



2015 INDEPENDENT ENVIRONMENTAL AUDIT

Muswellbrook Coal Company

ABSTRACT

Muswellbrook Coal Company are required to have an independent environmental audit conducted every three years to fulfil the conditions of the sites Muswellbrook Shire Council Development Application approval DA 205/2002. This report details the results of the 2015 audit.

Peter Horn
Environmental Principal



Project

Development Application Number	Muswellbrook Shire Council DA 205/2002
Description of Project	Modification to Permit the Continuation of Mining Operations at Muswellbrook Coal Mine for an Additional Five (5) Years – Multiple Allotments – Coal Road Muswellbrook
Project Address	No. 1 Open Cut, Muscle Creek Road, Muswellbrook, NSW 2333
Proponent	Muswellbrook Coal Company Ltd
Proponent Address	PO Box 123, Muswellbrook, NSW 2333

Independent Environmental Audit

Certificate	<p>I certify that I have prepared the contents of the attached independent audit and to the best of my knowledge:</p> <ul style="list-style-type: none"> • It is in accordance with relevant approval conditions; • I have acted professionally, accurately and in an unbiased manner in conducting the audit; • I am not related to any owner or operator of the project as a spouse, partner, child, sibling, employer, or in a contractual arrangement outside the audit; • I do not have any pecuniary interest in the project, including where there is a reasonable likelihood or expectation of appreciable financial gain or loss to me or to a person to whom I am related; • I have not provided consultancy services to the project that were subject to this audit; • I have not accepted, nor intend to accept any inducement, commission, gift or any other benefit (apart from fair payment) from any owner or operator of the project, their employees or any interested party.
Name	Peter Horn
Auditor Certification	Environmental Compliance and Environmental Management Systems Lead Auditor (ISO14001:2015) Certified through Exemplar Global
Date	12 November 2015



Executive Summary

The Muswellbrook Coal Company Limited have requested Peter Horn to conduct an Independent Environmental Audit (IEA) of the Muswellbrook Coal Open Cut. To fulfil the requirements of the Muswellbrook Shire Council Development Application approval DA 205/2002, Condition 8.1, an independent Environmental Audit of compliance is required in 2015. The last audit was completed in 2012.

The audit was designed and conducted to satisfy the planning approval conditions for Muswellbrook Coal Company and focused on the site's compliance with licences, approvals and supporting documents including management plans. This audit period is 1 August 2012 to 20 October 2015.

The Independent Environmental Audit was undertaken generally in accordance with *AS/NZS ISO 19011:2003 – Guidelines for quality and/or environmental management systems auditing* by Peter Horn as a certified lead auditor. The Independent Environmental Audit consisted of a detailed desktop review of documents supporting compliance, interviews with Muswellbrook Coal Company staff and a site inspection of No.1 Open Cut and supporting infrastructure from 16 – 20 October 2015.

In conducting the audit, the auditor and Muswellbrook Coal Company communicated with Muswellbrook Shire Council and the NSW Office of Water to assist in directing the audit focus.

The Muswellbrook Coal Mine is 100% owned by Idemitsu Australia Resources Pty Ltd.

The site has a relatively long history of operation with underground coal mining commencing at Muswellbrook Coal Mine in 1907 and open-cut operations in 1944. Muswellbrook Coal Company operates as a truck and shovel multi-seam mine. Coal is washed and trucked to the Ravensworth Coal Terminal, where it is transported by rail to the Port of Newcastle for export. When required, coal is also hauled by road to the Bayswater Power Station. Currently, operations are focused on the No. 1 Open Cut Extension, which began operation in 2005. The No.1 Open Cut Extension was approved in DA 205/2002 in 2002.

The Independent Environmental Audit reviewed 27 approvals and environmental management documents in detail and other documents in a more general manner, where relevant. A total of 654 conditions and commitments were assessed as part of this audit. 42 issues resulted in 53 non-compliances. 27 of the issues were administrative. Some of the non-compliances noted in this audit relate to the same issue which, due to the duplication of commitments between consent documents and management plans, raise the same non-compliance several times.

A basic risk assessment was conducted for all non-compliances with Low/Medium/High/Extreme risk levels as results. For the non-compliances that were not administrative (there were 27 administrative non-compliances), there were 11 Low, and 15 Medium results. No High or Extreme risks were identified in the audit.

The audit report details the areas found not compliant and makes further recommendations aimed at improving environmental performance including a review of key environmental aspects of the sites operation and environmental management.



Glossary

Term	Meaning
ACHMP	Archaeology and Cultural Heritage Management Plan.
AEMR	Annual Environmental Management Report.
Archaeology	In this text refers to the study of the aborigines of the area and any history they may have on the development site.
CCC	Community Consultative Committee.
DA	Development Application.
DIPNR	Department of Infrastructure Planning and Natural Resources (now OEH, NoW, EPA and DP&E or parts thereof)
Director Generals Requirements	A directive from the DP&E to a development proponent as to which issues must be addressed in and EIS.
DMR	Department of Mineral Resources (now DRE).
DP&E	NSW Department of Planning and Environment.
DRE	NSW Department of Trade and Industry, Division of Resources and Energy.
EEC	Endangered Ecological Community, a community of native species that exist in the same geographical area that are listed as endangered as a community under either NSW or Commonwealth legislation.
EIS	Environmental Impact Statement - is a document describing the potential environmental impact of a proposed development and offering mitigation strategies to reduce or remove the impacts.
EMS	Environmental Management Strategy.
EO	Environment Officer
EPA	Environment Protection Authority.
EPL	Environment Protection Licence.
FFMP	Flora and Fauna Management Plan.
FVMP	Final Void Management Plan.
LMP	Land Management Plan.
MCC	Muswellbrook Coal Company.
MIA	Mine Infrastructure Area.



Term	Meaning
MOP	Mining Operations Plan.
MP	Management Plan.
MSC	Muswellbrook Shire Council.
NMP	Noise Management Plan.
NoW	NSW Office of Water.
OCE	Open Cut Examiner.
OEH	NSW Office of Environment and Heritage.
RFS	Rural Fire Service.
SCMP	Spontaneous Combustion Management Plan.
SSMP	Soil Stripping Management Plan.
Subsidence	A lowering of the surface ground levels above an area where underground coal extraction has taken place.
SWMP	Site Water Management Plan.
TARP	Trigger Action Response Plan, a plan for managing environmental issues that uses trigger levels in the monitoring of environmental variables to precipitate actions to remedy impacts.
VLMP	Visual and Landscape Management Plan.



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1 INTRODUCTION

1.1 BACKGROUND

The Muswellbrook Coal Company Limited (MCC) have requested Peter Horn to conduct an Independent Environmental Audit (IEA) of the Muswellbrook Coal Open Cut (the Site). To fulfil the requirements of the Muswellbrook Shire Council (MSC) Development Application approval DA 205/2002, Condition 8.1, an independent Environmental Audit of compliance is required in 2015. The last audit was completed in 2012.

The audit was designed and conducted to satisfy the planning approval conditions for MCC and focused on the site's compliance with licences, approvals and supporting documents including management plans. This audit period is 1 August 2012 to 20 October 2015.

1.2 SITE DESCRIPTION

The Muswellbrook Coal Mine is 100% owned by Idemitsu Australia Resources Pty Ltd.

The site has a relatively long history of operation with underground coal mining commencing at Muswellbrook Coal Mine in 1907 and open-cut operations in 1944.

MCC operates as a truck and shovel multi-seam mine. Coal is washed and trucked to the Ravensworth Coal Terminal, where it is transported by rail to the Port of Newcastle for export. When required, coal is also hauled by road to the Bayswater Power Station.

Currently, operations are focused on the No. 1 Open Cut Extension, which began operation in 2005. The No.1 Open Cut Extension was approved in DA 205/2002 in 2002.

The site is located 3km northeast of Muswellbrook in New South Wales.

1.3 AUDIT REQUIREMENT

The requirements of the Muswellbrook Shire Council (Council) Development Application approval DA 205/2002, Condition 8.1 are detailed in Table 1 along with the requirement for audit from the Water Access Licences, Condition 9 of 20BL169037, 20BL169038 and 20BL170473 that are also being audited.

Table 1 - Requirements for this IEA

Condition	Requirement	Location in Report
DA 205/2002		
8.1 a)	Every three years from the date of this consent until completion of mining in the DA area, or as otherwise directed by MSC, the Applicant shall conduct an environmental audit of the mining and infrastructure areas of the development in accordance with ISO14010 – Guidelines and general principles for environmental auditing, and ISO 14011 – Procedures for environmental auditing	This Audit



Condition	Requirement	Location in Report
	(or the current versions) and in accordance with any specifications issued by MSC. Copies of the report shall be submitted to MSC, EPA, DIPNR, DMR, NPWS and CCC within two weeks of the reports completion for comment.	
8.1 b)	i) assess compliance with the requirements of this consent, licences and approvals;	Section 4
	ii) assess the development against the predictions made in the EIS;	Section 4
	iii) review the effectiveness of the environmental management of the mine, including any mitigation works;	Section 5
	iv) be carried out at the Applicants expense; and	Noted
	v) be conducted by a duly certified independent person or team approved by MSC (as acceptable by the Minister for Infrastructure and Planning).	Appendix A
8.1 c)	MSC may, after considering any submission made by the relevant government agencies, and CCC on the report, notify the Applicant of any requirements with regard to any recommendations in the report. The Applicant shall comply with those reasonable requirements within such time as MSC may require.	Noted
8.1	Note: MSC May agree to a request from the Applicant that the Independent Environmental Audit required under this condition be integrated with similar audits required in accordance with other development consents applicable to MSC.	Noted
20BL169037, 20BL169038 and 20BL170473		
9	As part of the independent environmental auditing required under the development consent, the licence holder must ensure that the audit:	
9 i)	Seeks input from the office of water;	Appendix B
9 ii)	Assess compliance with the terms and conditions of this licence;	Section 4
9 iii)	Assess compliance with the water management plan and any sub-plans under the development consent;	Section 4
9 iv)	Review reported impacts of the extractions on any aquifers, groundwater dependent ecosystems and any streams in the area;	Section 5
9 v)	Assess the methodology used to report the impacts in condition 7 (iv);	Sections 4 and 5
9 vi)	Make comparisons between reported and predicted impacts (modelled results);	Section 5
9 vii)	Provide recommendations regarding any works that should be performed or additional obligations that should be imposed in order to rectify any impacts on groundwater or any connected water dependent assets.	Section 6



1.4 AUDIT METHODOLOGY

This IEA was undertaken generally in accordance with *AS/NZS ISO 19011:2003 – Guidelines for quality and/or environmental management systems auditing* by Peter Horn as a certified lead auditor.

The auditor was approved by MSC (on 16 September 2015) prior to conducting the audit. The MSC approval is attached as Appendix A of this report.

This IEA consisted of a detailed desktop review of documents supporting compliance, interviews with MCC staff and a site inspection of MCC from 16 – 20 October 2015. Interviewees included:

- Senior Operations Manager;
- Environmental Coordinator;
- Acting Production Superintendent (normally OCE);
- Mine Production Engineer (looks after drill and blasting);
- Technical Services Superintendent;
- Maintenance Planner; and
- Stores Officer.

The environmental conditions at the time of the audit were mild with daytime maximum temperatures in the low thirties (degrees Celsius) and minimums between 10°C and 12°C. There were fine conditions during the site audit with light cloud.

1.5 REPORT STRUCTURE

This report is structured as follows:

Executive Summary

Section 1.0 Provides an introduction, background and description of MCC, describes the requirements for the IEA and provides a guide to the structure of the report.

Section 2.0 Discusses consultation conducted for the audit.

Section 3.0 Lists the planning and other approvals and licences and the site management documents in place at MCC and confirms those which were criteria for this IEA.

Section 4.0 Lists conditions found to be “not compliant”.

Section 5.0 Details a review of the environmental management at the site.

Section 6.0 Details recommendations aimed at improving the environmental performance of MCC.

Section 7.0 Conclusion



2 CONSULTATION

MCC requested approval of the auditor from MSC and approval was given by the MSC Planning and Building Services Manager on 16 September 2015. MSC did not direct any particular focus for the audit.

In accordance with condition 9 i) of the water licenses (20BL169037, 20BL169038 and 20BL170473), comment was sought from NoW. A letter from NoW detailed the following:

DPI Water recommends that the following considerations be included in the audit of site water licenses.

- Review Site Water Management Plan. It is noted that DPI Water provided comment to the proponent in September 2015 in relation to the Site Water Management Plan and the Surface Water and Groundwater Monitoring Plan. It is recommended that the site water audit include assessment of whether these plans have been updated in accordance with the advice issued by DPI Water. (see Section 4.23 of this report).
- Review metering of water take and assess whether metering complies with license and approval requirements, and any requirements specified in the Site Water Management Plan and the Surface Water and Groundwater Monitoring Plan. (see Sections 4.9, 4.10, 4.11 and 4.12 of this report).
- Review of water monitoring (surface water and groundwater). Assess whether water monitoring is being completed in accordance with the project approval and the Site Water Management Plan and Surface Water and Groundwater Monitoring Plan. (see Section 4.23 of this report).
- License/Approval status – ensure all licenses and approvals held under the Water Act 1912 and Water Management Act 2000 are current. (see Sections 4.9, 4.10, 4.11 and 4.12 of this report).
- Review licence and approval conditions and ensure compliance, particularly in relation to the following groundwater licenses:
 - 20BL169014 (Mining)
 - 20BL169037 (Dewatering)
 - 20BL169038 (Dewatering)
 - 20BL170473 (Mining) (see Sections 4.9, 4.10, 4.11 and 4.12 of this report).
- Reconcile records of take of water with the relevant Water Access Licenses and Property Accounts to determine if take of water from each water source is within the licensed entitlement for each water source. (This is conducted in the AEMRs and was reviewed in the SLR reports that were reviewed for this audit)

The letter is attached as Appendix B of this report.



3 DOCUMENTS AUDITED

Table 2 lists the documents reviewed for compliance in this IEA along with where each document is addressed in the report. There were many other documents reviewed by the audit team as evidence or supporting information that are not listed here.

Table 2- Documents Audited

Document	Report Section Number
DA 205/2002 - Modification to Permit the Continuation of Mining Operations at Muswellbrook Coal Mine for an Additional Five (5) Years.	4.2
Muswellbrook Coal Company Limited, No. 1 Open Cut Extension Environmental Impact Statement 2002	4.3
Environment Protection License 656	4.4
Mining Operations Plan	4.5
Mining Lease (ML1304)	4.6
Mining Lease (ML1562)	4.7
Consolidated Coal Lease (CCL 713)	4.8
Water License (20BL169014)	4.9
Water License (20BL169037)	4.10
Water License (20BL169038)	4.11
Water License (20BL170473)	4.12
Spontaneous Combustion Management Plan (2010)	4.13
Environmental Management Strategy (2010)	4.14
Archaeology and Cultural Heritage Management Plan (2010)	4.15
Flora and Fauna Management Plan (2010)	4.16
Erosion and Sediment Control Plan (2010)	4.17
Soil Stripping Management Plan (2010)	4.18
Visual Amenity and Landscape Management Plan (2010)	4.19
Final Void Management Plan (2010)	4.20
Bushfire Management Plan (2010)	4.21
Land Management Plan (2010)	4.22
Site Water Management Plan and Surface & Groundwater Monitoring Plan (2013)	4.23
Waste Management Plan (2010)	4.24
Dust Management Plan (2015)	4.25
Blast - Vibration Management Plan (2015)	4.26



Document	Report Section Number
Noise Management Plan (2015)	4.27
Lighting Management Plan (2010)	4.28



4 ENVIRONMENTAL COMPLIANCE

In the assessment of compliance, the status of each condition is described as:

- Compliant;
- Not Compliant;
- Not Compliant Administrative (the issue was caused by not submitting a document or keeping a document on file, not by the omission of an action or measurement);
- Observation; or
- Not Applicable (used where conditions have not yet been activated/triggered due to activities not being commenced or requests not being made for example).

A total of 654 conditions and commitments were assessed as part of this audit. 42 issues resulted in 53 non-compliances. 27 of the issues were administrative. Some of the non-compliances noted in this audit relate to the same issue which, due to the duplication of commitments between consent documents and management plans, raise the same non-compliance several times.

A basic risk assessment was conducted for all non-compliances with Low/Medium/High/Extreme risk levels as results. For the non-compliances that were not administrative (there were 27 administrative non-compliances), there were 11 Low, and 15 Medium results. No High or Extreme risks were identified in the audit.

4.1 ISSUES LEADING TO NON-COMPLIANCE

Each non-compliance was caused by an action, omission or event. These constitute the issues that the site needs to address to achieve compliance. For this reason, the issues are extracted from the non-compliances so they will be more readily addressed by MCC.

The issues identified in this audit and the consequential non-compliances are presented in Table 3.

Table 3 – Issues Resulting in Non-Compliance

Issue	Conditions and Commitments Not Compliant
Environment Officer not approved by MSC. MCC have requested approval but no response had been received at the time of the audit.	DA3.1 a)
The Environmental Management Strategy did not include the documentation of consultation conducted in its preparation.	DA 3.2 b)
Site Water Management Plan was not provided/ made available to the CCC when updated in 2013	DA 3.2 e)
Site Water Management Plan was not placed on the website when updated in 2013.	DA 3.2 f)
Water meters installed to measure the flow of water around the site have not been regularly calibrated.	DA 4.2 h)



Issue	Conditions and Commitments Not Compliant
The Site Water Management Plan did not address the duration of monitoring during operation and after closure and did not identify mechanisms to transfer data to the DIPNR (now NoW) database.	DA 4.3 c)
Due to equipment failure and misadventure, some environmental monitoring samples were not collected.	DA 6.1.2 a) EPL M 2.1 EPL M 7.1
Lighting reviews / audits are not conducted.	DA 6.5 a)
Management plans with sampling protocols or monitoring plans do not include a quality assurance/ quality control plan.	DA 8 b)
The AEMR did not include an annual compliance audit of the performance of the project against conditions of the consent and statutory approvals or an assessment of any changes to agricultural land suitability resulting from the Mining Operations.	DA 9.2 a) EMS 8.3
Record keeping for environmental sampling did not always include the samplers name.	DA 9.3 c) EPL M1.3
MCC did not enter into a legally binding agreement to support community enhancement with MSC prior to commencing the No.1 Open Cut Extension project.	DA 11.3
A report to MSC detailing waste disposal and relocation associated with the relocation of the MIA was not able to be provided as evidence.	DA 40
The offset area is not inspected to ensure it is being managed in accordance with the requirements of the consent.	DA 48
Biodiversity Areas are not monitored.	MOP 6.0 Table 21
Reports detailing compliance with Mining Lease 1304 are not developed.	ML 1304 C.4.0
The NoW has not approved works to prevent alluvial flows from entering the mine workings.	20BL169014 C.4
An Annual Compliance Report was not submitted to NoW.	20BL169014 C.8
The NoW has not approved the installation and operation of the water flow meters installed at the site.	20BL169014 C.9 20BL169037 C.8 20BL169038 C.8 20BL170473 C.8
The AEMR did not assess compliance with the terms and conditions of 20BL169037, 20BL169038 and 20BL170473.	20BL169037 C.7 20BL169038 C.7 20BL170473 C.7
The Environment Coordinator did not conduct a bimonthly audit of areas of spontaneous combustion.	SCMP MP 4.1
The Environment Coordinator did not conduct internal audits.	EMS 8.2 ACHMP 6.4.2
A booklet identifying threatened species was not provided to inductees during training.	FFMP 5.6
The rehabilitation procedure did not include rock raking.	SSMP 5.0



Issue	Conditions and Commitments Not Compliant
The rehabilitation procedure did not include selective placement of the A1 and A2 soil horizons.	SSMP 5.0
The rehabilitation procedure did not include the exclusion of the use of the A2 soil horizon on steeper portions of the rehabilitation areas.	SSMP 5.0
The relocated MIA did not have external materials that have a colour and texture that blend with the natural surroundings.	VLMP 5.5
Native species have not been planted in and around the relocated MIA.	VLMP 5.5
The risk of accidental bushfire ignition such as lit cigarettes thrown from cars was not included in site inductions.	Bushfire MP 6.1
There was no evidence of access tracks being inspected by the OCE.	Bushfire MP 6.2
Bushfire inspections were not conducted in conjunction with the RFS.	Bushfire MP 6.2
Bushfire inspection and risk assessment report not forwarded to the RFS.	Bushfire MP 7.1
Emergency contacts in Appendix A of the Bushfire MP were not up to date.	Bushfire MP 7.1
Areas of rehabilitation observed in the site inspection do not appear to be able to reach Class IV Land Capability.	LMP 5.1.1
A Vermin Eradication Plan has not been developed.	LMP 5.6
A Weed Eradication Plan has not been developed.	LMP 5.7
Weed inspections were annual not six monthly.	LMP 5.7
Neighbours were not provided with annual updates on weed management at MCC.	LMP 5.7
Water flow meters were recorded quarterly not monthly.	SWMP 7.1
Groundwater bore RDH614 was not monitored.	SWMP 7.2
Mobile equipment was not fitted with smart alarms, which adjust tonal noise to suit the ambient noise conditions.	NMP 3.2
Lighting assessments were not conducted annually.	Lighting MP



4.2 COMPLIANCE WITH DA 205/2002

The conditions that were not compliant within DA 205/2002 are shown in Table 4. An assessment of compliance for each condition in DA 205/2002 is provided in the audit protocol in Appendix C.

Table 4- Compliance with DA 205/2002

Condition	Requirement	Audit Finding
3.1 a)	<p>The Applicant shall ensure that a suitably qualified Environmental Officer is available throughout the life of the mine and shall consult with Muswellbrook Shire Council prior to the appointment of the Environmental Officer for the Project. The Environmental Officer shall:</p> <ul style="list-style-type: none"> i) be responsible for the preparation of the environmental management plan (refer to condition no. 32) ii) be responsible for considering and advising on matters specified in the conditions of this consent and compliance with such matters; iii) be responsible for receiving and responding to complaints in accordance with Condition 10.2; iv) facilitate an environmental induction and training program for all person involved with mining and remedial activities; and v) take reasonable steps to avoid or minimise adverse environmental impacts. The Environmental Officer shall advise the Mine Manager to issue instructions to stop work if a significant adverse impact on the environment is likely to occur. 	<p>All of these requirements were met except the approval of EO by MSC. MCC requested the approval of the EO by MSC but no response had been received at the time of the audit.</p> <p>Not Compliant Administrative</p>



Condition	Requirement	Audit Finding
3.2 b)	<p>The Environmental Management Strategy shall include, but not be limited to:</p> <ul style="list-style-type: none"> i) statutory and other obligations which the Applicant is required to fulfil during mining, including all approvals and consultations and agreements required from authorities and other stakeholders, and key legislation and policies; ii) definition of the role, responsibility, authority, accountability and reporting of personnel relevant to environmental management, including the Environmental Officer; iii) overall environmental management objectives and performance outcomes, during, mining and decommissioning of the mine, for each of the key environmental elements for which management plans are required under this consent; iv) overall ecological and community objectives for the project, and a strategy for the restoration and management of the areas affected by Mining Operations, including elements such as wetlands and other habitat areas, creek lines and drainage channels, within the context of those objectives; v) identification of cumulative environmental impacts and procedures for dealing with these at each stage of the development; vi) steps to be taken to ensure that all approvals, plans, and procedures are being complied with; vii) processes for conflict resolution in relation to the environmental management of the project; viii) documentation of the results of consultations undertaken in the development of the Environmental Management Strategy. 	<p>There was no evidence of the documentation of the results of consultation in the EMS as required. Evidence that consultation occurred was provided.</p> <p>Not Compliant Administrative</p>
3.2 e)	<p>The Applicant shall make copies of the Environmental Management Strategy components in subclause (d) above available to the relevant government agencies and CCC, and ensure that the plans are made publicly available within 14 days of commencement of operations.</p>	<p>The SWMP, when updated in 2013, was not provided to the CCC.</p> <p>Not Compliant Administrative</p>



Condition	Requirement	Audit Finding
3.2 f)	The management plans are to be reviewed, and updated every five years or at other times as directed by MSC, in consultation with the relevant government agencies. The review should consider changing environmental requirements or changes in technology/operational practices. Any changes which are made shall be made and approved in the same manner as the initial Environmental Management Strategy. The Management Strategies shall be made publicly available within two weeks of approval by MSC.	The SWMP on the website was not updated to the 2013 version. Not Compliant Administrative
4.2 h)	The Applicant shall install to the satisfaction of the department in respect of location, type and construction an appliance (s) to measure the quantity of water extracted from the works. The appliance (s) to consist of either a measuring weir or weirs with automatic recorder, or meter or mean of measurement as may be approved by the department. The appliance(s) is to be maintained in good working order and condition. Detailed records of all water extracted from the works shall be kept and supplied to the department upon request. The applicant when requested must provide a test certificate as to the accuracy of the appliance(s) furnished either by the manufacturer or by some person or authority duly qualified;	Calibration Certificates were not able to be provided. Not Compliant Low Risk
4.3 c)	"i) The Applicant shall incorporate into the Site Water Management Plan details of the monitoring program for both surface water and groundwater. The Site Water Management Plan shall include: * the duration of the monitoring program (pre, during and post mining); * sites to be sampled; * frequency of sampling; * the parameters to be measured; * the depth of bore construction (if required); * the need for any contingency plans; * the analysis of data and the reporting procedure, including a mechanisms to transfer monitoring data from the mine to DIPNR data base and to produce annual reports with interpreted results; and * determination of appropriate criteria for monitoring purposes determined in consultation with DIPNR. The results of the monitoring program shall be reported in the AEMR. The post-mining monitoring program shall be prepared no later than one year prior to the cessation of Mining Operations. "	The duration of monitoring and a mechanism to transfer data to the DIPNR (now NoW) database was not addressed in the SWMP. Not Compliant Administrative
6.1.2 a)	For each monitoring point specified below the applicant must monitor (by sampling and obtaining results by analysis) the concentration of each pollutant specified. The applicant must use the sampling method, unit of measure and sample at the frequency shown: • TSP- $\mu\text{g}/\text{m}^3$, continuous, AS 3580.9.8-2001 • PM10 - $\mu\text{g}/\text{m}^3$, every 6 days, 24 hour composite sample	Due to equipment failure and misadventure, some environmental monitoring



Condition	Requirement	Audit Finding
	<ul style="list-style-type: none"> • Deposited Dust- g/m²/month, continuous, AM-19 	<p>samples were not collected. This occurred in each year of the audit period.</p> <p>Not Compliant Medium Risk</p>
6.5 a)	The Applicant shall screen or direct all on-site lighting away from residences and roadways to the satisfaction of MSC during mining operations.	<p>Lighting reviews were not conducted. One lighting complaint in the audit period.</p> <p>Not Compliant Low Risk</p>
8 b)	All sampling strategies and protocols undertaken as part of any monitoring program shall include a quality assurance/ quality control plan and shall be included in the relevant environmental management plan. Only accredited laboratories shall be used for laboratory analysis.	<p>None of the relevant MPs included a quality assurance/ quality control plan.</p> <p>Not Compliant Administrative</p>
9.2 a)	<p>“The Applicant shall, throughout the life of the mine and for five years after the completion of mining in the DA area, prepare and submit an Annual Environmental Management Report (AEMR) to the satisfaction of MSC and DMR. The AEMR shall review the performance of the mine against the Environmental Management Strategy and the relevant Mining Operations Plans, the conditions of this consent, and other licences and approvals relating to the mine. To enable ready comparison with the predictions made in the EIS, diagrams and tables, the report shall include, but not be limited to, the following matters:</p> <p>(11)an annual compliance audit of the performance of the project against conditions of this consent and statutory approvals;</p> <p>....</p> <p>(vi) an assessment of any changes to agricultural land suitability resulting from the Mining Operations, including cumulative changes; “</p>	<p>There Was no annual compliance audit or assessment of agricultural land suitability in the AEMRs.</p> <p>Not Compliant Administrative</p>
9.3 c)	“The following records must be kept in respect of any samples required to be collected:	The name of the person



Condition	Requirement	Audit Finding
	<p>(11)the date(s) on which the sample was taken; (ii) the time(s) at which the sample was collected; (iii) the point at which the sample was undertaken; and (iv) the name of the person who collected the sample. "</p>	<p>sampling was not always recorded. Generally Complaint apart from this.</p> <p>Not Compliant Administrative</p>
11.3	<ul style="list-style-type: none"> • Prior to mining of the extension area, the Applicant shall enter into a legally binding agreement with MSC for financial and/or in kind contribution to MSC for the purpose of community enhancement to address the social, amenity and associated community infrastructure requirements arising from the operation of the extension. The financial and/or in kind contribution shall be generally in accordance with the MSC Community Enhancement Plan and as agreed between the Applicant and MSC. • Further, the Applicant shall enter into a legally binding agreement with Council to provide an agreed area of land to incorporate void number 3, and a suitable access road to the void from the exiting waste disposal area which are appropriately fenced and landscaped and that such void is provided to Council in a condition suitable to the requirements of Council and any relevant regulatory authorities. " 	<p>A legally binding agreement has not been entered into with MSC.</p> <p>Not Compliant Medium Risk</p>
40	<p>Upon completion of works and prior to occupation, the person entitled to act on this consent shall provide to Council the following information;</p> <ul style="list-style-type: none"> (a) the total tonnage of all waste and excavated material disposed of from the site; (b) the disposal points and methods used; and (c) a copy of all disposal receipts are to be provided. 	<p>The report to MSC was not able to be produced as evidence.</p> <p>Not Compliant Administrative</p>
48	<p>A restriction as to user shall be registered on the title of affected land for the purpose of creating a Vegetation Offset Area as indicated on Figure 1 'Proposed Offset Area' prepared by Hansen Bailey dated 12/10/10 Cad file: 06836A.dwg. Muswellbrook Council shall be nominated as the sole authority empowered to vary or modify the restriction.</p> <p>The terms of the restriction shall include the following matters:</p> <ul style="list-style-type: none"> a) Restriction against clearing. b) Restriction against use of land in any way inconsistent with the maintenance of the EEC on the land. c) Restrictions on livestock grazing on the land. d) Obligation to fence the land. e) Obligation to control noxious weeds and pests on the land. 	<p>No inspections are conducted so MCC cannot ensure that the land is managed in accordance with a), b), c), d) and e).</p> <p>Not Compliant Medium Risk</p>



Condition	Requirement	Audit Finding
	A caveat acceptable to Muswellbrook Council, shall be prepared and registered on the title of affected land, by Muswellbrook Coal Company at no cost to Council.	

4.3 COMPLIANCE WITH COMMITMENTS IN THE 2002 EIS

The commitments of the 2002 EIS were assessed and all conditions were either “Compliant” or “Not Applicable”. No conditions were found to be “Not Compliant”. An assessment of compliance for all commitments in the 2002 EIS is provided in the audit protocol in Appendix C.

4.4 COMPLIANCE WITH THE ENVIRONMENT PROTECTION LICENCE 656

The conditions that were not compliant within EPL 656 are shown in Table 5. An assessment of compliance for each condition in EPL 656 is provided in the audit protocol in Appendix C.

Table 5 - Compliance with the EPL

Condition	Requirement	Audit Finding
M 1.3	"The following records must be kept in respect of any samples required to be collected for the purposes of this licence: a) the date(s) on which the sample was taken; b) the time(s) at which the sample was collected; c) the point at which the sample was taken; and d) the name of the person who collected the sample."	The name of the person sampling was not always recorded. Generally Complaint apart from this. Not Compliant Administrative
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:	2011-12, 4 day measurements not recorded (TEOM) 2012-13, 48 day measurements not recorded (TEOM) 2012-13, 3 dust deposition measurements not recorded



Condition	Requirement	Audit Finding
		2013-14, 36 day measurements not recorded (TEOM) 2013-14, 3 dust deposition measurements not recorded. Not Compliant Medium Risk
M 7.1	To determine compliance with conditions L3.1, L3.2, L3.3 and L3.4: a) Airblast overpressure and ground vibration must be measured and electronically recorded for monitoring points 3, 4, 5 and 6 for the parameters specified in column 1 of the table below; and b) The licensee must use the units of measure, sampling method, and sample at the frequency specified opposite in the other columns. Airblast Overpressure Record All blasts Ground Vibration Peak Particle Velocity Record All blasts	2011-12, 20 measurements not recorded. 2012 - 13, 21 measurements not recorded. 2013 - 14, 6 measurements not recorded. Not Compliant Medium Risk

4.5 COMPLIANCE WITH THE MINING OPERATIONS PLAN

The commitments that were not compliant with the Mining Operations Plan are shown in Table 6. An assessment of compliance for each commitment in the Mining Operations Plan is provided in the audit protocol in Appendix C.

