Place. Evidence was sighted during the audit to indicate that the sites were salvaged and relocated to the Cumbo Gunerah Keeping Place (Salvage Management Plan and Application for a Care Agreement for Aboriginal Objects).	
7.2	Obtain a S85A Care and Control Permit under the NPW Act prior to relocation of the artefacts to the Cumbo Gunerah Keeping Place.	Y	Aboriginal Cultural Heritage Management Plan (ACHMP), section 3.2.2 states that in consultation with the relevant Aboriginal groups Aboriginal objects from sites B1, B2 and B3 will be salvaged in accordance with various protocols, including an application for a Care Agreement for Aboriginal Artefacts is to be made for the keeping of the Artefacts at the Cumbo Gunerah Keeping Place in accordance with Section 85a of the NP&W Act. AEMR 2009/2010 section 3.12.1 states that an application for a Care Agreement for Aboriginal Artefacts was made for the keeping of the Artefacts at the Cumbo Gunerah Keeping Place in accordance with Section 85a of the NP&W Act. The application for agreement was sighted during the audit.	
7.3	Align the transport route to avoid disturbance to the scarred trees ST1 and ST2.	Y	ACHMP section 3.2.4 states that ST1 and ST2 are two scarred trees both located on the "Stratford" property on a section of closed road oriented north-south, as shown on Figure 3. They lie approximately 1.5km to the south of the Project's site boundary, approximately 1.25km south-east of the transport route. The transport route as constructed does not impact of trees ST1 and ST2.	
7.4	Locate the proposed light vehicle entrance away from Btree 1 and Btree 2.	Y	ACHMP section 3.2.3 states that Btree 1 and Btree 2 are two scarred trees both located on the eastern side of the Wean Road easement. The light vehicle entrance off Wean Road was observed to be located approximately 600 metres to the south of the trees.	
7.5	Enclose the scarred trees identified within a fenced area of at least 20m radius from the tree with the location and words "Culturally Sensitive Area – Aboriginal Scarred Tree" marked on all mine plans.	N	During the on-site audit inspection, it was observed that the scarred trees on Wean Road had been fenced off with parawebbing as part of the Wean Road diversion works. Fencing and/or signage of the scarred trees as described in this commitment has not occurred, as it was considered by Whitehaven that these actions could be potentially detrimental by drawing attention to the existence of the artefacts which are within a public road reserve. The auditor concurs with this approach.	It is recommended that Whitehaven liaise with DECCW, DoP and the aboriginal stakeholder groups to obtain their concurrence to the approach of not providing fencing or signage so as not to draw attention to the scarred trees in Wean Road.
7.6	Report all mitigation measures undertaken for all identified Aboriginal objects within the mine area.	Y	AEMR 2009/2010 section 3.12.2 states that during the reporting period, no cultural material of significance was identified during soil stripping activity. However, procedures are in place within the ACHMP which details mitigative measures should they be required.	
7.7	Invite Aboriginal monitors to site for all topsoil stripping along the north-south oriented tributary traversing the Project Site. Manage any sites detected in accordance with the relevant acts.	Y	AEMR 2009/2010 section 3.12.2 states that Whitehaven, through the soil stripping contractor, regularly consults with representatives of the local Aboriginal community. In accordance with the agreement with the representative Aboriginal groups, notification of planned topsoil stripping is provided by the soil stripping contractor directly to the nominated Aboriginal site monitors approximately 2 to 3 days in advance of planned activities.	
7.8	Cease work at any area if further Aboriginal objects are uncovered during the course of the Project, and contact the DECC (NPWS) for advice.	Y	No further aboriginal objects have been uncovered to date. However, ACHMP, section 3.4 lists the procedures to be undertaken upon discovering a possible artefact or site, which include cease work and notifying DECC.	

No.	Requirement	Compliance Y/N/NT/V/NA	Evidence	Comments
7.9	Conduct a Cultural Heritage Awareness Induction Course for staff, contractors and any heritage monitors working on the Project Site.	Y	ACHMP section 3.3 states that induction training program is designed by WHCM in consultation with the identified Aboriginal groups and delivered in the general mine site induction. Any person undertaking soil stripping activities will also undertake additional training in the recognition of Aboriginal artefacts as provided by the nominated Aboriginal monitors during soil stripping campaigns. A copy of the information that will be included in the Cultural Awareness induction training program is provided in Appendix 4 of the ACHMP and includes the procedures to be adopted in the event of a discovery of a potential site or artefact.	
7.10	Prepare a Cultural Heritage Management Plan.	Y	Whitehaven Coal Mining Pty Limited, Aboriginal and Cultural Heritage Management Plan for the Rocglen Coal Mine, Edition 1 Rev 0 dated 24/4/2008.	
7.11	Maintain and continue equitable communication and involvement in the management of Aboriginal cultural heritage by all registered Aboriginal stakeholders.	Y	ACHMP section 4 outlines the ongoing consultation methods with registered Aboriginal stakeholders.	
7.12	Supply formal site cards for all identified Aboriginal artefacts to the DECC Aboriginal Heritage Information Management System (AHIMS) Registrar.	Y	Site cards were prepared as part of the EA process. No further site cards have been required. However, ACHMP section 4.2 states that in the event that an Aboriginal artefact or site is identified, and in accordance with the procedure documented in Section 3.4, a site register card will be completed and forwarded to the DECC for entry onto the AHIMS database. Any artefacts to be transferred in accordance with a s85 permit under the NP&W Act 1979 will also be undertaken in accordance with the procedure identified in Section 3.2.2.	
7.13	Include culturally important vegetation in the rehabilitation of the Project Site.	V	Although the requirements to include culturally important vegetation (eg Wild Orange) have been identified in the ACHMP (Sections 2.2 and 3.4), the Landscape Management Plan, including the Rehabilitation Plan, has not yet been finalised or submitted for approval. Therefore, it is not possible to confirm at this stage that these requirements have been incorporated into the rehabilitation plan for the site.	
8	Noise and Vibration			
8.1	Avoid all noisy activities occurring concurrently during construction particularly before 9.00am when the affects of local inversions may be noticeable.	V	Noise Monitoring Program (NMP) section 3.1 states the safeguards to minimise the likelihood of noise criteria exceedance due to construction activities were presented in the Noise and Vibration Assessment (pp 4B-77 to 4B-99), which are: as far as practical, construction activities will be restricted to only one of the more noisy activities at a time (e.g. tree felling or top-soil stripping); and if unavoidable, these noisier activities would only occur simultaneously after 9:00am when the affects of local temperature inversions are likely to be minimal.	Construction has been completed, therefore this cannot be verified at this time.
8.2	Construct the northern stockpile and eastern perimeter stockpile to provide an acoustic barrier between the open cut and nearest non-project related residence.	Y	NMP section 3.2 states that topsoil and subsoil stripped in advance of mining activities will be placed in a northern stockpile and eastern perimeter stockpile to provide an acoustic barrier between the open cut and nearest non-Project-related residence ("Costa Vale"). During the audit site inspection, it was observed that acoustic bunds had been created from the soil stockpiles along the eastern perimeter of the site.	
8.3	Undertake in-pit overburden placement when prevailing winds are from the northwest or south.	V	NMP section 3.2 states that when prevailing winds are from the northwest, south or southwest, ie. towards the nearest non-project related residence, in-pit overburden placement would be undertaken in preference to out-of-pit placement. Whilst these requirements have been identified by Whitehaven in the management plan, in-pit dumping has only recently commenced due to the issues with highwall stability that required stabilisation works. The use of in-pit dumping when prevailing winds are from the northwest or south should be verified at the next audit.	

No.	Requirement	Compliance Y/N/NT/V/NA	Evidence	Comments
8.4	Use equipment with lower sound power levels in preference to more noisy equipment.	Y	NMP section 3.1 states that site equipment will be selected as to have the lowest practical level of sound emission and will be maintained in good order; and Prior to being brought onsite, all earthmoving equipment would be required to exhibit sound power levels consistent with the schedules in the noise assessment by Spectrum Acoustics. Evidence was sighted to confirm that the sound power level for all major noise sources is validated prior to commencement of operation on site (eg MDG15 Compliance for Hired Plant for Emeco Truck 777D dated 21/9/10).	
8.5	Instruct all truck drivers to avoid the use of exhaust brakes when approaching the Project Site entrance and transport route intersections.	Y	NMP section 3.3 states that all project employees and contractors will be instructed to avoid the use of engine compression brakes when approaching the Mine entrance and intersections with Wean Road and Hoard Lane, and to be mindful of noise when accelerating.	
8.6	Regularly service all equipment used on site to ensure the power sound levels remain at or below the levels specified in the noise assessment for the EA.	Y	Whitehaven has well developed systems in place for monitoring the maintenance and service requirements of plant and equipment. Evidence sighted included excel spreadsheet Service Schedule Rocglen Coal Mine 1.xls, Current High and Low Priority Defects Report dated 6/5/11 and Heavy Earthmoving Pre-Start Checklist No. 10705 dated 12/5/11 for Unit 853.	
8.7	Fit mid frequency broadband beepers to mobile mining equipment.	Y	NMP section 3.4 states that mid frequency broadband reverse beepers would be fitted to mobile mining equipment, decreasing sound power levels by 2 to 3 dB(A). "Squashed duck" reversing beepers were heard across the site indicating that mid-frequency beepers have been fitted.	
8.8	Ensure the on-site road network is well maintained to limit body noise from empty trucks travelling on internal roads.	Y	NMP section 3.4 states that the on-site road network will be well maintained to limit body noise from empty trucks travelling on internal roads. During the audit site inspection, the internal roads were observed to be well maintained.	
8.9	Establish a noise monitoring program (NMP), in consultation with the DECC (EPA), to initially validate the predictions arising from the modelling and then record noise levels against the Project noise criteria. The NMP would include a noise monitoring protocol which would include the contingent measures to be followed should non-compliant noise levels be measured.	Y	Noise Monitoring Program for the Rocglen Coal Mine, Incorporating a Noise Management Protocol and Noise Monitoring Program, Edition 1, Rev 0, dated 24/4/2008.	
8.10	Comply with the following noise limits. <ul style="list-style-type: none"> • LAeq (15 minute) of 35dB(A) during construction and operational stages of the mine. • LA1 (1 minute) or LAmax of 45dB(A) at night. 	N	AEMR 2009/2010 section 3.10.3.2 states that on the 8th September 2009 attended noise monitoring was undertaken at "Costa Vale" (N1) and "Surrey" (N2). Spectrum Acoustics reported that noise emissions from the mine exceeded the criterion of 35 dB(A) at "Surrey" during the morning survey (37 dB(A)) and "Costa Vale" during the evening survey (38 dB(A)). At both locations the mine noise was attributable to engine noise and revs mainly from haul trucks. On review of the Rocglen weather station data, it was determined that a temperature inversion was present at the time of the exceedance at "Surrey". A fault with the weather station during the evening survey, when the "Costa Vale" exceedance was recorded, removed the capacity to assess incidence of temperature inversion at that time. As this result represented the first operational noise exceedance at the "Costa Vale" property, Whitehaven proposed to maintain the current noise monitoring arrangements. DoP and DECCW were notified in writing of the exceedances and the proposed continuation of current monitoring arrangements.	
9	Blasting			
9.1	Blast design and implementation would be undertaken by a suitably qualified blasting engineer and/or experienced and appropriately certified shot-firer.	Y	MOP section 3.4.4.1 states that blast design will be undertaken by a blasting engineer with loading and firing undertaken by a suitably qualified and experienced contractor holding a "blasting explosives user's licence" issued by WorkCover NSW and endorsed by the Department of Primary Industries (Mineral Resources). Blasting reports reviewed indicated that blast design and implementation is undertaken by Orica as the mine's blast contractor.	
9.2	Orientate the blast face, where practical, away from or at an oblique angle to nearby residences.	Y	MOP section 3.4.4.3 states that where practicable, the orientation of the blast face will be away from, or at an oblique angle, to nearby residences.	Blasts are designed and undertaken by a suitably qualified blast contractor.

No.	Requirement	Compliance Y/N/NT/V/NA	Evidence	Comments
9.3	Implement blasthole spacing in accordance with blast design.	Y	MOP section 3.4.4.3 states that blasthole spacing will be implemented in accordance with blast design.	Blasts are designed and undertaken by a suitably qualified blast contractor.
9.4	Select appropriate burden distance and stemming length and then implement precisely.	Y	MOP section 3.4.4.3 states that burden distance and stemming length will be carefully selected and then implemented precisely.	Blasts are designed and undertaken by a suitably qualified blast contractor.
9.5	Use appropriate materials, eg. 20mm aggregates, for stemming.	Y	MOP section 3.4.4.3 states that appropriate materials, eg. < 20mm aggregates, will be used for stemming.	Blasts are designed and undertaken by a suitably qualified blast contractor.
9.6	Limit the maximum instantaneous charge (MIC) to conservative and proven levels.	Y	MOP section 3.4.4.3 states that the maximum weight of explosive detonated in a given delay period (the maximum instantaneous charge) will be limited to conservative and proven levels.	Blasts are designed and undertaken by a suitably qualified blast contractor.
9.7	Undertake engineering / building inspections of "Costa Vale", "Surrey" and "Brolga".	Y	Property inspection reports sighted for "Brolga" dated July 2008, "Dunmohr" dated Aug 2009, and "Surrey" dated July 2008.	No building inspection report was available for "Costa Vale". During the on-site audit inspection, it was verbally confirmed that WCMPL offered to inspect the "Costa Vale" property, however the landowners declined the offer.
9.8	Implement a notification procedure for all residents within 3km of the Project Site.	Y	BMP, Section 3 states that WCMPL will provide specific notification of individual blasts to any person who registers an interest in being notified about the blasting schedule at the mine. Notification will involve: a letter, nominating a planned blast date, will be hand delivered on the day before each blast. The letter would provide the indicative time for the blast; and a telephone call during the morning of the blast to confirm the blast will proceed at the nominated (or varied) time.	During the on-site audit inspection, Blasting Notification Checklists were sighted dated 12/04/2011 for blast no. 72 and 16/04/2011 for blast no. 73, which detailed notification to landowners at Brolga, Roseberry, Surrey, Yarrari, and Penryn.
9.9	Install a blast notice board on Wean Road notifying of the next blast.	Y	During the on-site audit inspection, 2 blast notice signs were sighted along Wean Road notifying of the next blast.	It was noted that these 2 signs could be positioned better. They are currently facing east when driving north along Wean Road, which makes them difficult to see when driving past them. It is suggested they should be facing north and south so they are more clearly visible when driving either north or south along Wean Road.
9.10	Close Wean Road for the duration of each blast within 500m of Wean Road.	Y	Road Closure Management Plan (RCMP) was developed to safely manage Temporary Road Closure of any public road within 500m of Rocglen blasting activities, in particular Wean Road and Jaegar Lane.	
9.11	Update blast notice boards on Wean Road at least 24 hours prior to each blast.	Y	During the on-site audit inspection, a blast was scheduled for 12pm Friday 13 May. The blast signs were inspected during the afternoon of Thursday 12 May and the blast signs had been updated accordingly.	
9.12	Inspect Wean Road for blast debris following each blast within 500m of the road.	Y	RCMP states that once the blast has been fired the road sentry will drive the entire route to confirm the road has not been impacted by the blast (fly rock or damage). The road sentry will remove any fly rock that impacts on the road. At the conclusion of this process the road will then be reopened to traffic.	
9.13	Ensure all blasts generate airblast overpressure levels at non-project-related residences of <120dB(L) for 100% of blasts and <115dB(L) for 95% of blasts.	N	Two exceedances were recorded in 2009 representing 8.3% of total blasts for that year.	
9.14	Ensure all blasts generate ground vibration levels at non-project-related residences <10mm/s for 100% of blasts and <5mm/s for 95% of blasts.	Y	Blast results reviewed during the audit indicate no exceedances.	
10	Surface Water			
10.1	Prepare a Surface Water Management Plan in consultation with DWE and DECC.	Y	Water Management Plan for Rocglen Coal Mine, Edition 1 Rev 1 dated August 2009.	
10.2	Outline contingency measures in the Surface Water Management Plan that will accommodate the full range of seasonal conditions likely throughout the mine life.	N	WMP section 2.2.2 states that the waterways were sown following construction to establish a cover crop to further reduce potential for erosion and sedimentation. The seasonal conditions will have a direct influence on the effective operation of the waterways, and in the event that groundcover establishment has been ineffective, alternate options such as rock armouring will be introduced to ensure effective erosion and sediment control.	No specific evidence relating to control measures to accommodate the full range of seasonal conditions.
10.3	Check the storage capacities of clean water dams as constructed and obtain a DWE water licence if the combined capacity of the dams exceed 26ML.	Y	WMP section 3.3.1 indicates the maximum dam capacity and states that of the "clean" water that could be captured on the mine site each year, WCMPL has a right to collect and use only a proportion of this, ie. the maximum harvestable rights. The maximum harvestable right for the mine site was determined in the following manner. Maximum Harvestable Right = Catchment Area (ha) x Multiplier Value3 = 366 x 0.07 = 25.6ML.	