Table 6 - Compliance with the Mining Operations Plan

Reference	Commitment	Audit Finding
6.0	Table 21 – Biodiversity Offset Areas will be monitored annually.	The BOAs were not monitored. Not Compliant Medium Risk

4.6 COMPLIANCE WITH MINING LEASE 1304

The conditions that were not compliant with ML1304 are shown in Table 7. An assessment of compliance for each condition in ML 1304 is provided in the audit protocol in Appendix C.



Table 7 - Compliance with ML1304

Condition	Requirement	Audit Finding
4.0	a) The Leaseholder must submit a Compliance Report to the satisfaction of the Minister. c) The Compliance Report must be lodged with the Department annually on the grant anniversary date for the life of this mining lease.	Compliance Reports were not developed for this licence. First report was due in June 2015. Not Compliant Low Risk

4.7 COMPLIANCE WITH MINING LEASE 1562

The conditions of Mining Lease 1562 were assessed and all conditions were either “Compliant” or “Not Applicable”. No conditions were found to be “Not Compliant”. An assessment of compliance for all conditions in Mining Lease 1562 is provided in the audit protocol in Appendix C.

4.8 COMPLIANCE WITH CONSOLIDATED COAL LEASE 713

The conditions of Consolidated Coal Lease 1562 were assessed and all conditions were either “Compliant” or “Not Applicable”. No conditions were found to be “Not Compliant”. An assessment of compliance for all conditions in Consolidated Coal Lease 1562 is provided in the audit protocol in Appendix C.

4.9 COMPLIANCE WITH WATER LICENCE 20BL167014

The conditions that were not compliant with Water Licence 20BL169014 are shown in Table 8. An assessment of compliance for each condition in Water Licence 20BL169014 is provided in the audit protocol in Appendix C.

Table 8 - Compliance with Water Licence BL20169014

Condition	Requirement	Audit Finding
4	The licence holder must implement measures to prevent alluvial groundwater flows from entering the mine work by 14 August 2014, as approved by the Office of Water.	These measures have been implemented but without the approval of the Office of Water. Not Compliant



Condition	Requirement	Audit Finding
		Low Risk
8	The licence holder must supply the Office of Water with an Annual Compliance Report.	An Annual Compliance Report has not been submitted, the AEMR covers some of the required details but not all. Not Compliant Administrative
9	An extraction measurement device must be installed and maintained on each extraction device (pump) used for extraction of water under this licence, and such devices must be of a type and standard, and must be maintained in a manner, which is acceptable to the Office of Water.	Water meters have been installed without consultation with the Office of Water as to whether they were acceptable or not. Water meters were not calibrated. Not Compliant Medium Risk

4.10 COMPLIANCE WITH WATER LICENCE BL20169037

The conditions that were not compliant with Water Licence 20BL169037 are shown in Table 9. An assessment of compliance for each condition in Water Licence 20BL169037 is provided in the audit protocol in Appendix C.

Table 9 - Compliance with Water Licence BL20169037

Condition	Requirement	Audit Finding
7	As part of the Annual Reporting required under the development consent, the licence holder must: i) Assess compliance with the terms and conditions of this licence.	There was no assessment of compliance with this



Condition	Requirement	Audit Finding
		licence in the AEMR. Not Compliant Administrative
8	An extraction measurement device must be installed and maintained on each extraction device (pump) used for extraction of water under this licence, and such devices must be of a type and standard, and must be maintained in a manner, which is acceptable to the Office of Water.	Water meters have been installed without consultation with the Office of Water as to whether they were acceptable or not. Water meters were not calibrated. Not Compliant Medium Risk

4.11 COMPLIANCE WITH WATER LICENCE BL20169038

The conditions that were not compliant with Water Licence 20BL169038 are shown in Table 10. An assessment of compliance for each condition in Water Licence 20BL169038 is provided in the audit protocol in Appendix C.

Table 10 - Compliance with Water Licence BL20167038

Condition	Requirement	Audit Finding
7	As part of the Annual Reporting required under the development consent, the licence holder must: i) Assess compliance with the terms and conditions of this licence.	There was no assessment of compliance with this licence in the AEMR. Not Compliant Administrative
8	An extraction measurement device must be installed and maintained on each extraction device (pump) used for extraction of water under this licence, and such devices must be of a type and standard, and must be maintained in a manner, which is acceptable to the Office of Water.	Water meters have been installed without consultation



Condition	Requirement	Audit Finding
		with the Office of Water as to whether they were acceptable or not. Water meters were not calibrated. Not Compliant Medium Risk

4.12 COMPLIANCE WITH WATER LICENCE BL20170473

The conditions that were not compliant with Water Licence 20BL170473 are shown in Table 11. An assessment of compliance for each condition in Water Licence 20BL170473 is provided in the audit protocol in Appendix C.

Table 11 - Compliance with Water Licence BL20170473

Condition	Requirement	Audit Finding
7	As part of the Annual Reporting required under the development consent, the licence holder must: i) Assess compliance with the terms and conditions of this licence.	There was no assessment of compliance with this licence in the AEMR. Not Compliant Administrative
8	An extraction measurement device must be installed and maintained on each extraction device (pump) used for extraction of water under this licence, and such devices must be of a type and standard, and must be maintained in a manner, which is acceptable to the Office of Water.	Water meters have been installed without consultation with the Office of Water as to whether they were acceptable or not. Water meters were not calibrated.



Condition	Requirement	Audit Finding
		Not Compliant Medium Risk

4.13 COMPLIANCE WITH THE SPONTANEOUS COMBUSTION MANAGEMENT PLAN

The commitments that were not compliant with the Spontaneous Combustion Management Plan are shown in Table 12. An assessment of compliance for each commitment in the Spontaneous Combustion Management Plan is provided in the audit protocol in Appendix C.

Table 12 - Compliance with the Spontaneous Combustion Management Plan

Reference	Commitment	Audit Finding
4.1	In addition, a bimonthly audit will be carried out by the Environmental Officer to determine the location of hot spots that require ongoing maintenance and areas that are of high risk for spontaneous combustion. This occurs for production areas of the pit and waste emplacements.	The Environmental Coordinator did not conduct a bimonthly audit. Not Compliant Administrative

4.14 COMPLIANCE WITH THE ENVIRONMENTAL MANAGEMENT STRATEGY

The commitments that were not compliant with the Environmental Management Strategy are shown in Table 13. An assessment of compliance for each commitment in the Environmental Management Strategy is provided in the audit protocol in Appendix C.

Table 13 - Compliance with the Environmental Management Strategy

Reference	Commitment	Audit Finding
8.2	Throughout the operation of the mine, the Environmental Officer will conduct an internal audit annually on operations to ensure that all activities are in compliance with the conditions of the Development Consent. The results will be distributed internally within MCC.	Annual internal audits were not conducted by the Environmental Coordinator. Not Compliant Low Risk
8.3	An Annual Environmental Management Report (AEMR) is to be submitted throughout the mine life and for five years after the completion of mining in the Project area in accordance with Condition 9.2 of the Development Consent Conditions. An annual compliance	The AEMR did not include an annual compliance



	audit of the performance of the project against the conditions of the Development Consent and statutory approvals is to be included in the AEMR.	audit of the performance of the project. Not Compliant Administrative
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4.15 COMPLIANCE WITH THE ARCHAEOLOGY AND CULTURAL HERITAGE MANAGEMENT PLAN

The commitments that were not compliant with the Archaeology and Cultural Heritage Management Plan are shown in Table 14. An assessment of compliance for each commitment in the Archaeology and Cultural Heritage Management Plan is provided in the audit protocol in Appendix C.

Table 14 - Compliance with the Archaeology and Cultural Heritage Management Plan

Reference	Commitment	Audit Finding
6.4.2	6.4.1 referred to below sets out management objectives for Archaeological sites remaining (not salvaged) at MCC. “The above performance objectives should be measured using regular internal audits and monitoring”	Regular internal audits were not conducted by the Environmental Coordinator. Not Compliant Medium Risk

4.16 COMPLIANCE WITH THE FLORA AND FAUNA MANAGEMENT PLAN

The commitments that were not compliant with the Flora and Fauna Management Plan are shown in Table 15. An assessment of compliance for each commitment in the Flora and Fauna Management Plan is provided in the audit protocol in Appendix C.

Table 15 - Compliance with the Flora and Fauna Management Plan

Reference	Commitment	Audit Finding
5.6	A booklet identifying possible threatened species on the site will be supplied to mine workers and contractors. The booklet and a discussion of the significance of threatened species will be provided during site induction and training.	A booklet identifying threatened species was not provided to inductees during training. Not Compliant Low Risk



4.17 COMPLIANCE WITH THE EROSION AND SEDIMENT CONTROL PLAN

The commitments of the Erosion and Sediment Control Plan were assessed and all conditions were either “Compliant” or “Not Applicable”. No conditions were found to be “Not Compliant”. An assessment of compliance for all commitments in Erosion and Sediment Control Plan is provided in the audit protocol in Appendix C.

4.18 COMPLIANCE WITH THE SOIL STRIPPING MANAGEMENT PLAN

The commitments that were not compliant with the Soil Stripping Management Plan are shown in Table 16. An assessment of compliance for each commitment in the Soil Stripping Management Plan is provided in the audit protocol in Appendix C.

Table 16 - Compliance with the Soil Stripping Management Plan

Reference	Commitment	Audit Finding
Topsoil Spreading	Prior to the re-spreading of topsoil material, the prepared surface of the overburden spoil will be rock raked to remove all rocks that are greater than 200mm in diameter.	The Rehabilitation Procedure did not include rock raking. Not Compliant Administrative
Topsoil Spreading	Selective placement of topsoil material will be done in accordance with the properties of the soil. The A-2 horizon will form the underlying capping material, with the A-1 horizon topsoil forming the surface soil structure, where practicable.	The Rehabilitation Procedure did not include selective emplacement of horizons. Not Compliant Administrative
Topsoil Spreading	The use of the A-2 horizon subsoil will be avoided, where practicable, on sloping or high erosion potential areas.	The Rehabilitation Procedure did not include selective emplacement of horizons based of rehabilitation area gradient. Not Compliant Administrative



4.19 COMPLIANCE WITH THE VISUAL AND LANDSCAPE MANAGEMENT PLAN

The commitments that were not compliant with the Visual and Landscape Management Plan are shown in Table 17. An assessment of compliance for each commitment in the Visual and Landscape Management Plan is provided in the audit protocol in Appendix C.

Table 17 - Compliance with the Visual and Landscape Management Plan

Reference	Commitment	Audit Finding
5.5	For the relocation of the administration building, workshop and bathhouse, the colour and texture of external materials of the buildings will be chosen to ensure they blend in to the natural surroundings. In this regard, neutral non reflective material shall be used in all external finishes	The relocated MIA did not have external materials that have a colour and texture that blend with the natural surroundings. Not Compliant Medium Risk
5.5	New native species planting will be made to integrate the new infrastructure components into the natural surroundings.	No native plantings had occurred around the relocated MIA. Not Compliant Medium Risk

4.20 COMPLIANCE WITH THE FINAL VOID MANAGEMENT PLAN

The commitments of the Final Void Management Plan were assessed and all conditions were either “Compliant” or “Not Applicable”. No conditions were found to be “Not Compliant”. An assessment of compliance for all commitments in the Final Void Management Plan is provided in the audit protocol in Appendix C.

4.21 COMPLIANCE WITH THE BUSHFIRE MANAGEMENT PLAN

The commitments that were not compliant with the Bushfire Management Plan are shown in Table 18. An assessment of compliance for each commitment in the Bushfire Management Plan is provided in the audit protocol in Appendix C.

Table 18 - Compliance with the Bushfire Management Plan



Reference	Commitment	Audit Finding
6.1	The risk of accidental bushfire ignition such as lit cigarettes thrown from cars shall be incorporated in site inductions.	Bushfire risks associated with cigarettes thrown from cars was not included in the Induction Program. Not Compliant Medium Risk
6.2	Access tracks will be inspected by the Open Cut Examiner and maintained if necessary. Access to dams and water supply will be inspected by the Open Cut Examiner and maintained if necessary.	There was no evidence that these OCE inspections occur. Not Compliant Low Risk
6.2	The RFS and MCC shall conduct an annual inspection and bushfire risk assessment, preferably during winter, to assess fuel loads and fire hazards.	Bushfire inspections were conducted but not in conjunction with the RFS. Not Compliant Administrative
7.1	Reporting will consist of: • The annual inspection and risk assessment report, which will be sent to the RFS and will address detailed issues identified and / or enacted during the preceding year.	The Annual Inspection and Risk Assessment was not sent to the RFS. Not Compliant Administrative
Appendix A	Emergency Contact Numbers	These have not been kept up to date, 5 numbers were incorrect.



Reference	Commitment	Audit Finding
		Not Compliant Administrative

4.22 COMPLIANCE WITH THE LAND MANAGEMENT PLAN

The commitments that were not compliant with the Land Management Plan are shown in Table 19. An assessment of compliance for each commitment in the Land Management Plan is provided in the audit protocol in Appendix C.

Table 19 - Compliance with the Land Management Plan

Reference	Commitment	Audit Finding
5.1.1	Gently sloping areas of the rehabilitated overburden emplacement will be suitable for the establishment of pastoral grassland. These will have a minimum of 10cm of topdressing and are considered to have a Class IV capability.	Areas of rehabilitation observed don't look like they will reach Class IV land capability which includes the potential for cropping. Not Compliant Administrative
5.6	"A Vermin Eradication Plan will be developed for the site, within three (3) months from the commencement of operations. The principles for the selected control strategies for feral animal management will be: <ul style="list-style-type: none"> • Define the management objectives; • Select the management options; • Develop management strategies; and • Monitor the success of the program against the stated objectives. " 	There was no Vermin Eradication Plan. Not Compliant Administrative
5.7	A Weed Eradication Plan will be developed for the site, within three (3) months from commencement of operations.	There was no Weed Eradication Plan. Not Compliant Administrative
5.7	Weed inspections shall be conducted at 6 monthly intervals, and reporting of weed control will be included in the Annual Environmental Management Report.	Weed inspections were conducted annually, not six monthly.



Reference	Commitment	Audit Finding
		Not Compliant Low Risk
5.7	Neighbours will be contacted on an annual basis and they will be provided with information on MCC's weed management strategy.	Neighbours were not contacted regarding weed management at MCC. Not Compliant Low Risk

4.23 COMPLIANCE WITH THE SITE WATER MANAGEMENT PLAN

The commitments that were not compliant with the Site Water Management Plan are shown in Table 20. An assessment of compliance for each commitment in the Site Water Management Plan is provided in the audit protocol in Appendix C.

Table 20 - Compliance with the Site Water Management Plan

Reference	Commitment	Audit Finding
7.1	Flow meters have been installed on the following pipelines: <ul style="list-style-type: none"> • Pipeline from No. 2 Open Cut to Dam No. 1; • Pipeline from Borehole Pump 1 and Borehole Pump 2 (No. 2 Underground) to Dam No. 2; • Pipeline that supplies water for dust suppression; and • Pipeline from Final Settling Pond to No.1 Open Cut Void. Each flow meter shall be read and recorded at least on a monthly basis.	Meters were read quarterly not monthly. Not Compliant Administrative
7.2	The groundwater monitoring program is based on two bores located in the No.2 Underground workings (Bore RDH522) and St Heliers Colliery workings (Bore RDH614).	RDH614 was not monitored (as per AEMR and monitoring spreadsheet). Not Compliant Administrative

4.24 COMPLIANCE WITH THE WASTE MANAGEMENT PLAN

The commitments of the Waste Management Plan were assessed and all conditions were either "Compliant" or "Not Applicable". No conditions were found to be "Not Compliant". An assessment of



compliance for all commitments in Waste Management Plan is provided in the audit protocol in Appendix C.

4.25 COMPLIANCE WITH THE DUST MANAGEMENT PLAN

The commitments of the Dust Management Plan were assessed and all conditions were either “Compliant” or “Not Applicable”. No conditions were found to be “Not Compliant”. An assessment of compliance for all commitments in Dust Management Plan is provided in the audit protocol in Appendix C.

4.26 COMPLIANCE WITH THE BLAST – VIBRATION MANAGEMENT PLAN

The commitments of the Blast - Vibration Management Plan were assessed and all conditions were either “Compliant” or “Not Applicable”. No conditions were found to be “Not Compliant”. An assessment of compliance for all commitments in Blast - Vibration Management Plan is provided in the audit protocol in Appendix C.

4.27 COMPLIANCE WITH THE NOISE MANAGEMENT PLAN

The commitments that were not compliant with the Noise Management Plan are shown in Table 21. An assessment of compliance for each commitment in the Noise Management Plan is provided in the audit protocol in Appendix C.

Table 21 - Compliance with the Noise Management Plan

Reference	Commitment	Audit Finding
3.2	<p>A number of mitigation measures have been developed to reduce the operational noise impacts on surrounding landholders. These include the following measures:</p> <ul style="list-style-type: none"> • • Mobile equipment are fitted with smart alarms, which adjust tonal noise to suit the ambient noise conditions; and • 	<p>“Smart alarms” were not fitted.</p> <p>Not Compliant Medium Risk</p>

4.28 COMPLIANCE WITH THE LIGHTING MANAGEMENT PLAN

The commitments that were not compliant with the Lighting Management Plan are shown in Table 22. An assessment of compliance for each commitment in the Lighting Management Plan is provided in the audit protocol in Appendix C.

Table 22 - Compliance with the Lighting Management Plan

Reference	Commitment	Audit Finding
5.3	<p>The design, placement and directional control of all lighting on site will conform with the most current Australian Standard AS 4282 – <i>Control of the Obtrusive Effects of Outdoor Lighting</i>.</p>	<p>Lighting was not audited at MCC.</p>



Reference	Commitment	Audit Finding
		Not Compliant Low Risk
5.3	MCC will conduct lighting assessments on at least an annual basis to ensure compliance with this standard.	No audits were conducted – not annually. Not Compliant Low Risk



5 ENVIRONMENTAL MANAGEMENT

From an environmental perspective, the key potential environmental impacts resulting from operations at MCC are spontaneous combustion, rehabilitation, closure, surface water quality, ground water extraction, air quality and noise. This section of the report reviews the adequacy of the mitigation measures and the on ground applicability of the management measures proposed in the site environmental management documentation.

5.1 SPONTANEOUS COMBUSTION



Figure 1 - Spontaneous Combustion in No 1 Open Cut

Figure 1 shows the extent of spontaneous combustion through the No 1 open cut at the time of the audit. It clearly had the potential to be a major environmental and health issue for MCC.

MCC's complaints register illustrated the importance of this issue to the community. In the period 2012 to the time of the audit, almost 50% of the complaints were regarding odour and smoke issues from spontaneous combustion.

The site had implemented the Spontaneous Combustion Management Plan and the site inspection showed a high degree of compliance with the management plan. There was one non-compliance that was an administrative oversight. All staff interviewed had a good understanding of the issue. The auditor attended the morning staff meeting where the spontaneous combustion was discussed in detail by the Senior Operations Manager and other relevant staff.



Figure 2 - Management of Spontaneous Combustion

The management actions visible in the photo include:

- Three sprays directed at hot areas for the purpose of water infusion;
- The brown areas in the centre right of the photo are areas of clay placed over hot spots to exclude oxygen and reduce heating; and
- The main area of heating is being actively mined and whilst the auditor was observing this a hot spot started up and an excavator immediately moved to it and it was loaded onto trucks whilst a water cart wet the area down.

It is clear that efforts to control spontaneous combustion in the active mining area come at a financial cost:

- Additional water in the coal (the coal stockpiles are also wet down);
- The use of clay to cover heating and hot areas has implications for washing of coal from those areas, clay is particularly difficult to remove from coal;
- Additional resources required in the form of extra water carts and the spray equipment, pumps and so on; and
- Time and effort from all mining personnel.



MCC are putting significant efforts into the management of spontaneous combustion. The audit of documentation and site inspection has not been able to identify areas for improvement that would contribute to the effectiveness of spontaneous combustion management at the site.

5.2 REHABILITATION



Figure 3 - Rehabilitated area

Generally the rehabilitated areas of the site appear in good order with older areas holding up well and newer areas showing solid growth, good establishment of pastures and reasonable germination and growth of woody species.

The rehabilitation procedure does not accurately describe the rehabilitation process and should be rewritten to cover the requirements of the consent, the management plans and MOP including completion criteria.

Completion criteria developed in 2015 and included in the Closure MOP appear adequate though a little low on detail in some areas such as species richness and sustainability / robustness of the ecology of the rehabilitated areas in the longer term.

The Environment Coordinator discussed MCC plans to trial grazing of suitable rehabilitated pasture areas in the near future. This presents opportunities to identify fencing requirements, confirm water requirements and identify other cattle management infrastructure that may be required to manage the site post closure. It also offers the chance to reduce rank pastures and start nutrient cycling in pasture areas. There will also be an opportunity to observe the resilience of pasture areas to disturbance, this should be well documented to support relinquishment of these areas.



Figure 4 - Recently completed topsoiling and seeding

Figure 4 shows an area of recently completed rehabilitation work using Organic Growth Medium (OGM) in combination with topsoil. In the future, 'OGM only' areas of rehabilitation will be established. The organic growth matter is generated by composting domestic waste. OGM has been used on mine sites at several locations across the Hunter Valley but there is not a long history associated with its use. Monitoring of these areas to ensure nutrient cycling is occurring should be continued in the medium term to ensure the sustainability of rehabilitation vegetation established on this substrate.

The offset area was not inspected by MCC and the requirements of Condition 48 cannot be fulfilled without inspections. The fact that the caveat on the title is not yet in place does not remove the requirement to manage the land in accordance with this condition.

Local seeds have not been used in rehabilitation at the site. Site seed is sourced in Queensland, this is not rehabilitation best practise as local seed stock is better suited to local climate and soil variables.

Currently, Carbon Based conduct the rehabilitation reviews and historically they have implemented and managed the majority of the rehabilitation effort at MCC. In effect they were reviewing their own work. In the future, MCC will be using different consultants and contractors for the rehabilitation works and the Rehabilitation Review.



Figure 5 - Topsoil stockpile with weeds

Weed management on the site is generally good though Figure 5 shows a topsoil stockpile with a high weed cover including Paterson's Curse (*Echium plantagineum*) which was observed on each of the topsoil stockpiles sighted in the inspection. Weed control elsewhere was adequate though there are significant numbers of golden wreath wattle (*Acacia saligna*) through some areas of rehabilitation. This species is endemic to Western Australia and is considered a weed in some jurisdictions. Control should be considered as once established it is difficult to remove due to the seed bank.

5.3 CLOSURE

MCC currently conducts truck and excavator mining in the No. 1 open cut pit, with reserves expected to be exhausted there in 2018. Coal reserves in the No. 2 open cut pit have been exhausted. Rehabilitation and decommissioning activities are projected to continue until 2020 in the closure MOP.

The mine is preparing for closure in 2018-19 and careful consideration is required to identify those closure tasks that are most economically achieved whilst the mine is still operational. There is a large amount of mobile equipment left at the site that would be best removed whilst the consent is in its current form. There is also a large amount of equipment in various laydown areas that would be best removed whilst roads are still trafficable by larger transport vehicles.

Completion criteria are established and future rehabilitation monitoring is to consider these measures. How they impact on the duration of ongoing monitoring post closure should be considered to allow adequate capital to be set aside to cover the ongoing cost associated with the site.

MCC should consider all potential cash flows including land sale where relinquishment can occur and commence negotiation with MSC for any required rezoning. Monies from land sales will help support



the legacy monitoring and rehabilitation maintenance for the potentially medium to long term that this will be necessary.

A review of site documentation should be conducted to ensure it is directing the site towards relinquishment in addition to managing operations to closure.

5.4 WATER

The auditor reviewed two water studies recently completed for MCC:

- Muswellbrook Coal Mine - Groundwater Management Study, July 2015 SLR Consulting Australia Pty Ltd; and
- Muswellbrook Coal Mine – Surface Water Management Study, October 2015 SLR Consulting Australia Pty Ltd.

There were no significant findings for the future of the site though some actions were recommended. The reports identified some issues that were relevant to closure none of which were relevant to the audit.



Figure 6 - Borehole and pump station showing water meter

Water meters (see Figure 6) should be calibrated to ensure compliance with the water licences.

5.5 AIR QUALITY

Spontaneous combustion is a key contributor to the sites air emissions as shown in Figure 7, note that this photo was taken on a cooler morning at approximately 8.00am with very low wind speeds and a



probable inversion trapping the smoke close to the ground. The plume extended some distance off site but was not impacting local residents due to wind direction.



Figure 7 - Spontaneous combustion and air quality

The sites layout at the time of the audit was favourable from a dust emission perspective with most activity within the pit. Areas of softer material (due to spontaneous combustion) created some dust but it was not observed leaving the pit during the site inspection. The dust management plan is well structured and implemented and no requirements were found to be non-compliant. In the audit period, dust complaints constituted approximately 17% of total complaints.

Due to the majority of mining operations being in-pit at the time of the audit (apart from coal to stockpile hauls) the opportunity was presented for large areas outside the pit to be rehabilitated and this had occurred reducing the total amount of exposed area at the site. This has obvious ongoing air quality benefits.

Large amounts of stockpiled coal were increasing the risk of spontaneous combustion out of the pit though these were well managed through inspections and watering or loading out when heating occurs.

Monitoring data collection and retention requires review as there were consistent losses over the audit period with no positive trends. This was not only in air quality data but blast monitoring too.

5.6 NOISE

The sites operations have moved further away from the closest Muswellbrook residences in recent years and there is acoustic protection from landforms between the site and the town. Consequently, noise complaints only constituted 5% of complaints in the audit period.



5.7 IN GENERAL

Site personnel were engaged and aware of environmental risks and act to reduce the sites impact. The auditor was very impressed by this given the sites limited operational future.

Housekeeping needs minor improvement (see Figure 8) to prevent additional costs at closure.



Figure 8 - Oil drums and spills

[The drums and oil spills were located near the oil separator in the workshop area.]

It can be difficult on a small site like this to focus outside the production issues but the site did this well with spontaneous combustion management. This needs to extend further to cover closure issues where site operations staff are best placed to deal with those issues.



6 RECOMMENDATIONS

There are a number of issues noted in *Table 3 – Issues Resulting in Non-Compliance* of this report not addressed below as these have been addressed or are currently being addressed by MCC and do not need to be repeated here. The following recommendations have resulted from:

- Observations made by the auditor;
- Non-compliances that required a recommendation; and
- Those made to improve environmental performance.

Some of these recommendations have not been noted in the document prior to this section as they do not all result from a lack of compliance.

- (1) The site induction had a strong OHS focus and the environmental section is attached on the end. The induction could be strengthened by the inclusion of more environmental content and the addition of a number of environment related quiz questions to ensure the inductee understands the material. There were no environmental questions.
- (2) Refresher training on environmental matters had been minimal through the audit period. Like all other training, environmental training requires updating and reinforcement with the workforce.
- (3) The flora and fauna threatened species booklet should be handed out at the induction.
- (4) With the site approaching closure, the protection of the offset area should be finalized with MSC as a priority.
- (5) The 2015 site management plan review should consider the Completion criteria in the MOP and other closure considerations to ensure that not all of the closure work is left till after the site is closed. It should also carefully review the actual site operation with that noted in the management plan.
- (6) The native vegetation seed mix used at the site should be in accordance with local native vegetation (as identified in the EIS) and not include any species not found locally.
- (7) There was a general lack of procedures to support the management plans. Site personnel were able to provide appropriate responses to questions regarding the environmental aspects of operations but the lack of documentation must be remedied to help ensure compliance across the operation.
- (8) There had been a consistent loss of monitoring data across the audit period with no improving trend. A review of the management of monitoring equipment is required with the objective of improving data collection and retention. Work has commenced on this



issue with the blast monitoring network but a review of real time air quality data capture should also be considered.

- (9) Agricultural monitoring in the form of pasture productivity should be conducted annually to help support relinquishment of the pasture areas.
- (10) AEMR reporting should be carefully compared with the requirements for reporting the in the management plans, MOP, licenses and other approvals to ensure it is complete.
- (11) The biodiversity offset area requires monitoring.
- (12) Seek approval from NoW for works conducted to prevent alluvial inflows into the open cuts.
- (13) Develop and submit annual compliance reports for water licenses.
- (14) Calibrate water flow meters in accordance with the manufacturers recommendations.
- (15) More auditing and compliance reviews are required and should be reported in the AEMR.
- (16) The Visual Amenity and Landscape Management Plan should reflect the actual site conditions and operations. The version reviewed for the audit had poor quality control with lots of typographic errors and unfinished sentences.
- (17) Review groundwater monitoring and the issue of RDH 614 not being monitored. Adjust documentation as appropriate.
- (18) The 2015 review of the Lighting Management Plan should consider the best way to address compliance with Australian *Standard AS 4282 – Control of the Obtrusive Effects of Outdoor Lighting*.
- (19) Remove weeds from topsoil stockpiles.
- (20) Carefully monitor the extent and dominance of golden wreath wattle (*Acacia saligna*) and control if required to reduce relinquishment risk.
- (21) Review equipment onsite and commence removing redundant equipment to reduce the cost post closure. Any equipment not owned by MCC should be prioritised.



APPENDIX A – AUDITOR APPROVAL

From: Eddie Love
Sent: Wednesday, 16 September 2015 1:53 PM
To: Julie Thomas
Subject: RE: Environmental Auditor Approval

Julie – apologies for the delay. Please take this as approval for Peter Horn to be the lead auditor for the upcoming audit.

Kind regards,

Eddie Love
Planning & Building Services Manager

Direct:

Mobile:

Fax:

www.muswellbrook.nsw.gov.au



Please consider the environment before printing this email.

From: Julie Thomas
Sent: Tuesday, 15 September 2015 11:16 AM
To: Eddie Love
Subject: Environmental Auditor Approval

Hi Eddie

I'm following up on the letter I gave you last week requesting approval of our environmental auditor. Can you please give me an update on how this is progressing? We are keen to keep moving with this project.

Regards
Julie

Julie Thomas
Environmental Coordinator
Muswellbrook Coal Company Limited



Muscle Creek Road Muswellbrook NSW 2333
PO Box 123 Muswellbrook NSW 2333

Ph:
Fax:
Mob:
Email:
Web: www.idemitsu.com.au



APPENDIX B – CONSULTATION WITH REGULATORY STAKEHOLDERS



Contact Alison Collaros

Phone

Email

Peter Horn
Environmental Principal
PO Box 122
Clarence Town NSW 2321

Our ref OUT15/30421

Your ref

Dear Mr Horn

Muswellbrook Coal Independent Environmental Audit

Reference is made to your email dated 16 October 2015 requesting comment from DPI Water in relation to the Muswellbrook Coal independent audit. It is noted that the site water licenses will be audited simultaneously with the general site environmental audit.

DPI Water recommends that the following considerations be included in the audit of site water licenses.

- Review Site Water Management Plan. It is noted that DPI Water provided comment to the proponent in September 2015 in relation to the Site Water Management Plan and the Surface Water and Groundwater Monitoring Plan. It is recommended that the site water audit include assessment of whether these plans have been updated in accordance with the advice issued by DPI Water.
- Review metering of water take and assess whether metering complies with license and approval requirements, and any requirements specified in the Site Water Management Plan and the Surface Water and Groundwater Monitoring Plan.
- Review of water monitoring (surface water and groundwater). Assess whether water monitoring is being completed in accordance with the project approval and the Site Water Management Plan and Surface Water and Groundwater Monitoring Plan.
- License/Approval status – ensure all licenses and approvals held under the *Water Act 1912* and *Water Management Act 2000* are current.
- Review licence and approval conditions and ensure compliance, particularly in relation to the following groundwater licenses:
 - 20BL169014 (Mining)
 - 20BL169037 (Dewatering)
 - 20BL169038 (Dewatering)
 - 20BL170473 (Mining)
- Reconcile records of take of water with the relevant Water Access Licenses and Property Accounts to determine if take of water from each water source is within the licensed entitlement for each water source.

If you have further enquiries please do not hesitate to contact Alison Collaros, Senior Water Regulation Officer (Newcastle) on .

Yours sincerely

A handwritten signature in blue ink, appearing to read 'T. Baker', with a long horizontal flourish extending to the right.

Tim Baker

A/ Manager Strategic Stakeholder Liaison

30 October 2015



APPENDIX C – AUDIT PROTOCOL

Reference	Condition	Requirement	Evidence	Audit Finding	Risk		
					Consequence	Likelihood	Risk
DA 205/2002 - Modification to Permit the Continuation of Mining Operations at Muswellbrook Coal Mine for an Additional Five (5) Years.							
1.0 General							
	1	There is an obligation on the Applicant to prevent and minimise harm to the environment throughout the life of the project. This requires that all practicable measures are to be taken to prevent and minimise harm that may result from the construction, operation and where relevant decommissioning of the development	This is addressed at various points through the audit and is a requirement of the <i>Protection of the Environment Operations Act 1997</i> and is not reassessed here.	Noted			
Period of Approval/Project Commencement	1.2 a)	This consent is limited to a period of 17 years from the date of the original consent	Original Consent dated 2003, time limit 2020.	Not Applicable			
	1.2 b)	At least two weeks prior to the commencement of operations the Applicant shall submit for the approval of the Manager Environmental Services a compliance report detailing compliance with all the relevant conditions that apply to the development.	Outside the audit period, compliance with this condition was audited in 2009 and found to be compliant.	Not Applicable			
	1.2 c)	The Applicant shall ensure that employees, contractors and sub-contractors are aware of, and comply with the conditions of this consent relevant to their respective activities.	Inductions and tool box talks, other ongoing training. The induction could be strengthened by the insertion of some quiz questions and answers	Compliant			
	1.2 d)	Date of commencement of operation is to be notified in writing to MSC at least two weeks prior to commencement of operation.	Outside the audit period, compliance with this condition was audited in 2009 and found to be compliant.	Not Applicable			
Update Report on Compliance	1.3	Notwithstanding condition 1.2 of this consent, MSC may require an update report on compliance with all, or any part, of the conditions of this consent. Any such update shall meet the requirements of MSC and be submitted within such period as MSC may agree.	Requested in the audit period	Not Applicable			
Dispute Resolution	1.4	In the event that the applicant or Government agency (other than integrated planning bodies) cannot agree on the specification/ requirements applicable under consent, the matter shall be referred by either party to the MSC. If not resolved Minister for Infrastructure and Planning will be involved and his decision will be final and binding on the parties.	This has not occurred in the audit period.	Not Applicable			
Security Deposits and Bonds	1.5	Security deposits and bonds will be paid as required by DMR under mining lease approval conditions.	Evidence of the lodgement and amount of security deposits provided.	Compliant			
2.0 Mine Management							
Mine Management Plan, Operations and Methods	2.1 a)	No mining undertaken in accordance with this consent shall occur until the Applicant has submitted and had accepted by the DMR, a Mining Operations Plan (MOP) in accordance with current guidelines issued by DMR. The Plan covers Mining Operations for a period of up to twelve years.	MOPs were in place for the audit period, note closure MOP approved in March 2015	Compliant			
	2.1 b)	The MOP shall: i) be prepared in accordance with DMR Guidelines for the Preparation of MOPs (Document 08060002.GUI or its most recent equivalent); ii) demonstrate consistency with the conditions of this consent and any other statutory approvals; iii) demonstrate consistency with the Environmental Management Plans for the project site; iv) provide the basis for implementing Mining Operations, environmental management, and ongoing monitoring; v) include a mine rehabilitation and land use management plan; (vi) identify a schedule of proposed mine development for the period covered by the plan and include: - the area proposed to be impacted by mining activity and resource recovery mining methods and remediation measures; - areas of environmental, heritage or archaeological sensitivity and mechanisms for appropriately minimising impact; - water management; and - proposals to appropriately minimise surface impact	i) complies with this requirement ii) is consistent with the consent and other relevant statutory approvals iii) is consistent with the EMPs and reports on each iv) Complies v) Includes land use planning and rehabilitation planning vi) provides a schedule of proposed mining and rehabilitation activities for the period of the MOP	Compliant			
	2.1 c)	In preparing the MOP, the Applicant shall consult with affected service authorities and make arrangements satisfactory to those authorities for the protection or relocation of those services	No services will be impacted in the current MOP /Audit Period.	Not Applicable			
	2.1 d)	A copy of the MOP, excluding commercial in confidence information, shall be forwarded to MSC within 14 days of acceptance by DMR.	Cover letter to MSC 10-04-15, MOP approved 31-03-15	Compliant			
	2.1 e)	Within two years of development consent the Applicant shall investigate, determine and report, taking account of the potential community benefits, on a final strategy for the future use of the mine site and any general infrastructure components, in consultation with DIPNR, MSC and for approval of DMR.	Closure MOP now approved by DRE	Compliant			
Spontaneous Combustion	2.2	Prior to commencement of operations the Applicant shall prepare a Spontaneous Combustion Management Plan for the Project to the satisfaction of DMR.	Spontaneous Combustion Management plan provided as evidence. Original DRE approval outside the audit period, evidence provided of provision of revised MP to DRE in 2012.	Compliant			

Reference	Condition	Requirement	Evidence	Audit Finding	Risk		
					Consequence	Likelihood	Risk
Limits on Production	2.3	Product coal from the Project shall not exceed 2.0 Mtpa. The Applicant must notify MSC prior to any short term increase in production above these levels.	Saleable coal has not exceeded 2Mtpa in the audit period	Compliant			
Hours of Operation	2.4	Hours of operation at the development shall be as follows: - Open Cut Mining 24 hours, 7 days - Blasting 9 am-5pm Mondays to Fridays	Blasting hours are compliant as confirmed in a review of the blast register	Compliant			
3.0 Land and Site Environmental Management							
Appointment of Environment Officer	3.1 a)	The Applicant shall ensure that a suitably qualified Environmental Officer is available throughout the life of the mine and shall consult with Muswellbrook Shire Council prior to the appointment of the Environmental Officer for the Project. The Environmental Officer shall: i) be responsible for the preparation of the environmental management plan (refer to condition no. 32) ii) be responsible for considering and advising on matters specified in the conditions of this consent and compliance with such matters; iii) be responsible for receiving and responding to complaints in accordance with Condition 10.2; iv) facilitate an environmental induction and training program for all person involved with mining and remedial activities; and v) take reasonable steps to avoid or minimise adverse environmental impacts. The Environmental Officer shall advise the Mine Manager to issue instructions to stop work if a significant adverse impact on the environment is likely to occur.	All of these requirements are met except the approval of EO by MSC. MCC has requested the approval of the EO by MSC but no response had been received at the time of the audit.	Not Compliant Administrative			
	3.1 b)	The Applicant shall notify MSC, DMR, MSB, EPA, NPWS, DIPNR and CCC (refer condition 10.1) of the name and contact details of the Environmental Officer and any changes to that appointment.	Letters to all those listed (with current naming for depts) provided as evidence	Compliant			
Environmental Management Strategies and Plans	3.2 a)	The Applicant shall prepare an Environmental Management Strategy, providing a strategic context for the environmental management plans (refer condition 3.2 (d)). The Environmental Management Strategy shall be prepared following consultation with the NPWS, DIPNR, EPA, DMR and the CCC (refer condition 10.1) and to the satisfaction of MSC. The strategy shall be provided to MSC prior to any work commencing on the site.	EMS provided as evidence	Compliant			
	3.2 b)	The Environmental Management Strategy shall include, but not be limited to: i) statutory and other obligations which the Applicant is required to fulfil during mining, including all approvals and consultations and agreements required from authorities and other stakeholders, and key legislation and policies; ii) definition of the role, responsibility, authority, accountability and reporting of personnel relevant to environmental management, including the Environmental Officer; iii) overall environmental management objectives and performance outcomes, during, mining and decommissioning of the mine, for each of the key environmental elements for which management plans are required under this consent; iv) overall ecological and community objectives for the project, and a strategy for the restoration and management of the areas affected by Mining Operations, including elements such as wetlands and other habitat areas, creek lines and drainage channels, within the context of those objectives; v) identification of cumulative environmental impacts and procedures for dealing with these at each stage of the development; vi) steps to be taken to ensure that all approvals, plans, and procedures are being complied with; vii) processes for conflict resolution in relation to the environmental management of the project; viii) documentation of the results of consultations undertaken in the development of the Environmental Management Strategy.	All present except for viii), no evidence of the documentation of the results of consultation in the EMS as required. Evidence that consultation occurred was provided.	Not Compliant Administrative			
	3.2 c)	The Applicant shall make copies of the Environmental Management Strategy available to EPA, DIPNR, NPWS, DMR, MSB and the CCC prior to commencement of operations.	Cover letters to all of the nominated organisations provided as evidence	Compliant			

Reference	Condition	Requirement	Evidence	Audit Finding	Risk		
					Consequence	Likelihood	Risk
	3.2 d)	The Applicant shall prepare the following environmental management plans, which also form part of the Mining Operations Plan prior to commencement of operations: i) Spontaneous Combustion Management Plan (Condition 2.2) ii) Environmental Management Strategy (Condition 3.2) iii) Archaeology and Cultural Management Plan (Condition 3.3) iv) Flora and Fauna Management Plan (Condition 3.4) v) Erosion and Sediment Control Plan (Condition 3.5) vi) Soil Stripping Management Plan (Condition 3.6) vii) Visual Amenity and Landscaping Management Plan (Condition 3.8) viii) Final Void Management Plan (Condition 3.9) ix) Bushfire Management Plan (Condition 3.10) x) Land Management Plan (condition 3.11) xi) Site Water Management Plan (4.1) xii) Surface and groundwater Monitoring Plan (Condition 4.2) xiii) Waste Management Plan (Condition 5.1) xiv) Dust Management Plan (Condition 6.1.3) xv) Blasting/Vibration Management Plan (Condition 6.3.2) xvi) Noise Management Plan (Condition 6.4.5) xvii) Lighting Emissions Management Plan (Condition 6.5) These environmental management components may also form part of the overall Site Environmental Management Plan and/or Mining Operations Plan.	All of these have been prepared.	Compliant			
	3.2 e)	The Applicant shall make copies of the Environmental Management Strategy components in subclause (d) above available to the relevant government agencies and CCC, and ensure that the plans are made publicly available within 14 days of commencement of operations.	These plans are all provided on the company website. "Commencement of Operations" is outside the audit period. The SWMP when updated in 2013 was not provided to the CCC.	Not Compliant Administrative			
	3.2 f)	The management plans are to be reviewed, and updated every five years or at other times as directed by MSC, in consultation with the relevant government agencies. The review should consider changing environmental requirements or changes in technology/operational practices. Any changes which are made shall be made and approved in the same manner as the initial Environmental Management Strategy. The Management Strategies shall be made publicly available within two weeks of approval by MSC.	Those plans that have not been updated since 2010 are currently undergoing review, several (Blast-Vibration Management Plan, Dust Management Plan and Noise Management Plan) have been submitted to MSC for approval. The SWMP on the website has not been updated, still the 2010 version.	Not Compliant Administrative			
Archaeology and Cultural Heritage Management	3.3						
Assessment and Management	3.3 a)	The applicant shall prepare an Archaeology and Cultural Management plan for the DA area to consider Aboriginal cultural and European heritage issues. The plan shall be prepared in consultation with the relevant Aboriginal community group(s), DMR, NPWS and NSW Heritage, and to the satisfaction of the MSC. The Plan is to be completed prior to commencement of operations. The Plan shall include but not be limited to: i) provision of management strategies for all parts of the DA area not affected by mining or activities associated with this development; ii) management of parts of the project area where known Aboriginal sites are not expected to be directly impacted by mining operations or activities associated with this development; iii) management of parts of the project area where known European heritage sites are not expected to be directly impacted by mining operations or activities associated with this development; iv) induction procedures and guidance to mining personnel about the management of cultural heritage/archaeological values within the mining area, both for known sites and sites that may be encountered during the course of Mining Operations. v) development of a salvage strategy for the sites at which salvage is proposed to be undertaken; vi) general land management issues to protect cultural heritage values	The current plan was completed prior to the audit period. The previous audit found this condition compliant. No new archaeological sites have been encountered in the audit period.	Not Applicable			
	3.3 b)	NPWS - GTA S 90 consent will be issued by NPWS for the Aboriginal artefact find locations MR-1, MR-2, MR-3, MR-4.	This occurred in the previous audit period and this requirement was found to be compliant	Not Applicable			
	3.3 c)	NPWS - GTA Salvage work is to be undertaken in two locations: 1. one of the deposit in the vicinity of sites MR-2 to MR-3; and 2. one in the location of MR-1. The initial investigations are to be confined to test excavations which establish the nature of distribution of objects. Should insitu archaeological evidence be revealed larger retrieval excavations need to be considered.	Found compliant two audits ago.	Not Applicable			
	3.3 d)	The Applicant is to consult regularly, at no greater than twelve month intervals, with the relevant Aboriginal community group(s) as identified by NPWS using consultation principles and strategies consistent with those outlined in the "Guidelines for best practice community consultation in the NSW Mining and extractive industries". The results of these consultations shall be documented in the AEMR.	Letters for the audit period provided as evidence	Compliant			

Reference	Condition	Requirement	Evidence	Audit Finding	Risk		
					Consequence	Likelihood	Risk
	3.3 e)	NPWS - GTA The Aboriginal community is to be provided with the opportunity to collect artefacts from all locations for which a Section 90 consent is to be obtained, excluding those areas set aside for scientific investigation.	Found compliant two audits ago.	Not Applicable			
	3.3 f)	If, during the course of construction of any future surface facilities and mining activities the Applicant becomes aware of any significant heritage or archaeological material not previously identified or covered by the above mentioned Consents to Destroy, all work likely to affect the material shall cease immediately and the relevant authorities consulted about an appropriate course of action prior to recommencement of work. The relevant authorities may include NPWS, the NSW Heritage Office, and the relevant local Aboriginal community. Any necessary permits or consents shall be obtained and compiled with prior to commencement of work.	No additional finds have occurred in the audit period.	Not Applicable			
	3.3 g)	Any proposed works that will affect non-indigenous heritage items will require an approval under section 139 of the Heritage Act 1977 and an application for an excavation permit to disturb the relics. This will require the Applicant to carry out an investigation and report to MSC if the items are listed on the Heritage Schedule of the Local Environmental Plan.	Noted	Not Applicable			
Flora and Fauna Assessment, Management and Monitoring							
	3.4						
Assessment and Management	3.4.1 a)	<p>The Applicant shall prepare and implement a Flora and Fauna Management Plan for the DA area to address and manage the flora and fauna issues associated with the Project.</p> <p>The Plan shall be prepared prior to the commencement of operation. The Plan shall be prepared by an appropriately qualified and/or experienced ecologist to the satisfaction of MSC. The ecologists shall be responsible for providing advice to minimise potential impacts upon threatened and protected fauna species that may utilise the site and to provide expert advice on the regeneration and reconstruction of flora and fauna habitat on mine areas.</p> <p>The Plan is specifically required to outline the following, but not be limited to:</p> <p>1. Measures required prior to vegetation clearance</p> <p>i) details of strategic vegetation management, including procedures for cleaning or disturbing vegetation and other habitat types;</p> <p>ii) timeframes for clearing and re-vegetation activities (including a map illustrating the Plan);</p> <p>iii) details of the schedule for clearing activities incorporating seasonal habitat requirements for species such as bats and other mammals, with the objective of avoiding incidents during sensitive hibernation and breeding periods; and</p> <p>iv) details of pre-clearance inspections, including the identification and inspection of trees containing tree hollows, including stags, prior to clearing of any vegetation.</p> <p>2. Clearing of vegetation</p> <p>i) details of how micro habitats including dead trees, stumps and hollow branches will, where practical be salvaged and relocated to areas lacking in tree hollow habitat and in the recreation of habitat areas;</p> <p>ii) details of the establishment of roost and nesting boxes appropriate for bat and avifauna species and methods for the regular maintenance;</p> <p>iii) details of the methods for strategically placing felled trees between cleared and remnant bushland to provide runways of ground cover for dispersion of animal; and</p> <p>iv) details of the measures to care for any animals injured or found during clearing activities, including the use of WIRES/WARP to attend to fauna as necessary, and the methods for their relocation if appropriate. This shall include measures for harbouring the releasing nocturnal animals at night.</p> <p>3. Reconstruction of indigenous bushland - Post mining Fauna Habitat</p> <p>i) strategies for the establishment of long-term post mining land use objectives over the site;</p> <p>ii) measures to re-instate vegetation communities and to use local indigenous species for revegetation as soon as possible;</p> <p>iii) methods to actively manage existing areas of remnants vegetation through fencing (using animal friendly materials) to exclude grazing animals, where appropriate, and control of feral animals where practical, revegetate where appropriate, and maintain weed and fire controls;</p> <p>iv) details of the strategies for the exclusion of grazing cattle on areas of native bushland reconstruction;</p> <p>v) measures to monitor the success of revegetated areas and plant additional species where necessary.</p> <p>vi) methods of revegetation; and</p> <p>vii) development of a protocol for managing significant impacts on any threatened flora and fauna species not identified in the EIS, during construction or operation of the Project.</p>	<p>The current plan was completed prior to the audit period.</p> <p>The previous audit found this condition compliant.</p>	Not Applicable			
	3.4.1 b)	The Applicant shall establish habitat corridors as part of the final rehabilitated landform to replace areas of forest and woodland vegetation that are to be removed under the proposed mine plan. The design and extent of the habitat corridors shall be generally in accordance with the DMR Synoptic Plan of Integrated Landscapes (1999).	The MOP and Flora and Fauna Management Plan both detail the corridor between Skelatar Ridge and Bells Mountain in broad accordance with the DMR Synoptic Plan (1999). They also detail other minor corridors enhancing landscape connections and riparian corridors.	Compliant			

Reference	Condition	Requirement	Evidence	Audit Finding	Risk		
					Consequence	Likelihood	Risk
Rehabilitation and Remediation	3.4.2	<p>The Applicant shall, to the satisfaction of MSC and in consultation with DIPNR, NPWS and DMR:</p> <ul style="list-style-type: none"> i) ensure that any vegetated areas cleared for any future construction purposes and not utilised in the Mining Operations are restored at least to the condition as agreed to by consultation with relevant stakeholders; ii) develop a program for vegetation rehabilitation involving re-establishment of native species, especially groundcover species, in order to prevent erosion and future degeneration of the communities; and iii) ensure that all rehabilitated slopes are effectively and appropriately stabilised. iv) A minimum of 23ha shall be re-forested utilising the following species that shall be sourced from local seed provinces; Grey-box, Bullock, Narrowed-leaved Iron Bark and Grey Gum or an equivalent area of 23ha comprising of similar flora structural and floristic characteristics in green-offsets to be placed under a conservation order; v) increasing the artificial drainage controls form the 'bridge' between the two open cut pits; vi) The thin apron of topsoil material which is available for removal and use on the northern area of the site must be managed with care to improve the useability of topsoil, and allow available must be beneficiated in order to maximise the rehabilitation on site. The meagre amounts of topsoil available must be beneficiated in order to maximise the rehabilitation quality of the site. <p>The Topsoil Management Plan must explain how topsoil management will be conducted in such a way as to improve the rehabilitation quality of the site; and</p> <ul style="list-style-type: none"> vii) the timeframe of rehabilitation must be clearly explained, both in terms of topsoil remediation and for the lifespan of erosion and sediment control structures on the site. 	<p>The current plan was completed prior to the audit period.</p> <p>The previous audit found this condition compliant.</p>	Not Applicable			
Maintenance	3.4.3 a)	<p>The applicant shall during the life of the mine and until the revegetated areas are established to the satisfaction of DIPNR and DMR, maintain revegetated areas. Maintenance shall include, where necessary, but not be limited to:</p> <ul style="list-style-type: none"> i) replanting failed or unsatisfactory areas; ii) repairing erosion problems; iii) fire management - fire suppression or fire encouragement; iv) pest and weed control; v) maintenance and repair of fencing; vi) fertiliser application; vii) application of lime or gypsum to control pH and improve soil structure; and viii) appropriate and effective stabilisation of all rehabilitated slope. 	<p>The maintenance of the rehabilitated areas is detailed in the MOP, Flora and Fauna Management Plan, Land Management Plan, Erosion and Sediment Control Plan and Site Water Management Plan.</p> <p>Reviewed the inspections of the rehab areas during the site inspection.</p>	Compliant			
	3.4.3 b)	<p>The efforts and progress of the Flora and Fauna Management Plan shall be documented in the Annual Environmental Management Report in accordance with the Department of Mineral Resource's Guidelines to the Mining, Rehabilitation and Environmental Management Process (March 1998) or its latest version.</p>	<p>Documented in 2011-12 and 2012-13 AEMRs in Sections 3.6 and 3.7 and 2013-14 AEMR in Section 9</p>	Compliant			
Monitoring	4.4.4 a)	<p>The restoration works shall be monitored by the environmental officer. The results of the monitoring and the effectiveness of the restoration shall be reported as part of the Annual Environmental Management Report.</p>	<p>Reviewed the inspections of the rehabilitated areas during the site inspection.</p> <p>Summary is included in the AMERs</p>	Compliant			
	3.4.4 b)	<p>The information obtained from the monitoring shall be used to guide future revegetation efforts on the mine site.</p>	<p>Comments on the monitoring in the AEMRs indicate this process is followed.</p>	Compliant			
Erosion and Sediment Control		3.5					
General	3.5 a)	<p>Sedimentation dams must be constructed to contain or treat surface water runoff from all mining areas and areas disturbed by mining including overburden dumps, topsoil stockpiles, unsealed roads and areas cleared of vegetation. Sedimentation dams must be designed:</p> <ul style="list-style-type: none"> i) so that the maximum flow velocity through the dams meets DIPNR guidelines; ii) to prevent short circuiting; iii) if inflow is likely to contain oil or other deleterious floating matter a baffle must be installed at the outlet to prevent discharge of that matter; and iv) so as to avoid impacts on Aboriginal heritage values 	<p>Erosion and Sediment Control Plan confirms this requirement in Sections 4, 5.3, 5.4, 5.6 and the Archaeological and Cultural Heritage Management Plan controls the protection of archaeological / Aboriginal heritage values.</p>	Compliant			
		<ul style="list-style-type: none"> i) Stormwater/sediment control - Construction Phase Soil and water management controls must be employed to minimise soil erosion and the discharge of sediment and other pollutants to lands and/or waters during construction activities in accordance with the requirements outlined in Managing Urban Stormwater: Soils and Construction (Department of Housing). ii) Stormwater/sediment control - Operation Phase Stormwater management measures must be implemented to mitigate the impacts of stormwater runoff from and within the premises following the completion of construction activities in a manner that is consistent with the Stormwater Management Plan for the catchment. Where a Stormwater Management Plan has not yet been prepared the measures should be consistent with the guidance contained in Managing Urban Stormwater. Council Handbook (available from the EPA). 					

Reference	Condition	Requirement	Evidence	Audit Finding	Risk		
					Consequence	Likelihood	Risk
EPA General Terms of Approval	3.5 b)	The Applicant shall prepare and implement an Erosion and Sediment Control Plan for the DA area prior to commencement of construction of any on-site Water Management Dams, in accordance with the requirements of DMR and DIPNR. The Erosion and Sediment Control Plan shall include but not be limited to: i) clear identification of areas required to be disturbed and ensuring that disturbance is limited to those areas; ii) details of temporary and permanent erosion and sediment control systems to be used during the operation, including earthworks associated with landscaping; iii) details of soil salinity management where relevant; iv) measures that will be employed to minimise soil erosion and the discharge of sediment and other pollutants to lands and/or waters during construction. The Plan should be prepared in accordance with the requirements of DMR; v) the consideration of the location and purpose of structures in the erosion and sediment control plan to maximise similarities between pre-development and post-development characteristics; vi) consideration and management of erosion and sedimentation of affected surface watercourses/water bodies, including creek lines within or adjacent to the DA areas; vii) measures to construct banks, channels and similar works to convey clean run-off away from disturbed area and to divert surface and road runoff away from fill batters and drainage lines; viii) procedures to ensure that all diversion banks, channels and points of discharge are constructed or stabilised so as to minimise erosion and scouring; ix) a program for reporting on the effectiveness of the erosion and sediment control systems and performance against objectives contained in the approved Erosion and Sediment Control Plan, and EIS. x) procedures for ensuring that adequate monitoring is maintained for the water quality parameters and the criteria for establishing the release of runoff water.	The construction phase was outside the audit period, compliance with his condition was identified in the 2009 Audit.	Not Applicable			
Soil Stripping Management 3.6							
	3.6	The Applicant shall prepare and implement a Soil Stripping Management Plan to the requirements of DMR that shall include, but not be limited to: a) demonstration of consistency with the commitments made in documents listed in condition 1.1 and compliance with the conditions of this consent; b) details of the management of soil stockpiles, soil stripping techniques and scheduling; and c) a program for reporting on the effectiveness of the soils stripping methods and performance against objectives contained in the Soil Stripping Management Plan, and EIS. The Soil Stripping Management Plan shall be submitted for approval of DMR and DIPNR, no later than one month prior to the commencement of operation of the development, as appropriate, or within such period as otherwise agreed by the DMR. Operations shall not commence until written approval has been received from DMR that the Mining Operations Plan (MOP) has been determined. Upon receipt of approval, the Applicant shall supply a copy of the Soils Stripping's Management Plan to MSC, within 14 days. The applicant shall make the Soil Stripping Management Plan available for public inspection on request.	The Soil Stripping Management Plan was not developed or revised in the audit period, the version currently in use was found to be compliant during the last audit in 2012.	Not Applicable			
Site Rehabilitation Management 3.7							
	3.7	The Applicant shall carry out rehabilitation of all mine areas in accordance with the requirements of any Mining Lease granted by the Minister for Mineral Resources and ensure that progressive rehabilitation of the area is also to the satisfaction of DIPNR. The rehabilitation shall also have regard to the Synoptic Plan - Integrated Landscapes for Minesite Rehabilitation (1999), for the Upper Hunter, or its latest version.	Mining Lease compliance is assessed elsewhere in this audit, rehabilitation in accordance with the mining lease conditions was found to be compliant.	Compliant			
Visual Amenity and Landscaping 3.8							
	3.8	The applicant shall address visual amenity and landscaping issues for the DA area to address all visual and landscaping associated with throughout the Project life when undertaking landscaping works. This shall include but not be limited to, the following: i) an on site landscaping strategy detailing design and proposed planting of trees and shrubs and landscaping of areas around surface facilities, and at any other areas identified as necessary by MSC for the maintenance of satisfactory visual amenity, and as agreed by MSC; ii) appropriate erosion control and sediment control practices for earthworks associated with the landscaping; iii) details of visual appearance of any buildings, structures, facilities or works (including paint colours and specifications) that are proposed to be constructed or relocated/renovated. Buildings and structures shall be designed and constructed /renovated so as to present a neat and orderly appearance, to blend as far as practicable with the surrounding landscape and to minimise visual impact; v) details, specifications and staged work programs to be undertaken, maintenance of all landscape works and maintenance of building materials and cladding; and v) use of indigenous species for rehabilitation.	The Visual Amenity and Landscape Management Plan was not developed or revised in the audit period, the version currently in use was found to be compliant during the last audit in 2012.	Not Applicable			

Reference	Condition	Requirement	Evidence	Audit Finding	Risk		
					Consequence	Likelihood	Risk
Final Void Management 3.9							
	3.9	<p>Within two years of consent the Applicant shall prepare a Final Void Management Plan to the satisfaction of MSC, in consultation with MSC, DMR and DIPNR. The Plan shall be reviewed at least twelve months prior to the completion of mining operations, or as otherwise agreed by MSC. This shall include, but not be limited to, the following:</p> <ul style="list-style-type: none"> i) an investigation of options for future use of the final voids; ii) a re-examination and validation of groundwater modelling of the potential effects on the local and regional groundwater; iii) details of a strategy for the long term management of the final voids; iv) implement strategies to minimise any adverse impacts where the assessment indicates the potential for degradation to surrounding water resources; and v) programs for catchment management, including the types of fertilisers used in the rehabilitation programs to ensure that there is little residual risk of nutrient enrichment of final void water. 	The Final Void Management Plan was not developed or revised in the audit period, the version currently in use was found to be compliant during the last audit in 2012.	Not Applicable			
Bushfire and other Fire Controls 3.10							
	3.10	<p>The applicant shall:</p> <ul style="list-style-type: none"> i) make available to the Rural Fire Services and emergency services when required, personnel, water carts and trucks in cases of bushfire incidents on the mine site; and ii) prior to commencement of operations prepare a Bushfire Management Plan for the DA area to the satisfaction of MSC and the Rural Fire Services. 	<p>The AEMRs refer to cooperation with the RFS and report on the Bushfire Management Plan, there were no bushfires reported in the audit period.</p> <p>The Bushfire Management Plan was not developed or revised in the audit period, the version currently in use was found to be compliant during the last audit in 2012.</p>	Not Applicable			
Land Management 3.11							
	3.11	<p>The Applicant shall prior to commencement of operations prepare a Land Management Plan for the DA area to provide for proper land management in consultation with DIPNR and DMR, and to the satisfaction of MSC. The plan shall include, but not be limited to:</p> <ul style="list-style-type: none"> i) management proposals for pastures and remnant vegetation; ii) clear illustration of the design of rehabilitated landforms and the final landform; iii) prevention and rehabilitation of land degradation; iv) mechanisms to ensure that the diminution of higher and capability classes on the site does not occur, including specific strategies for the rehabilitation of the areas of cropping land of capability classes of I-IV. Details must be provided to explain how land capability classes are to be maintained, and how integration of woodland/forest cover with pastureland is to be provided for fauna corridors and linkages to densely forested areas, microclimate and agricultural land use. v) progressive reshaping of slopes to less than 10 degrees, unless otherwise indicated in an accepted Mining Operations Plan for the DA area; vi) progressive rehabilitation of disturbed areas; vii) feral animal control; viii) proposals for weed and vermin control, including development and implementation of an eradication plan; regular inspections to identify areas of weed infestation ix) maintenance procedures to ensure that all suitable topsoil is recovered during Mining Operations and properly managed to maintain its quality prior to respreading over areas of rehabilitation. x) consideration of any adverse characteristics in the overburden material on the land rehabilitation program; xi) a quantification of the requirements for topsoiling of all rehabilitated lands and a calculation of any deficit in the available topsoil. xii) Assessment of the potential for recycling of standing timber removed from the site; and xiii) A strategy for sustainable land management and enhancement of agricultural values and production across the entire site, taking into account biodiversity and Aboriginal heritage values as appropriate. 	The Land Management Plan was not developed or revised in the audit period, the version currently in use was found to be compliant during the last audit in 2012.	Not Applicable			