No.	Requirement	Compliance Y/N/NT/V/NA	Evidence	Comments
10.4	Construct diversion bank (DB2) and waterways (WW1 and WW2) upstream of mining and other related disturbance to approved design specifications.	Y	WMP section 2.2.2 states that all diversion bank structures have been designed to cater for water velocity of 1.2m/s. Section 2.2.2 also states that Waterway 1 is located on the western boundary of the mine site and directs surface flows from Vickery State Forest to the north and south to ensure clean water flows do not interact with disturbed areas. Waterway 2 (WW2) is located on the south-eastern side of the mine site and directs flows south via a series of sediment basins and storage dams prior to being able to discharge off the mine site. During the audit site inspection, it was observed that the diversion banks and waterways had been installed. A review of the survey plan shows that the structures have generally been constructed as designed.	
10.5	Construct clean water storage dams (SD1 to SD8 and GBD1) at the discharge points of the diversion structures and to approved design specifications.	Y	The dam quantities survey plan reviewed during the audit showed that the dams had been constructed to approved capacities. Several of these dams were also inspected as part of the audit site inspection.	
10.6	Inspect the diversion banks and storage dams on a monthly basis, or following rainfall of >25mm/24 hours, and undertake maintenance work as necessary.	Y	WMP section 2.2.2 states that all structures are inspected following significant storm events to ensure the structures have been able to sustain those flow velocities. Monthly Environmental Inspection Checklist dated 30/12/2010 sighted which includes checking the water storage structures.	
10.7	Construct catch banks (CB1 to CB12) downstream of mining and other related disturbance to approved design specifications.	Y	WMP section 2.2.3 states that catch banks (prefix CB) are constructed prior to disturbance to divert potentially sediment-laden waters into sediment basins (prefix SB) constructed downstream of these areas of disturbance. During the audit site inspection, it was noted that catch banks have been installed downstream of disturbance areas. The survey plan reviewed also showed that catch banks have been installed as designed.	
10.8	Inspect the catch banks on a monthly basis, or following rainfall of >25mm/24 hours, and undertake maintenance work as necessary.	Y	Monthly Environmental Inspection Checklist dated 30/12/2010 sighted which includes checking the water storage structures. WMP section 2.2.3 states that all catch banks have been designed to cater for water velocity of 1.2m/s, an acceptable rate considering these banks will be well grassed.	
10.9	Construct sediment basins (SB1 to SB17) at the discharge points of the catch banks and to approved design specifications.	Y	WMP section 2.2.3 details the sediment basins specifications. The design capacities were checked on the survey plan and all were constructed to capacity apart from SB1, which was constructed with increased capacity.	
10.10	Install a marker post indicating a 20% capacity reduction level within each sediment basin.	V	During the on-site audit inspection, a marker post was sighted in SD3, however this appeared to measured water level height, not sediment capacity. WMP section 2.2.3 states that Sediment Basins are managed to ensure retention of sufficient capacity to reduce the potential for discharge off site.	This condition would be difficult to comply with since a marker post would only be effective in indicating reduced capacity due to sediment buildup when the dam is empty. It would not be particularly effective to indicate sediment buildup during times when the dam is full of water.
10.11	Inspect the sediment basins on a monthly basis, or following rainfall of >25mm/24 hours, and clean out the sediment basins of consolidated sediment once capacity reduced by 20%.	Y	WMP section 4.4 states that the erosion and sediment control structures will be inspected monthly, or after a rainfall event of >25mm/24hr, to assess their success in preventing erosion, identify signs of potential erosion and determine the retained capacity especially within the sediment basins. Monthly Environmental Inspection Checklist dated 30/12/2010 sighted which includes checking the water storage structures, including the requirements to check the structures following rainfall events.	
10.12	Review general performance of catchment and settlement structures and upgrade the existing structures or install additional structures to ensure all dirty water is captured and settled prior to discharge.	Y	Monthly Environmental Inspection Checklist dated 30/12/2010 was sighted which includes a section on water management, with one item being to check whether any sediment reduction measures need replacing or installing.	
10.13	Construct catchment and settlement structures 'in-line' such that overflow from one structure is directed to another downstream.	Y	The dam quantities survey plan reviewed during the audit shows that generally, water management structures are constructed 'in-line'. For example, the series of sediment basins along the western boundary of the site and SB18, SD6 and SD1 at the northern end of the site, which were inspected during the site inspection.	

No.	Requirement	Compliance Y/N/NT/V/NA	Evidence	Comments
10.14	Ensure drainage paths between the catchment and settlement structures are well grassed.	Y	WMP section 2.2 states that all diversion bank structures have been designed to cater for water velocity of 1.2m/s, an acceptable rate considering these structures will be maintained and well grassed. During the audit site inspection, it was noted that the drainage channels between SB5, SB6 and SD3 were well grassed as was the overland flow path from SB18.	
10.15	Maintain a grass coverage of >70% over the Project Site.	N	The mine plan figures show that there is not a grass coverage of > 70% on the project site.	
10.16	Undertake monitoring of any discharged water from the Project Site.	Y	AEMR 2009/2010 section 2.8.1 states that two wet weather discharge points are nominated in the current EPL 12870. These are SD-3 (EPL ID No. 11) and Northern Boundary Site Exit (EPL ID No. 12) (Plan 4). Three ambient monitoring points are also nominated on the EPL for water quality monitoring during discharge events. These are Driggle Draggle Creek (DDCK – EPL ID No. 13), Un-named Drainage Channel (UNDC – EPL ID No. 14) and Storage Dam 7 (EPL ID No. 15). Monitoring data confirms that monitoring of discharges is undertaken.	
10.17	Add flocculants to sediment-laden water within the sediment basins, if required, to expedite the settlement process.	Y	AEMR 2009/2010 section 2.8.3 outlines the discharge events that occurred during that reporting period. On 31/03/2010 at SD3, Due to the ongoing issues with elevated TSS levels in discharge waters from SD3, Rocglen implemented the use of DamClear Flocculant Blocks (floc blocks) in March 2010. This involved the placement of blocks on the inflow of SD3 and the pumping/recirculation of water through the blocks to activate the flocculant within the dam (Plate 2). The blocks visibly reduced the sediment level at the surface of the water.	
10.18	Ensure any water discharged from the northern and southern discharge points (Figure B) meets the DECC Environment Protection Licence criteria, expected to be as follows. <ul style="list-style-type: none"> • TSS < 50mg/L. • pH: 6.5 to 8.5. • Oil & grease < 10mg/L. • Electrical conductivity < 350µS/cm 	N	EPL condition L3.4, states that "The Total Suspended Solids concentration limits specified for Points 11 and 12 may be exceeded for water discharged provided that: (a) the discharge occurs solely as a result of rainfall measured at the premises that exceeds 38.4 ml over any consecutive 5 day period immediately prior to the discharge occurring; and (b) all practical measures have been implemented to dewater all sediment dams within 5 days of rainfall such that they have sufficient capacity to store run off from a 38.4 millimetre, 5 day rainfall event. AEMR 2009/2010 section 2.8.3 details the wet weather discharge events that occurred during the reporting period. During the 2009/2010 reporting period there were instances where the TSS recorded was > 50mg/L and the rainfall recorded over the preceding 5 day period was less than 38.4ml. Some examples include: 4 Jan 2010 at SD3 followed 25.2mm rain over the preceding 5 day period and the TSS level recorded was 1490mg/L. 15 Jan 2010 at SB18 followed 21.6mm rain over the previous day and TSS level recorded was 1490mg/L. 31 March 2010 at SD3 followed 16.8mm rain with TSS level recorded 108mg/L.	There were instances recorded of TSS level exceedances outside of the EPL condition.
10.19	Monitor the quantity and quality of mine inflows and, through comparison against the predictions of RCA (2007).	N	During the on-site audit inspection it was verbally advised by WCMPL staff that mine inflows are currently measured for quality, however are not being measured for quantity.	
10.20	Pump all mine water to the various dedicated mine water dams within the footprint of the open cut mine area – generally in the locations shown on Figure B .	Y	AEMR 2009/2010 section 2.8.2 states that dirty water originating from surface runoff is collected by catch banks located down slope of the potential sources of pollution and directed to the sediment basins while water pumped from the open cut is piped to the Void Water Dam or retained in pit within managed sumps. Water collected within the sediment basins and the Void Water Dam is used for dust suppression in addition to waters in the storage dams to avoid potential for off-site water discharge. During the audit site inspection, the mine water dam "Void Water Dam" on the eastern side of the pit was inspected. The in-pit sump was observed to be generally in the location identified as "B" on the Plan.	

No.	Requirement	Compliance Y/N/NT/V/NA	Evidence	Comments
10.21	Monitor from the open cut sump the quantity and quality of mine water pumped to the dedicated mine water dam(s).	N	During the on-site audit inspection it was verbally advised by WCMPL staff that the quantity and quality of mine water from the open cut sump is not currently being monitored. However, water in the dedicated mine water dam is currently being monitored.	
10.22	Monitor the quantity and quality of water pumped from any dewatering bores surrounding the open cut pumped to the dedicated mine water dam(s).	NT	There are no dewatering bores on site.	
10.23	Give preference to the use of water pumped from the active mine water dam for dust suppression purposes.	Y	Section 3.3.3 states that water for dust suppression purposes on site is preferentially sourced from the nominated discharge storages to assist in reducing potential for discharge. During the audit site inspection, it was noted that water standpipes and pumping points were provided at several of the SB and SD water management structures.	
10.24	Securely store all hydrocarbon products.	A	Hydrocarbons including oils and greases were generally observed to be stored in impervious bunded areas at the workshop area. These bunded areas were considered to provide adequate secondary containment in the event of a spill and spill kits were observed to be located adjacent to each storage area. Waste oil is stored within an impervious metal bund inside a shipping container. However, there is evidence of oil staining on the dirt and gravel hardstand area immediately outside of the container. The hydrocarbon storage practices observed to be in use by the scraper contractor would not be considered best practice and are not in keeping with the OEH (formerly DECCW) guidelines for the storage of liquid substances. For example, there were eight drums of oil and lubricants that were being stored in an area off the main scraper haul road. The area had been partially bunded with earth, however the bunding would not be considered impervious and may not provide adequate secondary containment in the event of a spill.	AEMR 2009/2010, section 3.17.2 states that The DPI (now I&I NSW) undertook a site visit in July 2009 and identified that hydrocarbon management activities at the workshop required improvements. Additional concrete bunding has since been installed at the re-fuelling bay, oilwater separator and hydrocarbon storage areas to reduce the likelihood of soil and water contamination. A steel bollard has also been erected adjacent to the northern end of the fuel tank, following a suggestion from the then DPI in July 2009 that the fuel tank should be protected from approaching vehicles. The issues identified from the DI&I inspection were observed to have been addressed by Whitehaven and were closed out.
10.25	Refuel all but the less mobile mining equipment which would be refuelled within the open cut area, within designated areas.	Y	During the on-site audit inspection, the Workshop Manager advised that generally the mining fleet was refuelled at the designated refuelling bay, however occasionally vehicles were refuelled on other areas of the site.	During the on-site audit inspection the refuelling bay was sighted. The refuelling truck was sighted, however it did not contain a spill kit on board.
10.26	Direct all water from wash-down areas and workshops to oil/water separators and containment systems.	Y	During the on-site inspection conducted during the audit, it was observed that the maintenance workshop area, including the washdown area and the hydrocarbon and chemical storage areas, had a concrete floor which drained to a sump that connected to an oil/water separator. Waste oil from the separator is pumped to the waste oil tank for disposal by contractor.	
10.27	Ensure all fuel storage tanks are either self-bunded tanks or bunded with an impermeable surface and have a capacity to contain a minimum 110% of the largest storage tank capacity.	Y	The main diesel storage tanks sighted at the workshop during the audit were self bunded containers with appropriate vehicle collision protection and impervious bunded areas for refuelling.	
10.28	Implement a 3-phase remedial action plan in the event of a major hydrocarbon spill as follows. <ul style="list-style-type: none"> Phase 1 – Initial Recovery: Recover as much as possible at the source by pumping free hydrocarbon from the surface and excavating hydrocarbon-contaminated materials. Phase 2 – Source Control: Begin hydraulic control of the source to prevent spreading of contamination. Phase 3 – Recovery: If necessary, install boreholes to remove and treat contaminated groundwater. 	N	The MOP, AEMRs and WMP were reviewed during the audit and none of the documents reviewed included the requirements for remedial action of hydrocarbon spills.	
10.29	Remove all temporary diversion banks at the end of the mine life to generally re-instate pre-mining flows.	NT	Mining is still active.	
10.30	Ensure that all re-instated drainage lines in the final landform are diverted around the final void and will not be able to overflow into the void.	NT	MOP section 5.2.1 states that the major features of the final landform include reinstated drainage which diverts water flowing from the east to the south of the water holding depression and into the retained central drainage line of the mine site. The Mine Closure Plan and Final Void Management Plan have yet to be finalised, therefore it could not be verified at this time that these requirements are included in the Plans.	

No.	Requirement	Compliance Y/N/NT/V/NA	Evidence	Comments
10.31	Seek licencing from DWE for the final mine void in the event its Harvestable Rights Capacity is exceeded.	NT	Mining is still active. The Mine Closure Plan and Final Void Management Plan have yet to be finalised, therefore it could not be verified at this time that these requirements are included in the Plans.	
11	Visibility			
11.1	Use a maximum of six lighting plants for night-time activities.	N	AEMR 2009/2010 section 2.4.3 states there are 8 lights for evening/night operations. This was confirmed by the mine's Project Manager, who advised that up to 8 lighting plants are used.	
11.2	Position all floodlights downward during night-time operations and turn off when not required.	V	Environmental Management Strategy (EMS), Section 5.11 Visibility. Table 5.11 - Objective (h) states that to ensure that all external lighting associated with the mine complies with Australian Standard AS4282 1997 – Control of Obtrusive Effects of Outdoor Lighting, i.e. wherever possible, all mine lighting is directed downward. A review of the complaints registers undertaken during the audit shows that Whitehaven received two complaints, on consecutive nights, from the "Surrey" property residents regarding light impacts from the mine site. The complaints prompted discussions with the Open Cut Examiners (OCEs) to ensure placement of lighting is appropriate to minimise impacts on surrounding residences. The complainant's were provided with the night shift OCE mobile phone number to allow direct contact should this problem persist. A night time inspection was not undertaken as part of the audit, therefore it was not possible to verify that all lighting is positioned downwards at this time.	
11.3	Design the overburden emplacements to as much as possible, replicate existing topographic features.	V	AEMR 2009/2010, section 3.21 states that on completion of all mining activities, the successful rehabilitation of areas of disturbance and the relinquishment of the mining lease, the land affected by mining within the Project Approval area will, in the main, be returned to a classification similar to that prior to mining. During the audit site inspection, it was noted that the overburden emplacement is quite high and just in line with the ridge line of the Vickery State Forest. AEMR 2009/2010 section 3.11.1 states that as mining has progressed, the southern waste emplacement has developed to be close to maximum height which has resulted in the site being visible from locations further to the south and east. It is expected that reshaping of the southern emplacement will be well advanced during the next AEMR period which will further limit visible impact.	
11.4	Minimise the extent of land disturbance / clearing in advance of mining.	Y	MOP section 3.2.2.1 states that Vegetation clearing to be undertaken during the term of this MOP will include initial clearing of the areas designated for mining lease infrastructure, ie. internal roads, coal processing and mine facilities areas, and soil stockpile areas, followed by annual (or more frequent) campaigns sufficient for the subsequent year of mine development. During the audit site inspection it was noted that clearing and stripping was in progress in an area to the east of the current pit in readiness for the next 12 months of mining as identified on the mining sequence plans.	
11.5	Maintain the mine and associated areas of disturbance in a clean and tidy condition at all times.	Y	During the on-site audit inspection, the majority of the areas inspected were in a clean and tidy condition.	
11.6	Maintain regular communications with those residents whose visual amenity is affected by the Project and implement any reasonable additional controls to further reduce the impact on their visual amenity.	Y	AEMR 2009/2010 section 4.3 states that In accordance with Condition 9 of Schedule 5 of PA 06_0198 a Community Consultative Committee (CCC) was formed in July 2008. The committee comprises representatives of Gunnedah Shire Council, Rocglen Coal Mine and the community and is chaired by Mr John Sturgess. Since its inception, the CCC has met on a regular basis, meeting 4 times per year. Rocglen Mine representatives and Whitehaven's Community Liaison Officers (1 x full time, 1 x part time) continue to maintain regular personal contact with the neighbours in the vicinity of the mine. These contacts not only provide a means of information dissemination, but also enable Whitehaven to ascertain and address any potential issues which may arise from time to time.	AEMR 2009/2010 section 4.1 states that Whitehaven maintains a designated complaints line, with messages checked on a daily basis (seven days/week) by the Environmental Manager. In the event of a complaint, details pertaining to the complainant, complaint and action taken are recorded on a "Complaints Form". Over the last 12 months, two complaints have been received in relation to operations at the mine. Both complaints were made by the same complainant in relation to noise and lighting issues over two consecutive nights as well as increased rubbish along Wean Road.