Reference	Condition	Requirement	Evidence	Audit Finding	Risk		
					Consequence	Likelihood	Risk
4.0 Water Management							
Surface and Groundwater Management	4.1 a)	<p>The applicant shall prepare and implement a Site Water Management Plan for the DA area prior to the commencement of operations, in consultation with DIPNR, MSC and DMR, and to the satisfaction of MSC and DIPNR. The Plan shall include, but not be limited to the following matters:</p> <p>i) a review of the issues that need to be managed in relation to identified impacts that the Project may have on any aquifer, groundwater dependant ecosystems and any water resources in the DA area;</p> <p>ii) management of the quality and quantity of surface and groundwater within the areas covered by the water management strategy;</p> <p>iii) development of a Stormwater Management Scheme to mitigate the impacts of storm water runoff from and within the premises. This must include management of stormwater and general surface run-off diversion to ensure separate effective management of clean and dirty water, a consideration of the separation of heavily contaminated waters including those containing oil, grease or other pollutants, and the containment of sediment laden run-off from around the surface facilities;</p> <p>iv) an outline of measures for the installation and maintenance of erosion and sedimentation control structures to ensure water quality is unaffected;</p> <p>v) outline of a methodology and rationale demonstrating how mining operations do/will not cause the quality of the groundwater to deteriorate below unacceptable water quality limits in the medium to long term.</p> <p>Acceptable water quality limits for these purposes means:</p> <p>* that the beneficial value of groundwater remains unchanged, and</p> <p>* that water quality changes attributable to mining activity will not lead to an irreversible or significant impact on the environment.</p> <p>vi) measures to ensure that poorer quality class waters are effectively reused on the site, where practicable, including consideration of segregation of waters based on salinity classes and other levels of contamination;</p> <p>vii) details of design and maintenance of all storages, diversion bank, transmission channels and sedimentation basins for the site, to minimise sedimentation of watercourses. Particular reference must be given to the clean water diversion around the active mining area, and the areas to which such water will be diverted;</p> <p>viii) contingency plans for managing adverse impacts of the development on surface and groundwater quality;</p> <p>ix) details of a strategy for the decommissioning of water management structures;</p> <p>x) details of any licensing requirements for any extractions, storages, or other constructions on the site;</p> <p>xi) projection of potential groundwater changes during mining (short term) and post-mining (long term) with particular attention given to the effect of changes to groundwater quality and mobilisation of salts;</p> <p>xii) an assessment of water make and usage, particularly to facilitate planning for new water storages as required; and</p> <p>xiii) a program for reporting on the effectiveness of the water management systems and performance against objectives contained in the approved site water management plans and EIS.</p>	<p>The Site Water Management Plan was revised in 2013 (within the audit period). Evidence of consultation and approval by MSC?</p> <p>i) Section 5 ii) Section 6 iii) Section 6.1 iv) Sections 5.2 and 6.3 v) Sections 5.3, 5.4, 7.2 and 7.4 vi) Section 6.3 vii) Sections 5.2.1, 6.3.1 and the Erosion and Sediment MP Sections 9 and 5.6 viii) Sections 5.4.3, 5.4.4, 5.4.5, 5.4.6, and 7.4 ix) Section 7.5 x) Section 2 xi) Sections 4.2, 4.3, 4.4, 5.3 and 5.4.3 xii) Section 6.2 xiii) Section 9</p>	Compliant			
	4.1 b)	<p>The applicant shall ensure, to the satisfaction of DIPNR, that the works associated with the proposal shall not damage or interfere in any way with:</p> <p>i) vegetation on protected land outside the area of the works;</p> <p>ii) the stability of adjacent or nearby watercourse bank or bed; and</p> <p>iii) the quality of water in the watercourse.</p>	<p>DIPNR approval occurred outside the audit period. Vegetation Protection is covered in the Flora and Fauna MP, stream stability in Erosion and Sediment MP and Site Water MP.</p>	Compliant			
	4.1 c)	The Applicant shall be responsible for the stabilisation and progressive rehabilitation of the works and all areas affected by those works, to the satisfaction of DIPNR.	Noted				
	4.1 d)	The applicant shall be responsible for any excavation or removal of material undertaken by any person or company within the DA Area with respect to any activities associated with this DA and/or consent	Noted				
	4.1 e)	The Applicant shall ensure that any displaced materials are stabilised or relocated and made secure so that these materials will not detrimentally affect any watercourse or riparian area.	Noted, covered in MPs				
	4.1 f)	If in the opinion of an authorised DIPNR officer any work is being carried out in such a manner as it may damage or detrimentally affect any watercourse or riparian area, the works considered to be causing or contributing to the problem shall cease upon the oral or written direction of the officer.	Noted, no such notifications in the audit period				
	4.1 g)	Discharge of saline mine water is authorised at 1 mega litre per day during flood flows in accordance with the Hunter River Salinity Trading Scheme and Section 4.5.1 of the EIS.	No discharges in the audit period.	Not Applicable			
	4.1 h)	Provision of fencing, The applicant is required to provide fencing where possible to:					
		i) Manage stock access to the watercourse(s) to minimise bank erosion; and	Covered in Land MP	Compliant			
		ii) Establish/maintain riparian (riverine) corridor vegetation to reduce soil erosion and to encourage habitat regrowth and integrity.					
DIPNR Agreed Terms of Approval							
	4.2 a)	Any work to which these general terms of approval relate is not to be commenced until a formal licence has been issued by the Department as required under Section 112 of the <i>Water Act 1912</i> .	Licences are in place and have been for the audit period.	Compliant			
	4.2 b)	The licence holder shall allow the Department or any person authorised by it, full and free access to the works either during or after construction, for the purpose of carrying out any inspection or test of the works for protection of the quality and prevention from pollution or contamination of sub surface water. Any inspections of the site by the DIPNR will be carried out in consultation with the mine operator.	Construction Phase Completed, outside of audit period. There has been no request to access the site from NoW in the audit period	Not Applicable			

Reference	Condition	Requirement	Evidence	Audit Finding	Risk		
					Consequence	Likelihood	Risk
	4.2 c)	An application must be lodged for a licence to sink a bore under Part 5 of the Act, in accordance with the Water (Part 5) General Regulation, 1995, including details of: i) The number of proposed excavations and bores; ii) The type of bore/excavation sought to be constructed (for water supply and monitoring bores); iii) The size of proposed bore; iv) The materials proposed to be used for the construction; and v) The location and type of screens, if any, proposed to be installed as part of the works.	No GW wells installed in the audit period, no additional extraction requiring additional licenses in the audit period	Not Applicable			
	4.2 d)	As part of the overall Environmental Management Plan (EMP) for the proposal, the applicant shall develop a Groundwater Management Plan (GMP), based on DIPNR requirements, which details the monitoring, contingency and remediation measures, and release criteria. The Groundwater Management Plan component of the EMP is to be endorsed by DIPNR prior to commencement of mining operations.	Included in the Site Water MP	Compliant			
	4.2 e)	Any bore driller engaged to construct any work must be licensed pursuant to section 118A of the Water Act 1912;	No GW wells installed in the audit period, no additional extraction requiring additional licenses in the audit period	Not Applicable			
	4.2 f)	Any water extracted from the works shall not be discharged into any watercourse or source of groundwater unless it meets the requirements of POEO Act 1997 or Hunter River Salinity Trading Scheme;	No GW wells installed in the audit period, no additional extraction requiring additional licenses in the audit period	Not Applicable			
	4.2 g)	Works used for the purpose of conveying, distributing or storing water from the work authorised by the licence shall not be constructed or installed so as to obstruct the free passage of floodwaters flowing in, to or from a river or lake;	No Rivers or lakes associated with site water management.	Not Applicable			
	4.2 h)	The Applicant shall install to the satisfaction of the department in respect of location, type and construction an appliance (s) to measure the quantity of water extracted from the works. The appliance (s) to consist of either a measuring weir or weirs with automatic recorder, or meter or mean of measurement as may be approved by the department. The appliance(s) is to be maintained in good working order and condition. Detailed records of all water extracted from the works shall be kept and supplied to the department upon request. The applicant when requested must provide a test certificate as to the accuracy of the appliance(s) furnished either by the manufacturer or by some person or authority duly qualified;	The Site Water MP indicates that meters have been installed at the following locations: • Pipeline from No. 2 Open Cut to Dam No. 1; • Pipeline from Borehole Pump 1 and Borehole Pump 2 (No. 2 Underground) to Dam No. 2; • Pipeline that supplies water for dust suppression; and • Pipeline from Final Settling Pond to No.1 Open Cut Void. Each flow meter shall be read and recorded at least on a monthly basis. Calibration Certificates were not able to be provided.	Not Compliant	E	3	Low
	4.2 i)	All operations shall be conducted to minimise potential impacts on groundwater flow and quality of the groundwater resource and to minimise off-site effects;	Noted				
	4.2 j)	The applicant shall implement all practicable measures to prevent or minimise any harm to the environment that may result from the operation and where relevant, the related processes;	Noted				
	4.2 k)	The applicant shall submit the Groundwater Management Plan to DIPNR on an annual basis in relation to the operations.	Submission of the AEMR including the Site Water Balance. Which includes extraction compared with license limits.	Compliant			
	4.2 l)	The applicant must give DIPNR prompt written notification of the permanent cessation of its operations by which groundwater is abstracted directly or indirectly from the area. Upon such notification being received by DIPNR: a) The applicant must provide evidence that all areas affected by dewatering (and any associated activity) have been rehabilitated/restored to pre-mining or otherwise agreed condition; b) The Applicant may be required to undertake further rehabilitation work, based on the findings of any investigation into the performance of the applicants cessation obligations, or as required by DIPNR;	This has not occurred in the audit period.	Not Applicable			
	4.2 m)	A copy of the licence, once issued to the Applicant, must be kept at the premises to which the licence applies.	Copies of licenses provided as evidence.	Compliant			
	4.2 n)	The licence must be produced to any authorised officer of the DIPNR who asks to see it.	This has not occurred in the audit period.	Not Applicable			
	4.2 o)	The licence must be available for inspection by any employee or agent of the Applicant working at the premises;	Licenses are available for inspection at site.	Compliant			
	4.2 p)	The applicant by reason of this Permit, is not relieved of the obligation to obtain or comply with other authorities or permission that may apply to the Extraction Operations. The Applicant must obtain and observe all statutory provisions and lawful orders made by any other government authority of competent jurisdiction in relation to the Extraction Operations that are in force from time to time.	Noted				
Surface and Groundwater Monitoring							
	4.3						
	4.3 a)	The applicant shall prepare and implement a Surface and Groundwater Monitoring Plan for the DA area prior to the commencement of operations, in consultation with DIPNR and MSC. The monitoring program shall satisfy the requirements of DIPNR and shall be reviewed after five years of mining operations to ensure its adequacy. This monitoring program shall include, but not limited to the following matters: * the establishment of a groundwater monitoring program to establish background water quality and assess short and long term environmental impact associated with the Mining Operations and other associated groundwater works. * prepare a detailed monitoring program in respect of surface water quality and quantity, including water in and around the DA area during mining works and post mine operations. The program shall be developed in consultation with DIPNR, and to the satisfaction of the MSC and DIPNR.	This is detailed in the Site Water MP, the 5 year review occurred prior to the audit period.	Compliant			

Reference	Condition	Requirement	Evidence	Audit Finding	Risk		
					Consequence	Likelihood	Risk
	4.3 b)	The Monitoring Program shall have the capacity to collect sufficient data to adequately assess: (i) the impact of any licensed groundwater extraction on groundwater levels on neighbouring properties and in the locality, and to identify any water quality impact; (ii) cumulative impacts of mining on the local and regional groundwater regime, including the contribution from the Project. (iii) monitor changes in surface water quality which may result from the impact of the mining operations on groundwater's, and describe any remedial action which may be required to minimise these changes. (iv) DIPNR - GTA All monitoring data shall be submitted to the department in a report and in digital format acceptable to DIPNR, which includes data, interpretation of results, and a discussion of monitoring results compared to groundwater and salinity impact and predictions stated in the EIS. After reviewing the annual report, DIPNR may require the Applicant to take particular measures or perform particular work within a specified time frame.	The Monitoring conducted appears to reflect DPNRs quoted requirements. No request from NoW in the audit period to "take particular measures or perform particular work within a specified time frame".	Compliant			
	4.3 c)	i) The Applicant shall incorporate into the Site Water Management Plan details of the monitoring program for both surface water and groundwater. The Site Water Management Plan shall include: * the duration of the monitoring program (pre, during and post mining); * sites to be sampled; * frequency of sampling; * the parameters to be measured; * the depth of bore construction (if required); * the need for any contingency plans; * the analysis of data and the reporting procedure, including a mechanisms to transfer monitoring data from the mine to DIPNR data base and to produce annual reports with interpreted results; and * determination of appropriate criteria for monitoring purposes determined in consultation with DIPNR. The results of the monitoring program shall be reported in the AEMR. The post-mining monitoring program shall be prepared no later than one year prior to the cessation of Mining Operations. ii) The Applicant shall report on the monitoring results and raw data in the AEMR on the following matters: * a basic statistical analysis (mean, range, variance, standard deviation) of the results for the parameters measured in individual bores/wells and as a subset of the aquifer; * an interpretation of the water quality results and changes in time for water quality and water levels (supported with graphs, contour plots showing changes in aquifer pressure levels); * an interpretation and review of the results in relation to cut-off criteria and predictions made in the EIS; and * an interpretation of the water balance identifying the volume and make up of mine pit inflows as compared to Part V licence (required under part V of the Water Act 1912), and predictions made in the EIS on previous AEMR.	Duration of monitoring not addressed. No mechanisms identified to transfer data to the DIPNR database.	Not Compliant Administrative			
Wastewater Management 4.4							
Wastewater Management	4.4	Contaminated water and wastewater shall continue to be treated as per existing treatment process outlined in section 4.6.3 of the EIS.	This issue is reviewed in more detail elsewhere in the audit.	Compliant			
5.0 Waste							
	5.1 a)	The Applicant shall construct and manage the overburden emplacements to the approval of the DMR.	MOP and annual AEMR inspections	Compliant			
	5.1 b)	The Applicant shall undertake measures, as far as practical, to prevent spontaneous combustion from occurring on the site, in accordance with the Spontaneous Combustion Management Plan required under Condition 2.2.	Reviewed in site inspection, measures to control spon com were extensive and it is apparent that the issue is a key focus for the mine.	Compliant			
	5.1 c)	The Applicant must not cause, permit or allow any waste generated outside the premises to be received at the premises for storage, treatment, processing, reprocessing or disposal of any waste generated at the premises to be disposed of at the premises, except as expressly permitted by a licence under the Protection of the Environment Operations Act 1997. This condition only applies to the storage, treatment, processing, reprocessing or disposal of waste at the premises if those activities require an environment protection licence under the Protection of the Environment Operations Act 1997.	No waste comes to site. Verified at interview and by site observation.	Compliant			
	5.1 d)	(i) The Applicant shall reuse, recycle or dispose of all waste (including but not limited to solid waste, liquid waste and putrescible matter) from the site to the satisfaction of MSC or EPA, as relevant. (ii) The Applicant shall dispose of all solid waste and putrescible matter from the sites to the satisfaction of MSC or EPA, as relevant. (iii) The Applicant shall dispose of all treated sewage to the satisfaction of MSC and in accordance with the EPA Licence.	Reviewed waste management, segregation is adequate, sewage is disposed of by licensed contractor, solid waste and trackable waste also by a licensed contractor.	Compliant			

Reference	Condition	Requirement	Evidence	Audit Finding	Risk		
					Consequence	Likelihood	Risk
	5.1 e)	<p>Prior to the commencement of operations the Applicant shall prepare a Waste Management Plan for the DA area to the satisfaction of the MSC. The Plan shall include but not be limited to:</p> <p>(i) details of measures to facilitate waste management on site;</p> <p>(ii) details of compliance with the Applicant's obligations under the Protection of the Environment Operations Act (1997);</p> <p>(iii) identification of all types and quantities of waste materials produced at the mine site during construction, commissioning and operation of the Project;</p> <p>(iv) programs aimed at minimising production of waste at the mine site through the implementation of operational and management measures;</p> <p>(v) details of the potential reuse and recycling avenues for waste materials produced at the mine site, including collection and handling procedure;</p> <p>(vi) details of appropriate disposal routes in the event that reuse and recycling avenues are not available or are not practicable; and</p> <p>(vii) programs for involving and encouraging employees and contractors to minimise waste production at the mine site and reuse / recycling where appropriate.</p>	The Waste Management Plan was revised out of the audit period.	Not Applicable			
6.0 Air Quality, Blast, Noise and Lighting Management and Monitoring							
Air Quality Management and Monitoring	6.1						
Air Quality Standards / Goals	6.1.1	<p>The Applicant shall manage the Project so as to satisfy the relevant EPA air quality criteria for dust deposition and dust concentration in accordance with condition 6.1.3.</p> <p>The air quality criteria are:</p> <ul style="list-style-type: none"> • TSP- Annual mean; 90 µg/m³, NH& MRC • PM10 - Annual mean; 30 µg/m³, NSW EPA • PM10- Short term average; 50 µg/m³, NSW EPA • Deposited Dust-Max. increase in levels; 2 g/m²/month. Max total levels; 4 g/m²/month 	Review of the EPL Annual Returns and scrutiny of the monitoring data show that the site was compliant with this requirement for the audit period.	Compliant			
EPA General Terms of Approval	6.1.2 a)	<p>For each monitoring point specified below the applicant must monitor (by sampling and obtaining results by analysis) the concentration of each pollutant specified.</p> <p>The applicant must use the sampling method, unit of measure and sample at the frequency shown:</p> <ul style="list-style-type: none"> • TSP- µg/m³, continuous, AS 3580.9.8-2001 • PM10 - µg/m³, every 6 days, 24 hour composite sample • Deposited Dust- g/m²/month, continuous, AM-19 	Some samples were not collected due to equipment downtime.	Not Compliant	E	1	Medium
	6.1.2 b)	<p>The licensee must monitor (by sampling and obtaining results by analysis) each weather parameter specified using the sampling method, unit of measure and frequency given:</p> <ul style="list-style-type: none"> • Wind speed; m/s, continuous, instrumental • Wind direction; continuous, instrumental • Inversion: °C, continuous, instrumental 	Reviewed weather results and AEMRs, ARs - found compliant	Compliant			
	6.1.2 c)	<p>The Applicant must submit to the EPA, with an application to vary licence 656, a draft program for monitoring of dust deposition and long term PM10. The objective of the program is to:</p> <ol style="list-style-type: none"> 1. Gather information to form the basis of real time reactive management strategies; and 2. To monitor whether ambient PM10 levels (at sites predicted to be impacted by the expansion) are within predicted levels and/or 50 µg/m³. <p>The program must continuously monitor PM10 levels such that a representative picture of PM10 levels at all monitoring points can be established. The draft program must identify sufficient monitoring sites to represent the wider area around the mine and account for possible weather effects (eg seasonal wind direction) and operational effects. Based on information presented in the draft program the EPA will attach licence conditions detailing required monitoring.</p> <p>The following points referred to below are identified for the purposes of monitoring and/or the setting of limits for the emission of pollutants from the point.</p> <ul style="list-style-type: none"> • Deposited matter, TSP, PM10- All points to be determined when a licence variation application is submitted to the EPA. 	Outside the audit period, compliance with this condition was audited in 2009 and found to be compliant.	Not Applicable			

Reference	Condition	Requirement	Evidence	Audit Finding	Risk		
					Consequence	Likelihood	Risk
Dust Management	6.1.3	<p>The Applicant shall, prior to the commencement of operations, prepare and implement a Dust Management Plan for the DA area to deal with and manage the dust impacts generated by, or associated with, the Project. This Plan shall detail air quality safeguards and procedures for dealing with dust emissions from the construction and operation of the Project to the satisfaction of MSC and EPA and updated as directed.</p> <p>The Plan shall be prepared in consultation with and be updated as required by MSC. This shall include, but not be limited to, details of:</p> <ul style="list-style-type: none"> (i) the identification of properties which will be affected by dust generated by the mine in accordance with the criteria detailed in condition 6.1.1; (ii) specifications of the procedures for the dust monitoring program for the purpose of undertaking independent dust investigations; (iii) outline the procedure to notify property owners and occupiers as identified by monitoring as likely to be affected by dust generated by the mine in excess of criteria detailed in condition 6.1.1; (iv) mitigation measures to be employed to minimise dust emissions during the operation phase. This should include proactive/predictive and reactive mitigation measures to be employed; <p>(v) The Applicant shall ensure the prompt and effective rehabilitation of all disturbed areas of the DA area following the completion of mining an associated activities in that area to minimise the generation of windblown dust.</p> <p>(vi) the use of the existing protocol for handling dust complaints that include recording, reporting and acting on complaints;</p> <p>(vii) outline of response and/or management measures to be undertaken in the event of complaints from a landowner where dust levels are demonstrated, in accordance with Condition 6.1.4, to be below the dust criteria in condition 6.1.1;</p> <ul style="list-style-type: none"> (viii) appropriate mechanisms for community consultation; (ix) equipment to be available and used to control dust generation; (x) methods to determine when and how the mine operation is to be modified to minimise the potential for dust emissions, particularly from surface activities; (xi) details of locations and frequency of existing dust monitoring and deposition gauges at the residential areas as agreed by the EPA, as part of a licence variation; (xii) measures to manage and mitigate short term episodic events including investigations into the relationships between short-term variations in dust levels (particularly TSP and dust deposition) and levels of complaints and annoyance, with a view to reviewing the monitoring approaches; and <p>(xiii) as far as practicable details of the interrelationships of this plan with the dust management plans with other mining operations in the vicinity.</p> <p>(xiv) mobile tankers equipped with a pump and sprays must be provided to suppress dust from unsealed roads when in use.</p> <p>(xv) the measures currently employed at MCC for the reduction of windblown dust as outlined in Section 7.8 of the EIS.</p>	<p>The Dust Management Plan includes all these details.</p> <p>The plan was originally approved outside the audit period, has been revised recently, evidence of submission for approval to MSC provided to the auditor.</p>	Compliant			
Air Quality and Dust Monitoring	6.1.4 a)	<p>The Applicant shall:</p> <ul style="list-style-type: none"> (i) monitor dust deposition and the concentration of total suspended particulate matter and of PM₁₀ particulate matter in accordance with a Dust Monitoring Plan submitted to the EPA. The Environment Protection Licence will include conditions specifying the location, frequencies and methods used to monitor air emissions; (ii) monitor and report against the NSW EPA goals of 50µg/m³ (24-hour average) and 30µg/m³ (annual mean). The results of this monitoring and reporting are to be incorporated into the AEMR; (iii) establish in consultation with the EPA, dust deposition and TSP monitoring sites as approved by the EPA. The sampling method, units of measure, interval and frequency of monitoring will be as set out in the Approved Methods for sampling and analysis of Air Pollutants in NSW; (iv) include sites for monitoring impacts of dust at the nearest non-mine owned residences and locations as may be determined to be necessary by MSC and in accordance with the Dust Management Plan referred to in Condition 6.1.3; (v) provide reporting once every 12 months on the performance of the control measures and of the monitoring system detailed in the EIS and conditions of this consent, unless otherwise agreed by MSC. The reports shall be included in the AEMR and provided to MSC within fourteen days of completion of the report; and (vi) provide all results and analysis of air quality monitoring in the AEMR including a determination of the dust deposition rate in g/m²/month, which shall be plotted in the AEMR. 	<p>All of these requirements are met in AEMR and the EPL/AR</p>	Compliant			

Reference	Condition	Requirement	Evidence	Audit Finding	Risk		
					Consequence	Likelihood	Risk
	6.1.4 b)	In the event that a landowner or occupier considers that dust from the Project at his/her dwelling is in excess of the criteria detailed in condition 6.1.1, and MSC is satisfied that an investigation is required, the Applicant shall upon the receipt of a written request from MSC: (i) consult with the landowner or occupant affected to determine his/her concerns; (ii) modify the mining activity or take other steps in accordance with the Dust Management Plan if exceedances are demonstrated by the independent investigations to result in part from the Project related activity. This may include: 1. introduction of additional controls, either of dust generation from individual sources on the site or on site operations, or modify operations to attempt to ensure that the dust criteria are achieved; and/or 2. negotiate, as far as reasonably practicable, an agreement with the landowner or provide such forms of benefit or amelioration of the impact of dust as may be agreed between the parties as providing acceptable compensation for the dust levels experienced. (iii) conduct follow up investigation(s) to the satisfaction of the MSC, where necessary. Note: Vacant land in this condition means the whole of the lot in a current plan registered at the Land Titles Office as at the date of this consent that does not have a dwelling situated on the lot and is permitted to have a dwelling on that lot.	No requests to acquire in the audit period	Not Applicable			
	6.1.4 c)	If the independent dust investigations in sub-clause (b) above confirm that dust levels from the Project alone are in excess of the relevant criteria detailed in condition 6.1.1, and if the measures in sub-clause (b)(ii)(1) above do not reduce the dust levels, from the Project alone, below the criteria in condition 6.1.1, or if agreement in accordance with sub-clause (b)(ii)(2) above cannot be reached, the Applicant shall at the written request of the owner acquire the relevant property. Acquisition shall be in accordance with the procedures set out in Condition 11.1.	No requests to acquire in the audit period	Not Applicable			
	6.1.4 d)	Further independent investigation(s) shall cease if MSC is satisfied that the relevant criteria in Table 1, Table 2 and Table 3 in condition 6.1.1 are not being exceeded and are unlikely to be exceeded in the future.	No requests to acquire in the audit period	Not Applicable			
	6.1.4 e)	Monitoring for the concentration of a pollutant emitted to the air required to be conducted by a licence under the <i>Protection of the Environment Operations Act 1997</i> , in relation to the development or in order to comply with a relevant local calculation protocol must be done in accordance with: * any methodology which is required by or under the <i>Protection of the Environment Operations Act 1997</i> to be used for the testing of the concentration of the pollutant; * if no such requirement is imposed by or under the <i>Protection of the Environment Operations Act 1997</i> , any methodology which the condition of the licence or the protocol (as the case may be) requires to be used for that testing; or * if no such requirement is imposed by or under the <i>Protection of the Environment Operations Act 1997</i> or by a condition of the licence or the protocol (as the case may be), any methodology approved in writing by the EPA for the purposes of that testing prior to the testing taking place.	The monitoring reports quote the EPS sampling guidelines as the compliance standard	Compliant			
Dust Suppression and Control 6.2							
	6.2 a)	The Applicant shall ensure the prompt and effective rehabilitation of all disturbed areas of the DA area following the completion of mining and associated activities in that area to minimise the generation of windblown dust.	Disturb only the minimum require for mining. Done in accordance with the MOP. <u>Rehabilitation is conducted as soon as possible following mining.</u>	Compliant			
	6.2 b)	Activities occurring at the premises must be carried out in a manner that will minimise emissions of dust from the premises.	Reviewed during site inspections on the 19th and 20th October.	Compliant			
Blast Management and Monitoring 6.3							
Blasting Criteria and Limits 6.3.1							
Time of Blasting	6.3.1 a)	Blasting operations on the premises may only take place between 9.00am and 5.00pm Monday to Friday inclusive, unless permission is granted by MSC where special circumstances related to the safety of the mine requires a blast to be initiated outside these hours.	All blasts were within the proscribed times and days	Compliant			
Overpressure	6.3.1 b)	The overpressure level from blasting operations on the premises must not: (i) Exceed 115dB (Linear Peak) for more than 5% of the total number of blasts over a period of 12 months; and (ii) Exceed 120dB (Linear Peak) at any time, when measured at any residence or noise sensitive location (such as a school or hospital) that is not owned by the licensee or subject of a private agreement between the owner of the residence or noise sensitive location and the licensee as to an alternative overpressure level.	No blasts exceeded either vibration or overpressure criteria.	Compliant			

Reference	Condition	Requirement	Evidence	Audit Finding	Risk		
					Consequence	Likelihood	Risk
Ground Vibration	6.3.1 c)	Ground vibration peak particle velocity from the blasting operations at the premises must not: (i) Exceed 5mm/s for more than 5% of the total number of blasts over a period of 12 months; and (ii) Exceed 10mm/s at any time, when measured at any residence or noise sensitive location (such as a school or hospital) that is not owned by the licensee or subject of a private agreement between the owner of the residence or noise sensitive location and the licensee as to an alternative ground vibration level.	No blasts exceeded either vibration or overpressure criteria.	Compliant			
Residences	6.3.1 d)	The Applicant shall investigate any vibration problem(s) associated with residential buildings which occur as a result of blasting at the mine in relation to the standards in Condition 6.3.1(b) and 6.3.1(c). Should such an investigation be necessary the Applicant shall advise MSC the result of such investigation and any proposed preventive/remedial measures.	No vibration problems in the audit period. One complaint re damage but the vibration levels were so low that damage as a result of vibration was ruled out.	Compliant			
Blasting Vibration Management	6.3.2						
	6.3.2 a)	The Applicant shall prepare and implement a Blasting/Vibration Management Plan to the satisfaction of MSC, in consultation with EPA and DMR. This must include, but not be limited to, the following matters: (i) demonstration of consistency in compliance with blasting criteria at the existing mining operation (ii) compliance blasting criteria; (iii) mitigation measures, such as, adverse weather conditions; (iv) monitoring methods and program in accordance with blast monitoring and inspection conditions; (v) measures to be undertaken to demonstrate that the Project is achieving best practice in minimising air blast overpressure, ground vibration levels, fumes and odours from blasting activities; (vi) measures to protect underground utilities (eg: rising mains, subsurface telecommunication and electric cables, irrigation lines) and livestock on non-mine owned land; (vii) measures to protect surface infrastructure where relevant, such as dams, rail infrastructure and power poles; (viii) measures to consider the blasting activities from other neighbouring mines. This shall include details of the proposed measures to ensure that cumulative blast related impacts are managed, such as through consultation with the other mines to co-ordinate blasting activities; (ix) procedures for the investigation of blast related complaints from the Project, in consultation with other mines in the event of cumulative related impacts; (x) procedures for the notification of occupiers of buildings and residences prior to detonation of each blast; and (xi) measures to ensure no damage by fly rock to people, property, livestock and power lines.	The Blast management Plan has recently been revised and is with MSC for review and approval.	Compliant			
	6.3.2 b)	The applicant shall, as a minimum, advise occupiers of buildings and residences, unless otherwise requested by the occupier, in the North Muswellbrook, Sandy Creek Road and other areas to the satisfaction of Council of future blasting events through a community information telephone hotline and the advertisement and promotion of the hotline. The hotline shall be at no cost to the caller.	Evidence of advertisements provided in the form of invoices from the local newspapers.	Compliant			
	6.3.2 c)	The applicant shall design blasts so as not to exceed 20% of the EPA maximum ground vibration limit of 10mm/s at the nearest residence or equivalent location as approved by the EPA. The maximum charge weight and predicted vibration levels shall be made available on the above mentioned hotline service on the day of the blast. Blast design records shall be retained by the applicant and made available for inspection at his premises upon reasonable request.	The blast levels have remained below the 5% levels through the audit period	Compliant			
	6.3.2 d)	The applicant shall respond to complaints on blasting in a timely fashion and in accordance with the Muswellbrook Shire Council Protocol.	Evidence was provided in the response data for several recent complaints	Compliant			
Blast Monitoring	6.3.3 a)	The applicant must monitor ground vibration and airblast overpressure of all blasts at locations in accordance with the Blast Management Plan;	The blast monitoring sites comply.	Compliant			
	6.3.3 b)	Ground vibration or the overpressure must be measured at noise sensitive sites (eg. Residences, hospitals, schools etc), selected in consultation with the EPA.	See EPL, EPLAR's and Blast Vibration MP	Compliant			
	6.3.3 c)	The Applicant must document the date, wind speed and direction, weather conditions, atmospheric conditions including cloud cover, location of blast and the quantity of explosive used for each blast.	All documented in the blast checklist	Compliant			
	6.3.3 d)	The results of the blast monitoring must be submitted to EPA at the end of each reporting period and be summarised and interpreted in the AEMR.	The AR and AEMR include the required information.	Compliant			

Reference	Condition	Requirement	Evidence	Audit Finding	Risk		
					Consequence	Likelihood	Risk
Noise Control 6.4							
Noise Criteria	6.4.1	<p>EPA - GTA Noise generated at the premises must not exceed the noise limits presented below:</p> <ul style="list-style-type: none"> • LAeq (15 min) of 36 dB(A) at residence 7 (Watts); • LAeq (15 min) of 40 dB(A) at residence 13 (McMaster); • LAeq (15 min) of 38 dB(A) at residence 20 (Gordon); • LAeq (15 min) of 35 dB(A) residences 15, 16 and 17 (Collins, Tuckey and Colvin respectively); <p>Noise from the premises must not exceed the night time LA1 (1 min) noise limits presented below:</p> <ul style="list-style-type: none"> • R7 (Watts) LA1 (1 min) 44 dB(A) • Residences 15, 16 & 17 (Collins, Tuckey and Colvin respectively) LA1 (1 min) 46 dB(A) • R13 (McMaster) LA1 (1 min) 51 dB(A) • R20 (Gordon) LA1 (1 min) 48 dB(A) 	All noise was within the limits specified when INP is applied.	Compliant			
Noise Acquisition Criteria	6.4.2	<p>The acquisition zone for noise is defined by predicted or demonstrated exceedance of the noise levels shown in below:</p> <ul style="list-style-type: none"> • R7 (Watts) LA1eq (15 min) 41 dB(A) • Residences 15, 16 & 17 (Collins, Tuckey and Colvin respectively) LAeq (15 min) 40 dB(A) • R13 (McMaster) LAeq (15 min) 45dB(A) • R20 (Gordon) LAeq (15 min) 43 dB(A) 	Noted				
Interpretation of Noise Levels	6.4.3 a)	<p>For the purposes of condition 6.4.1 and 6.4.2:</p> <ul style="list-style-type: none"> - Day is defined as the period from 7am to 6pm Monday to Saturday and 8am to 6pm Sundays and Public Holidays; - Evening is defined as the period from 6pm to 10pm; and - Night is defined as the period from 10pm to 7am Monday to Saturday and 10pm to 8am Sundays and Public Holidays. 	Noted				
	6.4.3 b)	Noise from the project is to be measured within the residential boundary, or within 30m of the dwelling (rural stations) where the dwelling is more than 30m from the boundary to determine compliance with the LAeq(15 minutes) noise limit in condition 6.4.1. 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 Noise Policy. The modification factors presented in Section 4 of the NSW Industrial Noise Policy shall also be applied to the measured noise level where practical.	This has been varied with EPAs permission to site boundary or nearest non intrusive location to maintain residents privacy.	Compliant			
	6.4.3 c)	Noise from the project is to be measured at 1m (unless otherwise agreed with the property owner) from the dwelling façade, to determine compliance with the LA1(1 minute) noise limits in Condition 6.4.1.	This has been varied with EPAs permission to site boundary or nearest non intrusive location to maintain residents privacy.	Compliant			
	6.4.3 d)	<p>The noise emission limits identified in Condition 6.4.1 apply under meteorological conditions of:</p> <ul style="list-style-type: none"> - wind speed up to 3 m/s at 10 metres above ground level - Temperature inversion conditions of up to 30°C/100m. 	Noted				
	6.4.3 e)	The loading of large rocks onto mine trucks is to be undertaken outside the night time period.	OCE confirmed this practise at interview, they also noted the general lack of large rocks due to geology and blast practise.	Compliant			
Monitoring and Management	6.4.4 a)	<p>In the event that a landowner or occupier of a non-mine owned property considers that noise from the Project is in excess of the noise level criteria as set out in Condition 6.4.2 and MSC is satisfied that an investigation is required, the Applicant shall upon the receipt of a written request from MSC:</p> <p>(i) consult with the landowner or occupants affected to determine their concerns;</p> <p>(ii) make arrangements for, and bear the costs of, following consultation as far as reasonably practicable with other mine operations in the vicinity where necessary, appropriate independent noise investigations in accordance with the Noise Management Plan to the satisfaction of MSC, to quantify the impact and determine the source of the effect and the contribution of the Project to the effect;</p> <p>(iii) modify the mining activity in accordance with a noise reduction plan prepared as part of the Noise Management Plan, if exceedance are demonstrated by the investigation to result in part from the mine related activity. This shall include:</p> <ul style="list-style-type: none"> - introduction of additional controls, either on noise emission from individual sources on the site or on site operations or modify operations, to ensure that the noise criteria in Condition 6.4.1 is achieved as far as possible, or; - seek agreement of the landowner, and in the case of the cumulative impacts the other relevant mines / industrial operations, to undertake noise mitigation measures at the dwelling to achieve a level which is at least 10dB(A) below the relevant external noise criterion; and - seek agreement of the landowner, and in the case of cumulative impacts with the other relevant mines / industrial operations in the area and the landowner, to provide such other forms of benefit or amelioration of the impacts of noise as may be agreed between the parties as providing acceptable compensation for the noise levels experienced. <p>(iv) conduct follow up investigations to the satisfaction of MSC, where necessary. If necessary, the follow up investigation should be conducted 3 months after the initial investigation to give MCC time to implement the recommended noise control.</p>	No requests to acquire in the audit period	Not Applicable			