No.	Requirement	Compliance Y/N/NT/V/NA	Evidence	Comments
12	Traffic and Transport			
12.1	Prepare Transport Management Plans to RTA standards to ensure appropriate procedures are in place during all construction activities along the transport route.	V	Construction works were undertaken by a contractor managed by Whitehaven's Project Manager for Road Construction. During the audit, no evidence was sighted on site to indicate Whitehaven had retained copies of any traffic management plans that may have been prepared for the works. However, Whitehaven staff advised that such plans had been prepared as part of the construction contracts. As the road construction works have now been completed, it is not possible to verify whether or not such plans were prepared and implemented.	Based on the auditor's experience with RTA projects, the submission of a traffic management plan under RTA specification G10 is a hold point prior to the commencement of construction, therefore, in the auditor's opinion, a traffic management plan was likely to have been prepared.
12.2	Contact all potentially affected landowners and surrounding residents prior to initial construction and the commencement of any upgrading works to inform / discuss the proposed works.	V	During the on-site audit inspection it was verbally advised by WCMPL staff that landowners and surrounding residents were contacted prior to construction commencing. However, this communication was not documented.	
12.3	Construct the Mine Access Road in the location illustrated on Figure C .	Y	During the on-site audit inspection, the mine access road was travelled along its length from the mine boundary to Bluevale Road. It has generally been constructed as per the location on Figure C .	
12.4	Construct the intersection between Shannon Harbour Road and Hoad Lane as illustrated in Figure D and in accordance with Council specifications.	Y	During the on-site audit inspection, the intersection was sighted. It has been constructed as per the location on Figure D and in accordance with Council specifications. Letter from GSC sighted confirming their satisfaction with the Construction Completion Certificate sighted dated 16/02/2011 from Constructive Solutions confirming the Kamilaroi Highway Access Improvements have been completed in accordance with RTA requirements.	
12.5	Upgrade the Kamilaroi Highway and CHPP Junction / Blue Vale Road Junction in accordance with RTA recommendations.	Y	Construction Completion Certificate sighted dated 16/02/2011 from Constructive Solutions confirming the Kamilaroi Highway Access Improvements have been completed in accordance with RTA requirements.	
12.6	Upgrade the Kamilaroi Highway between the Blue Vale and CHPP Junctions in accordance with RTA recommendations.	Y	Construction Completion Certificate sighted dated 16/02/2011 from Constructive Solutions confirming the Kamilaroi Highway Access Improvements have been completed in accordance with RTA requirements.	
12.7	Transport all earthmoving equipment and construction materials from the Whitehaven Mine via Hoad Lane and Shannon Harbour Road.	N	CCC meeting minutes dated 22/10/2008 detail a complaint made on 12/08/2008 in regards to trucks transporting demountable buildings to site, overtaking a school bus on Wean Road. Another complaint on 20/08/2008 indicated dust from Wean Road at the "Penryn" residence due to mine related traffic.	Since construction commenced 1/08/2008, these complaints would most likely be in relation to construction materials.
12.8	Erect appropriate road signage.	V	Road signage has been installed along Wean Road, and the coal transport route. 'Do not litter' signs were also sighted along Wean Road.	This commitment does not specify what is considered to be appropriate road signage or who is responsible for assessing whether the signage is appropriate. Whilst signage has been provided as part of the road construction and intersection upgrade works, this condition cannot be verified at this time, although in the auditors opinion, the road signage that has been erected is appropriate for the area.
12.9	Transport all oversize loads with all necessary permits.	V	Requirements identified in management plans but no documented evidence available at the time of the audit.	
12.10	Close Shannon Harbour Road at the Wean Road end and erect a sign displaying "No Through Road" at the Hoad Lane end.	Y	During the on-site audit inspection it was observed that Shannon Harbour Road (at the intersection of Wean Road) has been closed with a gate and locked. A sign has not been erected saying "No Through Road".	
12.11	Seal and provide centre and edge line markings on all public road sections of the transport route.	Y	Observed during the on-site audit inspection.	
12.12	Undertake all transport activities strictly in accordance with the project approval and environment protection licence.	Y	All transport activities are being undertaken in accordance with the project approval and environment protection licence (see audit spreadsheets for 'Project Approval Conditions' and EPL').	
12.13	Undertake all deliveries of "oversize" loads in accordance with RTA and Council restrictions on transport hours and safety / warning requirements.	V	Requirements identified in management plans but no documented evidence available at the time of the audit.	

No.	Requirement	Compliance Y/N/NT/V/NA	Evidence	Comments
12.14	Ensure all loads are within each trucks legal limit through the use of a weighbridge (see Figure A).	Y	MOP section 3.3.4 states that the Coal Handling Processing Area includes the product bin and batch weigh system, which loads coal onto trucks. Section 3.5 states the product bin will incorporate a batch loading system whereby each trailer will be loaded with the correct weight of coal per axle to satisfy RTA requirements. Whilst it is noted that Whitehaven does not have a weighbridge at Rocglen, the systems in place to batch load from the product bin and the use of weight sensors in the dozer buckets are considered by the auditor to meet the intent of this commitment.	During the on-site audit inspection it appeared that the loading system was temporarily not working and trucks were being loaded using dozers. It was reported that the dozer buckets have a weight sensor to monitor the weight of the loads.
12.15	Maintain the communication system currently in use at the Whitehaven Coal Mine between the truck drivers and local school bus drivers on school days.	Y	EMS table 5.12 states one of the key performance outcomes for product coal transportation is for communication to be maintained between truck drivers and local school bus drivers. Section 6.1 states that WCMPL will provide the opportunity for the CCC and local residents, landholders, schools and community groups to visit the mine, as well as maintaining an open door policy for interested local residents.	During the on-site audit inspection a sign was sighted on the coal transport route which indicated the transmission number the truck drivers were on.
12.16	Adopt a covered load policy to all trucks transporting coal from the mine and backloading rejects from the Whitehaven CHPP.	Y	AEMR 2009/2010 section 3.1.2 states one of the control measures for air pollution is the use of covers on all product coal trucks. Toll is the principal contractor engaged in the haulage of coal from the Rocglen Mine to the CHPP. All Toll vehicles and those operated by its contractors are fitted with roll-over tarpaulins. During the on-site audit inspection all trucks observed containing coal were covered.	
12.17	Ensure all trucks transporting coal are well maintained and that drivers act in a courteous manner at all times.	Y	Trucks observed leaving the Rocglen site and travelling along the coal transport route were generally observed to well maintained (eg no significant visual emissions, covers in place, trucks generally clean and tidy).	
12.18	Ensure all truck drivers operate in accordance with a Transport Policy and Code of Conduct.	Y	RNMP section 3 states that prior to the commencement of coal transportation, WCM, in conjunction with the coal transport contractor, will undertake an education program for all drivers reinforcing including the necessity to comply with all commitments in the Transport Code of Conduct, a copy of which will be supplied to all drivers. An example of a signed code of conduct form was sighted in training records. During the inspection of the coal transport route, no adverse driver behaviour was observed.	
12.19	Reduce the number of truck movements along the transport route with the use of 40t B-Doubles.	Y	MOP section 3.5 states that a front-end loader will be used to place coal from the ROM pad into the 40t capacity coal loading hopper. During the on-site audit inspection, 40t B-Double trucks were sighted transporting coal.	
12.20	Restrict the number of coal truck movements to that proposed in Tables A and B .	Y	Tables A and B are contained in the Response to Submissions dated 11/02/2008. Table A lists the estimated operational traffic movements, whilst Table B lists the accumulated operational traffic movements (Belmont, Whitehaven and Tarrawonga mines). Table A allows for an average daily movement of heavy vehicles for coal transport/reject backloading of 240, noting that this number would increase by 30% and 35% with the exclusive use of 30t semi-trailers. Table B indicates that for Belmont Coal Mine, the average daily movement for heavy vehicles operating from 2009 onwards is 248.	Daily Production Reports up to April 2011 were reviewed and the daily truck movements were calculated by dividing the tonnage of coal transported to the CHPP by 40, which is the maximum truck capacity. The day that recorded the most amount of tonnage of coal transported was on 31/03/2011 with 9,484 tonnes of coal. This calculates to approximately 237 truck movements. This amount is below the levels in Tables A and B for Rocglen, therefore no exceedances recorded. It is recommended that Whitehaven implement a system to collect data on the number of truck movements per day to provide a readily available verification for this commitment.

No.	Requirement	Compliance Y/N/NT/V/NA	Evidence	Comments
12.21	Instruct drivers of all heavy vehicles to access the Project Site via Hoad Lane / Shannon Harbour Road Intersection.	Y	RNMP figure 2.2 shows the coal transport route which accesses the project site via the Hoad Lane/Shannon Harbour Road intersection. During the on-site audit inspection, it was verbally advised by WCMPL staff that drivers are instructed to use the correct haul routes during toolbox talks. No heavy vehicles were observed to access the site from Wean Road during the 2 days of the audit, which provides an indication that Whitehaven's policy is communicated to and accepted by drivers.	
12.22	Construct the realigned road to a standard similar to the existing road.	Y	The realigned section of Wean Road was sighted during the audit. From a visual inspection, the road appears to have been constructed to a standard similar or better than the existing road. Letter sighted from GSC acknowledging their satisfaction with the works.	
12.23	Prepare a Transport Management Plan to ensure appropriate procedures are in place for public traffic during the realignment of Wean Road.	V	Construction works were undertaken by a contractor managed by Whitehaven's Project Manager for Road Construction. During the audit, no evidence was sighted on site to indicate Whitehaven had retained copies of any traffic management plans that may have been prepared for the works. However, Whitehaven staff advised that such plans had been prepared as part of the construction contracts. As the road construction works have now been completed, it is not possible to verify whether or not such plans were prepared and implemented.	Based on the auditor's experience with RTA projects, the submission of a traffic management plan under RTA specification G10 is a hold point prior to the commencement of construction, therefore, in the auditor's opinion, a traffic management plan was likely to have been prepared.
12.24	Require all trucks (from all origins) and light vehicle traffic originating from the Gunnedah area to travel to the Belmont Coal Mine site via Blue Vale Road and Hoad Lane.	V	RNMP section 1 states that transportation of coal from the mine via a purpose built road between the project site and Shannon Harbour Road over the "Brentry" and "Stratford" properties, an upgraded section of Shannon Harbour Road, and existing sections of Hoad Lane, Blue Vale Road and the Kamilaroi Highway to the Whitehaven Coal handling and preparation Plant (CHPP) and rail loading facility at the Whitehaven siding.	During the audit site inspection, trucks were observed to be entering and leaving the site via Shannon Harbour Road and Bluevale Road. Whitehaven advised that all coal transport drivers and delivery truck drivers are advised of the requirements to access the site via this route.
12.25	Undertake a two-stage program of road sealing along Wean Road. Stage 1: 0 - 6km (200m north of light vehicle entrance). Stage 2: 6 - 8km (200m north of deviation).	V	During the on-site audit inspection, it was observed that stage 1 had been sealed, however stage 2 has not been sealed although construction has been completed and the road sealing has been programmed. The sealing of Stage 2 of Wean Road should be verified next audit.	
12.26	Require all trucks from all origins to travel to Belmont Coal Mine via Blue Vale Road and Hoad Lane.	Y	During the on-site audit inspection, it was verbally advised by WCMPL staff that drivers are instructed to use the correct haul routes during toolbox talks. No heavy vehicles were observed to access the site from Wean Road during the 2 days of the audit, which provides an indication that Whitehaven's policy is communicated to and accepted by drivers.	
12.27	Construct a height bar above the light vehicle entrance to prevent access to the Belmont Coal Mine for vehicles other than light vehicles.	N	There is no height bar above the light vehicle entrance. However, as all heavy vehicles are required to access the site from Bluevale Road and Shannon Harbour Road, this commitment is somewhat redundant.	
12.28	Leave the sealed, realignment section of Wean Road to remain beyond the end of the mine life.	NT	This should be included in the Mine Closure Plan when developed.	
12.29	Undertake a research and development program to investigate means by which coal trucks and the road surface can be modified to ensure the DECC sleep criteria can be satisfied.	N	Whitehaven advised during the audit that the research and development program has not been undertaken.	
12.30	Undertake the research and development program in consultation with the residents of "Weroona" and "Brooklyn".	N	Whitehaven advised during the audit that the research and development program has not been undertaken.	

No.	Requirement	Compliance Y/N/NT/V/NA	Evidence	Comments
12.31	Commence coal transportation between 10:00pm and 7:00am on a limited basis (6 coal truck movements / hour) – “the trial period”.	NT	This trial period of coal transportation has not taken place. AEMR 2009/2010 section 2.4.4 states that coal transportation from the mine site is undertaken between the hours of 7:00am to 9:15pm Monday to Friday and 7:00am to 5:15pm on Saturdays.	This commitment conflicts with the Project Approval condition no. 40 which states 'The proponent shall only dispatch coal from the site by road between the hours of: (a) 7am to 9.15pm, Monday to Friday; (b) 7am to 5.15pm Saturday; and (c) at no time on Sundays and public holidays. As the project approval conditions take precedence over the Statement of Commitments (see PA Schedule 2, Condition 3), this commitment cannot be complied with as it is superseded.
12.32	Extend coal transportation to 10 coal truck movements / hour between 10:00pm and 7:00am.	NT	This trial period of coal transportation has not taken place. AEMR 2009/2010 section 2.4.4 states that coal transportation from the mine site is undertaken between the hours of 7:00am to 9:15pm Monday to Friday and 7:00am to 5:15pm on Saturdays.	This commitment conflicts with the Project Approval condition no. 40 which states 'The proponent shall only dispatch coal from the site by road between the hours of: (a) 7am to 9.15pm, Monday to Friday; (b) 7am to 5.15pm Saturday; and (c) at no time on Sundays and public holidays. As the project approval conditions take precedence over the Statement of Commitments (see PA Schedule 2, Condition 3), this commitment cannot be complied with as it is superseded.
13	Soils, Land Capability and Agricultural Suitability			
13.1	Strip topsoil and subsoil to the depths nominated in the EA.	Y	MOP section 3.2.3.4 states that topsoil will be stripped to a depth of approximately 25cm – 60cm based on material type in accordance with recommendations of GSS Environmental following a recent soil assessment conducted during 2010. Soil stripping will use the site bulldozer, or scraper if available.	
13.2	Transfer and respread directly stripped soil materials directly over areas to be rehabilitated following the first 18 to 24 months of mine operations.	V	Although requirements to transfer and respread stripped material directly over areas to be rehabilitated have been identified in the MOP and AEMR, the Landscape Management Plan (which includes a Rehabilitation Plan) has not yet been finalised.	
13.3	Place higher alkalinity soils over the surface of the overburden emplacement to provide neutralising capacity in the event pockets of acid forming rock are encountered.	N	During the on-site audit inspection it was verbally advised by WCMPL staff that they are not currently testing for acid forming rock.	Whitehaven should investigate the need to implement a testing program for acid forming rock such that any acid generating potential can be neutralised as described in this commitment.
13.4	Install erosion protection around soil stockpiles.	Y	During the audit site inspection, it was observed that erosion and sediment control measures had been implemented around the site. For example, sediment fences downstream of the recently constructed dam at the northern end of the site. It was also noted that there was evidence that sediment fencing had been constructed around the eastern soil stockpiles, however those controls were no longer required as good vegetative cover has now been established.	
13.5	Limit topsoil and sub soil stockpiles to 2m and 3m in height respectively.	Y	MOP section 3.2.3.4 states that the topsoil and subsoil stockpiles will be no higher than 2m and 3m respectively, and with slopes no greater than 1:2 (V:H) and a slightly roughened surface to minimise erosion. During the audit site inspection, it was observed that the subsoil stockpiles on the eastern boundary were no higher than 3 metres in height.	
13.6	Seed any stockpiles retained for over three months with a non-persistent cover crop.	Y	MOP section 3.2.3.4 states that all topsoil and subsoil stockpiles will be seeded with a non-persistent cover crop to reduce erosion potential as soon as possible after completion of stockpiling. During the audit site inspection, it was observed that cover crops had been established on the soil stockpiles on the eastern boundary of the site.	
13.7	Maintain and regularly reconcile with rehabilitation requirements an inventory of soil resources present on the Project Site.	V	MOP section 3.2.3.4 states that an inventory of soil resources present on the mine site, ie. both in stockpiles and awaiting stripping, will be maintained and regularly reconciled with rehabilitation requirements. However, the Landscape Management Plan, including the Rehabilitation Plan, has yet to be finalised.	

No.	Requirement	Compliance Y/N/NT/V/NA	Evidence	Comments
13.8	Divert surface water flow away from soil stockpile areas.	Y	During the audit site inspection, it was observed that catch drains and diversion drains had been constructed to divert water around soil stockpiles (for example, the catch drains in the north east of the site which divert clean water / runoff away from the northern emplacement and the eastern soil stockpiles).	
13.9	Monitor erosion from soil stockpiles or rehabilitated surfaces throughout the life of the Project with remedial works undertaken should erosion be observed.	Y	WMP section 4.4 - Erosion and Sediment Control Management, details the management practices that are to be implemented to further reduce the risk of erosion and sedimentation. Sighted copies of Monthly Environmental Inspection Checklist (eg checklist dated 30/12/2010) which includes the monitoring of erosion and sediment controls.	
13.10	Undertake all clearing and topsoil stripping in campaigns on an as-needs basis.	Y	MOP section 3.2.2.1 states that Vegetation clearing to be undertaken during the term of this MOP will include initial clearing of the areas designated for mining lease infrastructure, ie. internal roads, coal processing and mine facilities areas, and soil stockpile areas, followed by annual (or more frequent) campaigns sufficient for the subsequent year of mine development. During the audit site inspection it was noted that clearing and stripping was in progress in an area to the east of the current pit in readiness for the next 12 months of mining as identified on the mining sequence plans.	
14	Air Quality			
14.1	Minimise clearing ahead of construction and operational activities.	Y	MOP section 3.2.2.1 states that Vegetation clearing to be undertaken during the term of this MOP will include initial clearing of the areas designated for mining lease infrastructure, ie. internal roads, coal processing and mine facilities areas, and soil stockpile areas, followed by annual (or more frequent) campaigns sufficient for the subsequent year of mine development. During the audit site inspection it was noted that clearing and stripping was in progress in an area to the east of the current pit in readiness for the next 12 months of mining as identified on the mining sequence plans.	
14.2	Undertake soil stripping at a time when there is sufficient soil moisture to prevent significant lift-off of dust.	V	AEMR 2009/2010 section 3.1.2 states that where practicable, limiting soil stripping activities to periods when there is sufficient soil moisture to prevent significant dust lift-off and avoiding periods of high winds. MOP table 3.4 states the Project Manager is responsible for inspecting cleared areas and ensure soil stripping is not undertaken when soil moisture is high. Whilst the inspections by the Project Manager are not specifically documented, Whitehaven advised that they are undertaken.	
14.3	Avoid stripping soil in periods of high wind.	V	AEMR 2009/2010 section 3.1.2 states that where practicable, limiting soil stripping activities to periods when there is sufficient soil moisture to prevent significant dust lift-off and avoiding periods of high winds. MOP table 3.4 states the Project Manager is responsible for inspecting cleared areas and ensure soil stripping is not undertaken when soil moisture is high. Whilst the inspections by the Project Manager are not specifically documented, Whitehaven advised that they are undertaken.	
14.4	Use water application to increase soil moisture should stripping occur during periods of high wind or low soil moisture.	Y	AEMR 2009/2010 section 3.1.2 states that where practicable, limiting soil stripping activities to periods when there is sufficient soil moisture to prevent significant dust lift-off and avoiding periods of high winds; and application of water to exposed surfaces, with emphasis on those areas subject to frequent vehicle / equipment movements which may cause dust generation and dispersal. During the audit site inspection, a water cart was observed in operation on the site.	