Reference	Condition	Requirement	Evidence	Audit Finding	Risk		
					Consequence	Likelihood	Risk
Acquisition	6.4.4 b)	(i) If the independent noise investigation(s) in sub clause (a) above confirm that the noise acquisition criteria of condition 6.4.2 is being exceeded by the Project alone, and the measures in Condition 6.4.5 do not reduce the levels below this criteria, the Applicant shall at the written request of the landowner acquire the relevant property. Acquisition shall be in accordance with the procedures set out in condition 11.1. (ii) if the independent noise investigations in Condition 6.4.2 confirm that noise acquisition criteria is being exceeded as a result of cumulative impacts, including a contribution from the Project, the Applicant shall enter into consultation with the neighbouring mines for the purchase of the affected property in accordance with the Condition 11.1. Should the Applicant not be able to formulate a joint acquisition agreement with neighbouring mines in accordance with Condition 11.1 the Applicant shall at the written request of the owner acquire the relevant property. Acquisition shall be in accordance with the procedures set out in Condition 11.1.	No requests to acquire in the audit period	Not Applicable			
	6.4.4 c)	If continued complaints and noise investigation confirm that the noise criteria is being exceeded as a result of the contribution from the Project, but are less than the noise acquisition criteria, the Applicant shall negotiate with the landowner until a resolution to the satisfaction of MSC is reached.	No continued complaints regarding noise in the audit period	Not Applicable			
	6.4.4 d)	If a landowner disputes any noise mitigation or other measures proposed by the Applicant in accordance with sub-clause (a) above, the matter shall be referred by either the Applicant or landowner to MSC. If the matter cannot be resolved within 21 days, the matter shall be referred to the Independent Dispute Resolution Process.	This has not occurred in the audit period.	Not Applicable			
	6.4.4 e)	Further independent investigations shall cease if MSC is satisfied that the relevant criterion in Condition 6.4.2 (a) is not being exceeded and are unlikely to be exceeded in the future.	This has not occurred in the audit period.	Not Applicable			
Noise Management	6.4.5	The Applicant shall prior to the commencement of operations prepare and implement a Noise Management Plan for the Project (incorporating construction and operational noise), in consultation with EPA and to the satisfaction of MSC. The plan shall: (i) Demonstrate consistency in complying with noise criteria limits at the existing MCC operation (ii) include details of the conduct of noise investigations at six monthly intervals (unless otherwise agreed by MSC) to evaluate, assess and report the LAeq (15 minute) noise emission levels due to the normal operations of the Project; (iii) provide details regarding operating configuration, determining survey intervals, weather conditions and seasonal variations, selecting variations, locations, periods and times of measurements; (iv) detail management measures where the target noise level criteria of this consent are predicted to be exceeded, or are exceeded during Mining Operations. These measures should include but not be limited to: - The selection of representative monitoring locations within the community must be carried out in consultation with MSC; - prompt response to any community issues of concern; - refinement of on site noise mitigation measures and mine operating procedures where practical; - discussions with relevant property holders to assess concerns; - consideration of acoustical mitigation at receivers; and - consideration of negotiated agreements with property owners. (v) outline proactive/predictive and reactive mitigation measures to be employed on the site to limit noise emissions. (vi) outline measures to reduce the impact of intermittent, low frequency and tonal noise (including truck reversing alarms); (vii) survey and investigate noise reduction measures from plant and equipment annually, subject to noise monitoring results and/or complaints received, and report in the AEMR at the conclusion of the first 12 months of Mining Operations and set targets for noise reduction taking into consideration valid noise complaints in the previous year; and (viii) specify the procedures for a noise monitoring program for the purpose of undertaking independent noise investigations; (ix) outline the procedure to notify property owners and occupiers likely to be affected by noise from the operations; (x) maintain a protocol for handling noise complaints that include recording, reporting and acting on complaints, particularly where complaints are received and it is demonstrated noise levels are in excess of the criteria contained in this consent; (xi) record appropriate mechanisms for community consultation; (xii) as far as practicable, details of the interrelationship of this plan with the noise management plan for other mines in the vicinity.	The original NMP was developed and approved prior to the audit period. i) is not relevant to current NMP ii) NMP complies iii) NMP complies iv) NMP Complies v) None of these have been required in the audit period, the NP provides for these actions vi) Rocks in trucks and reversing beepers are addressed in the mitigation section (3.2) vii) Equipment noise (SPL) testing is addressed viii) S 8.0 addresses the issue ix) This is partially addressed in S 3.1 but is no longer needed as the condition (contacting potentially impacted neighbours would have been required in 2002-03. x) This is included xi) This is included xii) Included though limited	Compliant			
Lighting	6.5						
	6.5 a)	The Applicant shall screen or direct all on-site lighting away from residences and roadways to the satisfaction of MSC during mining operations.	Lighting Reviews are not conducted	Not Compliant	E	2	Low
	6.5 b)	The Applicant shall prepare and implement a Lighting Management Plan prior to commencement of operations. The lighting component is to be formulated to the satisfaction of MSC, outlining details of the proposed process and measures to address light spillage issues to residents or road users impacted by lighting from the mine site and details of measures to minimise light emissions.	Lighting Management Plan provided as evidence, review by MSC is outside of the audit period.	Compliant			

Reference	Condition	Requirement	Evidence	Audit Finding	Risk		
					Consequence	Likelihood	Risk
7.0 Transport and Utilities							
Coal Haulage	7.1	All coal haulage access to the mining lease area is restricted to the Coal Road, Private Coal Haul Road, Muscle Creek Road and New England Highway.	This is currently the case (at the time of the audit)	Compliant			
Provision of Utility Services	7.2	In preparing the Mining Operations Plan (refer to Condition 2.1), the Applicant shall consult with affected service authorities, including Energy Australia, Telecommunication Infrastructure Provider and the Land Information Centre. Following this consultation, the Applicant shall make arrangements satisfactory to those authorities for the protection or relocation of services. Particular reference should be given to transmission lines, optical fibre cables and copper network cables and State Trigonometric Points.	Based on work with the service authorities in previous MOPs it is apparent that there are no services or utilities in the mining area defined by the closure MOP there fore no consultation was required.	Not Applicable			
8.0 Monitoring / Auditing							
	8 a)	In addition to the requirements contained elsewhere in this consent, MSC may, at any time in consultation with the relevant government authorities and the Applicant, require the monitoring programs in Conditions 3, 4 and 6 to be revised/ updated to reflect changing environmental requirements or changes in technology/ operational practices. Changes shall be made and approved in the same manner as the initial monitoring programs. All monitoring programs shall also be made publicly available within two weeks of approval of the relevant government authority.	No such requests in the audit period.	Not Applicable			
	8 b)	All sampling strategies and protocols undertaken as part of any monitoring program shall include a quality assurance/ quality control plan and shall be included in the relevant environmental management plan. Only accredited laboratories shall be used for laboratory analysis.	Reviewed MPs and monitoring reports for QA plan - none identified.	Not Compliant Administrative			
Third Party Monitoring / Auditing	8.1	Independent Environmental Auditing	This audit	Compliant			
	8.1 a)	Every three years from the date of this consent until completion of mining in the DA area, or as otherwise directed by MSC, the Applicant shall conduct an environmental audit of the mining and infrastructure areas of the development in accordance with <i>ISO 14010 Guidelines and General Principles for Environmental Auditing</i> , and <i>ISO 14011 – Procedures for Environmental Auditing</i> (or the current versions), and in accordance with any specifications required by MSC. Copies of the report shall be submitted by the Applicant to MSC, EPA, DIPNR (comprises 2 departments; Department of Natural Resources and Department of Planning), DMR, NPWS and CCC within two weeks of the reports completion for comment.	This audit	Compliant			
	8.1 b)	The audit shall: i. assess compliances with the requirements of this consent, licenses and approvals; ii. assess the development against the predictions made in the EIS; iii. review the effectiveness of the environmental management of the mine, including any mitigation works; iv. be carried out at the Applicants expense; and v. be conducted by a duly qualified independent person or team approved by MSC (as acceptable to Minister of Infrastructure and Planning).	This audit	Compliant			
	8.1 c)	MSC may, after considering any submission made by the relevant government agencies, and CCC on the report, notify the Applicant of any requirements with regard to any recommendation in the report. The Applicant shall comply with those reasonable requirements within such time as MSC may require. Note: MSC may agree to a request from the Applicant that the Independent Environmental Audit requirement under this condition be integrated with similar audits required in accordance with other development consents applicable to MCC.	Noted				
9.0 Reporting							
Reports on Operations	9.1	The Applicant shall report on mine operations in accordance with the Mining Operations Plan (refer to Condition 2.1).	Included in the AEMRs	Compliant			
Annual Environmental Management Report	9.2 a)	The Applicant shall, throughout the life of the mine and for five years after the completion of mining in the DA area, prepare and submit an Annual Environmental Management Report (AEMR) to the satisfaction of MSC and DMR. The AEMR shall review the performance of the mine against the Environmental Management Strategy and the relevant Mining Operations Plans, the conditions of this consent, and other licences and approvals relating to the mine. To enable ready comparison with the predictions made in the EIS, diagrams and tables, the report shall include, but not be limited to, the following matters: (i) an annual compliance audit of the performance of the project against conditions of this consent and statutory approvals; (ii) assess the extension against predictions made in the EIS and the terms and commitments in the documents listed in condition 1.1; (iii) a review of the effectiveness of the environmental management of the mine in terms of EPA, DIPNR, DMR, MSC requirements; (iv) results of all environmental monitoring required under this consent or other approvals, including interpretations and discussion by a suitably qualified person; (v) identification of trends in monitoring results over the life of the mine; (vi) an assessment of any changes to agricultural land suitability resulting from the Mining Operations, including cumulative changes; (vii) a listing of any variations obtained to approvals applicable to the DA area during the previous year; (viii) the outcome of the water budget for the year, the quantity of water used from water storages and details of exchange of any water from the site; (ix) status of rehabilitation and revegetation works; and (x) environmental management targets and strategies for the next year, taking into account identified trends in monitoring results.	From the AEMRs: i) not satisfactorily addressed ii) Broadly addressed I each section on management. iii) this is done iv) this is adequate v) this is not done, the information is presented but no commentary is provided to identify and explain trends. vi) Not included vii) Included viii) Included ix) Included x) Included	Not Compliant Administrative			

Reference	Condition	Requirement	Evidence	Audit Finding	Risk		
					Consequence	Likelihood	Risk
	9.2 b)	In preparing the AEMR, the Applicant shall: (i) consult with MSC during preparation of each report for any additional requirements; (ii) comply with any reasonable requirements of MSC or other relevant government agency; and (iii) ensure that the first report is completed and submitted within twelve months of this consent, or at a date determined by MSC in consultation with the DMR and the EPA.	Evidence of consultation with MSC provided No requirements from MSC in audit period Not in the audit period	Compliant			
	9.2 c)	The Applicant shall ensure the copies of each AEMR are submitted to MSC, DMR, EPA, DIPNR, NPWS and CCC, and made available for public information at MSC within fourteen days of submission to these authorities.	Cover Letters for the audit period provided as evidence.	Compliant			
Reporting and Recording Requirements							
	9.3						
Monitoring Records	9.3 a)	The results of any monitoring required to be conducted by this consent, or a licence under the <i>Protection of the Environment Operations Act 1997</i> , in relation to the development or in order to comply with any load calculation protocol must be recorded and retained as set out in subclauses b) and c).	Noted				
	9.3 b)	All records required to be kept by the licence must be: (i) in a legible form, or in a form that can readily be reduced to a legible form; (ii) kept for at least 4 years after the monitoring or event to which they relate took place; and (iii) produced in a legible form to any authorised officer of the EPA who asks to see them.	i) all reports are archived, kept in original format ii) Kept for life of consent	Compliant			
	9.3 c)	The following records must be kept in respect of any samples required to be collected: (i) the date(s) on which the sample was taken; (ii) the time(s) at which the sample was collected; (iii) the point at which the sample was undertaken; and (iv) the name of the person who collected the sample.	The name of the person sampling was not always recorded. Generally Compliant apart from this.	Not Compliant Administrative			
	9.3 d)	The Applicant must provide an annual return to the EPA in relation to the development as required by any licence under the <i>Protection of the Environment Operations Act 1997</i> in relation to the development. In the return the Applicant must report on the annual monitoring undertaken (where the activity results in pollutant discharges), provide a summary of complaints relating to the development, report on compliance with licence conditions and provide a calculation of licence fees (administrative fees and, where relevant, load based fees) that are payable. If load based fees apply to the activity the applicant will be required to submit load based fee calculation worksheets with the return. This may form part of the AEMR.	Annual Returns provided as evidence were in compliance with this requirement	Compliant			
10.0 Community Consultation / Obligations							
Community Consultative Committee							
	10.1						
	10.1 a)	The Applicant shall: i) Maintain the current CCC to incorporate all issues specific to the Project. Selection of community representatives shall be in accordance with MSC's Community Consultative Committee Guidelines. The Committee shall be chaired by a representative of MSC. ii) Representatives from relevant government agencies or other individuals may be invited to attend meetings as required by the Chairperson. The Committee may make comments and recommendations about the preparation and implementation of environmental management plans, monitor compliance with conditions of this consent and other matters relevant to the operation of the mine during the term of the consent. The Applicant shall ensure that the Committee has reasonable access to the necessary plans for such purposes. The Applicant shall consider the recommendations and comments of the Committee and provide a response to the Committee and MSC.	One CCC member change in audit period, MSC approval sighted for replacement nominated CCC member Water MP made available to CCC in 2013 when it was revised.	Compliant			
	10.1 b)	The Applicant shall, at its own expense: (i) nominate two (2) representatives to attend all meetings of the Committee; (ii) provide to the Committee regular information on the progress of work and monitoring results; (iii) promptly provide to the Committee such other information as the Chair of the Committee may reasonable request concerning the environmental performance of the development may reasonably request concerning the environmental performance of the development; (iv) provide access for site inspections by the Committee; and (v) provide meeting facilities for the Committee, and take minutes of Committee meetings. These minutes shall be available for public inspection at MSC within 14 days of the meeting, or as agreed by the Committee.	Reviewed CCC meeting minutes - Compliant	Compliant			
Complaint Handling Procedures							
	10.2						
	10.2 a)	The Environmental Officer employed by the mine (refer condition 3.1) shall be responsible for: (i) establishing and maintaining a system for recording complaints with respect to mine operations on a dedicated and publicly advertised telephone line, 24 hours per day 7 days per week, entering complaints or comments in an up to date log book, or other suitable date base, and ensuring that an initial response is provided to the complainant within 24 hours; (ii) providing a report of complaints received with respect to the operation of the mine, every 12 months throughout the life of the project to MSC, EPA, DMR and CCC or as otherwise agreed by MSC. A summary of this report shall be included in the AEMR. (iii) Consult with the environmental officer(s) employed by other mines in the vicinity to seek to co-ordinate a response to any complaints received regarding the operations of MCC and other mines.	i) sighted system ii) complaints reported to CCC at each meeting and in AEMR iii) not a lot of work done between sites on complaints due to MCCs remoteness from the other sites around Muswellbrook.	Compliant			
	EO	The Applicant must nominate one person (and their telephone number) who will be available to the EPA on a 24 hours basis, and who have authority to provide information and to implement such measures as may be necessary from time to time to address a pollution incident or to prevent pollution from continuing as directed by an authorised officer of the EPA.	Appointment correspondence infers the EO is the 24 hour contact.	Compliant			

Reference	Condition	Requirement	Evidence	Audit Finding	Risk		
					Consequence	Likelihood	Risk
11.0 Applicants Obligations							
Area of Affection - Land Acquisition							
	11.1						
	11.1 a)	The Applicant shall seek to conclude an agreement to purchase a property, or part of a property, as identified by 6.1.4 (c) or 6.4.4 (b) within six (6) months of a written request from the affected land owner. The owner of any dwelling, or vacant land (as described in 6.1.4 (c)) located in areas that exceed noise and/or air quality criteria established in accordance with conditions 6.1.1 and 6.4.2 and of this consent, and at any time after the granting of development consent, may request the Applicant in writing to purchase the whole or part of that property.	No such requests in the audit period.	Not Applicable			
	11.1 b)	In respect of a request to purchase land arising under this condition, the Applicant shall pay the owner the acquisition price which shall take into account and provide payment for: (i) a sum not less than the current market value of the owner's interest in the land at the date of this consent, as if the land was unaffected by the Project the subject of this DA, having regard to: * the existing use and existing permissible use of the land in accordance with the planning instruments in force at the date of this consent; and * the presence of permissible or approved improvements on the land and/or any Council approved building or structure which is substantially commenced at the date of request is completed subsequent to that date. (ii) the owner's reasonable compensation for disturbance allowance and relocation costs within Muswellbrook Local Government Area, or within such other location as may be determined by MSC in exceptional circumstances; and (iii) the owner's reasonable costs for obtaining legal advice and expert witnesses for the purposes of determining the acquisition price of the land and the terms upon which it is to be acquired.	No such requests in the audit period.	Not Applicable			
	11.1 c)	In the event that either the owner or the Applicant is not satisfied the Applicant and any owner referred to in this condition cannot agree within the time limit upon the acquisition price of the land and/or the terms upon which it is to be acquired, then: (i) either party may refer the matter to MSC, who shall request the President of the Australian Property Institute to appoint a qualified independent valuer or Fellow of the Institute, who shall determine, after consideration of any submissions from the owners and the Applicant, a fair and reasonable acquisition price for the land as described in sub-clause (b) and/or terms upon which it is to be acquired; (ii) in the event that either the owner or the Applicant is not satisfied with the determination of the independent valuer, the independent valuer shall refer the matter to MSC, recommending the appointment of a qualified panel. MSC, if satisfied that there is need for a qualified panel, shall arrange for the constitution of the panel. The panel shall consist of: * the appointed independent valuer; * Manager Environmental Services or nominee; and * The President of the Law Society of NSW or nominee. The qualified panel shall determine a fair and reasonable acquisition price as described in subclause (b) above and/or the terms upon which the property is to be acquired.	No such requests in the audit period.	Not Applicable			
	11.1 d)	The Applicant shall bear the costs of any valuation or survey assessment requested by the independent valuer, panel, or MSC and the costs determination referred to in sub clauses (b) and (c).	No such requests in the audit period.	Not Applicable			
	11.1 e)	Upon receipt of a determination pursuant to sub-clauses (b) and (c), the Applicant shall, within 14 days, offer in writing to acquire the relevant land at a price not less than the determination. Should the Applicant's offer to acquire not be accepted in writing by the owner within six (6) months of the date of such offer, the Applicant's obligations to purchase the property shall cease, unless otherwise agreed by MSC.	No such requests in the audit period.	Not Applicable			
	11.1 f)	In the event that the Applicant and the land owner agree that only part of the land is to be transferred to the Applicant, the Applicant shall pay all reasonable costs associated with applying for Council approval to any plan of subdivision and registration of the plan at the Office of the Registrar-General.	No such requests in the audit period.	Not Applicable			
	11.1 g)	The provisions of this condition do not apply to a land owner who is the holder of an authority under the <i>Mining Act, 1992</i> .	Noted				
	11.1 h)	Notwithstanding any other condition of this consent, the Applicant may, upon request of the landowner, acquire any property affected by the project during the course of this consent on terms agreed to between the Applicant and the landowner.	Has not occurred in the audit period.	Not Applicable			
Cumulative Impact							
	11.2						
	11.2 a)	In the event that the cumulative impact of noise or dust contributed by the operation of the Project and any future mining activities/industrial operations, at dwellings, or vacant land (as described in Condition 6.1), in the vicinity of the operation, is in excess of the noise or dust acquisition criteria contained in these conditions of consent, the Applicant shall endeavour, as far as reasonably practicable, to negotiate with the other companies and landowner to determine appropriate arrangements to reasonably contribute to the management of the identified cumulative impacts to the satisfaction of MSC in proportion to their contributions to the impact.	This has not occurred in the audit period.	Not Applicable			

Reference	Condition	Requirement	Evidence	Audit Finding	Risk		
					Consequence	Likelihood	Risk
	11.2 b)	If agreement cannot be reached from negotiations undertaken in accordance with subclause (a), then, with the agreement of the other contributing mines and future mining or industrial operations, the matter is to be referred to MSC by either the Applicant or landowner. If the matter is not resolved within 21 days of the referral, the matter will be referred to an Independent Dispute Resolution Process as determined by MSC, and resolved as determined by MSC. The Independent Dispute Resolution Process shall determine the responsibilities of each of the mining and/ or present or future companies in accordance with subclause (a) above and actions to be undertaken. The recommendation of the Independent Dispute Resolution Process shall be determined by MSC.	This has not occurred in the audit period.	Not Applicable			
	11.2 c)	Prior to referral to the Independent Dispute Resolution process, the Applicant shall provide Director-General a report detailing the Applicant's reasons for being unable to reach agreement with the other parties, and the reasons for the criteria exceedances with demonstration that the Project activities are not the sole cause of the exceedance. Note: 1. The Applicant shall endeavour to enter into an agreement with other nearby mines/ industrial operations to address any potential cumulative management and joint acquisition requirements of this development consent; 2. the intent of this condition is to encourage mining companies to form a voluntary agreement regarding the management and acquisition of properties subject to cumulative impacts; 3. MSC will be requiring joint acquisition requirements in all development consents where cumulative impacts are known to occur, and may potentially occur, as a result of mine or industrial related activities.	This has not occurred in the audit period.	Not Applicable			
Contributions to Council							
	11.3						
	11.3	<ul style="list-style-type: none"> Prior to mining of the extension area, the Applicant shall enter into a legally binding agreement with MSC for financial and/or in kind contribution to MSC for the purpose of community enhancement to address the social, amenity and associated community infrastructure requirements arising from the operation of the extension. The financial and/or in kind contribution shall be generally in accordance with the MSC Community Enhancement Plan and as agreed between the Applicant and MSC. Further, the Applicant shall enter into a legally binding agreement with Council to provide an agreed area of land to incorporate void number 3, and a suitable access road to the void from the exiting waste disposal area which are appropriately fenced and landscaped and that such void is provided to Council in a condition suitable to the requirements of Council and any relevant regulatory authorities. 	Point one has not been completed Point 2 completed and found compliant in the previous audit	Not Compliant	E	1	Medium
12.0 Further Approvals and Agreements							
Statutory Requirements	12.1	The Applicant shall ensure that all statutory requirements including but not restricted to those set down by the <i>Environmental Planning and Assessment Act 1979</i> , the <i>Local Government Act 1993</i> , <i>Protection of the Environment Administration Act 1991</i> , <i>Protection of the Environment Operations Act 1997</i> , <i>River and Foreshores Improvement Act 1948</i> , <i>Water Act 1912</i> , <i>National Parks and Wildlife Act 1974</i> and all other relevant legislation, Regulations, Australian Standards, Codes, Guidelines and Notices, Conditions, Directions, Notices and Requirements issued pursuant to statutory powers by MSC, EPA, DMR, NPWS, DIPNR, RTA, and NSW Agriculture, are fully met.	No evidence was identified that shows that the legislation quoted is not complied with	Compliant			
Condition of S.96 Mod 2005	13	The application, plans and specifications complying with the relevant sections of the <i>Environmental Planning and Assessment Act, 1997</i> , <i>Local Government Act, 1993</i> and Regulations and the <i>Building Code of Australia</i> .	Construction Certificates (approval of design) and the Occupation Certificate (built to design) provided as evidence.	Compliant			
Condition of S.96 Mod 2005	14	All proposed building, site works or property improvement indicated on the submitted plans or otherwise required under the terms of this consent being completed prior to occupation of the premises.	Not able to be assessed.	Not Applicable			
Condition of S.96 Mod 2005	15	The building is not to be used for habitable purposes.	Building is industrial only	Compliant			
Condition of S.96 Mod 2005	16	The proposed addition is to be designed and constructed in an architectural style, using extern materials and finishes that are consistent with the character and appearance of the existing development, to present an overall integrated appearance.	Not assessed.	Not Applicable			
Condition of S.96 Mod 2005	17	All erosion and sediment control measures/works, other pollution control and rehabilitation measures undertaken on the site shall conform to or exceed the specifications and standards contained in the current versions of: <ul style="list-style-type: none"> "Soils and Construction: Managing Urban Stormwater" (Landcom) "Pollution Control Manual for Urban Stormwater" (EPA) "Soil and Water Management for Urban Development" (D of H) Development Control Plan 9 "Erosion and Sediment Control Regional Policy and Code of Practice" (Muswellbrook Shire Council) 	Not able to be assessed, evidence was provided on drawings showing erosion and sediment controls but the implementation of these was not able to be adequately assessed.	Not Applicable			
Condition of S.96 Mod 2005	18	INSPECTIONS: At the following stages of construction, inspections are required: (a) Trenches (with reinforcement steel in position) and pier holes; (b) Slabs (with reinforcement steel in position); (c) Completion of the building prior to occupation or use. Should Council be nominated as the Principal Certifying Authority, 48 hours notice is required to enable inspection to be carried out. NB: All inspection enquiries and times should be directed to Council's Customer Service Officers on (02) 6549 3700. Inspections in bold are critical stage inspections under the provisions of the <i>Environmental Planning and Assessment Act</i> . Failure to ensure that these inspections are carried out and the work passed may result in refusal to issue an Occupation Certificate.	Not assessed.	Not Applicable			
Condition of S.96 Mod 2005	19	The building is not to be used or occupied until a final inspection has been carried out and an occupation certificate has been obtained from the Principal Certifying Authority.	Occupation Certificate provided as evidence	Compliant			

Reference	Condition	Requirement	Evidence	Audit Finding	Risk		
					Consequence	Likelihood	Risk
Condition of S.96 Mod 2005	20	This consent is for the development only. Prior to the commencement of any construction work a Construction Certificate application must be submitted to and approved by Council or an Accredited Certifier. Plans submitted with the Construction Certificate are to be amended to incorporate the conditions of the Development Consent and are to show compliance with the <i>Building Code of Australia</i> .	Construction Certificate provided as evidence	Compliant			
Condition of S.96 Mod 2005	21	Erosion and sedimentation controls are to be in place prior to the commencement of site works and are to be maintained throughout the construction activities until the site is stabilised. All works are to be in accordance with Council's Development Control Plan 9 "Erosion and Sediment Control Regional Policy and Code of Practice". Additional controls may be required as directed by Council officers. Infringement notices will be served for non-compliance.	Not able to be assessed, evidence was provided on drawings showing erosion and sed controls but the implementation of these was not able to be adequately assessed.	Not Applicable			
Condition of S.96 Mod 2005	22	Stormwater is to be disposed of to an approved disposal area.	Stormwater is as per details in the DA consent conditions	Compliant			
Condition of S.96 Mod 2005	23	A sign is to be erected in a prominent position at the front of the property stating the following information: (a) The name, address and telephone number of the Principal Certifying Authority. (b) The name of the Principal Contractor and contact telephone numbers including after hours telephone numbers (This would be the builders name or the owners name in the case of an owner builder). (c) That unauthorised entry to the worksite is prohibited. The sign is to be maintained to the completion of the project.	Unable to be assessed, no evidence at the time of the audit	Not Applicable			
Condition of S.96 Mod 2005	24	The path of travel to an exit is to be physically marked and kept clear at all times.	Unable to be assessed, no evidence at the time of the audit	Not Applicable			
Condition of S.96 Mod 2005	25	The nominated exits must not be blocked at the point of discharge and where necessary, suitable barriers must be provided to prevent vehicles from blocking the exit or access to it. (a) The owner of the building must cause the Certifying Authority to be given a certificate in relation to each essential service installed in the building prior to the building being occupied. (b) The owner of the building shall cause the Council to be given a certification in relation to each essential service installed in the building at least once in each period of twelve (12) months after the first certificate. (c) The certificate is to state for each essential service that: (i) The service has been inspected and tested by a person who is competent to carry out such inspections and tests; (ii) The service was or was not (at the date on which it was inspected and tested) found to have been designed, installed and to be capable of operating, to a standard not less than that required by or under the Regulations. (d) This requirement shall be drawn to the attention of any subsequent owner of the building.	Unable to be assessed, no evidence at the time of the audit	Not Applicable			
Condition of S.96 Mod 2005	26	A door in a required exit must be readily openable without a key from the side that faces a person seeking egress, by a single hand downward action or pushing action on a single device which is located between 900mm and 1.2 metres from the floor.	Not an environment related condition, not assessed.	Not Applicable			
Condition of S.96 Mod 2005	27	A schedule of existing and proposed fire safety measures is to be submitted with the Construction Certificate application.	Not an environment related condition, not assessed.	Not Applicable			
Condition of S.96 Mod 2009	28	A certificate and detailed drawings issued by an appropriately qualified structural engineer are to be submitted to the Certifying Authority with the Construction Certificate application for the relocated infrastructure facilities, which certifies that the design and construction of the structural element will be structurally adequate for its intended purpose.	Not an environment related condition, not assessed.	Not Applicable			
Condition of S.96 Mod 2009	29	A total of 2 car parking spaces for use by persons with a disability shall be provided as part of the total car-parking requirements for the infrastructure facilities. Consideration must be given to the means of access from the car-parking spaces to adjacent buildings, to other areas within the building and to footpath and roads and shall be clearly shown on the plans submitted to the Certifying Authority for approval with the Construction Certificate. All details shall be prepared in consideration of, and construction completed in accordance with Australian Standard AS2890.1 to achieve compliance with the Disability Discrimination Act, and the relevant provisions of AS1428.1 and AS1428.4.	Not an environment related condition, 2 disabled places and 24 places, disabled access to site offices.	Compliant			
Condition of S.96 Mod 2009	30	Ramps and access for people with disabilities are to be provided to and within all buildings. Consideration must be given to the means of dignified and equitable access from public places to adjacent buildings, to other areas within the building and to footpath and roads. Compliant access provisions for people with disabilities shall be clearly shown on the plans submitted to the Certifying Authority for approval with the Construction Certificate. All details shall be prepared in consideration of, and construction completed to achieve compliance with the provision of the Disability Discrimination Act, and the relevant provisions of AS1428.1 and AS1424.4.	Not an environment related condition, 2 disabled places and 24 places, disabled access to site offices.	Compliant			
Condition of S.96 Mod 2009	31	The area where the buildings are to be erected has been determined to be in a high wind area. The buildings shall be constructed so as to be capable of withstanding an ultimate limit state of 50 metres per second (N3). Detailed plans and specification of work showing that these design requirements have been met shall be submitted to, and approved by, the Certifying Authority prior to the issue of a Construction Certificate.	Not an environment related condition, not assessed.	Not Applicable			
Condition of S.96 Mod 2009	32	Detailed floor plans and elevations of the proposed buildings are to be submitted to the PCA with the Construction Certificate application.	Not an environment related condition, not assessed.	Not Applicable			
Condition of S.96 Mod 2009	33	The approved Water Management Plan is to be revised and submitted to Council prior to the issue of a Construction Certificate for the infrastructure facilities and shall include: • detailed delineation of stormwater catchments, • provision of sufficient rainwater tanks to supply water to bath house and administration building as appropriate.	SWMP was revised and submitted prior to the CC being issued.	Compliant			