No.	Requirement	Compliance Y/N/NT/V/NA	Evidence	Comments
14.5	Utilise water injection on the drill rigs or alternatively fit them with dust collectors.	Y	AEMR 2009/2010 section 3.1.2 states that one of the air quality control measures is the use of water injection on the drilling rig.	
14.6	Avoid ripping of softer overburden material during periods of high wind.	V	AEMR 2009/2010 section 3.1.2 states that where practicable, limiting soil stripping activities to periods when there is sufficient soil moisture to prevent significant dust lift-off and avoiding periods of high winds. MOP table 3.4 states the Project Manager is responsible for inspecting cleared areas and ensure soil stripping is not undertaken when soil moisture is high. Whilst the inspections by the Project Manager are not specifically documented, Whitehaven advised that they are undertaken.	
14.7	Spray low moisture coal with water prior to excavation to raise moisture content to >6%.	Y	Generally this is not required as the coal has a high moisture content, however the requirements for this to be undertaken when required were noted to be included in Section 3.6.4 of the MOP.	
14.8	Apply water to the coal at the feed hopper, crusher and all conveyor transfer and discharge points at the rate of approximately 1.5L/t coal processed.	Y	The feed hopper, crusher and load out bin were inspected during the audit and found to have water sprays installed and operational.	
14.9	Install bund walls and wind breaks as required.	Y	Bund walls and visual screen mounds were observed to be located along the eastern boundary of the site to screen the mine from Wean Road.	
14.10	Avoid coal being loaded above the truck body sides.	Y	The trucks observed being loaded during the audit site inspection all had roll over tarpaulins which would prevent coal from being loaded above the sides of the trucks.	
14.11	Cover all trucks carrying product coal from the mine with approved covers and securely fix the tailgates to prevent windblown dust emission or spillages.	Y	AEMR 2009/2010 section 3.1.2 states one of the control measures for air pollution is the use of covers on all product coal trucks. Rocglen is currently using both Toll and Daracon for contract haulage to the Whitehaven CHPP. All trucks observed leaving the Rocglen site during the audit were observed to be covered with little evidence of windblown dust sighted from trucks travelling along the coal transport route.	
14.12	Fit all earthmoving equipment on-site with exhaust controls which satisfy NSW DECC emission requirements.	Y	During the on-site audit inspection, MDG15 checklists were sighted which confirmed this requirement.	
14.13	Direct the exhausts of all equipment upwards or to the side so as not to cause dust lift-off.	Y	AEMR 2009/2010 section 3.1.2 states that equipment exhaust positioning to avoid exhausts impinging on the ground and causing dust lift-off.	
14.14	Temporarily cease operation in the event of protracted dry periods, high winds and significant dust generation and dispersal towards the surrounding residences.	Y	AEMR 2009/2010 section 3.1.2 states one of the air pollution control methods is cessation of coal processing activities during periods of concurrent high winds and temperatures which cause coal dust dispersal, independent of water applications.	
14.15	Undertake an air quality monitoring program at "Costa Vale" and "Surrey" to demonstrate compliance with the nominated goals. <ul style="list-style-type: none"> • Deposited dust at selected residences and strategic locations surrounding the Project Site. • Continuous wind speed and direction at the Project Site weather station. 	V	This was the original plan but air quality monitoring at Costa Vale was stopped at the request of the landowner and the PM10 at Surrey was relocated to Roseberry. Licence variations have been approved by the EPA and the EPL reflects the new monitoring arrangements.	
14.16	Ensure all deposited dust levels at monitoring locations do not exceed an annual average of 3.65g/m ² /month.	V	AEMR 2009/2010 section 3.1.1 states that the air quality criteria applicable to the Rocglen Coal Mine are specified in PA 06_0198 MOD 1 Schedule 3, Tables 5, 6 & 7 (Appendix 1), which is: acceptable mean annual increase in deposited dust = 2g/m ² /month; mean annual dust deposition (all sources) = 4g/m ² /month; mean annual TSP (all sources) concentration = 90 µg/m ³ ; mean annual PM10 particulate level = 30 µg/m ³ ; 24 hour average PM10 particulate level = 50 µg/m ³ .	AEMR 2009/2010 indicates the acceptable mean annual dust deposition level from all sources is 4g/m ² /month. The report indicates no exceedances for the reporting period based on this level, not 3.65g/m ² /month. Air Quality Monitoring Data spreadsheet with raw data from Oct 2007 to present was reviewed and there were some instances with monthly recordings exceeding 3.65g/m ² /month, however the annual average did not exceed this.
14.17	Undertake PM10 monitoring at "Costa Vale" or "Surrey" in the event: <ol style="list-style-type: none"> a) deposited dust monitoring identifies levels greater than predicted; or b) complaints and / or requests for further monitoring from the occupiers of either residence. 	V	This commitment needs to be amended to reflect that monitoring is now undertaken at Glen Roc and Roseberry rather than Costa Vale and Surrey.	PM10 monitoring was discontinued at both Costa Vale and Surrey at the request of the landholders.

No.	Requirement	Compliance Y/N/NT/V/NA	Evidence	Comments
14.18	Assess each of the measures recommended in Section 6.7.2 of Heggies (2007) and report on the implementation of those determined to be practicable.	N	This refers to the Air Quality Assessment completed by Heggies in 2007 as part of the original EA. Section 6.7.2 outlines the greenhouse gas mitigation measures recommended to be implemented. The Air Quality Monitoring Program does not refer to greenhouse gas emissions which are: <u>Diesel Consumption:</u> <ul style="list-style-type: none"> • optimise and schedule vehicle operations to reduce fuel consumption; • maintain engines according to manufacturers guidelines and keep tyres at optimum pressure to maximise fuel efficiency; • reduce vehicle idling time; • consider the optimal location of any on-site refuelling station; and • consider the use of alternative fuels, such as biodiesel, for mobile plant. <u>Electricity Consumption:</u> <ul style="list-style-type: none"> • ensure that externally-sourced electricity for processing plant is generated by renewable energy technologies, such as wind, solar or biomass; and • implement solar-powered lighting about site where possible. <u>On-Site Processing:</u> <ul style="list-style-type: none"> • ensure that the most efficient type of crushing plant is linked to the hourly throughput. If less than 500 tonnes per hour are being processed then a Jaw Crusher rather than a Gyratory Crusher may be more efficient; • optimise size settings on crushers; and • ensure early rejection of unsaleable material to reduce crusher burden. 	The AEMR 2009/2010, section 3.17.3 details the greenhouse gas emissions for the reporting period. No written evidence could be located of an assessment of each of the GHG measures and their implementation. It should also be noted that no electricity is used on site; therefore the conditions in the Heggies report relating to reducing electricity consumption are not valid.
15	Socio-Economic			
15.1	Implement a policy which encourages employment of local district personnel.	Y	EMS table 5.15 states socio-economic objectives which include: to provide the training required to ensure sufficient numbers of qualified and trained local personnel are available for employment; and to provide employment for suitably qualified (or trained), experienced and/or trained local district residents including members of the local Aboriginal community. Table 5.15 indicates on key performance outcome is the expansion of local skill base and a progressive increase in local employment at the mine. AEMR 2009/2010 section 4.2.1 states that approximately 85% of mine related employees reside in the Gunnedah area with the remainder residing in the surrounding districts.	
15.2	Preferentially use local contractors and suppliers for goods and services.	Y	EMS table 5.15 states that one socio-economic objective is to support local service and supply industries.	
15.3	Provide a local induction kit to any new workers (from outside the district) including contact details for community groups and services throughout the region.	N	EMS table 5.15 states that one socio-economic key performance outcome is: local induction kit provided to new workers including contact details for community groups and services.	During the on-site audit inspection it was verbally advised by WCMLP staff that this was not currently being practiced.
15.4	Investigate contributing to community facilities and infrastructure should significant population increases associated with the Project impact on the local infrastructure and / or service provision.	V	EMS table 5.15 states that one socio-economic objective is to support local community services and projects.	During the on-site audit inspection it was verbally advised by WCMLP staff that Whitehaven do provide funding to the local community.

No.	Requirement	Compliance Y/N/NT/V/NA	Evidence	Comments
16	Bushfire Hazard			
16.1	Clear vegetation away from blast (>20m).	V	Although not specifically documented, during the on-site audit inspection it was verbally advised by WCMPL staff that there is no vegetation within 20 metres of each blast.	
16.2	Remove all coal from open cut around blast.	V	Although not specifically documented, during the on-site audit inspection it was verbally advised by WCMPL staff that all coal is removed from the open cut around the blast.	
16.3	Undertake blast design by qualified personnel.	Y	MOP section 3.4.4.1 states that blast design will be undertaken by a blasting engineer with loading and firing undertaken by a suitably qualified and experienced contractor holding a "blasting explosives user's licence" issued by WorkCover NSW and endorsed by the Department of Primary Industries (Mineral Resources). Blasting reports reviewed indicated that blast design and implementation is undertaken by Orica as the mine's blast contractor.	
16.4	Inspect blast prior to blast.	V	Blasting Monitoring Program (BMP) outlines the monitoring locations and the nature of the monitoring equipment to be used, equipment set up and post-blasting procedures, and blast information analysis and reporting procedures. EMS section 5.9 states that all blasts at the mine will be designed to satisfy environmental and safety criteria with respect to airblast overpressure and ground vibration, initially using conservative predictive models and subsequently using site laws developed and refined on the basis of operational experience.	This commitment is considered to be poorly worded and provides no detail on what is to be inspected about each blast site. However, it was noted by the auditors that the Orica blast reports indicate that all blast sites are inspected prior to blasts being initiated.
16.5	Ensure water truck is available to douse any smouldering vegetation etc.	Y	During the on-site audit inspection, several water carts were sighted on the project site.	
16.6	Undertake refuelling within designated fuel bays or within cleared area of the Project Site.	Y	During the on-site audit inspection, the Workshop Manager advised that generally the mining fleet was refuelled at the designated refuelling bay, however occasionally vehicles were refuelled on other areas of the site.	During the on-site audit inspection the refuelling bay was sighted. The refuelling truck was sighted, however it did not contain a spill kit on board.
16.7	Turn vehicles off during refuelling.	Y	During the on-site audit inspection, it was verbally advised by WCMPL staff that this was reinforced during toolbox talks.	
16.8	Enforce no smoking policy in designated areas of the Project Site.	Y	During the on-site audit inspection, 'no smoking' signs were sighted and it was verbally advised by WCMPL staff that this was reinforced during toolbox talks.	
16.9	Maintain fire extinguishers within site vehicles.	Y	During the on-site audit inspection, fire extinguishers were sighted within vehicles.	
16.10	Regularly inspect and water stockpiles.	Y	During the on-site audit inspection, water carts were sighted in operation.	
16.11	Control stockpile height and volume to limit the duration coal is retained in stockpiles.	Y	During the on-site audit inspection, coal stockpiles were observed to be at reasonable heights.	
16.12	Prepare a Bushfire Management Plan for the Project.	N	A Bushfire Management Plan has not been prepared.	
16.13	Regularly liaise with NSW Forests personnel in relation to bushfire hazard posed by Vickery and Kelvin State Forests.	N	AEMR 2009/2010 section 3.15.1 states that the mine maintains firebreaks around both its landholding and the mine area and maintains fire fighting equipment as well as earthmoving equipment, a water truck etc which would be used in the control of fires. Rocglen personnel also liaise with the local (Nandewar) Rural Fire Service, as required.	There was no evidence sighted during the audit to indicate that Whitehaven staff regularly liaise with NSW Forests personnel in relation to bushfire hazards.

No.	Requirement	Compliance Y/N/NT/V/NA	Evidence	Comments
17	Environmental Monitoring			
	Groundwater			
17.1	Monitor the SWL, saturated thickness and water quality of the following registered bores. <ul style="list-style-type: none"> • GW050395, GW050166, GW011015 & GW011066 – on the “Glenroc” property. • GW045621 - on the “Yarrowonga” property. • GW044068 & GW044069 - on the “Yarrari” property. • GW022319 - on the “Roseberry” property. • GW13369 on the “Brolga” property. 	N	WMP section 6.3.1 and AEMR 2009/2010 Table 8 detail the groundwater monitoring locations, which are: <ul style="list-style-type: none"> • WB-1 (GW000743) on the “Costa Vale” property • WB-2 (GW050395) on the “Roseberry” property • WB-3 (GW050166) on the “Glenroc” property • WB-4 (GW045621) on the “Yarrowonga” property • WB-5 (GW011066) on the “Roseberry” property • WB-6 (GW044068) on the “Yarrari” property • WB-7 (GW022319) on the “Roseberry” property • WB-8 (GW052958) on the “Surrey” property • WB-9 on the “Carlton” property • WB-10, WB-11 & WB-12 on the “Brolga” property • MP-1 (GW968533) at the Rocglen Coal Mine • MP-2 (GW968534) at the Rocglen Coal Mine • MP-3 (GW968535) on the “Stratford” property • MP-4 (GW968536) on Surrey Lane 	The following bores are not listed as being monitored in the WMP or AEMR: <ul style="list-style-type: none"> • GW011015 (Glenroc) • GW044069 (Yarrari) • GW13369 (Brolga)
17.2	Construct and monitor the SWL and saturated thickness of three piezometers on Proponent-owned land between the open cut and the nearest non Project-related groundwater bores (see Figure D).	Y	AEMR 2009/2010 section 3.4.2 states that MP-1 to MP-5 were established as monitoring piezometers at the commencement of the Rocglen operation. WMP figure 5b indicates the locations of MP-1 to MP-5. Section 3.4.2 also outlines the SWL monitoring results for the reporting period. WB-3 is located north of the mine site on the “Glenroc” property. SWL has remained relatively consistent since monitoring began in September 2008, with eight separate monitoring occasions recording an SWL of 8.6 – 9m. Outlier results recorded on the 23rd January 2009 (23.72m) and 3rd May 2010 (18.53m) are likely due to the SWL being measured immediately following water being drawn from the bore to fill water storage points for stock/domestic purposes on the “Yarrowonga” and “Glenroc” properties.Y	
17.3	Monitor water quality of the in-pit sump.	V	Whilst the water quality of the in-pit sump is not specifically monitored, this water is pumped to the void mine water dam where water quality is monitored in accordance with the requirements of the EPL.	
17.4	Prepare and implement a groundwater monitoring program, in consultation with the DECC, DWE and DoP.	Y	Groundwater Monitoring Program is included in the Water Management Plan (Chapter 6). The WMP was prepared in consultation with DECC, DWE and DoP, the following correspondence was sighted: Letter dated 15/05/2008 from Michael Young (DoP) to Danny Young (WCMPL) recommending water experts to assist with the preparation of the WMP, email dated 22/07/2008 from Stephen O’Donoghue (DECC) to Danny Young (WCMPL) in relation to the WMP; and email dated 17/04/2008 from Danny Young (WCMPL) to Rod Browne (DWE) in relation to the WMP.	
17.5	Undertake monitoring of surface water quality as presented in Commitment 10.18 or as modified in consultation with the DECC for monitoring requirements in the EPL.	Y	A surface water quality monitoring program has been implemented. Monitorign data reviewed during teh audit indicates that monitoring is being conducted in accordance with Commitment 10.18 and also in accordance with the monitoring requirements of the EPL.	
17.6	Prepare and implement a surface water monitoring program, in consultation with the DWE and DoP.	Y	Surface Water Monitoring Program is included in the Water Management Plan (Chapter 5). The WMP was prepared in consultation with DECC, DWE and DoP, the following correspondence was sighted: Letter dated 15/05/2008 from Michael Young (DoP) to Danny Young (WCMPL) recommending water experts to assist with the preparation of the WMP, email dated 22/07/2008 from Stephen O’Donoghue (DECC) to Danny Young (WCMPL) in relation to the WMP; and email dated 17/04/2008 from Danny Young (WCMPL) to Rod Browne (DWE) in relation to the WMP.	

No.	Requirement	Compliance Y/N/NT/V/NA	Evidence	Comments
Noise				
17.7	Prepare a noise monitoring program for both operational and traffic noise.	Y	Noise Monitoring Program for the Rocglen Coal Mine including a Noise Management Protocol and Noise Monitoring Program, Edition 1 Rev 0 dated 24/4/08.	
17.8	Undertake noise validation modelling (attended and unattended monitoring) at the "Costa Vale" and "Surrey" residences during site establishment activities and during initial 3 months of mining.	Y	NMP section 5.1 states that noise model validation monitoring will be undertaken by both attended and unattended monitoring on a monthly basis during site establishment and during the first 3 months of mining at both the "Costa Vale" and "Surrey" residences. The initial 3 months of mining would have taken place between December 2008 and February 2009, since WCMPL staff verbally advised that the first coal transported offsite to the CHPP occurred in Dec 2008.	AEMR 2008/2009, Appendix 9 details results for the noise monitoring that undertaken at both the "Costa Vale" and "Surrey" properties for both attended monitoring (July 2008 to June 2009) and unattended monitoring (Aug 2008 to June 2009).
17.9	Undertake attended and unattended monitoring at the "Costa Vale" and "Surrey" residences to monitor compliance with operational noise criteria.	Y	NMP section 5.1 states that ongoing compliance monitoring will be undertaken by both attended and unattended monitoring on a 3 monthly basis at the "Costa Vale" and "Surrey" residences to monitor compliance with operational noise criteria. Monitoring data reviewed during the audit indicates that both attended and unattended monitoring has been carried out as indicated in the approved Noise Monitoring Program.	The Costa Vale property is now owned by WCMPL, no one currently resides in this residence.
17.10	Undertake attended monitoring at the "Brooklyn" and "Weroona" residences to monitor compliance with traffic noise criteria.	Y	NMP section 5.1 states that 3 monthly attended monitoring would be undertaken at the "Brooklyn" residence during both daytime and night time hours to monitor compliance with traffic noise criteria. Noise monitoring results reviewed during the audit confirmed that road noise monitoring has been undertaken at both Brooklyn and Weroona with no exceedances detected to date.	
17.11	Undertake targeted noise monitoring in response to any noise complaint.	Y	The Noise Monitoring Program includes a protocol for dealing with noise complaints. The CCC minutes reviewed during the audit indicated that Whitehaven has a real time noise monitor which has been located at residences in response to complaints.	
Blasting				
17.12	Monitor airblast overpressure and ground vibration at the "Costa Vale" residence, "Surrey" and "Brolga".	Y	BMP section 4 states the three proposed blast monitoring locations as "Costa Vale" (BB1), "Brolga" (BB2) and "Surrey" (BB3). Blast Monitoring Spreadsheet indicates there are three blast monitor locations which are BB1 (Costa Vale), BB2 (Brolga) and BB3 (Surrey), however some of the cells show results for "Roseberry" as well.	The Costa Vale property is now owned by WCMPL, no one currently resides in this residence.
17.13	Prepare a blast monitoring program.	Y	Blasting Monitoring Program for the Rocglen Coal Mine, Edition 1, Rev 0 dated 24/4/08.	
Air Quality				
17.14	Monitor wind speed and direction at the Project Site weather station.	Y	AEMR 2009/2010 section 3.22.1 states that a new meteorological station for the Rocglen Mine was commissioned in April 2009 at the "Glenroc" property north of the mine site. The previous weather station was located at "Belmont" (installed 2002) and relocated to "Glenroc" in January 2008. The weather station on the Glenroc property was sighted during the audit site inspection.	
17.15	Monitor deposited dust deposition at five residences in various directions surrounding the Project Site. The locations for dust deposition monitoring are as follows. • "Costa Vale" – D1 • "Yarrawonga" – D2 • "Belah" – D3 • "Surrey" – D4 • "Stratford" – D5	Y	Costa Vale monitoring has been stopped at the request of the landowner - EPL amended to reflect this. Dust is also monitored at sites 6, 7 and 8 as per the EPL.	
17.16	Monitor 24 hour PM ₁₀ levels at "Costa Vale" and / or "Surrey" if requested by the owner or deposited dust levels at D1 and D4 are higher than predicted.	V	Costa Vale monitoring was stopped at the request of the landowner and Surrey monitor has been relocated to Roseberry - EPL has been amended to reflect this, however Air Quality Monitoring Program has not been amended to reflect both changes.	
17.17	Prepare an air quality monitoring program.	Y	Air Quality Monitoring Program for the Rocglen Coal Mine incorporating and Air Monitoring Protocol, Edition 1, Rev 1 dated 9/1/2009.	

No.	Requirement	Compliance Y/N/NT/V/NA	Evidence	Comments
18	Environmental Documentation			
18.1	Incorporate the environmental procedures in an on-site management system.	Y	Environmental Management Strategy for the Rocglen Coal Mine, Edition1 Rev 0, dated 24/4/08	
18.2	Prepare the Mining Operations Plan for the mine site.	Y	Mining Operations Plan for the Rocglen Coal Mine, via Gunnedah (MOP Amendment No. 1) dated 8 June 2010	
18.3	Incorporate relevant environmental data / information in Annual Environmental Management Reports.	Y	Environmental data observed in the 2009/2010 AEMR and 2008/2009 AEMR.	
18.4	Prepare the following environmental plans for the Project.			
	Erosion and Sediment Control Plan	Y	Chapter 4 of Water Management Plan.	
	Air Quality Monitoring Program	Y	Air Quality Monitoring Program for the Rocglen Coal Mine incorporating and Air Monitoring Protocol, Edition 1, Rev 1 dated 9/1/2009.	
	Noise Monitoring Program	Y	Noise Monitoring Program for the Rocglen Coal Mine including a Noise Management Protocol and Noise Monitoring Program, Edition 1 Rev 0 dated 24/4/08.	
	Blast Monitoring Program	Y	Blasting Monitoring Program for the Rocglen Coal Mine, Edition 1, Rev 0 dated 24/4/08.	
	Cultural Heritage Management Plan	Y	Aboriginal and Cultural Heritage Management Plan for the Rocglen Coal Mine, Edition 1, Rev 0 dated 24/04/2008.	
	Flora and Fauna Management Plan	N	Flora and Fauna Management Plan has not been prepared.	During the on-site audit inspection, it was verbally confirmed by WCMPL staff that the Landscape Management Plan would incorporate flora and fauna management.
	Surface Water Management Plan (incorporating a Stormwater Management Plan)	Y	Chapter 5 of WMP is Surface Water Monitoring Program. There is no separate 'Stormwater Management Plan', however these issues are covered in the Surface Water Management Program. Chapter 4 of WMP is the Erosion and Sediment Control Plan, which in section 4.1 states is consistent with the Department of Housing's Managing Urban Stormwater: Soils and Construction Manual (Landcom, 2004).	
	Groundwater Management Plan (incorporating a Groundwater Contingency Plan and Groundwater Monitoring Program)	Y	Chapter 6 of WMP is Surface Water Monitoring Program. There is no specific 'Stormwater Management Plan'.	
	Transport Management Plan	V	Transport Management Plan has not yet been prepared.	There is no intention to prepare this plan.
	Rehabilitation and Landscape Management Plan	N	Rehabilitation and Landscape Management Plan has not been prepared.	Landscape Management Plan will be prepared, on hold until current project extension being assessed. Rehabilitation management will be incorporated into this plan.
	Bushfire Management Plan	N	Bushfire Management Plan has not been prepared.	There is no intention to prepare this plan.
	Final Void Design and Management Plan	N	Final Void Design and Management Plan has not been prepared.	Mine Closure Plan will be prepared, on hold until current project extension being assessed. Final void design and management will be incorporated into this plan.
18.5	Prepare a comprehensive Mine Closure Plan (for submission to all relevant authorities).	N	Mine Closure Plan has not yet been prepared.	
19	Consultation			
19.1	Consult with the following Government agencies during the preparation of the Mining Operations Plan – DPI-MR, DPI-Fisheries, DECC and DWE.	V	Letter from DPI dated 12/06/2008 sighted advising DPI technical officers have reviewed the MOP. Initial MOP dated 11 April 2008 states prepared by WCMPL in conjunction with R.W. Corkery & Co. Pty Limited.	There was no consultation with DPI-Fisheries, however it is of the auditors opinion that this is not relevant to the project site. As the MOP was approved, it is assumed that DPI was comfortable with the level of agency consultation completed
19.2	Involve relevant government agencies in Annual meetings to discuss the AEMR.	Y	AEMR 2009/2010, page i shows the distribution list which includes: Department of Environment, Climate Change and Water Department of Planning Department of Industry and Investment NSW Department of Industry and Investment NSW - Agriculture NSW Office of Water Gunnedah Shire Council Rocglen Coal Mine Community Consultative Committee	Could not locate any evidence that these agencies were invited/involved in annual meetings to discuss the AEMR.

APPENDIX 4

Compliance Assessment EPL 12870

Environment Protection Licence No. 12870

Review Due Date: 18/8/2014



Condition No.	Requirement	Compliance Y/N/NT/V/NA	Evidence	Comments														
1. Administrative conditions																		
A 1 What the licence authorises and regulates																		
A 1.1	Not applicable.	NA																
A 1.2	<p>This licence authorises the carrying out of the scheduled activities listed below at the premises specified in A2. The activities are listed according to their scheduled activity classification, feebased activity classification and the scale of the operation.</p> <p>Unless otherwise further restricted by a condition of this licence, the scale at which the activity is carried out must not exceed the maximum scale specified in this condition.</p> <table border="1"> <tr> <td colspan="2">Scheduled Activity</td> </tr> <tr> <td>Mining for coal</td> <td></td> </tr> <tr> <td>Coal works</td> <td></td> </tr> <tr> <td colspan="2"> </td> </tr> <tr> <td>Fee Based Activity</td> <td>Scale</td> </tr> <tr> <td>Mining for coal</td> <td>> 500000 - 2000000 T produced</td> </tr> <tr> <td>Coal works</td> <td>0 - 2000000 T loaded</td> </tr> </table>	Scheduled Activity		Mining for coal		Coal works				Fee Based Activity	Scale	Mining for coal	> 500000 - 2000000 T produced	Coal works	0 - 2000000 T loaded	Y	2009/2010 AEMR notes 1,031,775t of coal transported from the mine. Daily production data spreadsheet reviewed.	
Scheduled Activity																		
Mining for coal																		
Coal works																		
Fee Based Activity	Scale																	
Mining for coal	> 500000 - 2000000 T produced																	
Coal works	0 - 2000000 T loaded																	
A 1.3	Not applicable.	NA																
A 2 Premises to which this licence applies																		
A2.1	<p>The licence applies to the following premises:</p> <table border="1"> <tr> <td>Premises Details</td> </tr> <tr> <td>Rocglen Coal Mine</td> </tr> <tr> <td>Wear Road</td> </tr> <tr> <td>GUNNEDAH</td> </tr> <tr> <td>NSW</td> </tr> <tr> <td>2380</td> </tr> <tr> <td>LOT 1 DP 787417; LOTS 1 & 4 DP 1120601</td> </tr> </table>	Premises Details	Rocglen Coal Mine	Wear Road	GUNNEDAH	NSW	2380	LOT 1 DP 787417; LOTS 1 & 4 DP 1120601	Y	Figure 7 Rocglen Extension EA. Aerial Photo with cadastral overlay shows operations are being carried out within approved boundary.								
Premises Details																		
Rocglen Coal Mine																		
Wear Road																		
GUNNEDAH																		
NSW																		
2380																		
LOT 1 DP 787417; LOTS 1 & 4 DP 1120601																		
A 3 Other activities																		
A 3.1	Not applicable.	NA																
A 4 Information supplied to the EPA																		
A 4.1	<p>Works and activities must be carried out in accordance with the proposal contained in the licence application, except as expressly provided by a condition of this licence. In this condition the reference to "the licence application" includes a reference to:</p> <p>(a) the applications for any licences (including former pollution control approvals) which this licence replaces under the Protection of the Environment Operations (Savings and Transitional) Regulation 1998; and</p> <p>(b) the licence information form provided by the licensee to the EPA to assist the EPA in connection with the issuing of this licence.</p>	Y	Belmont Coal project licence application to DECC dated July 2007 sighted. The water discharge points on the licence application appear to be different to those listed on the EPL. Licence application states discharge points are SD1 and SD3; EPL states discharge points are northern site boundary and SD3. AEMR 2009/2010 recorded discharges at SB18 and SD3.															
2. Discharges to air and water and applications to land																		
P 1 Location of monitoring/discharge points and areas																		
P 1.1	The following points referred to in the table below are identified in this licence for the purposes of monitoring and/or the setting of limits for the emission of pollutants to the air from the point.																	

Condition No.	Requirement	Compliance Y/N/NT/V/NA	Evidence	Comments																																												
	<p style="text-align: center;"><i>Air</i></p> <table border="1"> <thead> <tr> <th>EPA Identification no.</th> <th>Type of Monitoring Point</th> <th>Type of Discharge Point</th> <th>Description of Location</th> </tr> </thead> <tbody> <tr> <td>2</td> <td>Ambient Air Monitoring</td> <td></td> <td>Location labelled B02 (Glarroc) identified on Figure 3 Proposed Air Quality Monitoring Network provided with licence variation application and letter from Whitehaven Coal Mining Pty. Ltd. dated 27 February 2009.</td> </tr> <tr> <td>3</td> <td>Ambient Air Monitoring</td> <td></td> <td>Location labelled R05 (Rushy) identified on Figure 3 Proposed Air Quality Monitoring Network provided with licence variation application and letter from Whitehaven Coal Mining Pty. 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Ltd. dated 27 February 2009.	10	Ambient Air Monitoring		PM10 location labelled "Roseberry" identified on Figure 3 Proposed Air Quality Monitoring Network provided with licence variation application and letter from Whitehaven Coal Mining Pty. Ltd. dated 27 February 2009.	Y	Monitoring locations are identified in the Air Quality Monitoring Program (Section 4.3). Monitoring data reviewed during the audit confirmed that monitoring is being undertaken at the locations specified in the licence.	Deposited dust and PM10 at Costa Vale was originally included but deleted from program at request of landholder. Licence was amended to reflect this. PM10 was relocated to Glen Roc. Similarly, PM10 at Surrey property was relocated to Roseberry and EPL amended to reflect this. The Air Quality Monitoring program document still has PM10 at Surrey but it has been relocated to Roseberry - need to update Program.
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EPA Identification no.	Type of Monitoring Point	Type of Discharge Point	Description of Location																																													
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P 1.2	The following points referred to in the table are identified in this licence for the purposes of the monitoring and/or the setting of limits for discharges of pollutants to water from the point.	Y	See below																																													

Condition No.	Requirement	Compliance Y/N/NT//NA	Evidence	Comments																												
P 1.3	<p>The following utilisation areas referred to in the table below are identified in this licence for the purposes of the monitoring and/or the setting of limits for any application of solids or liquids to the utilisation area:</p> <p style="text-align: center;"><i>Water and land</i></p> <table border="1"> <thead> <tr> <th>EPA identification no.</th> <th>Type of monitoring point</th> <th>Type of discharge point</th> <th>Description of location</th> </tr> </thead> <tbody> <tr> <td>11</td> <td>Wet weather discharge Discharge water quality monitoring</td> <td>Wet weather discharge Discharge water quality monitoring</td> <td>Discharge from storage dam 3 identified as "SD3 Wet Weather Discharge Monitor Point Southern Boundary - Site Exit" on Figure titled "Figure 1 Rocglen Site Water Monitoring for Wet Weather Discharge" submitted to DECC by email on 7 May 2009.</td> </tr> <tr> <td>12</td> <td>Wet weather discharge Discharge water quality monitoring</td> <td>Wet weather discharge Discharge water quality monitoring</td> <td>Discharge location at northern site boundary labelled "Wet Weather Discharge Monitor Point Northern Boundary - Site Exit" on Figure titled "Figure 1 Rocglen Site Water Monitoring for Wet Weather Discharge" submitted to DECC by email on 7 May 2009.</td> </tr> <tr> <td>13</td> <td>Ambient water quality monitoring</td> <td></td> <td>Monitoring point on northern side of mining lease to assess water quality in Driggle Driggle Creek identified as "DDCK" on Figure titled "Figure 1 Rocglen Site Water Monitoring for Wet Weather Discharge" submitted to DECC by email on 7 May 2009.</td> </tr> <tr> <td>14</td> <td>Ambient water quality monitoring</td> <td></td> <td>Monitoring point on southern side of mining lease to assess water quality in unnamed drainage channel identified as "UNDC" on on Figure titled "Fig 1 Rocglen Site Water Monitoring for Wet Weather Discharge" submitted to DECC by email on 7 May 2009.</td> </tr> <tr> <td>15</td> <td>Ambient water quality monitoring</td> <td></td> <td>Monitoring point on eastern side of mining lease to monitor upstream water quality in unnamed creek identified as "SD1" on Figure titled "Fig 1 Rocglen Site Water Monitoring for Wet Weather Discharge" submitted to DECC by email on 7 May 2009.</td> </tr> <tr> <td>16</td> <td>Surface water quality monitoring</td> <td></td> <td>Void Mine water dam located on premises</td> </tr> </tbody> </table>	EPA identification no.	Type of monitoring point	Type of discharge point	Description of location	11	Wet weather discharge Discharge water quality monitoring	Wet weather discharge Discharge water quality monitoring	Discharge from storage dam 3 identified as "SD3 Wet Weather Discharge Monitor Point Southern Boundary - Site Exit" on Figure titled "Figure 1 Rocglen Site Water Monitoring for Wet Weather Discharge" submitted to DECC by email on 7 May 2009.	12	Wet weather discharge Discharge water quality monitoring	Wet weather discharge Discharge water quality monitoring	Discharge location at northern site boundary labelled "Wet Weather Discharge Monitor Point Northern Boundary - Site Exit" on Figure titled "Figure 1 Rocglen Site Water Monitoring for Wet Weather Discharge" submitted to DECC by email on 7 May 2009.	13	Ambient water quality monitoring		Monitoring point on northern side of mining lease to assess water quality in Driggle Driggle Creek identified as "DDCK" on Figure titled "Figure 1 Rocglen Site Water Monitoring for Wet Weather Discharge" submitted to DECC by email on 7 May 2009.	14	Ambient water quality monitoring		Monitoring point on southern side of mining lease to assess water quality in unnamed drainage channel identified as "UNDC" on on Figure titled "Fig 1 Rocglen Site Water Monitoring for Wet Weather Discharge" submitted to DECC by email on 7 May 2009.	15	Ambient water quality monitoring		Monitoring point on eastern side of mining lease to monitor upstream water quality in unnamed creek identified as "SD1" on Figure titled "Fig 1 Rocglen Site Water Monitoring for Wet Weather Discharge" submitted to DECC by email on 7 May 2009.	16	Surface water quality monitoring		Void Mine water dam located on premises	Y	Monitoring locations are identified in the Site Water Management Plan (Section 5.4). Water monitoring data confirms that monitoring is being undertaken at points listed in EPL.	Water Management Plan identifies water quality sampling points as specified in the licence (plus additional sampling points).
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3 Limit Conditions																																
L 1 Pollution of waters																																
L 1.1	Except as may be expressly provided in any other condition of this licence, the licensee must comply with section 120 of the Protection of the Environment Operations Act 1997.	N	<p>Section 120 of this Act is in relation to 'Prohibition of pollution of waters' and states:</p> <p>(1) <i>A person who pollutes any waters is guilty of an offence.</i></p> <p>(2) <i>In this section:</i></p> <p><i>"pollute" waters includes cause or permit any waters to be polluted.</i></p> <p>There were exceedances of TSS levels recorded from water discharged offsite on several occasions during the 2009/2010 reporting period, which did not comply with the EPL conditions.</p>	Refer to Project Approval condition no. 3-1 and Statement of Commitment item no. 10.8.																												
L 2 Load Limits																																
L 2.1	Not applicable.	NA																														
L 2.2	Not applicable.	NA																														