Reference	Condition	Requirement	Evidence	Audit Finding	Risk		
					Consequence	Likelihood	Risk
Condition of S.96 Mod 2009	34	If the development involves building work or demolition work, the work site must be fully enclosed by a temporary security fence (or hording) before work commences.	Not an environment related condition, not assessed.	Not Applicable			
Condition of S.96 Mod 2009	35	Subject to this clause, construction activities are to be carried out during the following hours: (a) between Monday to Friday (inclusive) - 7.00am to 5.00pm, (b) on a Saturday - 8.00am to 1.00pm.	Completed prior to site audit, no records compliance but none would be expected. Not able to be assessed.	Not Applicable			
Condition of S.96 Mod 2009	36	Hot water installations shall be in accordance with AS 3500 and shall deliver hot water to all sanitary fixtures used primarily for personal hygiene purposes, at a temperature not exceeding 50 °C in all other buildings;	Not an environment related condition, not assessed.	Not Applicable			
Condition of S.96 Mod 2009	37	Demolition must be carried out in accordance with AS 2601 - 1991, Demolition of Structures . 1) Demolition materials must not be burnt or buried on the work site. 2) A person having the benefit of this certificate must ensure that all vehicles leaving the work site carrying demolition materials, have their loads covered and do not track soil or waste material onto the road. 3) If demolition work obstruct or inconvenience pedestrians or vehicular traffic on an adjoining public road or reserve, a separate application must be made to council to enclose the public place with a hoarding or fence. 4) Erosion and sediment controls must be provided in accordance with the details shown on the approved plans, prior to the disturbance of any soil on the work site and must be maintained in the functional condition through the construction activities until the see is stabilised. 5) The work site must be left free of waste and debris when work has been completed.	Not able to be assessed, evidence was provided showing assessment of contamination of the old MIA and the clean-up of said contamination but the demolition process and disposal od materials was not able to be adequately assessed.	Not Applicable			
Condition of S.96 Mod 2009	38	Provision shall be made for access to and within the building on the site for persons with a disability in accordance with the provisions of AS 1428 Part 1 prior to the use on any Occupation Certificate.	Not an environment related condition, not assessed.	Not Applicable			
Condition of S.96 Mod 2009	39	To ensure hazardous and toxic materials are not a threat to the environment they must be stored in accordance with WorkCover Authority requirements. All tanks, drums and containers of toxic and hazardous materials shall be stored in a bunded area. The bund walls and floors shall be constructed of impervious materials and shall be a sufficient size to contain 110% of the volume of the largest tank plus the volume displaced by any additional tanks within the bunded area. Certification of compliance with this requirement shall be obtained prior to the issuing of any Occupation Certificate.	At the time of the audit, hazardous materials appeared to be stored in accordance with the AS.	Compliant			
Condition of S.96 Mod 2009	40	Upon completion of works and prior to occupation, the person entitled to act on this consent shall provide to Council the following information; (a) the total tonnage of all waste and excavated material disposed of from the site; (b) the disposal points and methods used; and (c) a copy of all disposal receipts are to be provided.	Report to MSC was not able to be produced as evidence.	Not Compliant Administrative			
Condition of S.96 Mod 2009	41	Prior to issuing any Occupation Certificate for building works where asbestos based products and other hazardous materials have been removed tipping receipts, which detail that all waste has been disposed of at an approved waste disposal depot shall be provided to the Principal Certifying Authority. (Note: Further details of licensed asbestos waste disposal facilities can be obtained from www.dec.nsw.gov.au)	Not able to be assessed.	Not Applicable			
Condition of S.96 Mod 2009	42	All stormwater from the development including all hard standing and overflows from rainwater tanks is to be collected and disposed of to a distance of 3m clear of the proposed and any adjoining buildings. Car park stormwater is to be directed north to the mine.	Stormwater is managed in general agreement with this description.	Compliant			
Condition of S.96 Mod 2009	43	The final drawings are to be submitted to the Mine Subsidence Board prior to commencement of construction, are to contain a certification by a qualified structural engineer, to the affects that any improvements, constructed to meet the specification of such final drawings, will be safe, serviceable and repairable, taking into account future coal resource within the subject area.	Not an environment related condition, not assessed.	Not Applicable			
Condition of S.96 Mod 2009	44	The premises shall be connected to the wastewater treatment system in accordance with Council's permit to install and operate the wastewater treatment system. A satisfactory final inspection by Council of the installation must be conducted prior to any Occupation Certificate being issued.	Not Connected, pump out only	Not Applicable			
Condition of S.96 Mod 2009	45	Effluent for the on-site wastewater treatment system shall be segregated from the site water recycling system and used solely for the irrigation of rehabilitation. Appropriate guidelines for the irrigation of the effluent shall be observed. Other liquid waste not suitable for treatment in the on-site wastewater treatment systems shall be disposed of by a licensed wastewater contractor.	Not Connected, pump out only	Not Applicable			
Condition of S.96 Mod 2009	46	During construction works, a water cart is to be used for dust suppression.	Not documented during construction, not able to be assessed. No construction related dust complaints.	Not Applicable			
Condition of S.96 Mod 2009	47	The colour and texture of external materials of the building are to be chosen to ensure they blend in to the natural surroundings. In this regard, neutral nonreflective material shall be used in all external finishes. Details shall be submitted with the Construction Certificate application for written approval.	Workshop does not comply with these requirements.	Not Compliant	E	2	Low
Condition of S.96 Mod 2010	48	A restriction as to user shall be registered on the title of affected land for the purpose of creating a Vegetation Offset Area as indicated on Figure 1 'Proposed Offset Area' prepared by Hansen Bailey dated 12/10/10 Cad file: 06836A.dwg. Muswellbrook Council shall be nominated as the sole authority empowered to vary or modify the restriction. The terms of the restriction shall include the following matters: a) Restriction against clearing. b) Restriction against use of land in any way inconsistent with the maintenance of the EEC on the land. c) Restrictions on livestock grazing on the land. d) Obligation to fence the land. e) Obligation to control noxious weeds and pests on the land. A caveat acceptable to Muswellbrook Council, shall be prepared and registered on the title of affected land, by Muswellbrook Coal Company at no cost to Council.	Not yet completed, has been prepared and presented to MSC but agreement on terms of the caveat have not been reached. No inspections are conducted so MCC cannot ensure that the land is managed in accordance with a), b), c), d) and e).	Not Compliant	E	1	Medium

Reference	Condition	Requirement	Evidence	Audit Finding	Risk		
					Consequence	Likelihood	Risk
Condition of S.96 Mod 2010 Recommended Conditions of NOW	49	An updated Water Management Plan incorporating the requirements NSW Office of Water (NOW) for installation of additional monitoring bores and additional monitoring is to be prepared in consultation with NSW Office of Water (NOW) and submitted for review within six (6) months of project approval.	SWMP revised in 2013.	Compliant			
Condition of S.96 Mod 2010 Recommended Conditions of DECCW EPL Conditions - Administrative Conditions	50	A1 Works to be undertaken in accordance with information supplied to DECCW A1.1 Except as provided by these conditions of approval, the works and activities must be undertaken in accordance with the proposal contained in: a) The document "Muswellbrook Coal Company Limited Development Consent Modification -- Statement of Environmental Effects " prepared by Hansen Bailey and dated August 2010 unless otherwise specified in these conditions of approval.	Noted, see EIS review in this audit	Compliant			
Condition of S.96 Mod 2010 Recommended Conditions of DECCW EPL Conditions - Administrative Conditions	51	The applicant will consult with local Aboriginal Communities regarding this project in accordance with DECCW "Aboriginal cultural heritage consultation requirement for proponents 2010 ". Any archaeological investigations as part of this project are to ensure full compliance with Part 6 of the National Parks & Wildlife Act 1976 (NPW Act), as amended in October 2010 for the land subject of the development application.	Annual consultation letters provided as evidence.	Compliant			
Condition of S.96 Mod 2010 Recommended Conditions of DECCW EPL Conditions - Administrative Conditions	52	An application for a Care and Control Permit must be lodged along with any application for any Aboriginal objects that are located and moved in accordance with the NPW Act. The applicant is to consult with all of the registered Aboriginal stakeholders identified in the consultation process, and is to provide evidence of the support with any application for a care and control agreement.	No archaeological works have been conducted in the audit period t=so no permits were required.	Not Applicable			
Condition of S.96 Mod 2010 Recommended Conditions of DECCW EPL Conditions - Administrative Conditions	53	All reasonable efforts must be made to avoid impacts to Aboriginal cultural heritage values at all stages of the development works. If impacts are unavoidable, mitigation measures and permitting requirements are to be approved by the Aboriginal community and DECCW.	Induction training, AAHCMP and removal of all known archaeological materials at start of project	Compliant			
Condition of S.96 Mod 2010 Recommended Conditions of DECCW EPL Conditions - Administrative Conditions	54	In the event that surface disturbance identifies a new Aboriginal site, all works must halt in the immediate area to prevent any further impacts to the object(s). A suitably qualified archaeologist and Aboriginal community representatives must be contacted to determine the significance of the object(s). The site is to be registered in the AHIMS (managed by DECCW) and the management outcome of the site included in the information provided to the AHIMS. The proponent will consult with the Aboriginal community representatives the archaeologist and to develop management strategies for all objects/sites, which will require DECCW approval prior to recommencing works.	Has not occurred in the audit period.	Not Applicable			
Condition of S.96 Mod 2010 Recommended Conditions of DECCW EPL Conditions - Administrative Conditions	55	The applicant must continue to consult with, and involve, all Aboriginal representatives for the project, in the ongoing management of the Aboriginal cultural heritage matters associated with this project.	Annual consultation letters provided as evidence.	Compliant			
Condition of S.96 Mod 2010 Recommended Conditions of DECCW EPL Conditions - Administrative Conditions	56	If human remains are located in the event that surface disturbance occurs, all must halt in the immediate area to prevent any further impacts to the remains. The NSW Police are contacted immediately. No action is to be undertaken until police provide written notification to the proponent.	No human remains encountered in the audit period	Not Applicable			
Condition of S.96 Mod 2010 Recommended Conditions of DECCW EPL Conditions - Administrative Conditions	57	An Aboriginal Cultural Education program must be developed for the induction of personnel and contractors involved in the construction activities on site. The program should be developed in collaboration with the Aboriginal community.	Previous audit found stakeholder aboriginal consultation compliant. Cultural Education program has not progressed since then and is not complete.	Not Applicable			

Reference	Section	Requirement	Evidence	Audit Finding	Risk		
					Consequence	Likelihood	Risk
Muswellbrook Coal Company Limited, No. 1 Open Cut Extension Environmental Impact Statement 2002							
As the EIS is now 13 years old, following are the commitments considered by the lead auditor to be still relevant to the operation and those that have not been finalised in previous audits.							
2002 EIS	6.2 a)	The scope of vegetation clearing will have a short to medium term impact on the population of the Grey-crowned Babbler present within the proposed No. 1 Open Cut Extension. This impact will be minimised by medium to long-term mitigatory measures targeting the rehabilitation and re-instatement of habitat for this species.	Bimbadeen vegetation association was used for the rehabilitation of that area. Note GCBs were identified around the homestead in the original EIS.	Compliant			
2002 EIS	6.2 b)	The scope of vegetation clearing will have a short to medium term impact on local species vulnerable to the clearance of native vegetation. This impact will be minimised by medium to long-term mitigatory measures targeting the rehabilitation and re-instatement of vegetation and habitat, particularly focusing on the improvement of local vegetation connectivity.	Bimbadeen vegetation association is used for the rehab of that area. Note GCBs were identified around the homestead in the original EIS.	Compliant			
2002 EIS	6.2 c)	The proposed No. 1 Open Cut Extension is unlikely to result in a significant impact on threatened species or their habitats such that a viable local population will be placed at risk of extinction, provided that appropriate migratory measures are developed and implemented.	Bimbadeen vegetation association is used for the rehab of that area. Note GCBs were identified around the homestead in the original EIS.	Compliant			
2002 EIS	7.1	Minimise vegetation clearing throughout areas to the north of the Bimbadeen homestead to reduce the time period between vegetation removal and rehabilitation / habitat re-instatement activities;	Outside the audit period, not assessed.	Not Applicable			
2002 EIS	7.1	Restrict vegetation clearing throughout areas to the north of the Bimbadeen homestead to periods outside the breeding cycle of the Grey-crowned Babbler and Eastern False Pipistrelle;	Outside the audit period, not assessed.	Not Applicable			
2002 EIS	7.1	The appropriate collection and stockpiling of vegetation, soil and ground / arboreal habitat features for use in the creation of compensatory habitat, land rehabilitation and habitat re-instatement activities;	The salvage / collection of these materials and placement into the rehabilitated areas was sighted in the site inspection.	Compliant			
2002 EIS	7.1	Establish ecologically functional compensatory habitat for threatened and migratory species prior to clearing events within areas adjacent to the study area to promote the retention and preservation of local flora and fauna populations;	No native vegetation clearing in the audit period	Not Applicable			
2002 EIS	7.1	The implementation of appropriate rehabilitation activities, in accordance with the approved mine sequence, that minimises the medium and long-term impact on species vulnerable to the vegetation clearing;	See MOP	Compliant			
2002 EIS	7.1	The collection of local seed providence from the majority of flora species identified within the area to be cleared, thus maximising the value of vegetation rehabilitation and habitat re-instatement;	No native vegetation clearing in the audit period	Compliant			
2002 EIS	7.1	The implementation of exotic flora and fauna control programs targeting in particular the predatory pressures associated with the European Fox and feral cat, grazing pressures exerted by the European rabbit and feral goat ecological competitiveness exerted by invasive exotic plants;	Feral and Weed control are conducted and details provided in the AEMRs	Compliant			
2002 EIS	7.1	Minimise the edge to area ratio and improve alternative short-term vegetation connectivity by undertaking supplementary planting and rehabilitation activities throughout lands adjacent to the affected area prior to and during the mine operations plan;	This was to occur in the first MOP following approval which was prior to the audit period	Not Applicable			
2002 EIS	7.1	Undertake ongoing monitoring programs to measure progression of site rehabilitation;	Rehab monitoring Reports provided as evidence, these are summarised in the AEMR.	Compliant			
2002 EIS	7.1	Undertake a status review of the Eastern Grey Kangaroo within the study area, with the view to assessing and potentially ameliorating any deleterious grazing pressures exerted on native vegetation by excessively large populations of this species.	Some culling has been conducted with NPWS approval via the tag system	Compliant			
2002 EIS	6.3 and 7.2	Transfer of suitable topsoil will ideally be undertaken as a single operation to maximise the preservation of soil structure. The topsoil will be respread on rehabilitation sites with low erosion potential. Care will be taken to avoid mixing topsoil with the A2 horizon below. Current rehabilitation practices will continue.	Noted - see Topsoil Stripping MP for details.	Compliant			
2002 EIS	7.2	In the absence of a clear alternative, the voids will be made safe for abandonment according to the DMR requirements and guidelines.	Mine closure plan and closure MOP now approved.	Compliant			
2002 EIS	7.4	It is recommended that a noise monitoring program be carried out at the commencement of operations in the extension area to determine the degree of noise impact. If the measured noise levels are above the noise goals and are also unacceptable to residents, excavation works at ground level should be limited to daytime hours only while the relevant noise enhancing atmospheric conditions persist, or an engineering solution to reduce noise levels should be sought. It is recommended that residences 10, 13, 14, 15, 17 and 20 should be included in the monitoring program. The above recommendation also holds for Year 5, when residences to the south on Muscle Creek Road may experience a similar degree of impact.	Noted in the NMP, EPL and Consent, the worst scenario regarding noise occurred immediately after consent was granted and that time is outside of the audit period. At the time of the audit, the site was operating generally in the pit and further away from the potentially impacted residences.	Compliant			
2002 EIS	7.4	Sleep arousal: Excavator/shovel operators should take particular care when loading large rocks onto the back of dump trucks. The noise monitoring program should include measurement of Lmax levels, as well as the Leq levels required to determine compliance with operational noise goals.	Confirmed in interview with the OCE. Procedure for this activity has not been developed.	Compliant			
2002 EIS	7.4.1	MCC undertakes to develop procedures and train vehicle operators in working methods which minimise noise impacts	Induction review indicated that this is delivered but further refresh training would be appropriate.	Compliant			
2002 EIS	7.7.1	The mine will operate essentially as a zero discharge operation (discharge limited by the current EPL which is capped at 1 ML/day during Flood Flow in the Hunter River in accordance with the HRSTS) and therefore will not impact surrounding streams.	No discharges in the audit period	Compliant			
2002 EIS	7.7.8	A Farm Dams Property Assessment should be conducted, in the context of the proposed development, for any new dams that are to be built. Existing mine water system dams should be included. MCC has made application to the DLWC for existing mine water system dams to be registered.	Farm Dams Property Assessment not required in the audit period as no new dams were constructed	Not Applicable			

Reference	Section	Requirement	Evidence	Audit Finding	Risk		
					Consequence	Likelihood	Risk
2002 EIS	7.8	<p>The following measures will be taken by MCC to minimise the generation of dust:</p> <ul style="list-style-type: none"> - MCC will not use draglines in its operations. The equipment selected for the removal of coal and overburden addresses potential safety issues and environmental factors. Materials can be very selectively mined and placed with the minimum dust generation. - MCC have a blasting protocol in place that is designed to minimise overpressure, ground vibration and dust impacts. - In areas with high propensity for dust generation the use of water infusion will be used. This involves pumping water from underground storage areas and then allowing water to gravity feed through blast holes that have intersected underground workings or areas of high heat. The water percolates through the affected strata and back to the same underground storage area. - Overburden which has a high fines component and therefore, higher levels of dust generation will be placed at lower levels within the in pit dump. Materials that are still hot will also be placed low down in the pit area and capped with inert material. - Water carts equipped will be used to reduce dust during loading and unloading of trucks and to damp down haul roads to reduce dust generated by trucks hauling coal or overburden - When areas are identified as having a high dust potential mining can be suspended until more suitable conditions exist. Suitable conditions can consist of meteorological conditions - The use of wetting agents developed specifically developed for coal will be trialled in the suppression of dust. - Water sprays will be fitted to the ROM hopper, crusher and stack out facilities and will run while coal is being crushed or conveyed. - Stockpiles storage time will be monitored. - All trucks transporting coal from MCC have covers placed over the load to prevent coal dust being generated during transport of coal to local power stations or the RCT. 	<ul style="list-style-type: none"> No draglines used. Blasting protocol in place and blast results acceptable. Water infusion is used and was in use at the time of the site inspection. Noted and confirmed in interview with Production Superintendent. Water carts used. Mining adaption to environmental conditions confirmed. No trials of wetting agents in the audit period. Water sprays were fitted as described. Stockpile storage times were monitored and were a focus in management team meetings. Trucks are covered. 	Compliant			

Reference	Condition	Requirement	Evidence	Audit Finding	Risk																																					
					Consequence	Likelihood	Risk																																			
Environment Protection Licence 656																																										
1.0 Administrative Conditions																																										
	A 1.1	This licence authorises the carrying out of the scheduled activities listed below at the premises specified in A2. The activities are listed according to their scheduled activity classification, fee-based activity classification and the scale of the operation. Unless otherwise further restricted by a condition of this licence, the scale at which the activity is carried out must not exceed the maximum scale specified in this condition. Scheduled Activity Fee Based Activity Scale Coal works Coal Works 0 - 2000000 T handled Mining for coal Mining for Coal > 500000 - 2000000 T produced	The production number do not exceed these values.	Compliant																																						
2.0 Discharges to Air and Water and Applications to Land																																										
Location of monitoring/discharge points and areas	P 1																																									
	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. Point 1 - TSP Network , At locations where the level of particulate matter being sampled is representative of emissions from the operation of the mine taking into account prevailing wind direction and the location of residential properties or other sensitive receivers. Point 2 - Dust Deposition Network , At locations where dust deposition levels are representative of the levels experienced at residential properties, or other sensitive receivers, resulting from the operation of the mine.																																								
	P 1.2	The following points referred to in the table below are identified in this licence for the purposes of monitoring and/or setting of limits for the emission of noise from the point. Air blast overpressure & ground vibration peak particle velocity monitoring Point 3 - Monitoring location identified as B1 in "Muswellbrook Coal Company Limited, No. 1 Open Cut Extension, Blast-Vibration Management Plan, December 2010". Point 4 - Monitoring location identified as B2 in "Muswellbrook Coal Company Limited, No. 1 Open Cut Extension, Blast-Vibration Management Plan, December 2010". Point 5 - Monitoring location identified as B3 in "Muswellbrook Coal Company Limited, No. 1 Open Cut Extension, Blast-Vibration Management Plan, December 2010". Point 6 - Monitoring location identified as B4 in "Muswellbrook Coal Company Limited, No. 1 Open Cut Extension, Blast-Vibration Management Plan, December 2010".																																								
3.0 Limit Conditions																																										
Pollution of Waters	L 1																																									
	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 <i>Protection of the Environment Operations Act 1997</i> .	No evidence for any breach of Section 120 of the <i>Protection of the Environment Operations Act 1997</i> was identified in the audit.	Compliant																																						
Noise Limits	L 2																																									
	L 2.1	Noise from the premises must not exceed the noise limits presented in the table below. <table border="1"> <thead> <tr> <th>Location *</th> <th>Day LAeq(15 minute)</th> <th>Evening LAeq(15 minute)</th> <th>Night LAeq(15 minute)</th> <th>Night LA1(1 minute)</th> </tr> </thead> <tbody> <tr> <td>R7 (RG & GA Watts)</td> <td>36</td> <td>36</td> <td>36</td> <td>44</td> </tr> <tr> <td>R13 (McMaster)</td> <td>40</td> <td>40</td> <td>40</td> <td>51</td> </tr> <tr> <td>R15 (Collins)</td> <td>35</td> <td>35</td> <td>35</td> <td>46</td> </tr> <tr> <td>R16 (Tuckey)</td> <td>35</td> <td>35</td> <td>35</td> <td>46</td> </tr> <tr> <td>R17 (Colvin)</td> <td>35</td> <td>35</td> <td>35</td> <td>46</td> </tr> <tr> <td>R20 (Gordon)</td> <td>38</td> <td>38</td> <td>38</td> <td>48</td> </tr> </tbody> </table> Note: *The locations of the land identification numbers below are established in the document " Muswellbrook Coal Company Ltd- No. 1 Open Cut Extension EIS 2003" prepared by HLA Envirosciences Pty Ltd. Where LAeq mean the equivalent continuous noise level - the level of noise equivalent to the energy-average of noise levels occurring over a measurement period.	Location *	Day LAeq(15 minute)	Evening LAeq(15 minute)	Night LAeq(15 minute)	Night LA1(1 minute)	R7 (RG & GA Watts)	36	36	36	44	R13 (McMaster)	40	40	40	51	R15 (Collins)	35	35	35	46	R16 (Tuckey)	35	35	35	46	R17 (Colvin)	35	35	35	46	R20 (Gordon)	38	38	38	48	Compliant in 2011-12 Compliant in 2012-13 Compliant in 2013-14	Compliant			
Location *	Day LAeq(15 minute)	Evening LAeq(15 minute)	Night LAeq(15 minute)	Night LA1(1 minute)																																						
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R20 (Gordon)	38	38	38	48																																						
	L 2.2	For the purpose of Condition L2.1: a) Day is defined as the period from 7am to 6pm Monday to Saturday and 8am to 6pm Sundays and Public Holidays, b) Evening is defined as the period from 6pm to 10pm; and c) Night is defined as the period from 10pm to 7am Monday to Saturday and 10pm to 8am Sundays and Public Holidays.	Noted																																							

Reference	Condition	Requirement	Evidence	Audit Finding	Risk		
					Consequence	Likelihood	Risk
	L 2.3	Noise from the premises is to be measured within the residential boundary, or within 30m of the dwelling (rural situations) where the dwelling is more than 30m from the boundary to determine compliance with the LAeq(15 minute) noise limits in condition L2.1. Where it can be demonstrated that direct measurement of noise from the premises is impractical, the EPA may accept alternative means of determining compliance.	EPA has approved alternative locations (generally property boundary) that are less intrusive with regard to residents privacy	Compliant			
	L 2.4	Noise from the premises is to be measured at 1 metre from the dwelling facade to determine compliance with the LA1(1 minute) noise limit in condition L2.1.	EPA has approved alternative locations (generally property boundary) that are less intrusive with regard to residents privacy	Compliant			
Blasting	L 3						
	L 3.1	The airblast overpressure level from blasting operations in or on the premises must not exceed: 115 dB (Lin Peak) for more than 5% of the total number of blasts during each reporting period; at either monitoring point 3, 4, 5 or 6 in Condition P1.2.	Compliant in 2011-12 Compliant in 2012-13 Compliant in 2013-14	Compliant			
	L 3.2	The airblast overpressure level from blasting operations in or on the premises must not exceed: 120 dB (Lin Peak) at any time; at either monitoring point 3, 4, 5 or 6 in Condition P1.2.	Compliant in 2011-12 Compliant in 2012-13 Compliant in 2013-14	Compliant			
	L 3.3	The ground vibration peak particle velocity from blasting operations carried out in or on the premises must not exceed: 10 mm/second at any time; at either monitoring point 3, 4, 5 or 6 in Condition P1.2.	Compliant in 2011-12 Compliant in 2012-13 Compliant in 2013-14	Compliant			
	L 3.5	Offensive blast fume must not be emitted from the premises. <i>Definition:</i> <i>Offensive blast fume means post-blast gases from the detonation of explosives at the premises that by reason of their nature, duration, character or quality, or the time at which they are emitted, or any other circumstances:</i> <i>1. are harmful to (or likely to be harmful to) a person that is outside the premises from which it is emitted, or</i> <i>2. interferes unreasonably with (or is likely to interfere unreasonably with) the comfort or repose of a person who is outside the premises from which it is emitted.</i>	No offensive fume was reported in the audit period	Compliant			
4.0 Operating Conditions							
Activities must be carried out in a competent manner	O 1						
	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 b) the treatment, storage, processing, reprocessing, transport and disposal of waste generated by the activity.	The site inspection, review of the monitoring results and review of correspondence with the EPA did not identify any indication of incompetency on the part of MCC.	Compliant			
Maintenance of plant and equipment	O 2						
	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 b) must be operated in a proper and efficient manner.	The site inspection did not identify any poorly maintained equipment or improperly operated equipment associated with the licenced activity. The maintenance planning system was also reviewed to ensure maintenance was planned and coordinated and conducted in a timely fashion.	Compliant			
Dust	O 3						
	O 3.1	The premises must be maintained in a condition which minimises or prevents the emission of dust from the premises.	Dust emissions were adequately controlled at the time of the site inspection.	Compliant			
5.0 Monitoring and Recording Conditions							
Monitoring Records	M 1						
	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; b) kept for at least 4 years after the monitoring or event to which they relate took place; and c) produced in a legible form to any authorised officer of the EPA who asks to see them.	The monitoring reports are kept in hard copy for longer than 4 years though older ones were archived. No request from an EPA officer to produce records has occurred in the audit period. There had been a request to review results but records were not requested, only reviewed.	Compliant			
	M 1.3	The following records must be kept in respect of any samples required to be collected for the purposes of this licence: a) the date(s) on which the sample was taken; b) the time(s) at which the sample was collected; c) the point at which the sample was taken; and d) the name of the person who collected the sample.	The name of the person sampling was not always recorded. Generally Complaint apart from this.	Not Compliant Administrative			
Requirement to monitor concentration of pollutants discharged	M 2						

Reference	Condition	Requirement	Evidence	Audit Finding	Risk																		
					Consequence	Likelihood	Risk																
	M 7.1	To determine compliance with conditions L3.1, L3.2, L3.3 and L3.4: a) Airblast overpressure and ground vibration must be measured and electronically recorded for monitoring points 3, 4, 5 and 6 for the parameters specified in column 1 of the table below; and b) The licensee must use the units of measure, sampling method, and sample at the frequency specified opposite in the other columns. <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>Airblast Overpressure</td> <td>Decibels (Linear Peak)</td> <td>All blasts</td> <td>Australian Standard AS 2187.2-2006</td> </tr> <tr> <td>Ground Vibration Peak</td> <td>millimetres/second</td> <td>All blasts</td> <td>Australian Standard AS 2187.2-2006</td> </tr> <tr> <td>Particle Velocity</td> <td></td> <td></td> <td></td> </tr> </tbody> </table>	Parameter	Units of Measure	Frequency	Sampling Method	Airblast Overpressure	Decibels (Linear Peak)	All blasts	Australian Standard AS 2187.2-2006	Ground Vibration Peak	millimetres/second	All blasts	Australian Standard AS 2187.2-2006	Particle Velocity				2011-12, 20 measurements not recorded. 2012 - 13, 21 measurements not recorded. 2013 - 14, 6 measurements not recorded.	Not Compliant	E	1	Medium
Parameter	Units of Measure	Frequency	Sampling Method																				
Airblast Overpressure	Decibels (Linear Peak)	All blasts	Australian Standard AS 2187.2-2006																				
Ground Vibration Peak	millimetres/second	All blasts	Australian Standard AS 2187.2-2006																				
Particle Velocity																							
Other monitoring and recording conditions	M 8																						
	M 8.1	Requirement to monitor noise A noise compliance assessment report must be submitted to EPA on an annual basis with the Annual Return as set out in Condition R1. The report must be prepared by an accredited acoustic consultant and determine compliance with the noise limits in Condition L2.1.	2011-12, noise compliance report sighted in AR. 2012-13, noise compliance report sighted in AR. 2013-14, noise compliance report sighted in AR. All prepared by Global Acoustics - No indication of accreditation in report or on Global Acoustics website. EPA clarified this position and will accept a "suitably qualified and experienced acoustic practitioner". A review of CVs for the Global Acoustics team shows they meet this criteria.	Compliant																			
6.0 Reporting Conditions																							
Annual return documents	R 1																						
	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. At 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.	Annual Returns for the audit period provided as evidence and each contains the required details.	Compliant																			
	R 1.2	An Annual Return must be prepared in respect of each reporting period, except as provided below. <i>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.</i>	Noted																				
	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. <i>Note: An application to transfer a licence must be made in the approved form for this purpose.</i>	This has not occurred in the audit period	Not Applicable																			
	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.	This has not occurred in the audit period	Not Applicable																			
	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').	2013-14 Complies, postage confirmation and receipts attached to AR. 2011-12 and 2012-13 postage confirmation and receipts provided as evidence.	Compliant																			
	R 1.6	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.	Audit period ARs provided as evidence.	Compliant																			
	R 1.7	Within the Annual Return, the Statement of Compliance must be certified and the Monitoring and Complaints Summary must be signed by: a) the licence holder; or b) by a person approved in writing by the EPA to sign on behalf of the licence holder.	All ARs provided for the audit period meet these requirements	Compliant																			
Notification of environmental harm	R 2																						
	R 2.1	Notifications must be made by telephoning the Environment Line service on 131 555.	Noted																				
	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. <i>Note: The licensee or its employees must notify all relevant authorities of incidents causing or threatening material harm to the environment immediately after the person becomes aware of the incident in accordance with the requirements of Part 5.7 of the Act.</i>	No incidents in the audit period	Compliant																			
Written Report	R 3																						