Condition No.	Requirement	Compliance Y/N/NT/V/NA	Evidence	Comments
L 6 Noise Limits				
L 6.1	Noise from the premises must not exceed: (a) an LAeq (15 minute) noise emission criterion of 35 dB(A) at all times (day, evening and night time periods); and	N	AEMR 2009/2010 section 3.10.3.2 states that on the 8th September 2009 attended noise monitoring was undertaken at "Costa Vale" (N1) and "Surrey" (N2). Spectrum Acoustics reported that noise emissions from the mine exceeded the criterion of 35 dB(A) at "Surrey" during the morning survey (37 dB(A)) and "Costa Vale" during the evening survey (38 dB(A)). At both locations the mine noise was attributable to engine noise and revs mainly from haul trucks. On review of the Rocglen weather station data, it was determined that a temperature inversion was present at the time of the exceedance at "Surrey". DoP and DECCW were notified in writing of the exceedances and the proposed continuation of current monitoring	
	(b) an LA1(1 minute) noise emission criterion of 45 dB(A) at night	Y	AEMR 2009/2010 section 3.10.3.2 states that during the night time measurement circuit the L1 (1 min) noise from mine did not exceed 45 dB(A) at the monitoring locations.	
L 6.2 Definitions	<p>LAeq (15 minute) is the equivalent continuous noise level- the level of noise equivalent to the energyaverage of noise levels occurring over a measures period (i.e. 15 minutes).LA1(1 minute) is the A-weighted sound pressure level that is exceeded for 1 per cent of the time over a 1 minute measurement period. Day time is defined as the period from 7am to 6pm Monday to Saturday and 8am to 6pm Sundays and public holidays.</p> <p>Evening is defined as the period from 6pm to 10pm. Night is defined as the period from 10pm to 7am Monday to Saturday and 10pm to 8am Sundays and Public Holidays.</p> <p>Notes</p> <p>To determine compliance with the LAeq (15 minute) noise limits, noise from the project is to be measured at the most affected point within the residential boundary, or at the most affected point within 30m of a dwelling where the dwelling is more than 30m from the boundary, over a period of 15 minutes using "FAST" response on the sound level meter. To determine compliance with LA1(1 minute) noise limits, noise from the project is to be measured at 1 metre from the dwelling façade. Where it can be demonstrated that direct measurement of noise from the project is impractical, the EPA may accept alternative means of determining compliance (see Chapter 11 of the NSW Industrial Policy). The modification factors in Section 4 of the NSW Industrial Noise Policy shall also be applied to the measured noise levels where applicable.</p>	Y	Monitoring reports confirm that these criteria are being adhered to.	
L 6.3	The noise emission limits identified in this licence apply under all meteorological conditions except:			
	(a) during rain and wind speeds (at 10m height) greater than 3m/s; and	Y	AEMR 2009/2010 section 3.22.4 states that throughout the year wind speeds are generally less than 5m/s with occasional gusts greater than 5m/s. The Spring 2009 windrose shows a higher proportion of wind speeds greater than 5m/s from all directions.	
	(b) under "non-significant weather conditions".	noted		
	Note: Field meteorological indicators for non-significant weather conditions are described in the NSWIndustrial Noise Policy, Chapter 5 and Appendix E in relation to wind and temperature inversions.			
L 6.4	The noise limits set by condition L6.1 of the licence do not apply where a current legally binding agreement exists between the licensee and the occupant of a residential property that:			
	a) agrees to an alternative noise limit for that property; or	Y	Private agreement with Roseberry landowner sighted dated 12/02/2008 which states that '...the residence at "Roseberry" is project related and as such no monitoring of dust or noise is required. However, in the interest of harmonious relations between the Company and yourselves, the Company hereby sets out a commitment to a procedure to be followed in the unlikely event that monitoring indicates set levels have been exceeded in the case of: <u>Noise</u> - by more than 5dBA above the 35dBA set as the background level in the EA.'	
	b) provides an alternative means of compensation to address noise impacts from the premises.	Y	Private agreement with Roseberry landowner sighted dated 12/02/2008 outlines measures to be implemented should a complaint be received.	

Condition No.	Requirement	Compliance Y/N/NT/V/NA	Evidence	Comments
	A copy of any agreement must be provided to the EPA before the licensee can take advantage of the agreement.	V	During the on-site audit inspection, it was verbally advised by WCMPL staff that this agreement was submitted to DoP and EPA, however no evidence was sighted to confirm this.	
L 7 Blasting limits				
L 7.1	The overpressure level from blasting operations at the premises must not exceed 115dB (Lin Peak) for more than five per cent of the total number of blasts over each reporting period. Error margins associated with any monitoring equipment used to measure this are not to be taken into account in determining whether or not the limit has been	N	Blast results to January 2011 indicate 2 exceedances of the overpressure level on the 24th and 27th of August 2009. DoP and DECCW were notified and an Investigation was carried out by Orica Mining Services. In the 12 month period between 1/8/09 and 31/7/10, there were 24 blasts with 2 exceedances - exceedances therefore represent 8.3% of the total number of blasts for that reporting period.	
L7.2	The overpressure level from blasting operations at the premises must not exceed 120dB (Lin Peak) at any time. Error margins associated with any monitoring equipment used to measure this are not to be taken into account in determining whether or not the limit	Y	Monitoring data reviewed during the audit showed Blast results to March 2011 indicate no exceedances of 120dB	
L7.3	Ground vibration peak particle velocity from the blasting operations at the premises must not exceed 5mm/sec for more than five per cent of the total number of blasts over each reporting period. Error margins associated with any monitoring equipment used to measure this are not to be taken into account in determining	Y	Blast results to March 2011 indicate no exceedances of 5mm/sec	
L7.4	Ground vibration peak particle velocity from the blasting operations at the premises must not exceed 10mm/sec at any time. Error margins associated with any monitoring equipment used to measure this are not to be taken into account in determining whether or not the limit has been	Y	Blast results to March 2011 indicate no exceedances of 10mm/sec	
4 Operating Conditions				
O 1 Activities must be carried out in a competent manner				
O 1.1	Licensed activities must be carried out in a competent manner.			
	This includes:			
	(a) the processing, handling, movement and storage of materials and substances used to carry out the activity; and	Y	During the on-site audit inspection, activities were observed to be carried out in a competent manner. Notifications of Dangerous Goods on Premises from NSW WorkCover Licence Processing Unit were sighted documenting storage of above-ground diesel tank, dated 2011, 2010 and 2009.	
(b) the treatment, storage, processing, reprocessing, transport and disposal of waste generated by the activity.	Y	Wastes were observed to be handled and stored in a competent manner. Disposal of wastes is undertaken by licenced contractor (eg . invoice 4033 from Northern Lubequip dated 3/11/09 for removal of 2 full bins of waste oil filters; waste data form 1604 from Northern Lubequip dated 9/4/11 for removal of 3000L of waste oil; and invoice 1995 from Commercial Waste Services for the disposal of solid waste from skip bins).		
O 2 Maintenance of Plant and Equipment				
O 2.1	All plant and equipment installed at the premises or used in connection with the licensed activity:			
	(a) must be maintained in a proper and efficient condition; and	Y	Plant operators pre start checks, service sheets. Rocglen Coal Mine also utilises the PULSE management system which generates and records maintenance and defect schedules for all plant and equipment. For example, Heavy Earthmoving Pre-Start Checklist No 10705 12/5/11 for Unit 853, Current High and Low Priority Defects Report 6/5/11, and Service Schedule Rocglen Coal Mine 4/4/11.	
	(b) must be operated in a proper and efficient manner.	Y	Rocglen has implemented a comprehensive system for identifying and assessing competencies required for each position/job. For example, competency assessments were reviewed for an operator (eg R. Mills) who had completed Safe Operation of a Grader (27/5/09), Safe Operation of Water Cart (27/5/09), Mechanical Haul Truck (28/10/08).	
O 3 Dust				
O 3.1	All operations and activities occurring at the premises must be carried out in a manner that will minimise the emission of dust from the premises.	Y	Whitehaven has prepared and implemented an Air Quality Management Plan. Water carts were observed in use on site.	

Condition No.	Requirement	Compliance Y/N/NT/V/NA	Evidence	Comments																																																																																																																				
O3.2	Trucks transporting coal from the premises must be covered immediately after loading to prevent wind blown emissions and spillage. The covering must be maintained until immediately before unloading the trucks.	Y	Trucks observed loading and leaving the Rocglen site had their loads covered. Similarly, trucks travelling along the coal transport route were also observed to have covered loads.																																																																																																																					
5. Monitoring and Recording Conditions																																																																																																																								
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M 1.1	The results of any monitoring required to be conducted by this licence or a load calculation protocol must be recorded and retained as set out in this condition.	Y	Monitoring results are retained and recorded.																																																																																																																					
M 1.2	All records required to be kept by this licence must be:																																																																																																																							
	(a) in a legible form, or in a form that can readily be reduced to a legible form;	Y	Copies of monitoring reports and summaries available in legible form, primarily using excel spreadsheets.																																																																																																																					
	(b) kept for at least 4 years after the monitoring or event to which they relate took place; and	Y	All monitoring data taken to date is available on the Whitehaven server and web page.																																																																																																																					
M 1.3	(c) produced in a legible form to any authorised officer of the EPA who asks to see them.	NT	No authorised officers have asked to see them.																																																																																																																					
	The following records must be kept in respect of any samples required to be collected for the purposes of this licence:																																																																																																																							
	(a) the date(s) on which the sample was taken;	Y	Field notes recorded on field sheets for each sample. Monitoring spreadsheets contain the date samples are taken.																																																																																																																					
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M 2 Requirement to monitor concentration of pollutants discharged																																																																																																																								
M 2.1	For each monitoring/discharge point or utilisation area specified below (by a point number), the licensee must monitor (by sampling and obtaining results by analysis) the concentration of each pollutant specified in Column 1. The licensee must use the sampling method, units of measure, and sample at the frequency, specified opposite in the other columns: POINTS 2,3,4,5,6,7,8	Y	AEMR and monitoring results indicate these monitoring protocol are being adhered to. Monitoring frequencies and parameters were confirmed to be as required by the EPL following a review of the monitoring data.																																																																																																																					
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Dissinonate	milligrams per litre	Yearly	Grab sample																																																																																																																					
Chloride	milligrams per litre	Yearly	Grab sample																																																																																																																					
Conductivity	microsiemens per centimetre	Quarterly	In situ																																																																																																																					
Iron	milligrams per litre	Yearly	Grab sample																																																																																																																					
Manganese	milligrams per litre	Yearly	Grab sample																																																																																																																					
Oil and Grease	milligrams per litre	Quarterly	Grab sample																																																																																																																					
Sulfide	milligrams per litre	Yearly	Grab sample																																																																																																																					
Total organic carbon	milligrams per litre	Quarterly	Grab sample																																																																																																																					
Total suspended solids	milligrams per litre	Quarterly	Grab sample																																																																																																																					
pH	pH	Quarterly	In situ																																																																																																																					
M 3 Testing Methods - concentration limits																																																																																																																								
M 3.1	Monitoring for the concentration of a pollutant emitted to the air required to be conducted by this licence must be done in accordance with:																																																																																																																							
	(a) any methodology which is required by or under the Act to be used for the testing of the concentration of the pollutant; or	Y	Monitoring data shows that air quality is being measured using approved methods using PM10 monitors and a network of dust deposition gauges.																																																																																																																					

Condition No.	Requirement	Compliance Y/N/NT/V/NA	Evidence	Comments
	(b) if no such requirement is imposed by or under the Act, any methodology which a condition of this licence requires to be used for that testing; or	NT		
	(c) if no such requirement is imposed by or under the Act or by a condition of this licence, any methodology approved in writing by the EPA for the purposes of that testing prior to the testing taking place.	NT		
	Note: The Protection of the Environment Operations (Clean Air) Regulation 2002 requires testing for certain purposes to be conducted in accordance with test methods contained in the publication Approved Methods for the Sampling and Analysis of Air Pollutants in NSW.			
M 3.2	Subject to any express provision to the contrary in this licence, monitoring for the concentration of a pollutant discharged to waters or applied to a utilisation area must be done in accordance with the Approved Methods Publication unless another method has been approved by the EPA in writing before any tests are conducted. For the purposes of the table(s) above Special Frequency 1 means the collection of samples as soon as practicable after each discharge commences and in any case not more than 12 hours after each discharge commences. For the purposes of the table(s) above Special Frequency 2 means the collection of samples quarterly (in the event of a flow during the quarter) at a time when there is flow and as soon as practicable after each wet weather discharge from points 11 and 12 commences and in any case not more than 12 hours after each discharge commences.	Y	A review of water monitoring data indicates that water monitoring is being undertaken in accordance with the approved methods. The special frequencies as listed have been utilised for monitoring of wet weather discharges.	
	Note: Groundwater monitoring points have not been formally included in the licence. However, the licensee is required to undertake groundwater monitoring in accordance with a Department of Planning approved Water Management Plan required under Schedule 3, condition 2 Project Approval 06-0198 dated 15 April 2008. The licensee has submitted the document "Site Water Management Plan for the Rocglen Coal Mine, Whitehaven Coal Mining Pty Ltd, 2008." This document has been approved by Planning following consultation by the licensee with the EPA. The results of this monitoring are required to be reported in the Annual Environmental Management Report (AEMR).	Y	Groundwater monitoring noted to be reported in 2008-2009, 2009-2010 AEMR	
M 4 Recording of pollution complaints				
M 4.1	The licensee must keep a legible record of all complaints made to the licensee or any employee or agent of the licensee in relation to pollution arising from any activity to which this licence applies.	Y	Complaints records recorded in complaints register and updated on website.	
M 4.2	The record must include details of the following:			
	(a) the date and time of the complaint;	Y	Complaints register reviewed, date and time of complaint are recorded. Example sighted was 2011 Complaints Register, first entry recorded time and date of complaint at 2.00am on 20/01/2011).	
	(b) the method by which the complaint was made;	Y	Complaints register reviewed, date and time of complaint are recorded. Example sighted was 2011 Complaints Register, first entry recorded method of complaint was a phone call to Environmental Manager).	
	(c) any personal details of the complainant which were provided by the complainant or, if no such details were provided, a note to that effect;	Y	The personal details of the complainant are not recorded on the complaints register which is publicly available on the website, however these details are recorded by Rocglen.	
	(d) the nature of the complaint;	Y	Complaints register reviewed, date and time of complaint are recorded. Example sighted was 2011 Complaints Register, first entry recorded details the nature of the complaint was mining noise woke the complainant up at 2.00am).	

Condition No.	Requirement	Compliance Y/N/NT/V/NA	Evidence	Comments																																													
	(e) the action taken by the licensee in relation to the complaint, including any follow-up contact with the complainant; and	Y	Complaints register reviewed, date and time of complaint are recorded. Example sighted was 2011 Complaints Register, first entry recorded the details of the investigation which included an explanation to the complainant that mining operations are permitted 24hrs, but that operations are undertaken over two shifts, with night shift generally completed by 2.30am and the complainant was advised that a real time noise monitor would be placed at his property for several weeks to obtain some ongoing noise data to determine if the operation																																														
	(f) if no action was taken by the licensee, the reasons why no action was taken.	NT	Complaints register reviewed, each complaint recorded details action taken.																																														
M 4.3	The record of a complaint must be kept for at least 4 years after the complaint was made.	Y	Complaints register available from the commencement of operations, all records have been retained (has not been 4 years yet).																																														
M 4.4	The record must be produced to any authorised officer of the EPA who asks to see them.	NT	All records available, EPA has not requested to sight them as yet.																																														
M 5 Telephone complaints line																																																	
M 5.1	The licensee must operate during its operating hours a telephone complaints line for the purpose of receiving any complaints from members of the public in relation to activities conducted at the premises or by the vehicle or mobile plant, unless otherwise specified	Y	A complaints line operates under the number - 0439 441 251																																														
M 5.2	The licensee must notify the public of the complaints line telephone number and the fact that it is a complaints line so that the impacted community knows how to make a complaint	Y	Complaints number is published on a regular basis in the local newspaper. Copies of newspaper advertisements sighted.																																														
M 5.3	Conditions M5.1 and M5.2 do not apply until 3 months after:																																																
	(a) the date of the issue of this licence or	NT	Licence issued more than 3 months ago.																																														
	(b) if this licence is a replacement licence within the meaning of the Protection of the Environment Operations (Savings and Transitional) Regulation 1998, the date on which a copy of the licence was served on the licensee under clause 10 of that regulation.	NT	Licence is not a replacement.																																														
M 6 Requirement to monitor volume or mass																																																	
M 6.1	Not applicable.	NA																																															
M 7 Requirement to monitor weather																																																	
M 7.1	For each monitoring point specified in the table below, the licensee must monitor (by sampling and obtaining results by analysis) the parameters specified in Column 1. The licensee must use the sampling method, units of measure, averaging period and sample at the frequency, specified opposite in the other columns. Point W1 <table border="1"> <thead> <tr> <th>Parameter</th> <th>Units of Measure</th> <th>Frequency</th> <th>Averaging Period</th> <th>Sampling Method</th> </tr> </thead> <tbody> <tr> <td>Rainfall</td> <td>mm</td> <td>Continuous</td> <td>1 hour</td> <td>AM-4</td> </tr> <tr> <td>Wind speed @ 10 metres</td> <td>m/s</td> <td>Continuous</td> <td>15 minute</td> <td>AM-2 & AM-4</td> </tr> <tr> <td>Wind direction @ 10 metres</td> <td>°</td> <td>Continuous</td> <td>15 minute</td> <td>AM-2 & AM-4</td> </tr> <tr> <td>Temperature @ 2 metres</td> <td>°C</td> <td>Continuous</td> <td>15 minute</td> <td>AM-4</td> </tr> <tr> <td>Temperature @ 10 metres</td> <td>°C</td> <td>Continuous</td> <td>15 minute</td> <td>AM-4</td> </tr> <tr> <td>Sigma theta @ 10 metres</td> <td>°</td> <td>Continuous</td> <td>15 minute</td> <td>AM-2 & AM-4</td> </tr> <tr> <td>Solar radiation</td> <td>W/m²</td> <td>Continuous</td> <td>15 minute</td> <td>AM-4</td> </tr> <tr> <td>Additional requirements - Sling Measurement</td> <td></td> <td></td> <td></td> <td>AM-1 & AM-4 AM-2 & AM-4</td> </tr> </tbody> </table>	Parameter	Units of Measure	Frequency	Averaging Period	Sampling Method	Rainfall	mm	Continuous	1 hour	AM-4	Wind speed @ 10 metres	m/s	Continuous	15 minute	AM-2 & AM-4	Wind direction @ 10 metres	°	Continuous	15 minute	AM-2 & AM-4	Temperature @ 2 metres	°C	Continuous	15 minute	AM-4	Temperature @ 10 metres	°C	Continuous	15 minute	AM-4	Sigma theta @ 10 metres	°	Continuous	15 minute	AM-2 & AM-4	Solar radiation	W/m²	Continuous	15 minute	AM-4	Additional requirements - Sling Measurement				AM-1 & AM-4 AM-2 & AM-4	Y	Weather station is in operation. Weather data confirms that required parameters are being measured. Weather station observed during site inspection.	Data collection during the 2009/2010 reporting period, the weather station had been plagued with battery failure on a regular basis (ie. every couple of months). Whitehaven engaged Boztek Solutions Pty Ltd in June 2009 to service the weather station and determine the cause of the battery issues. It was identified that the super capacitor (which stores electricity generated from the solar panel) needed replacing and connecting to the weather console. This allows the batteries to only be used as a backup, thereby ensuring their longevity. A review of the meteorological data shows that the station appears to be functioning as intended with no battery issues since the repair was effected.
Parameter	Units of Measure	Frequency	Averaging Period	Sampling Method																																													
Rainfall	mm	Continuous	1 hour	AM-4																																													
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Additional requirements - Sling Measurement				AM-1 & AM-4 AM-2 & AM-4																																													
M 8 Noise and Blast Monitoring																																																	
M 8.1	For each monitoring point specified below, the Licensee must monitor the noise or vibration parameter specified in Column 1. The Licensee n fi <table border="1"> <thead> <tr> <th>Parameter</th> <th>Units of measure</th> <th>Frequency</th> <th>Sampling Method</th> </tr> </thead> <tbody> <tr> <td>Ambient Noise</td> <td>$L_{Aeq}(15\text{ min})$ L_{Amin} L_{A10} L_{A90} L_{Amax}</td> <td>Frequency of monitoring as detailed in the document "Noise Monitoring Program for the Rocglen Mine, Whitehaven Coal Mining Pty. Ltd., 24/4/2008"</td> <td>Type 1 Noise Meter – unattended and attended monitoring as detailed in the document "Noise Monitoring Program for the Rocglen Mine, Whitehaven Coal Mining Pty. Ltd., 24/4/2008"</td> </tr> </tbody> </table>	Parameter	Units of measure	Frequency	Sampling Method	Ambient Noise	$L_{Aeq}(15\text{ min})$ L_{Amin} L_{A10} L_{A90} L_{Amax}	Frequency of monitoring as detailed in the document "Noise Monitoring Program for the Rocglen Mine, Whitehaven Coal Mining Pty. Ltd., 24/4/2008"	Type 1 Noise Meter – unattended and attended monitoring as detailed in the document "Noise Monitoring Program for the Rocglen Mine, Whitehaven Coal Mining Pty. Ltd., 24/4/2008"	Y	Monitoring data confirms that monitoring is being undertaken using the identified sampling methods.																																						
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Condition No.	Requirement	Compliance Y/N/NT/V/NA	Evidence	Comments						
M 8.2	To determine compliance with condition(s) L7.1, L7.2, L7.3 and L7.4:									
	a) Airblast overpressure and ground vibration levels must be measured and electronically recorded at points N1, N2 - for all blasts carried out in or on the premises; and	Y	Blast reports sighted. Some blast monitoring was also conducted at Broilga in response to a request from the landowner.							
	b) Instrumentation used to measure the airblast overpressure and ground vibration levels must meet the requirements of Australian Standard AS 2187.2-2006.	Y	Blast Monitoring Program identifies monitors that are used are compliant with AS 2187.2							
M 8.3	For the purpose of conditions L8.1 and L8.2, the noise monitoring locations are described as: <table border="1"> <thead> <tr> <th>EPA Identification No.</th> <th>Description of Location</th> </tr> </thead> <tbody> <tr> <td>N1</td> <td>Property 'Costa Vale' residence</td> </tr> <tr> <td>N2</td> <td>Property 'Surrey' residence</td> </tr> </tbody> </table> <p>Note: The location, frequency of monitoring and the parameters to be monitored may be varied by the EPA once the variability of the noise impact is established.</p>	EPA Identification No.	Description of Location	N1	Property 'Costa Vale' residence	N2	Property 'Surrey' residence	Y	Noise monitoring locations identified in Noise Monitoring Program. Monitoring results confirm that monitoring is being undertaken at the locations specified.	
EPA Identification No.	Description of Location									
N1	Property 'Costa Vale' residence									
N2	Property 'Surrey' residence									
6. Reporting Conditions										
R 1 Annual return documents										
What documents must an Annual Return contain?										
R 1.1	The licensee must complete and supply to the EPA an Annual Return in the approved form comprising: (a) a Statement of Compliance; and (b) a Monitoring and Complaints Summary. A copy of the form in which the Annual Return must be supplied to the EPA accompanies this licence. Before the end of each reporting period, the EPA will provide to the licensee a copy of the form that must be completed and returned to the EPA.	Y	Annual Returns for 2008/09 and 2009/10 sighted. Section A is Statement of Compliance, Section B is the Monitoring and Complaints Summary.							
Period Covered by Annual Return										
R 1.2	An Annual Return must be prepared in respect of each reporting period, except as provided below. Note: The term "reporting period" is defined in the dictionary at the end of this licence. Do not complete the Annual Return until after the end of the reporting period.	Y	Annual Returns for 2008/09 and 2009/10 sighted.							
R 1.3	Where this licence is transferred from the licensee to a new licensee: (a) the transferring licensee must prepare an Annual Return for the period commencing on the first day of the reporting period and ending on the date the application for the transfer of the licence to the new licensee is granted; and (b) the new licensee must prepare an Annual Return for the period commencing on the date the application for the transfer of the licence is granted and ending on the last day of the reporting period. Note: An application to transfer a licence must be made in the approved form for this purpose.	NT								
R 1.4	Where this licence is surrendered by the licensee or revoked by the EPA or Minister, the licensee must prepare an Annual Return in respect of the period commencing on the first day of the reporting period and ending on: (a) in relation to the surrender of a licence - the date when notice in writing of approval of the surrender is given; or (b) in relation to the revocation of the licence - the date from which notice revoking the licence operates	NT								

Condition No.	Requirement	Compliance Y/N/NT/V/NA	Evidence	Comments
Deadline for Annual Return				
R 1.5	The Annual Return for the reporting period must be supplied to the EPA by registered post not later than 60 days after the end of each reporting period or in the case of a transferring licence not later than 60 days after the date the transfer was granted (the 'due date').	Y	2008 - 2009 Annual Return due on 29/09/09 and sent to EPA 28/08/09 as shown in cover letter. 2009-2010 Annual Return due 29/09/10 and sent to EPA 25/08/10 as shown in cover letter.	
Notification where actual load can not be calculated				
R 1.6	Not applicable.	NA		
Licensee must retain copy of annual return				
R 1.7	The licensee must retain a copy of the Annual Return supplied to the EPA for a period of at least 4 years after the Annual Return was due to be supplied to the EPA.	Y	Annual Returns for 2008/09 and 2009/10 sighted.	
Certifying of statement of Compliance and signing of Monitoring and Complaints Summary				
R 1.8	Within the Annual Return, the Statement of Compliance must be certified and the Monitoring and Complaints Summary must be signed by: (a) the licence holder; or (b) by a person approved in writing by the EPA to sign on behalf of the licensee.	Y	Annual Returns are signed by Directors as required where the licensee is a company.	
R 1.9	A person who has been given written approval to certify a certificate of compliance under a licence issued under the Pollution Control Act 1970 is taken to be approved for the purpose of this condition until the date of first review of this licence.	NT		
R 2 Notification of environmental harm				
	Note: The licensee or its employees must notify the EPA of incidents causing or threatening material harm to the environment as soon as practicable after the person becomes aware of the incident in accordance with the requirements of Part 5.7 of the Act.			
R 2.1	Notifications must be made by telephoning the Environment Line service on 131 555.	N	EMS schedule 5(3) states that within 24 hours of detecting an exceedance of the limits/performance criteria in this approval, or the occurrence of an incident that causes (or may cause) material harm to the environment, the Proponent shall notify the Department and other relevant agencies of the exceedance/incident. However, there was no evidence sighted during the audit to indicate that incidents are notified to EPA via the Environment	
R 2.2	The licensee must provide written details of the notification to the EPA within 7 days of the date on which the incident occurred.	N	Exceedance notifications were sighted for blast, noise, air and water exceedances, however there were several occasions where exceedances were reported after 7 days of the exceedance event. One example is the exceedance notice dated 12/10/2009 to DoP reported a noise exceedance incident that occurred on 8/09/2009.	
R 3 Written report				
R 3.1	Where an authorised officer of the EPA suspects on reasonable grounds that: (a) where this licence applies to premises, an event has occurred at the premises; or (b) where this licence applies to vehicles or mobile plant, an event has occurred in connection with the carrying out of the activities authorised by this licence, and the event has caused, is causing or is likely to cause material harm to the environment (whether the harm occurs on or off premises to which the licence applies), the authorised officer may	NT	No reports have been requested by EPA.	
R 3.2	The licensee must make all reasonable inquiries in relation to the event and supply the report to the EPA within such time as may be specified in the request.	NT		
R 3.3	The request may require a report which includes any or all of the following information:			
	(a) the cause, time and duration of the event;	NT		
	(b) the type, volume and concentration of every pollutant discharged as a result of the event;	NT		
	(c) the name, address and business hours telephone number of employees or agents of the licensee, or a specified class of them, who witnessed the event;	NT		

Condition No.	Requirement	Compliance Y/N/NT/V/NA	Evidence	Comments
	(d) the name, address and business hours telephone number of every other person (of whom the licensee is aware) who witnessed the event, unless the licensee has been unable to obtain that information after making reasonable effort;	NT		
	(e) action taken by the licensee in relation to the event, including any follow-up contact with any complainants;	NT		
	(f) details of any measure taken or proposed to be taken to prevent or mitigate against a recurrence of such an event; and	NT		
	(g) any other relevant matters.	NT		
R 3.4	The EPA may make a written request for further details in relation to any of the above matters if it is not satisfied with the report provided by the licensee. The licensee must provide such further details to the EPA within the time specified in the request.	NT	No written requests have been received from EPA.	
R 4	The licensee must report any exceedance of the licence blasting limits to the regional office of the EPA as soon as practicable after the exceedance becomes known to the licensee or to one of the licensee's employees or agents.	Y	Exceedances of blasting on the 24th/27th August were reported to the EPA on the 23rd September 2011 in writing	
General Conditions				
G 1 Copy of licence kept at premises				
G 1.1	A copy of this licence must be kept at the premises to which the licence applies.	Y	Copy available at premises.	
G 1.2	The licence must be produced to any authorised officer of the EPA who asks to see it.	NT	No officer has asked to see it.	
G 1.3	The licence must be available for inspection by any employee or agent of the licensee working at the premises.	Y	The licence is available on site. Employees and / or agents can access the licence via the company web site or the DECCW web site from on site computers.	
Pollution studies and reduction programs				
U 1.1	Not applicable.	NA		
Special conditions				
E 1.1	Not applicable.	NA		

APPENDIX 5

Compliance Assessment ML 1620

Mining Lease No: 1620

Lease granted 10 June 2008 - due to expire June 2029

Conditions 2-8 and 17-23 are identified as conditions relating to environmental management.



Condition No.	Requirement	Compliance Y/N/NT/V/NA	Evidence	Comments
1. Notice to Landholders	Within a period of three months from the date of the grant/renewal of this lease or within such further time as the minister may allow, the lease holder must serve on each landholder of the land a notice in writing indicating that this lease has been granted/renewed and whether the lease includes the surface. An adequate plan and description of the lease area must accompany the notice. If there are ten or more landholders affected, the lease holder may serve the notice by publication in a newspaper circulating in the region where the lease area is situated. The notice must indicate that this lease has been granted/renewed; state whether the lease includes the surface and must contain an adequate plan and description of the lease area.	NA	Not applicable to environmental audit.	
2. Environmental Harm	The proponent 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.	N	The proponent has established relevant Environmental Management Plans which identify management of potential environmental issues. A Mining Operations Plan (MOP) has been developed to manage mining operations and rehabilitation taking into account environmental considerations. The mine has not yet prepared or had approved a Landscape Management Plan for the site. As such, there is no formal plan for rehabilitation of the site.	The site inspection and audit of compliance documentation found no significant issues relating to environmental management at the site. However several non-conformances have been identified as documented in the compliance checklists and summarised in this report. Rocglen has experienced some environmental performance issues relating to air, noise, blasting and water discharge exceedances. Many of these exceedances were during the early stages of operations and Whitehaven has investigated each incident and modified operations accordingly to minimise the potential for future exceedances. Environmental Management Plans have been prepared for a range of environmental issues and evidence was sighted that the plans that have been prepared have generally been implemented. It was noted that there is a good level of environmental awareness amongst all staff interviewed as part of the audit. The key compliance issue relates to the lack of an approved Landscape Management Plan for the site.
3. Mining Operations Plan	(a) Mining operations must not be carried out otherwise than in accordance with: a Mining Operations Plan (MOP) which has been approved by the Director-General of the Department of Primary Industries.	Y	Mining Operations Plan (MOP) commencement date 12/05/2008, amended 8/06/2010. MOP approval letter received from DPI 12/6/08 which was prior to the commencement of construction and mining.	
	(b) The MOP must:			
	i) identify areas that will be disturbed by mining operations;	Y	MOP, section 2 Pre-MOP Environment, and section 3.2 Land Preparation.	

Condition No.	Requirement	Compliance Y/N/NT/V/NA	Evidence	Comments
	ii) detail the staging of specific mining operations;	Y	MOP, section 3 Proposed Mining Activities. Foreward, page xi states: The MOP incorporates the construction phase, initial mine development, subsequent mining activities and conceptual plans for the closure of the mine	
	iii) identify how the mine will be managed to allow mine closure;	Y	MOP, section 4 Proposed Rehabilitation Activities, and section 5 Final Rehabilitation includes a final landform assessment.	Mine Closure Plan is yet to be prepared to provide more details of how the mine will be managed in relation to mine closure.
	iv) identify how mining operations will be carried out on site in order to prevent and or minimise harm to the environment;	Y	MOP, section 6 Environmental and Rehabilitation Risk Identification.	
	v) reflect the conditions of approval under:			
	•the Environmental Planning and Assessment Act 1979	Y	MOP, Table 1.1 lists the current approvals and licences relevant to the operations. Project Approval MP 05 0102.	
	•the Protection of the Environment Operations Act 1997	Y	MOP, Table 1.1 lists the current approvals and licences relevant to the operations. Environment Protection Licence 12870.	
	•and any other approvals relevant to the development including the conditions of this lease; and	Y	MOP, Table 1.1 lists the current approvals and licences relevant to the operations.	
	vi) have regard to any relevant guidelines adopted by the Director-General.	NT		
	(c) The titleholder may apply to the Director-General to amend an approved MOP at any time.	Y	MOP amended 8/06/2010.	
	(d) It is not a breach of this condition if:			
	i) the operations constituting the breach were necessary to comply with a lawful order or direction given under the Mining Act 1992 , the Environmental Planning and Assessment Act 1979 , Protection of the Environment Operations Act 1997 or the Occupational Health and Safety Act 2000 , and	NT		
	ii) the Director-General had been notified in writing of the terms of the order or direction prior to the operations constituting the breach being carried out.	NT		
	(e) A MOP ceases to have affect 7 years after date of approval or other such period as identified by the Director-General. An approved amendment to the MOP under condition 5 does not constitute an approval for the purpose of this paragraph unless otherwise identified by the Director-General.	NT		
4. Environment Management Reporting	The lease holder must lodge Environmental Management Reports (EMR) with the Director-General annually or at dates otherwise directed by the Director-General.	Y	2008-2009 AEMR and 2009-2010 AEMR have been produced and lodged. Letter from DPI dated 20/7/10 approving the 2008/2009 AEMR.	