Reference	Condition	Requirement	Evidence	Audit Finding	Risk		
					Consequence	Likelihood	Risk
	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 request a written report of the event.	Request for incident report on Spontaneous Combustion, report provided. Both the request and the response provided as evidence.	Compliant			
	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.	Request for incident report on Spontaneous Combustion, report provided. Both the request and the response provided as evidence.	Compliant			
	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; b) the type, volume and concentration of every pollutant discharged as a result of the event; c) the name, address and business hours telephone number of employees or agents of the licensee, or a specified class of them, who witnessed the event; d) the name, address and business hours telephone number of every other person (of whom the licensee is aware) who witnessed the event, unless the licensee has been unable to obtain that information after making reasonable effort; e) action taken by the licensee in relation to the event, including any follow-up contact with any complainants; f) details of any measure taken or proposed to be taken to prevent or mitigate against a recurrence of such an event; and g) any other relevant matters.	Incident report on Spontaneous Combustion includes these details.	Compliant			
	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.	No further requests for information had been forthcoming at the time of the audit.	Not Applicable			
Other reporting conditions							
	R 4						
	R 4.1	Noise Compliance Assessment Report A noise compliance assessment report must be submitted to the EPA on an annual basis with the Annual Return as set out in Condition R1. The report must be prepared by an accredited acoustic consultant and determine compliance with the noise limits in Condition L2.1.	2011-12, noise compliance report sighted in AR. 2012-13, noise compliance report sighted in AR. 2013-14, noise compliance report sighted in AR. All prepared by Global Acoustics - No indication of accreditation in report or on Global Acoustics website. EPA clarified this position and will accept a "suitably qualified and experienced acoustic practitioner". A review of CVs for the Global Acoustics team shows they meet this criteria.	Compliant			
	R 4.2	Reporting of exceedance of noise limits 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.	There were no exceedances in the audit period if the IPL is applied.	Compliant			
	R 4.3	Reporting of blasting monitoring The results of the blast monitoring required by condition M7.1 must be submitted to the EPA at the end of each reporting period.	These results were included in the ARs provided as evidence for the audit	Compliant			
	R 4.4	Spontaneous combustion management reporting The licensee must prepare and submit quarterly spontaneous combustion management reports to the EPA. A copy of each quarterly report must be forwarded to the regional office of the EPA no later than two (2) months after the quarterly period being reported. The quarterly report must include but not be limited to the following: a) A monthly summary of actions and procedures undertaken to prevent or control spontaneous combustion at the site b) An assessment of the effectiveness of the actions and procedures undertaken c) Spontaneous combustion areas capped in square meters d) Spontaneous combustion areas mined out in square meters e) Areas under water infusion f) Map of the approximate location of the areas subject to spontaneous combustion, areas capped, areas mined out and areas under water infusion g) Number of complaints received in relation to spontaneous combustion.	All the required quarterly Spontaneous Combustion reports for the audit period were provided as evidence. The Spontaneous Combustion reports provided contain the details listed in the licence at R 4.4	Compliant			
7.0 General Conditions							
Copy of licence kept at the premises or plant	G 1						
	G 1.1	A copy of this licence must be kept at the premises to which the licence applies.	Sighted in site inspection	Compliant			
	G 1.2	The licence must be produced to any authorised officer of the EPA who asks to see it.	No such requests in the audit period	Not Applicable			
	G 1.3	The licence must be available for inspection by any employee or agent of the licensee working at the premises.	Sighted in site inspection and verified at interview, copy on website (16-10-15)	Compliant			
8.0 Pollution Studies and Reduction Programs							
Coal Mine Wind Erosion of Exposed Land Assessment	U 1						

Reference	Condition	Requirement	Evidence	Audit Finding	Risk		
					Consequence	Likelihood	Risk
	U 1.1	<p>The licensee must undertake the following steps:</p> <ol style="list-style-type: none"> 1. Calculate the wind erosion exposed surface area (in hectares) within the premises as of 30 September 2015. 2. Determine the wind erosion exposed surface area (in hectares) predicted as at 30 September 2015 within the licensee's Environmental Assessment for the premises. 3. Compare the areas calculated in steps 1 and 2. 4. Submit a written report to the EPA at hunter.region@epa.nsw.gov.au containing the analysis required in steps 1 to 3, by 30 November 2015. <p>The report submitted to the EPA must be accompanied by spatial data to confirm the wind erosion exposed surface area calculations. The following data is required:</p> <ul style="list-style-type: none"> · Shapefiles showing the premises boundary. · Shapefiles showing the wind erosion exposed area within the premises as of 30 September 2015 · Shapefiles showing areas classified as stabilised surface as of 30 September 2015. · Details of any studies undertaken to verify that the areas of stabilised surface meet the definition. 	<p>The analysis that was required by 30th September 2015 is completed. This report is not yet completed</p>	Not Applicable			
		<p><i>Note: Environmental Assessment means any environmental assessment document prepared in order to gain approval or consent under the Environmental Planning and Assessment Act (1979) under which the licensee currently operates at the premises. If the predictions made in this document do not correspond to the current year of mine operation, the licensee should extrapolate between predictions.</i></p> <p><i>Stabilised Surface means any previously disturbed surface area which shows visual or other evidence of surface crusting and is resistant to wind-driven fugitive dust and is demonstrated to be stabilised. Stabilisation can be determined in accordance with one or more of the applicable test methods contained in the Rule 403 Implementation Handbook located at: www.copcoa.org/Docs/SCAQM%20r403%20handbook.doc.</i></p> <p><i>Wind Erosion Exposed Surface Area means the portion of the premises surface which has been physically moved, uncovered, destabilised or otherwise modified from its natural state, thereby increasing the potential for fugitive particulate matter emissions, but excluding areas which have been:</i></p> <ul style="list-style-type: none"> · paved or covered by a permanent building or structure; · maintained with a vegetative ground cover of at least 50% of ground cover for particular areas. <p><i>Vegetative ground cover can be determined in accordance with the standardised procedure for revegetation assessment contained in Atyeo C. & Thackway R. (2009) located at: http://data.daff.gov.au/data/warehouse/pe_brs90000004196/revegetationManual200906_20100410_ap14.pdf or</i></p> <ul style="list-style-type: none"> · classified as a stabilised surface. 	Noted				

Reference	Section	Requirement	Evidence	Audit Finding	Risk		
					Consequence	Likelihood	Risk
Muswellbrook Coal Company Mining Operations Plan, March 2015 to December 2020							
1.0 Introduction							
OC 1 Extension Environmental Impact Statement	1.2.1	In accordance with the Environmental Impact Statement (EIS) for the No. 1 Open Cut Extension the objectives of rehabilitation at MCC are to create a landform that is: <ul style="list-style-type: none"> • Compatible with the surrounding countryside; • Stable in the long term; and • Capable of a productive form of land use. The traditional land use in the area was beef cattle grazing. The rehabilitation commitments in the EIS are that rehabilitated land will have good grazing potential and high wildlife amenity. This will be achieved by maintenance of grazing capacity and the establishment of trees native to the region. Tree corridors will also be established to enhance connectivity of vegetation to surrounding remnant native vegetation, particularly to nearby Bells Mountain and Skelletar Ridge.	The site is compliant with all of these requirements but there is no agricultural monitoring to determine whether the productive capacity is "good" and is being "maintained". Agricultural (pasture productivity) monitoring is recommended to ensure this commitment can be confirmed and to assist MCC to press the case when relinquishment is sought.	Compliant			
Area C Modification Statement of Environmental Effects	1.2.2	The Area C Modification Statement of Environmental Effects (SEE) identifies that MCC is to develop an integrated, free-draining final landform that is consistent with the principles of the Synoptic Plan: Integrated Landscapes for Coal Mine Rehabilitation in the Hunter Valley of New South Wales (Synoptic Plan) (DMR, 1999).	The landform is consistent with the principles of the Synoptic Plan.	Compliant			
2.0 Proposed Mining Activities							
Mining Operations	2.3.3	The No. 1 Open Cut mining schedule will continue within the southern section of the approved area mining adjacent to previously extracted areas of the No. 2 and No. 3 Open Cuts and within a small section of the Muswellbrook Anticline which was previously excluded from the mining area. When the pit has reached full width it will continue north down through the seam sequences as they present from the Fleming through to the Loder seam with the final void located in the north western corner of No.1 Open Cut.	It is apparent that (within the confines of unknown geological and commercial constraints) the site is broadly following this plan. There are no increases in environmental impact as a result of any minor changes to the mining discussed here.	Compliant			
Overburden Emplacement	2.3.4	Overburden will be dumped back sequentially into the No.1 Open Cut void with consideration being given to carbonaceous content and liability to spontaneous combustion. Excess waste from No.1 Open Cut will be dumped into the western side of No.2 Open Cut. No extraction is planned within No.2 Open Cut during the MOP period.	Confirmed at interview with Mine Planners and OCE, included in induction package and observed in site inspection.	Compliant			
	2.3.4	MCC are establishing a small temporary out of pit dump (OOPD) on previously disturbed and rehabilitated surface within the approved disturbance area of No. 1 Open Cut. This temporary OOPD will be built on the top of the highwall of No.1 Open Cut to a maximum height of RL260	Sighted on-site	Compliant			
Processing Residues and Tailings	2.3.5	Belt pressed tailings are disposed of in the open cut as are coarse rejects	Sighted in sight inspection.	Compliant			
Decommissioning and Demolition Activities	2.3.7	A decommissioning and demolition strategy will be developed for the site prior to closure.	Not yet developed	Not Applicable			
Progressive Rehabilitation and Completion	2.3.9	Rehabilitation will continue to be progressively undertaken on areas that cease to be used for mining or mine-related activities as soon as reasonably practicable.	This occurs, sighted in site inspection and confirmed at various points of interview with EO.	Compliant			
3.0 ENVIRONMENTAL ISSUES MANAGEMENT							
Geology and Geochemistry	3.2.1	The top portion of the Greta Coal Measures and associated reactive ground is selectively mined and placed low within the pit to reduce the possibility of the material forming acidic water.	Confirmed at interview with Mine Planners and OCE and observed in site inspection.	Compliant			
	3.2.1	Geochemical sampling program Approximately 87 samples are proposed to be taken from existing drill core materials from five drill holes. A series of static and kinetic geochemical tests are proposed to be completed on the mine waste samples. The geochemical test program is designed to assess the degree of risk from the presence and potential oxidation of sulphides, acid generation and the presence/leaching of metals/ metalloids and salts.	Geologist confirmed that this analysis is scheduled for completion prior to the end of 2015.	Not Applicable			
Spontaneous Combustion	3.2.3	See Spontaneous Combustion Management Plan elsewhere in this audit					
Erosion and Sediment control	3.2.7	See Erosion and Sediment Control Management Plan elsewhere in this audit					
Soil Types	3.2.8	See Soil Stripping Management Plan elsewhere in this audit					
Flora	3.2.9	See Flora and Fauna Management Plan elsewhere in this audit					
Fauna	3.2.10	See Flora and Fauna Management Plan elsewhere in this audit					
Weeds and Feral Animals	3.2.11	Weed inspections shall be conducted on a regular basis, and reporting of weed control will be included in the Annual Environmental Management Report.	Inspection reports sighted and weeds are reported in the AEMRs	Compliant			

Reference	Section	Requirement	Evidence	Audit Finding	Risk		
					Consequence	Likelihood	Risk
Weeds and Feral Animals	3.2.11	Feral animal control will be undertaken on an annual or as required basis depending on the severity of feral animal populations. Control programs, such as baiting programs, will be developed in consultation with relevant authorities and neighbouring landowners to ensure that all legislative requirements are addressed and domestic animals are not exposed to any control regimes.	Inspections by the EO determine when feral animals are at levels where control is required. Evidence of consultation provided including contact with Hebden Wild Dog Association, LHPA and an aerial baiting program	Compliant			
Surface Water	3.2.12	See Water Management Plan and Erosion and sediment Control Management Plan elsewhere in this audit					
Groundwater	3.2.13	See Water Management Plan elsewhere in this audit					
Contaminated Land	3.1.24	Prior to final closure a preliminary investigation into potential sources of contamination, including some Phase 1 sampling and analysis, will be undertaken around the CHPP and MIA, as well as any other areas on site with the potential for contamination such as dams with diesel pumps etc.	Not yet conducted.	Not Applicable			
Blasting	3.2.16	See Blast-Vibration Management Plan elsewhere in this audit					
Noise	3.2.17	See Noise Management Plan elsewhere in this audit					
Air Quality	3.2.18	See Dust Management Plan elsewhere in this audit					
Visual and Lighting	3.2.19	See the Visual Amenity and Landscape Management Plan and the Lighting Management Plan elsewhere in this audit					
Aboriginal Heritage	3.2.20	See Archaeology and Cultural Heritage Management Plan elsewhere in this audit					
European Heritage	3.2.21	See Archaeology and Cultural Heritage Management Plan elsewhere in this audit					
Bushfire	3.2.22	See Bushfire Management Plan elsewhere in this audit					
4.0 POST MINING LAND USE							
Post Mining Landuse Goal	4.2	The final land use of the site will consist of a combination of approximately 50% pasture and 50% native trees with a vegetation corridor between Bells Mountain and Skelletar Ridge	Noted, assessed in the Flora and Fauna management plan and evident in the landscape design in the MOP plans	Compliant			
6.0 PERFORMANCE INDICATORS AND COMPLETION/RELINQUISHMENT CRITERIA							
Table 18		Water quality monitoring results show the water is suitable for beef cattle consumption.	Not yet achieved	Not Applicable			
Table 19		A free draining and stable landform is established. Landform is free draining with no unplanned pooling of water or identifiable rill or sheet erosion. Annual Monitoring Also covers other rehab commitments	Copy of Annual monitoring provided as evidence	Compliant			
Table 20		Soil Monitoring reports reported in AEMR	These have not been reported in the AEMRs as there has been no AEMRs developed since the new MOP was approved.	Not Applicable			
Table 21		Annual Rehabilitation monitoring reports for revegetation success assessment	Reported in AEMR	Compliant			
Table 21		Biodiversity Offset Areas monitored Annually	No monitoring conducted	Not Compliant	E	1	Medium
7.0 REHABILITATION IMPLEMENTATION							
Decommissioning Phase	7.2.1	MCC will decommission fixed plant, built infrastructure and services progressively when infrastructure items and plant become redundant. All mining related infrastructure will ultimately be removed at mine closure. Decommissioning activities include: Disconnection of all above ground and buried services and removal of associated infrastructure; Removal of all built infrastructure and plant; Removal of all wastes and hazardous materials; and Removal (or on-site remediation) of any contaminated soils in accordance with a contaminated land assessment (where required).	Noted, site still active at the time of the audit and production has not yet been reduced so little equipment has become redundant.	Not Applicable			
Landform Establishment Phase	7.2.2	The Land Management Plan, Water Management Plan, Final Void Management Plan and Soil Stripping Plan address this and are assessed elsewhere in the audit.					
Growth Media Development Phase	7.2.3	See Soil Stripping Plan and Land Management Plan elsewhere in this audit.					
Ecosystem and Land Use Establishment Phase	7.2.4	Native vegetation seed may be sown simultaneously with the pasture species seeding, preferably in the warmer months between late September and March. Sowing should occur as soon as possible after seedbed preparation to optimise the conditions for germination prior to surface crust development. Native vegetation establishment relies on initial establishment of local pioneer species to condition the soil for successive plant regeneration. These include wattles and grass species known to occupy disturbed environments throughout the local area.	This occurs - rehab activities at the time of the audit and confirmed at interview.	Compliant			
	7.2.4	The tree seed is pre-treated to break dormancy mechanisms and blended with a mixture of fertilizer and a bulking agent to assist in spreading operations	Evidence provided as an email from the seed provider.	Compliant			

Reference	Section	Requirement	Evidence	Audit Finding	Risk		
					Consequence	Likelihood	Risk
8.0 MONITORING AND RESEARCH							
Rehabilitation Monitoring	8.1	Landscape Function Analyses and Ecosystem Function LFA is a methodology used to assess key indicators of ecosystem function including landscape organisation and soil surface condition as a measure of how well the landscape retains and uses vital resources.	LFA conducted, reported in Rehabilitation Monitoring reports.	Compliant			
Rehabilitation Monitoring Locations	8.1.2	A total of six permanent reference sites have been established on MCC property representing both native woodlands and exotic grazing pasture. Rehabilitation monitoring sites were selected in October 2009, four woodland and three exotic pasture rehabilitation monitoring sites were established. In 2010 five new rehabilitation monitoring sites were established on new rehabilitation areas. Three woodland and two pasture sites were established.	Rehabilitation monitoring reports on these sites.	Compliant			
	8.1.2	Annual rehabilitation reports are prepared and the findings submitted as part of the Annual Environmental Management Report.	These have not been reported in the AEMRs as there has been no AEMRs developed since the new MOP was approved.	Not Applicable			
9.0 INTERVENTION AND ADAPTIVE MANAGEMENT							
	9.0	Annual rehabilitation monitoring results are assessed against completion criteria to identify if rehabilitation is trending toward a satisfactory outcome. In the event that rehabilitation monitoring results indicate a significant risk of rehabilitation failure, MCC will respond with a series of appropriate response actions to investigate the causes for the unsatisfactory rehabilitation performance and take any corrective steps necessary.	In the past, criteria were not established but rehab completion criteria were developed and approved by MCC in March 2015 and future Rehabilitation Monitoring reports will make the comparison.	Compliant			
Site Investigation	9.1.1	Where rehabilitation monitoring results indicate the potential for rehabilitation failure MCC will undertake a preliminary review of all site monitoring data to determine the extent and causes of the unsatisfactory performance. MCC will review rehabilitation monitoring results, site records (including weather records) and rehabilitation methodologies to identify any possible relationships between rehabilitation monitoring results, site conditions and rehabilitation practices.	No investigations conducted to date, some minor mitigation is planned and some further trials including the introduction of cattle is planned.	Not Applicable			
Management and Mitigation Responses	9.1.2	Following site investigations to investigate causes for unsatisfactory rehabilitation progress, MCC will undertake appropriate management actions to: • Mitigate the identified contributing factors; and • Repeat or repair rehabilitation works to produce a satisfactory standard.	No investigations conducted to date, some minor mitigation is planned and some further trials including the introduction of cattle is planned.	Not Applicable			
	9.1.2	Where investigations conclude that rehabilitation methodologies or land management practices have contributed to unsatisfactory rehabilitation outcomes, MCC utilises the continuous improvement feedback process to revise rehabilitation practices.	No investigations conducted to date, some minor mitigation is planned and some further trials including the introduction of cattle is planned.	Not Applicable			
Trigger Action Response Plan	9.3	Section 9.3 details the TARP, review directly from the TARP if it is found to have been triggered in the audit period.	The TARP has not been triggered in the audit period.	Not Applicable			
10.0 REPORTING							
	10	Rehabilitation monitoring and independent environmental audit results are reported in the Annual Environmental Management Report (AEMR). The AEMR discusses monitoring outcomes against completion criteria, and compliance with regulatory requirements and MCC's project commitments.	The 2014 AEMR does not compare monitoring outcomes with completion criteria, these have not been reported in the AEMRs as there has been no AEMRs developed since the new MOP was approved.	Not Applicable			
	10	In the event that potential rehabilitation failure has been identified that requires intervention any responses such as adaptive management or modification to rehabilitation methodologies will be reported in the AEMR.	No reported failure of rehabilitation	Not Applicable			
	10	AEMRs and independent audits will be submitted to relevant government agencies and made publically available via MCC's website.	The AEMR submission and publication is covered elsewhere and found compliant. Independent audits are on the MCC website.	Compliant			

Reference	Condition	Requirement	Evidence	Audit Finding	Risk		
					Consequence	Likelihood	Risk
Mining Lease 1304 for the Sandy Creek Underground Mine, renewed 16 June 2014							
1.0 Notice to Landholders							
	1 a)	Within a period of three months from the date of grant/renewal of this mining lease, the lease holder must serve on each landholder a notice in writing indicating that this mining lease has been granted/renewed and whether the lease includes the surface. A plan identifying each landholder and individual land parcel subject to the lease area, and a description of the lease area must accompany the notice.	All Land is owned by MCC	Not Applicable			
	1 b)	If there are ten or more landholders, 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 mining lease has been granted/renewed; state whether the lease includes the surface and must contain a plan and description of the lease area. If a notice is made under condition 1(b), compliance with condition 1(a) is not required.	All Land is owned by MCC	Not Applicable			
2.0 Rehabilitation							
		Any disturbance resulting from the activities carried out under this lease must be rehabilitated to the satisfaction of the minister	MOP and annual DRE inspections, note site has not yet asked for relinquishment.	Compliant			
3.0 Mining Operations Plan and Annual Rehabilitation Report							
	3 a)	The lease holder must comply with an approved Mining Operations Plan (MOP) in carrying out any significant surface disturbing activities, including mining operations, mining purposes and prospecting. The lease holder must apply to the Minister for approval of a MOP. An approved MOP must be in place prior to commencing any significant surface disturbing activities, including mining operations, mining purposes and prospecting.	See MOP review in this audit	Compliant			
	3 b)	The MOP must identify the post mining land use and set out a detailed rehabilitation strategy which: (i) identifies areas that will be disturbed; (ii) details the staging of specific mining operations, mining purposes and prospecting; (iii) identifies how the mine will be managed and rehabilitated to achieve the post mining land use; (iv) identifies how mining operations, mining purposes and prospecting will be carried out in order to prevent and or minimise harm to the environment; and (v) reflects the conditions of approval under: • the <i>Environmental Planning and Assessment Act 1979</i> ; • the <i>Protection of the Environment Operations Act 1997</i> ; and • any other approvals relevant to the development including the conditions of this mining lease.	The MOP complies with these requirements	Compliant			
	3 c)	The MOP must be prepared in accordance with the ESG3: Mining Operations Plan (MOP) Guidelines September 2013	MOP is approved by DRE Environment and Sustainability Branch	Compliant			
	3 f)	The lease holder must prepare a Rehabilitation Report to the satisfaction of the Minister. The report must: (i) provide a detailed review of the progress of rehabilitation against the performance measures and criteria established in the approved MOP; (ii) be submitted annually on the grant anniversary date (or at such other times as agreed by the Minister); and (iii) be prepared in accordance with any relevant annual reporting guidelines published on the Department's website at www.resources.nsw.gov.au/environment .	See AEMRs for the audit period, these are compliant with this requirement.	Compliant			

Reference	Condition	Requirement	Evidence	Audit Finding	Risk		
					Consequence	Likelihood	Risk
4.0 Compliance Report							
	4 a)	The lease holder must submit a Compliance Report to the satisfaction of the Minister. The report must be prepared in accordance with any relevant guidelines or requirements published by the Minister for compliance reporting.	Compliance reports are not developed	Not Compliant	E	2	Low
	4 b)	The Compliance Report must include: (i) the extent to which the conditions of this mining lease or any provisions of the Act or the regulations applicable to activities under this mining lease, have or have not been complied with; (ii) particulars of any non-compliance with any such conditions or provisions, (iii) the reasons for any such non-compliance; (iv) any action taken, or to be taken, to prevent any recurrence, or to mitigate the effects, of that non-compliance.	Compliance reports are not developed				
	4 c)	The Compliance Report must be lodged with the Department annually on the grant anniversary date for the life of this mining lease.	Compliance reports are not developed, first report was due in June 2015, not submitted				
	4 d)	In addition to annual lodgement under condition 4(c) above, a Compliance Report: (i) must accompany any application to renew this mining lease under the Act; (ii) must accompany any application to transfer this mining lease under the Act; and (iii) must accompany any application to cancel, or to partially cancel, this mining lease under the Act.	Compliance reports are not developed				
5.0 Environmental Incident Report							
	5 a)	The lease holder must notify the Department of all: (i) breaches of the conditions of this mining lease or breaches of the Act causing or threatening material harm to the environment; and (ii) breaches of environmental protection legislation causing or threatening material harm to the environment (as defined in the <i>Protection of the Environment Administration Act 1991</i>), arising in connection with significant surface disturbing activities, including mining operations, mining purposes and prospecting operations, under this mining lease. The notification must be given immediately after the lease holder becomes aware of the breach.	No breaches of license conditions were identified during the audit period	Compliant			
	5 b)	The lease holder must submit an Environmental Incident Report to the Department within seven (7) days of all breaches referred to in condition 5(a)(i) and (ii). The Environmental Incident Report must include: (i) the details of the mining lease; (ii) contact details for the lease holder; (iii) a map identifying the location of the incident and where material harm to the environment has or is likely to occur; (iv) a description of the nature of the incident or breach, likely causes and consequences; (v) a timetable showing actions taken or planned to address the incident and to prevent future incidents or breaches referred to in 5(a). (vi) a summary of all previous incidents or breaches which have occurred in the previous 12 months relating to significant surface disturbing activities, including mining operations, mining purposes and prospecting operations under this mining lease.	No reportable environmental incidents identified in the audit period	Compliant			

Reference	Condition	Requirement	Evidence	Audit Finding	Risk		
					Consequence	Likelihood	Risk
	5 C)	In addition to the requirements set out in conditions 5(a) and (b), the lease holder must immediately advise the Department of any notification made under section 148 of the <i>Protection of the Environment Operations Act 1997</i> arising in connection with significant surface disturbing activities including mining operations, mining purposes and prospecting operations, under this mining lease.	No such notifications	Compliant			
6.0 Subsidence Management							
	6	Underground operations must not commence without an approved Subsidence Management Plan	UG mine has not commenced	Not Applicable			
8.0 Single Security							
	8	<p>The lease holder is required to provide and maintain a security deposit to secure funding for the fulfilment of obligations of all or any kind under the mining lease, including obligations of all or any kind under the mining lease that may arise in the future.</p> <p>The amount of the security deposit to be provided as a single security has been assessed by the Minister at \$6,910,000.</p> <p>The leases covered by the single security include:</p> <p>Consolidated Coal Lease 713 (Act 1973)</p> <p>Mining Lease 1304 (Act 1992)</p> <p>Mining Lease 1513 (Act 1992)</p> <p>Mining Lease 1562 (Act 1992)</p>	Evidence of the lodgement and amount of security deposits provided.	Compliant			

Reference	Condition	Requirement	Evidence	Audit Finding	Risk		
					Consequence	Likelihood	Risk
Mining Lease 1562 for No 1 Open Cut Extension, granted 16 February 2005							
Notice to Landholders							
	1 a)	Within a period of three months from the date of grant/renewal of this mining lease, the lease holder must serve on each landholder a notice in writing indicating that this mining lease has been granted/renewed and whether the lease includes the surface. A plan identifying each landholder and individual land parcel subject to the lease area, and a description of the lease area must accompany the notice.	All land is owned by MCC.	Not Applicable			
	1 b)	If there are ten or more landholders, 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 mining lease has been granted/renewed; state whether the lease includes the surface and must contain a plan and description of the lease area. If a notice is made under condition 1(b), compliance with condition 1(a) is not required.	All land is owned by MCC.	Not Applicable			
Mining, Rehabilitation, Environmental Management Process, Mining Operations Plan							
	2.1	Mining operations, including mining purposes, must be conducted in accordance with a Mining Operations Plan (the Plan) satisfactory to the Director-General. The Plan together with environmental conditions of development consent and other approvals will form the basis for:- (a) ongoing mining operations and environmental management; and (b) ongoing monitoring of the project.	MOP is approved by DRE and DRE conduct annual inspections of the site to confirm compliance.	Compliant			
	2.2	The plan must be prepared in accordance with the Director Generals guidelines current at the time of lodgement.	MOP is approved by DRE and is current.	Compliant			
	2.3	A Plan must be lodged with the Director-General:- (a) prior to the commencement of mining operations (including mining purposes); (b) subsequently as appropriate prior to the expiry of any current Plan; and (c) in accordance with any direction issued by the Director-General.	MOP was in place prior to commencement of operations, this was outside of the audit period.	Compliant			
	2.4	The Plan must present a schedule of proposed mine development for a period of up to seven (7) years and contain diagrams and documentation which identify:- (a) area(s) proposed to be disturbed under the Plan; (b) mining and rehabilitation method(s) to be used and their sequence; (c) areas to be used for disposal of tailings/waste; (d) existing and proposed surface infrastructure; (e) existing flora and fauna on the site; (f) progressive rehabilitation schedules; (g) areas of particular environmental, ecological and cultural sensitivity and measures to protect these areas; (h) water management systems (including erosion and sediment controls); (i) proposed resource recovery; and (j) where the mine will cease extraction during the term of the Plan, a closure plan including final rehabilitation objectives/methods and post mining landuse/vegetation.	MOP plans reflect this requirement.	Compliant			
	2.8	During the life of the Mining Operations Plan, proposed modifications to the Plan must be lodged with the Director-General and will be subject to the review process outlined in clauses (5) - (7) above.	This occurs as evidenced by the submission and approval of the most recent MOP revision - the Closure MOP	Compliant			

Reference	Condition	Requirement	Evidence	Audit Finding	Risk		
					Consequence	Likelihood	Risk
Annual Environmental Management Report							
	3.1	Within 12 months of the commencement of mining operations and thereafter annually or, at such other times as may be allowed by the Director-General, the lease holder must lodge an Annual Environmental Management Report (AEMR) with the Director-General.	AEMRs submitted for the audit period	Compliant			
	3.2	The AEMR must be prepared in accordance with the Director-General's guidelines current at the time of reporting and contain a review and forecast of performance for the preceding and ensuing twelve months in terms of: (a) the accepted Mining Operations Plan; (b) development consent requirements and conditions; (c) Department of Environment and Conservation and Department of Infrastructure, Planning and Natural Resources licences and approvals; (d) any other statutory environmental requirements; (e) details of any variations to environmental approvals applicable to the lease area; and (f) where relevant, progress towards final rehabilitation objectives.	The AEMRs are generally in accordance with this requirement.	Compliant			
	3.3	After considering an AEMR the Director-General may, by notice in writing, direct the lease holder to undertake operations, remedial actions or supplementary studies in the manner and within the period specified in the notice to ensure that operations on the lease area are conducted in accordance with sound mining and environmental practice.	Some directions have been given following site inspections by DRE but no direction has been given as a result of the review of the AEMR. Sighted the action plan for the corrective actions, not due prior to the audit date.	Compliant			
	3.4	The lease holder shall, as and when directed by the Minister, co-operate with the Director-General to conduct and facilitate review of the AEMR involving other government agencies and the local council.	This direction has not been issued but several regulators do receive the AEMR for comment including MSC, OEH, NoW and DP&E	Compliant			
Subsidence Management							
	4.1	(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. (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 <i>Guideline for Applications for Subsidence Management Approvals</i> . (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 <i>Coal Mines Regulation Act 1982</i> , or the document <i>New Subsidence Management Plan Approval Process – Transitional Provisions</i> . (d) Subsidence Management Plans are to be prepared in accordance with the <i>Guideline for Applications for Subsidence Management Approvals</i> . (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 <i>New Approval Process for Management of Coal Mining Subsidence - Policy</i> .	Underground Mining has not commenced and is not planned at present	Not Applicable			

Reference	Condition	Requirement	Evidence	Audit Finding	Risk		
					Consequence	Likelihood	Risk
Control of Operations							
	6	<p>(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 lease holder to:-</p> <p>(i) cease working the lease; or</p> <p>(ii) cease that part of the operation not complying with the Act or conditions;</p> <p>until in the opinion of the Environmental Officer the situation is rectified.</p> <p>(b) The lease holder must comply with any direction given. The Director-General may confirm, vary or revoke any such direction.</p> <p>(c) A direction referred to in this condition may be served on the Mine Manager.</p>	No such directions have been given	Not Applicable			
Blasting							
	11	<p>(a) <u>Ground Vibration</u></p> <p>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 Conservation.</p> <p>(b) <u>Blast Overpressure</u></p> <p>The lease holder must ensure that the blast overpressure noise level generated by any blasting within the lease area does not exceed 120 dB (linear) and 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 Conservation.</p>	All blasts in the audit period comply with a) and b)	Compliant			
Rehabilitation							
	13	<p>(a) Land disturbed must be rehabilitated to a stable and permanent form suitable for a subsequent land use acceptable to the Director-General and in accordance with the Mining Operations Plan so that:-</p> <ul style="list-style-type: none"> • there is no adverse environmental effect outside the disturbed area and that the land is properly drained and protected from soil erosion. • the state of the land is compatible with the surrounding land and land use requirements. • the landforms, soils, hydrology and flora require no greater maintenance than that in the surrounding land. • in cases where revegetation is required and native vegetation has been removed or damaged, the original species must be re-established with close reference to the flora survey included in the Mining Operations Plan. If the original vegetation was not native, any re-established vegetation must be appropriate to the area and at an acceptable density. • the land does not pose a threat to public safety. <p>(b) Any topsoil that is removed must be stored and maintained in a manner acceptable to the Director-General.</p>	Rehabilitation to date is in compliance with this requirement.	Compliant			
	14	The lease holder must comply with any direction given by the Director-General regarding the stabilisation and revegetation of any mine residues, tallings or overburden dumps situated on the lease area.	No Directions given in the audit period	Compliant			
Exploratory Drilling							
	15.1	At least twenty eight days prior to commencement of drilling operations the lease holder must notify the relevant Department of Infrastructure, Planning and Natural Resources regional hydrogeologist of the intention to drill exploratory drill holes together with information on the location of the proposed holes.	Drilling Notification to NoW submitted 28 days prior to scheduled drilling commencement	Compliant			