Condition No.	Requirement	Compliance Y/N/NT/V/NA	Evidence	Comments
5. The EMR must:	a) report against compliance with the MOP;	N	AEMR reports against compliance with EPL, Project Approval and Mining Lease, but not MOP.	
	b) report on progress in respect of rehabilitation completion criteria;	Y	AEMR 2009/2010, chapter 5 Rehabilitation includes rehabilitation of disturbed land, rehabilitation objectives and achievements during the reporting period, along with rehabilitation monitoring and performance.	
	c) report on the extent of compliance with regulatory requirements;	Y	AEMR 2009/2010, Appendix 3 details Compliance Reviews based on Project Approval Conditions, Environment Protection Licence 12870 and Mining Lease 1620.	WCMPL are attempting to track their own compliance, however could be done more effectively.
	d) have regard to any relevant guidelines adopted by the Director-General.	Y	AEMR 2009/2010, section 1.2.2.	
6	Additional environmental reports may be required on specific surface disturbing operations or environmental incidents from time to time as directed in writing by the Director-General and must be lodged as instructed.	NT	No additional reports requested.	
7. Rehabilitation	Disturbed land must be rehabilitated to a sustainable/agreed end land use to the satisfaction of the Director-General.	Y	MOP has been approved by DI&I and includes agreed end use and rehabilitation activities. During the audit site inspection, it was observed that rehabilitation has commenced on parts of the site no longer required for operational purposes.	
8. Subsidence Management	(a) The lease holder shall prepare a Subsidence Management Plan prior to commencing any underground mining operations which will potentially lead to subsidence of the land surface.	NT	Auger mining has not yet commenced.	
	(b) Underground mining operations which will potentially lead to subsidence include secondary extraction panels such as longwalls or miniwalls, associated first workings (gateroads, installation roads and associated main headings, etc) and pillar extractions and are otherwise defined by the Applications for subsidence Management Approvals guidelines (EDG17) .	NT		
	(c) The lease holder must not commence or undertake underground mining operations that will potentially lead to subsidence other than in accordance with a Subsidence Management Plan approved by the Director-General, an approval under the Mine Health & Safety Act 2004, or the document New Subsidence Management Plan Approval Process - Transitional Provisions (EDP09).	NT		
	(d) Subsidence Management Plans are to be prepared in accordance with the <i>Guideline for Applications for Subsidence Management Approvals</i> .	NT		

Condition No.	Requirement	Compliance Y/N/NT/V/NA	Evidence	Comments
	(e) Subsidence Management Plans as approved shall form part of the Mining Operations Plan required under Condition 2 and will be subject to the Annual Environmental Management Report process as set out under Condition 3. The SMP is also subject to the requirements for subsidence monitoring and reporting set out in the document New Approval Process for Management of Coal Mining Subsidence - Policy	NT		
9. Working Requirement	The lease holder must:	NA	Not applicable to environmental audit.	
	(a) ensure that at least fifteen (15) competent people are efficiently employed on the lease area on each week day except Sunday or any week day that is a public holiday.	NA	Not applicable to environmental audit.	
	OR			
	(b) expend on operations carried out in the course of prospecting or mining the lease area, an amount of not less than \$262 500 per annum whilst the lease is in force. The minister may at any time or times, by instrument in writing served on the lease holder, increase or decrease the expenditure required or the number of people to be employed	NA	Not applicable to environmental audit.	
10. Control of Operations	(a) If an Environmental Officer of the Department believes that the lease holder is not complying with any provision of the Act or any condition of this lease relating to the working of the lease, he may direct the leaseholder to:	NT	There is no evidence that any directions from an Environmental Officer of the Department have been given in relation to the Rocglen site.	
	(i) cease working the lease; or	NT		
	(ii) cease that part of the operation not complying with the Act or conditions; until in the opinion of the Environmental Officer the situation is rectified.	NT		
	(b) The lease holder must comply with any direction given. The Director-General may confirm , vary or evoke any such direction.	NT		
	(c) A direction referred to in this condition may be served on the Mine Manager	NT		
11. Reports	The lease holder must provide an exploration report, within a period of 28 days after each anniversary of the date this lease has effect or at such other date as the Director-General may stipulate, of each year. The report must be to the satisfaction of the Director-General and contain the following:	NA	Not applicable to environmental audit.	
	(a) Full particulars, including results, interpretation and conclusions, of all exploration conducted during the 12 month period:	NA	Not applicable to environmental audit.	
	(b) Details of expenditure incurred in conducting that exploration:	NA	Not applicable to environmental audit.	
	(c) A summary of all geological findings acquired through mining or development evaluation activities	NA	Not applicable to environmental audit.	
	(d) Particulars of exploration proposed to be conducted in the next 12 month period	NA	Not applicable to environmental audit.	

Condition No.	Requirement	Compliance Y/N/NT/V/NA	Evidence	Comments
	(e) All plans, maps, sections and other data necessary to <u>satisfactorily interpret the report</u>	NA	Not applicable to environmental audit.	
12. Licence to Use Reports	(a) The lease holder grants to the Minister, by way of a non-exclusive licence, the right in copyright to publish, print, adapt and reproduce all exploration reports lodged in any form and <u>for the full duration of copyright</u>	NA	Not applicable to environmental audit.	
	(b) The non-exclusive licence will operate as a consent for the <u>purpose of section 365 of the Mining Act 1992</u>	NA	Not applicable to environmental audit.	
13. Confidentiality	(a) All exploration reports submitted in accordance with the conditions of this lease will be kept confidential while the lease is in force, except in cases where:	NA	Not applicable to environmental audit.	
	(i) the lease holder has agreed that specified reports may be <u>made non-confidential</u> .	NA	Not applicable to environmental audit.	
	(ii) reports deal with exploration conducted exclusively on <u>areas that have ceased to be part of the lease</u> .	NA	Not applicable to environmental audit.	
	(b) Confidentiality will be continued beyond the termination of a lease where an application for a flow-on title was lodged during the currency of the lease. The confidentiality will last until that flow-on title or any subsequent flow-on title, has <u>terminated</u>	NA	Not applicable to environmental audit.	
	(c) The Director-General may extend the period of <u>confidentiality</u>	NA	Not applicable to environmental audit.	
14. Terms of the non-exclusive licence	The terms of the non-exclusive copyright licence granted <u>under condition 12 are:</u>	NA	Not applicable to environmental audit.	
	(a) the Minister may sub-licence others to publish, print, adapt <u>and reproduce but not on-licence reports</u> .	NA		
	(b) the Minister and sub-licensee will acknowledge the lease holder's and any identifiable consultants ownership of copyright in any reproduction of the reports, including storage of reports onto an electronic database.	NA		
	(c) the lease holder does not warrant ownership of all copyright works in any report and, the lease holder will use best endeavours to identify those parts of the report for which <u>the lease holder owns the copyright</u>	NA		
	(d) there is no royalty payable by the Minister for the licence	NA		
	(e) If the lease holder has reasonable grounds to believe that the Minister has exercised his rights under the non-exclusive copyright licence in a manner which adversely affects the operations of the lease holder, that licence is revocable on the giving of a period of not less than three months notice.	NA		

Condition No.	Requirement	Compliance Y/N/NT/V/NA	Evidence	Comments
15. Blasting	(a) Ground Vibration: The lease holder must ensure that the ground vibration peak particle velocity generated by any blasting within the lease area does not exceed 10 mm/second and does not exceed 5 mm/second in more than 5% of the total number of blasts over a period of 12 months at any dwelling or occupied premises as the case may be, unless determined otherwise by the Department of Environment and Climate Change.	Y	Blast results to March 2011 indicate no exceedances of 10mm/sec or 5mm/sec.	
	(b) Blast Overpressure: The lease holder must ensure that the blast overpressure noise level generated by any blasting within the lease area does not exceed 115 dB (linear) in more than 5% of the total number of blasts over a period of 12 months, at any dwelling or occupied premises as the case may be, unless determined otherwise by the Department of Environment and Climate Change.	N	Blast results to January 2011 indicate 2 exceedances of the overpressure level on the 24th and 27th of August 2009 which represented 8.3% of the blasts for the year. DoP and DECCW were notified and an Investigation was carried out by Orica Mining Services. There was no evidence sighted that the exceedances were reported to DPI.	
16. Safety	Operations must be carried out in a manner that ensures the safety of persons or stock in the vicinity of the operations. All drill holes shafts and excavations must be appropriately protected, to the satisfaction of the Director-General, to ensure access to them by persons and stock is restricted. Abandoned shafts and excavations opened up or used by the lease holder must be filled in or otherwise rendered safe to a standard acceptable to the Director-General.	NA	Not applicable to environmental audit.	
17. Exploratory Drilling	(a) At least twenty eight days prior to commencement of drilling operations the lease holder must notify the relevant Department of Water and Energy Regional Hydrogeologist of the intention to drill exploratory drill holes together with information on the location of the proposed holes.	N	No evidence that this was undertaken.	Whitehaven should undertake the required notification and consider implementing a process (eg a checklist) to ensure that notification occurs in the future as required.
	(b) If the lease holder drills exploratory drill holes he must satisfy the Director-General that:-			
	(i) all cored holes are accurately surveyed and permanently marked in accordance with Departmental guidelines so that their location can be easily established;	Y	Survey plan sighted.	
	(ii) all holes cored or otherwise are sealed to prevent the collapse of the surrounding surface;	Y	Sealing certificates sighted.	
	(iii) all drill holes are permanently sealed with cement plugs to prevent surface discharge of groundwaters;	Y	Sealing certificates sighted.	
	(iv) if any drill hole meets natural or noxious gases it is plugged or sealed to prevent their escape;	NT		
(v) if any drill hole meets an artesian or sub-artesian flow it is effectively sealed to prevent contamination of aquifers.	NT			

Condition No.	Requirement	Compliance Y/N/NT/V/NA	Evidence	Comments
	(vi) once any drill hole ceases to be used the hole must be sealed in accordance with Departmental guidelines. Alternatively, the hole must be sealed as instructed by the Director-General.	Y	Sealing certificates sighted.	
	(vii) once any drill hole ceases to be used the land and its immediate vicinity is left in a clean, tidy and stable condition.	Y	Observed during on-site inspection.	
18. Prevention of Soil Erosion and Pollution	Operations must be carried out in a manner that does not cause or aggravate air pollution, water pollution (including sedimentation) or soil contamination or erosion, unless otherwise authorised by a relevant approval, and in accordance with an accepted Mining Operations Plan. For the purpose of this condition, water shall be taken to include any watercourse, waterbody or groundwaters. The lease holder must observe and perform any instructions given by the Director-General in this regard.	Y	Measures are implemented to prevent soil erosion and pollution.	
19. Transmission lines, Communication lines and Pipelines	Operations must not interfere with or impair the stability or efficiency of any transmission line, communication line, pipeline or any other utility on the lease area without the prior written approval of the Director-General and subject to <u>any conditions he may stipulate.</u>	N	Belmont electricity lines removed, however no evidence that approval was sought or granted. Consultation was undertaken with Origin Energy (now Essential Energy).	
20. Fences, Gates	(a) Activities on the lease must not interfere with or damage fences without the prior written approval of the owner thereof or the Minister and subject to any conditions the Minister may stipulate.	Y	Rocglen owns the land upon which surface disturbances are being undertaken.	
	(b) Gates within the lease area must be closed or left open in accordance with the requirements of the landholder.	Y	Rocglen owns the land upon which surface disturbances are being undertaken.	
21. Roads and Tracks	(a) Operations must not affect any road unless in accordance with an accepted Mining Operations Plan or with the prior written approval of the Director-General and subject to <u>any conditions he may stipulate.</u>	Y	Operations carried out in accordance with MOP and management plans.	
	(b) The lease holder must pay to the designated authority in control of the road (generally the local council or the Roads and Traffic Authority) the cost incurred in fixing any damage to roads caused by operations carried out under the lease, less any amount paid or payable from the Mines Subsidence Compensation Fund.	Y	Road maintenance agreement sighted.	
22	Access tracks must be kept to a minimum and be positioned so that they do not cause any unnecessary damage to the land. Temporary access tracks must be ripped, topsoiled and revegetated as soon as possible after they are no longer required for mining operations. The design and construction of access tracks must be in accordance with specifications fixed by the Department of Climate Change and Environment.	Y	Observed during on-site inspection.	

Condition No.	Requirement	Compliance Y/N/NT/V/NA	Evidence	Comments
23. Trees and Timber	(a) The lease holder must not fell trees, strip bark or cut timber on the lease without the consent of the landholder who is entitled to the use of the timber, or if such a landholder refuses consent or attaches unreasonable conditions to the consent, without the approval of a warden.	NA	Land on which works are undertaken is owned by Rocglen.	
	(b) The lease holder must not cut, destroy, ringbark or remove any timber or other vegetative cover on the lease area except such as directly obstructs or prevents the carrying on of operations. Any clearing not authorised under the Mining Act 1992 must comply with the provisions of the Native Vegetation Act 2003	Y	Rocglen has a site clearing procedure. Rocglen has a Part 3A approval in place and thus the Native Vegetation Act does not apply.	
	(c) The lease holder must obtain all necessary approvals or licences before using timber from any Crown land within the lease area.	Y	No timber used from Crown land.	
25. Resource Recovery	(a) Notwithstanding and description of mining methods and their sequence or of proposed resource contained within the Mining Operation Plan, if at any time the Director-General is of the opinion that minerals which the lease entitles the lease holder to mine and which are economically recoverable at the time are not being recovered from the lease area, or that any such minerals which are being recovered are not being recovered to the extent which should be economically possible or which for environmental reasons are necessary to be recovered; he may give notice in writing to the lease holder requiring the holder to recover such minerals.	NA	Not applicable to environmental audit.	
	(b) The notice shall specify the minerals to be recovered and the extent to which they are to be recovered, or the objectives in regard to resource recovery, but shall not specify the processes the lease holder shall use to achieve the specified recovery.	NA	Not applicable to environmental audit.	
	(c) The lease holder must, when requested by the Director-General, provide such information as the Director-General may specify about the recovery of the mineral resources of the lease area	NA	Not applicable to environmental audit.	
	(d) The Director-General shall issue no such notice unless the matter has firstly been thoroughly discussed with and a report to the Director-General has incorporated the views of the lease holder	NA	Not applicable to environmental audit.	
	(e) The lease holder may object to the requirements of any notice issued under this condition and on receipt of such an objection the minister shall refer it to a Warden for inquiry and report under Section 334 of the <i>Mining Act, 1992</i> .	NA	Not applicable to environmental audit.	
	(f) After considering the Warden's report the Minister shall decide whether to withdraw, modify or maintain the requirements specified in the original notice and shall give the lease holder written notice of the decision. The lease holder must comply with the requirements of this notice.	NA	Not applicable to environmental audit.	

Condition No.	Requirement	Compliance Y/N/NT/V/NA	Evidence	Comments
26. Indemnity	The lease holder must indemnify and keep indemnified the Crown from and against all actions, suits, claims and demands of whatsoever nature and all costs, charges and expenses which may be brought against the lease holder or which the lease holder may incur in respect of any accident or injury to any person or property which may arise out of the construction, maintenance or working of any workings now existing or to be made by the lease holder within the lease area or in connection with any of the operations notwithstanding that all other conditions of this lease shall in all respects have been observed by the lease holder or that any such accident or injury shall arise from any act or thing which the lease holder may be licensed or compelled to do.	NA	Not applicable to environmental audit.	
27. Security	(a) A security in the sum of \$100 000 must be given and maintained with the Minister by the lease holder for the purpose of ensuring the fulfilment by the lease holder of the obligations under this lease. If the lease holder fails to fulfil any one more of such obligations the said sum may be applied at the discretion of the Minister towards the cost of fulfilling such obligations. For the purpose of this clause the lease holder shall be deemed to have failed to fulfil the obligations of this lease if the lease holder fails to comply with any condition or provision hereof, any provision of the Act or regulations made thereunder or any condition or direction imposed or given pursuant to a condition or provision hereof or of any provision of the Act or regulations made thereunder.	NA	Not applicable to environmental audit.	
	(b) The lease holder must provide the security required by sub-clause (a) in one of the following forms:			
	(i) Cash	NA	Not applicable to environmental audit.	
	(ii) A security certificate in a form approved by the minister and issued by an authorised deposit-taking institution.	NA	Not applicable to environmental audit.	

APPENDIX 6

Photographic Plates



PLATE 1
Hydrocarbon spillage/staining outside waste oil container at workshop



PLATE 2
Hydrocarbon storage at the scraper contractor's facilities



PLATE 3
Waste dumping on western emplacement area



PLATE 4
Hydrocarbon storage at the workshop



PLATE 5
Hydrocarbon storage at the workshop



PLATE 6
Waste oil storage at the workshop

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