Reference	Condition	Requirement	Evidence	Audit Finding	Risk		
					Consequence	Likelihood	Risk
	15.2	<p>If the lease holder drills exploratory drill holes he must satisfy the Director-General that:-</p> <p>(a) all cored holes are accurately surveyed and permanently marked in accordance with Departmental guidelines so that their location can be easily established;</p> <p>(b) all holes cored or otherwise are sealed to prevent the collapse of the surrounding surface;</p> <p>(c) all drill holes are permanently sealed with cement plugs to prevent surface discharge of groundwaters;</p> <p>(d) if any drill hole meets natural or noxious gases it is plugged or sealed to prevent their escape;</p> <p>(e) if any drill hole meets an artesian or sub-artesian flow it is effectively sealed to prevent contamination of aquifers.</p> <p>(f) 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.</p> <p>(g) once any drill hole ceases to be used the land and its immediate vicinity is left in a clean, tidy and stable condition.</p>	Drilling Notification to NoW details all these requirements	Compliant			
Prevention of Soil Erosion and Pollution							
	16	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.	The rest of this audit shows that the site is compliant with this requirement	Compliant			
Roads and Tracks							
	19 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 Mine Subsidence Compensation Fund.	No road damage in the audit period	Not Applicable			
Special Conditions							
	27 a) and b)	<p>The lease holder shall take all precautions against causing outbreak of spontaneous combustion and fire on the subject area, shall make record of such occurrence, and notify a Environmental Officer of such occurrence.</p> <p>Notwithstanding (a) above, the lease holder shall establish and implement a Spontaneous Combustion Management Plan which is to address risk assessment, management control procedures and reporting protocols to the satisfaction of a Environmental Officer.</p>	<p>Spon Com reports cover this.</p> <p>Recorded in the hazard plan</p> <p>Notifications to EO - morning meeting and data for AEMP and Spon Com EPA reports</p> <p>Spontaneous Combustion MP provided as evidence.</p>	Compliant			

Reference	Condition	Requirement	Evidence	Audit Finding	Risk		
					Consequence	Likelihood	Risk
Consolidated Coal Lease 713, 4 December 2008							
Notice to Landholders							
	1	Within a period of three months from the date of grant/renewal of this mining lease, the lease holder must serve on each landholder a notice in writing indicating that this mining lease has been granted/renewed and whether the lease includes the surface. A plan identifying each landholder and individual land parcel subject to the lease area, and a description of the lease area must accompany the notice.	Not renewed in the audit period	Not Applicable			
	1	If there are ten or more landholders, 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 mining lease has been granted/renewed; state whether the lease includes the surface and must contain a plan and description of the lease area. If a notice is made under condition 1(b), compliance with condition 1(a) is not required.	Not renewed in the audit period	Not Applicable			
Environmental Harm							
	2	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.	Covered through the rest of this audit.	Compliant			
Mining Operations Plan							
	3	<p>(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.</p> <p>(b) The MOP must:</p> <ul style="list-style-type: none"> i) identify areas that will be disturbed by mining operations; ii) detail the staging of specific mining operations; iii) identify how the mine will be managed to allow mine closure; iv) identify how mining operations will be carried out on site in order to prevent and/or minimise harm to the environment; v) reflect the conditions of approval under: <ul style="list-style-type: none"> - the <i>Environmental Planning and Assessment Act 1979</i> - the <i>Protection of the Environment Operations Act 1997</i> - and any other approvals relevant to the development including the conditions of this lease; and vi) have regard to any relevant guidelines adopted by the Director-General. <p>(c) The titleholder may apply to the Director-General to amend an approved MOP at any time.</p> <p>(d) It is not a breach of this condition if:</p> <ul style="list-style-type: none"> i) the operations constituting the breach were necessary to comply with a lawful order or direction given under the <i>Mining Act 1992</i>, the <i>Environmental Planning and Assessment Act 1979</i>, <i>Protection of the Environment Operations Act 1997</i> or the <i>Occupational Health and Safety Act 2000</i>; and 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. <p>(e) A MOP ceases to have effect 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.</p>	MOP is in place and approved by DRE.	Compliant			
Environmental Management Reporting							
	4	The lease holder must lodge Environmental Management Reports (EMR) with the Director-General annually or at dates otherwise directed by the Director-General.	AEMRs have been submitted for the audit period that satisfy this requirement	Compliant			
	5	<p>5. The EMR must:</p> <ul style="list-style-type: none"> a) report against compliance with the MOP; b) report on progress in respect of rehabilitation completion criteria; c) report on the extent of compliance with regulatory requirements; and d) have regard to any relevant guidelines adopted by the Director-General; 	The AEMR is consistent with this requirement	Compliant			
	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.	Noted, no requests in the audit period	Not Applicable			
Rehabilitation							
	7	Disturbed land must be rehabilitated to a sustainable/agreed end land use to the satisfaction of the Director-General.	The MOP controls this, disturbed land is progressively rehabilitated.	Compliant			

Reference	Condition	Requirement	Evidence	Audit Finding	Risk		
					Consequence	Likelihood	Risk
Subsidence Management							
	8	<p>(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.</p> <p>(b) Underground mining operations which will potentially lead to subsidence include secondary extraction panels such as longwalls or minewalls, associated first workings (gateroads, installation roads and associated main headings, etc), and pillar extractions, and are otherwise defined by the <i>Applications for Subsidence Management Approvals guidelines (EDG17)</i></p> <p>(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 <i>Mine Health & Safety Act 2004</i>, or the document <i>New Subsidence Management Plan Approval Process – Transitional Provisions (EDF09)</i>.</p> <p>(d) Subsidence Management Plans are to be prepared in accordance with the <i>Guideline for Applications for Subsidence Management Approvals</i>.</p> <p>(e) Subsidence Management Plans as approved shall form part of the Mining Operations Plan required under Condition 3 and will be subject to the Annual Environmental Management Report process as set out under Condition 4. The SMP is also subject to the requirements for subsidence monitoring and reporting set out in the document <i>New Approval Process for Management of Coal Mining Subsidence - Policy</i>.</p>	No UG mining during the audit period and none Planned at present.	Not Applicable			
Control of Operations							
	6	<p>(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 lease holder to:-</p> <p>(i) cease working the lease; or</p> <p>(ii) cease that part of the operation not complying with the Act or conditions;</p> <p>until in the opinion of the Environmental Officer the situation is rectified.</p> <p>(b) The lease holder must comply with any direction given. The Director-General may confirm, vary or revoke any such direction.</p> <p>(c) A direction referred to in this condition may be served on the Mine Manager.</p>	No such direction given in the audit period.	Not Applicable			
Blasting							
	11	<p>(a) <u>Ground Vibration</u></p> <p>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 Conservation.</p> <p>(b) <u>Blast Overpressure</u></p> <p>The lease holder must ensure that the blast overpressure noise level generated by any blasting within the lease area does not exceed 120 dB (linear) and 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 Conservation.</p>	All blasts have complied with a) and b)	Compliant			
Exploratory Drilling							
	15.1	At least twenty eight days prior to commencement of drilling operations the lease holder must notify the relevant Department of Infrastructure, Planning and Natural Resources regional hydrogeologist of the intention to drill exploratory drill holes together with information on the location of the proposed holes.	No drilling in the CCL in the audit period	Not Applicable			

Reference	Condition	Requirement	Evidence	Audit Finding	Risk		
					Consequence	Likelihood	Risk
	15.2	<p>If the lease holder drills exploratory drill holes he must satisfy the Director-General that:-</p> <p>(a) all cored holes are accurately surveyed and permanently marked in accordance with Departmental guidelines so that their location can be easily established;</p> <p>b) all holes cored or otherwise are sealed to prevent the collapse of the surrounding surface;</p> <p>(c) all drill holes are permanently sealed with cement plugs to prevent surface discharge of groundwaters;</p> <p>(d) if any drill hole meets natural or noxious gases it is plugged or sealed to prevent their escape;</p> <p>(e) if any drill hole meets an artesian or sub-artesian flow it is effectively sealed to prevent contamination of aquifers.</p> <p>(f) 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.</p> <p>(g) once any drill hole ceases to be used the land and its immediate vicinity is left in a clean, tidy and stable condition.</p>	No drilling in the CCL in the audit period	Not Applicable			
Prevention of Soil Erosion and Pollution							
	16	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.	This compliance is covered through the audit.	Compliant			
Roads and Tracks							
	19 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 Mine Subsidence Compensation Fund.	No road damage as a result of this lease	Not Applicable			

Condition	Requirement	Evidence	Audit Finding	Risk		
				Consequence	Likelihood	Risk
NSW Office of Water Bore License, 20BL169014, 16 January 2014						
2	(2) THE LICENCE HOLDER MUST DEVELOP AND IMPLEMENT A METHODOLOGY TO ESTIMATE THE ANNUAL VOLUME OF ALL GROUNDWATER INFLOW (WATER BUDGET), APPROVED BY THE OFFICE OF WATER. WATER BUDGETS MUST BE SET AND APPROVED ONE MONTH PRIOR TO THE BEGINNING OF EACH WATER YEAR TO ENABLE IMPLEMENTATION.	Methodology is detailed in the SWMP. NoW were provided the SWMP for comment and are provided with the groundwater calculations in the AEMR annually.	Compliant			
3	(3) THE LICENCE HOLDER MUST PROVIDE THE OFFICE OF WATER WITH A MAP OF THE LICENSED SITE SHOWING AREAS OF ALLUVIAL SEDIMENTS INTERFERED BY THE MINE WORKS. NOTE: (IF THERE IS NO INTERFERENCE WITH ALLUVIAL SEDIMENTS A MAP IS NOT REQUIRED TO BE PROVIDED).	Map provided as evidence	Compliant			
4	(4) THE LICENCE HOLDER MUST IMPLEMENT MEASURES TO PREVENT ALLUVIAL GROUNDWATER FLOWS FROM ENTERING THE MINE WORK BY 14 AUGUST 2014, AS APPROVED BY THE OFFICE OF WATER. THE LICENCE HOLDER MUST ALSO COMPLY WITH ANY DIRECTIONS ISSUED BY THE OFFICE OF WATER WITH RESPECT TO INSTALLATION AND OPERATION OF NECESSARY WORKS TO ISOLATE THE MINE WORKS FROM WATER FLOWS EMANATING FROM SANDY CREEK.	Work has been conducted but there is no Office of Water Approval	Not Compliant	E	2	Low
5	(5) THE LICENSE HOLDER MUST PROVIDE THE OFFICE OF WATER WITH A MANAGEMENT PLAN, WITHIN SIX MONTHS OF ISSUING THE LICENCE, TO IDENTIFY MEASURES TO BE USED TO MINIMISE ONGOING SEEPAGE OF ALLUVIAL GROUNDWATER TO THE MINE WORKS AND FOR RESTORING THE MINE WORKS ABOVE THE FINAL WATER LEVEL FOR WHEN THE PITS ARE NO LONGER BEING USED, TO BE APPROVED BY THE OFFICE OF WATER.	SWMP, FVMP, Water Balance Provided to NoW for comment	Compliant			
6	(6) THE LICENCE HOLDER MUST PROVIDE THE OFFICE OF WATER WITH A MAP OF THE LICENSED SITE SHOWING AREAS OF ALLUVIAL SEDIMENTS LIKELY TO BE IMPACTED BY THE OPERATION OF THE BORE, INCLUDING THE DEWATERING BORE LICENSED AS 20BL170473, AND THE CLOSED MUSWELLBROOK (NORTH) UNDERGROUND MINE WORKINGS.	Map provided as evidence	Compliant			
7	(7) THE LICENCE HOLDER MUST DEVELOP AND IMPLEMENT A GROUNDWATER MONITORING AND CONTINGENCY PLAN, WITH ITS REPORTING SCHEDULE, AND APPROVED BY THE OFFICE OF WATER. THE GROUNDWATER MONITORING AND CONTINGENCY PLAN IS TO BE PREPARED AND SUBMITTED TO THE OFFICE OF WATER WITHIN SIX MONTHS OF ISSUING THE LICENCE USING THE TEMPLATE PROVIDED BY THE OFFICE OF WATER.	Groundwater TARP provided as evidence.	Compliant			
8	(8) THE LICENCE HOLDER MUST PROVIDE THE OFFICE OF WATER WITH AN ANNUAL COMPLIANCE REPORT, TO REPORT ON THE RESULTS OF THE GROUNDWATER MONITORING AND CONTINGENCY PLAN, WITHIN (3) THREE MONTHS OF THE END OF THE WATER YEAR BEING REPORTED ON. THE ANNUAL COMPLIANCE REPORT MUST: A) ASSESS COMPLIANCE WITH THE LICENCE, INCLUDING THE GROUNDWATER MONITORING; B) PROVIDE A SUMMARY OF NEW BORES OR PITS CONSTRUCTED DURING THAT YEAR C) PROVIDE A STATISTICAL SUMMARY FOR THE MONITORING DATA COLLATED FOR EACH BORE FOR THE LAST WATER YEAR.	Annual Compliance report, not submitted, AEMR covers some of the detail but not all.	Not Compliant Administrative			
9	(9) AN EXTRACTION MEASUREMENT DEVICE MUST BE INSTALLED AND MAINTAINED ON EACH EXTRACTION DEVICE (PUMP) USED FOR EXTRACTION OF WATER UNDER THIS LICENCE, AND SUCH DEVICES MUST BE OF A TYPE AND STANDARD, AND MUST BE MAINTAINED IN A MANNER, WHICH IS ACCEPTABLE TO THE OFFICE OF WATER.	Devices installed, no NOW approval sighted as evidence, devices have not been calibrated.	Not Compliant	E	1	Medium
12	(12) THE VOLUME OF GROUNDWATER EXTRACTED FROM THE WORKS AUTHORISED BY THIS LICENCE, SHALL NOT EXCEED 1000 MEGALITRES (ML) IN ANY 12 MONTH PERIOD COMMENCING 1ST JULY. (THIS IS REFERRED TO AS THE "GROUNDWATER-ONLY ALLOCATION").	This has not been exceeded.	Compliant			

Condition	Requirement	Evidence	Audit Finding	Risk		
				Consequence	Likelihood	Risk
NSW Office of Water Bore License, 20BL169037, 5 April 2014						
2	(2) THE LICENCE HOLDER MUST DEVELOP AND IMPLEMENT A METHODOLOGY TO ESTIMATE THE ANNUAL VOLUME OF ALL GROUNDWATER INFLOW (WATER BUDGET), APPROVED BY THE OFFICE OF WATER. WATER BUDGETS MUST BE SET AND APPROVED ONE MONTH PRIOR TO THE BEGINNING OF EACH WATER YEAR TO ENABLE IMPLEMENTATION.	Methodology is detailed in the SWMP. NoW were provided the SWMP for comment and are provided with the groundwater calculations in the AEMR annually.	Compliant			
3	(3) THE LICENCE HOLDER MUST PROVIDE THE OFFICE OF WATER WITH A MAP OF THE LICENSED SITE SHOWING AREAS OF ALLUVIAL SEDIMENTS INTERFERED BY THE MINE WORKS. NOTE: (IF THERE IS NO INTERFERENCE WITH ALLUVIAL SEDIMENTS A MAP IS NOT REQUIRED TO BE PROVIDED).	Map provided as evidence	Compliant			
4	(4) THE LICENCE HOLDER MUST OBTAIN NECESSARY LICENCE(S) IN ACCORDANCE WITH THE PROVISIONS OF THE WATER MANAGEMENT ACT 2000 AND SUBORDINATE LEGISLATION TO ACCOUNT FOR ALLUVIAL WATER INFLOW, AS DETERMINED IN ACCORDANCE WITH CONDITION 2, OR IMPLEMENT MEASURES TO PREVENT ALLUVIAL GROUNDWATER FLOWS FROM ENTERING THE MINE WORK BY 30 JUNE 2015, AS APPROVED BY THE OFFICE OF WATER. THE LICENCE HOLDER MUST ALSO COMPLY WITH ANY DIRECTIONS ISSUED BY THE OFFICE OF WATER WITH RESPECT TO INSTALLATION AND OPERATION OF NECESSARY WORKS TO ISOLATE THE MINE WORKS FROM WATER FLOWS EMANATING FROM SANDY CREEK.	20BL169014, 20BL169037, 20BL169038 and 20BL170473	Compliant			
5	(5) WITHIN 3 MONTHS OF BEING ISSUED THE LICENCE, THE LICENSE HOLDER MUST PROVIDE THE OFFICE OF WATER WITH A MANAGEMENT PLAN THAT IDENTIFIES MEASURES FOR RESTORING THE MINE WORKS ABOVE THE FINAL WATER TABLE WHEN THEY ARE NO LONGER BEING USED.	MOP and Site Water Management plan, and more recently Final Void Management Plan, all provided to NOW	Compliant			
6	(6) THE LICENCE HOLDER MUST DEVELOP AND IMPLEMENT A GROUNDWATER MONITORING AND CONTINGENCY PLAN, WITH ITS REPORTING SCHEDULE, AND APPROVED BY THE OFFICE OF WATER. THE GROUNDWATER MONITORING AND CONTINGENCY PLAN IS TO BE PREPARED AND SUBMITTED TO THE OFFICE OF WATER WITHIN SIX MONTHS OF ISSUING THE LICENCE USING THE TEMPLATE PROVIDED BY THE OFFICE OF WATER.	Included in the Site Water Management Plan	Compliant			
7	(7) AS PART OF THE ANNUAL REPORTING REQUIRED UNDER THE DEVELOPMENT CONSENT, THE LICENCE HOLDER MUST: (I) ASSESS COMPLIANCE WITH THE TERMS AND CONDITIONS OF THE LICENCE; (II) PROVIDE A SUMMARY OF NEW BORES OR PITS CONSTRUCTED DURING THAT YEAR; (III) PROVIDE KEY STATISTICS FOR THE MONITORING DATA COLLATED FOR EACH BORE FOR THE PREVIOUS WATER YEAR; (IV) SUMMARISE EVENTS THAT IMPACTED ON GROUNDWATER DURING THE PREVIOUS WATER YEAR, INCLUDING ACTIONS TAKEN TO REMEDY THE SITUATION AND RELEVANT EXTRA MONITORING RESULTS; AND (V) INCLUDE ANY RECOMMENDATIONS OR MEASURES TO BE TAKEN FOR IMPROVEMENTS FOR THE NEW WATER YEAR.	i) not done ii) Included in AEMR iii) Included in AEMR iv) Included in AEMR v) Included in AEMR	Not Compliant Administrative			
8	(8) AN EXTRACTION MEASUREMENT DEVICE MUST BE INSTALLED AND MAINTAINED ON EACH EXTRACTION DEVICE (PUMP) USED FOR EXTRACTION OF WATER UNDER THIS LICENCE, AND SUCH DEVICES MUST BE OF A TYPE AND STANDARD, AND MUST BE MAINTAINED IN A MANNER, WHICH IS ACCEPTABLE TO THE OFFICE OF WATER.	Devices installed, no NOW approval sighted as evidence, devices have not been calibrated.	Not Compliant	E	1	Medium
9	(9) AS PART OF THE INDEPENDENT ENVIRONMENTAL AUDITING REQUIRED UNDER THE DEVELOPMENT CONSENT, THE LICENCE HOLDER MUST ENSURE THAT THE AUDIT: (I) SEEKS INPUT FROM THE OFFICE OF WATER; (II) ASSESS COMPLIANCE WITH THE TERMS AND CONDITIONS OF THIS LICENCE; (III) ASSESS COMPLIANCE WITH THE WATER MANAGEMENT PLAN AND ANY SUB-PLANS UNDER THE DEVELOPMENT CONSENT; (IV) REVIEW REPORTED IMPACTS OF THE EXTRACTIONS ON ANY AQUIFERS, GROUNDWATER DEPENDENT ECO-SYSTEMS AND ANY STREAMS IN THE AREA; (V) ASSESS THE METHODOLOGY USED TO REPORT THE IMPACTS IN CONDITION 7 (IV); (VI) MAKE COMPARISONS BETWEEN REPORTED AND PREDICTED IMPACTS (MODELLED RESULTS); AND (VII) PROVIDE RECOMMENDATIONS REGARDING ANY WORKS THAT SHOULD BE PERFORMED OR ADDITIONAL OBLIGATIONS THAT SHOULD BE IMPOSED IN ORDER TO RECTIFY ANY IMPACTS ON GROUNDWATER OR ANY CONNECTED WATER DEPENDENT ASSETS.	i) Message sent to Mitchell Issacs @ NOW re input to the audit by lead auditor, 16-10-15 ii) This audit iii) This audit iv) These have been reviewed, nothing identified beyond EIS predictions so no mitigation required. v) Reviewed several documents relating to this most pertinent being SLRs review of final Void Water Quality and Quantity - <i>Groundwater Management Study, SLR 2015</i> . vi) The water levels in the final voids (<i>Groundwater Management Study, SLR 2015</i>) remain in the same order of magnitude as the levels developed by Coffey for the Final Void Management Plan though they are slightly lower, the 2002 EIS did not nominate final void water levels due to uncertainty regarding the proposed Sandy Creek Underground Mine. vii) No recommendation are made here though the site is developing further closure documentation supported by the SLR studies (surface water and groundwater).	Compliant			
10	(10) THE VOLUME OF GROUNDWATER EXTRACTED FROM THE WORKS AUTHORISED BY THIS LICENCE AND BY LICENSE(S) 20BL169038 SHALL NOT EXCEED 2000 MEGALITRES IN ANY 12 MONTH PERIOD COMMENCING 1ST JULY.	Results in the AEMRs indicate that the licence amounts have not been exceeded.	Compliant			

Condition	Requirement	Evidence	Audit Finding	Risk		
				Consequence	Likelihood	Risk
NSW Office of Water Bore License, 20BL169038, 5 April 2014						
2	(2) THE LICENCE HOLDER MUST DEVELOP AND IMPLEMENT A METHODOLOGY TO ESTIMATE THE ANNUAL VOLUME OF ALL GROUNDWATER INFLOW (WATER BUDGET), APPROVED BY THE OFFICE OF WATER. WATER BUDGETS MUST BE SET AND APPROVED ONE MONTH PRIOR TO THE BEGINNING OF EACH WATER YEAR TO ENABLE IMPLEMENTATION.	Methodology is detailed in the SWMP. NoW were provided the SWMP for comment and are provided with the groundwater calculations in the AEMR annually.	Compliant			
3	(3) THE LICENCE HOLDER MUST PROVIDE THE OFFICE OF WATER WITH A MAP OF THE LICENSED SITE SHOWING AREAS OF ALLUVIAL SEDIMENTS INTERFERED BY THE MINE WORKS. NOTE: (IF THERE IS NO INTERFERENCE WITH ALLUVIAL SEDIMENTS A MAP IS NOT REQUIRED TO BE PROVIDED).	Map provided as evidence	Compliant			
4	(4) THE LICENCE HOLDER MUST OBTAIN NECESSARY LICENCE(S) IN ACCORDANCE WITH THE PROVISIONS OF THE WATER MANAGEMENT ACT 2000 AND SUBORDINATE LEGISLATION TO ACCOUNT FOR ALLUVIAL WATER INFLOW, AS DETERMINED IN ACCORDANCE WITH CONDITION 2, OR IMPLEMENT MEASURES TO PREVENT ALLUVIAL GROUNDWATER FLOWS FROM ENTERING THE MINE WORK BY 30 JUNE 2015, AS APPROVED BY THE OFFICE OF WATER. THE LICENCE HOLDER MUST ALSO COMPLY WITH ANY DIRECTIONS ISSUED BY THE OFFICE OF WATER WITH RESPECT TO INSTALLATION AND OPERATION OF NECESSARY WORKS TO ISOLATE THE MINE WORKS FROM WATER FLOWS EMANATING FROM SANDY CREEK.	20BL169014, 20BL169037, 20BL169038 and 20BL170473	Compliant			
5	(5) WITHIN 3 MONTHS OF BEING ISSUED THE LICENCE, THE LICENSE HOLDER MUST PROVIDE THE OFFICE OF WATER WITH A MANAGEMENT PLAN THAT IDENTIFIES MEASURES FOR RESTORING THE MINE WORKS ABOVE THE FINAL WATER TABLE WHEN THEY ARE NO LONGER BEING USED.	MOP and Site Water Management plan, and more recently Final Void Management Plan, all provided to NOW	Compliant			
6	(6) THE LICENCE HOLDER MUST DEVELOP AND IMPLEMENT A GROUNDWATER MONITORING AND CONTINGENCY PLAN, WITH ITS REPORTING SCHEDULE, AND APPROVED BY THE OFFICE OF WATER. THE GROUNDWATER MONITORING AND CONTINGENCY PLAN IS TO BE PREPARED AND SUBMITTED TO THE OFFICE OF WATER WITHIN SIX MONTHS OF ISSUING THE LICENCE USING THE TEMPLATE PROVIDED BY THE OFFICE OF WATER.	Included in the Site Water Management Plan	Compliant			
7	(7) AS PART OF THE ANNUAL REPORTING REQUIRED UNDER THE DEVELOPMENT CONSENT, THE LICENCE HOLDER MUST: (I) ASSESS COMPLIANCE WITH THE TERMS AND CONDITIONS OF THE LICENCE; (II) PROVIDE A SUMMARY OF NEW BORES OR PITS CONSTRUCTED DURING THAT YEAR; (III) PROVIDE KEY STATISTICS FOR THE MONITORING DATA COLLATED FOR EACH BORE FOR THE PREVIOUS WATER YEAR; (IV) SUMMARISE EVENTS THAT IMPACTED ON GROUNDWATER DURING THE PREVIOUS WATER YEAR, INCLUDING ACTIONS TAKEN TO REMEDY THE SITUATION AND RELEVANT EXTRA MONITORING RESULTS; AND (V) INCLUDE ANY RECOMMENDATIONS OR MEASURES TO BE TAKEN FOR IMPROVEMENTS FOR THE NEW WATER YEAR.	i) not done ii) Included in AEMR iii) Included in AEMR iv) Included in AEMR v) Included in AEMR	Not Compliant Administrative			
8	(8) AN EXTRACTION MEASUREMENT DEVICE MUST BE INSTALLED AND MAINTAINED ON EACH EXTRACTION DEVICE (PUMP) USED FOR EXTRACTION OF WATER UNDER THIS LICENCE, AND SUCH DEVICES MUST BE OF A TYPE AND STANDARD, AND MUST BE MAINTAINED IN A MANNER, WHICH IS ACCEPTABLE TO THE OFFICE OF WATER.	Devices installed, no NOW approval sighted as evidence, devices have not been calibrated.	Not Compliant	E	1	Medium
9	(9) AS PART OF THE INDEPENDENT ENVIRONMENTAL AUDITING REQUIRED UNDER THE DEVELOPMENT CONSENT, THE LICENCE HOLDER MUST ENSURE THAT THE AUDIT: (I) SEEKS INPUT FROM THE OFFICE OF WATER; (II) ASSESS COMPLIANCE WITH THE TERMS AND CONDITIONS OF THIS LICENCE; (III) ASSESS COMPLIANCE WITH THE WATER MANAGEMENT PLAN AND ANY SUB-PLANS UNDER THE DEVELOPMENT CONSENT; (IV) REVIEW REPORTED IMPACTS OF THE EXTRACTIONS ON ANY AQUIFERS, GROUNDWATER DEPENDENT ECO-SYSTEMS AND ANY STREAMS IN THE AREA; (V) ASSESS THE METHODOLOGY USED TO REPORT THE IMPACTS IN CONDITION 7 (IV); (VI) MAKE COMPARISONS BETWEEN REPORTED AND PREDICTED IMPACTS (MODELLED RESULTS); AND (VII) PROVIDE RECOMMENDATIONS REGARDING ANY WORKS THAT SHOULD BE PERFORMED OR ADDITIONAL OBLIGATIONS THAT SHOULD BE IMPOSED IN ORDER TO RECTIFY ANY IMPACTS ON GROUNDWATER OR ANY CONNECTED WATER DEPENDENT ASSETS.	i) Message sent to Mitchell Issacs @ NOW re input to the audit by lead auditor, 16-10-15 ii) This audit iii) This audit iv) These have been reviewed, nothing identified beyond EIS predictions so no mitigation required. v) Reviewed several documents relating to this most pertinent being SLRs review of final Void Water Quality and Quantity - <i>Groundwater Management Study, SLR 2015</i> . vi) The water levels in the final voids (<i>Groundwater Management Study, SLR 2015</i>) remain in the same order of magnitude as the levels developed by Coffey for the Final Void Management Plan though they are slightly lower, the 2002 EIS did not nominate final void water levels due to uncertainty regarding the proposed Sandy Creek Underground Mine. vii) No recommendation are made here though the site is developing further closure documentation supported by the SLR studies (surface water and groundwater).	Compliant			
10	(10) THE VOLUME OF GROUNDWATER EXTRACTED FROM THE WORKS AUTHORISED BY THIS LICENCE AND BY LICENSE(S) 20BL169037 SHALL NOT EXCEED 2000 MEGALITRES IN ANY 12 MONTH PERIOD COMMENCING 1ST JULY.	Results in the AEMRs indicate that the licence amounts have not been exceeded.	Compliant			

Condition	Requirement	Evidence	Audit Finding	Risk		
				Consequence	Likelihood	Risk
NSW Office of Water Bore License, 20BL170473, 24 August 2014						
2	(2) THE LICENCE HOLDER MUST DEVELOP AND IMPLEMENT A METHODOLOGY TO ESTIMATE THE ANNUAL VOLUME OF ALL GROUNDWATER INFLOW (WATER BUDGET), APPROVED BY THE OFFICE OF WATER. WATER BUDGETS MUST BE SET AND APPROVED ONE MONTH PRIOR TO THE BEGINNING OF EACH WATER YEAR TO ENABLE IMPLEMENTATION.	Methodology is detailed in the SWMP. NoW were provided the SWMP for comment and are provided with the groundwater calculations in the AEMR annually.	Compliant			
3	(3) THE LICENCE HOLDER MUST PROVIDE THE OFFICE OF WATER WITH A MAP OF THE LICENSED SITE SHOWING AREAS OF ALLUVIAL SEDIMENTS INTERFERED BY THE MINE WORKS. NOTE: (IF THERE IS NO INTERFERENCE WITH ALLUVIAL SEDIMENTS A MAP IS NOT REQUIRED TO BE PROVIDED).	Map provided as evidence	Compliant			
4	(4) THE LICENCE HOLDER MUST OBTAIN NECESSARY LICENCE(S) IN ACCORDANCE WITH THE PROVISIONS OF THE WATER MANAGEMENT ACT 2000 AND SUBORDINATE LEGISLATION TO ACCOUNT FOR ALLUVIAL WATER INFLOW, AS DETERMINED IN ACCORDANCE WITH CONDITION 2, OR IMPLEMENT MEASURES TO PREVENT ALLUVIAL GROUNDWATER FLOWS FROM ENTERING THE MINE WORK BY 30 JUNE 2015, AS APPROVED BY THE OFFICE OF WATER. THE LICENCE HOLDER MUST ALSO COMPLY WITH ANY DIRECTIONS ISSUED BY THE OFFICE OF WATER WITH RESPECT TO INSTALLATION AND OPERATION OF NECESSARY WORKS TO ISOLATE THE MINE WORKS FROM WATER FLOWS EMANATING FROM SANDY CREEK.	20BL169014, 20BL169037, 20BL169038 and 20BL170473	Compliant			
5	(5) WITHIN 3 MONTHS OF BEING ISSUED THE LICENCE, THE LICENSE HOLDER MUST PROVIDE THE OFFICE OF WATER WITH A MANAGEMENT PLAN THAT IDENTIFIES MEASURES FOR RESTORING THE MINE WORKS ABOVE THE FINAL WATER TABLE WHEN THEY ARE NO LONGER BEING USED.	MOP and Site Water Management plan, and more recently Final Void Management Plan, all provided to NOW	Compliant			
6	(6) THE LICENCE HOLDER MUST DEVELOP AND IMPLEMENT A GROUNDWATER MONITORING AND CONTINGENCY PLAN, WITH ITS REPORTING SCHEDULE, AND APPROVED BY THE OFFICE OF WATER. THE GROUNDWATER MONITORING AND CONTINGENCY PLAN IS TO BE PREPARED AND SUBMITTED TO THE OFFICE OF WATER WITHIN SIX MONTHS OF ISSUING THE LICENCE USING THE TEMPLATE PROVIDED BY THE OFFICE OF WATER.	Included in the Site Water Management Plan	Compliant			
7	(7) AS PART OF THE ANNUAL REPORTING REQUIRED UNDER THE DEVELOPMENT CONSENT, THE LICENCE HOLDER MUST: (I) ASSESS COMPLIANCE WITH THE TERMS AND CONDITIONS OF THE LICENCE; (II) PROVIDE A SUMMARY OF NEW BORES OR PITS CONSTRUCTED DURING THAT YEAR; (III) PROVIDE KEY STATISTICS FOR THE MONITORING DATA COLLATED FOR EACH BORE FOR THE PREVIOUS WATER YEAR; (IV) SUMMARISE EVENTS THAT IMPACTED ON GROUNDWATER DURING THE PREVIOUS WATER YEAR, INCLUDING ACTIONS TAKEN TO REMEDY THE SITUATION AND RELEVANT EXTRA MONITORING RESULTS; AND (V) INCLUDE ANY RECOMMENDATIONS OR MEASURES TO BE TAKEN FOR IMPROVEMENTS FOR THE NEW WATER YEAR.	i) not done ii) Included in AEMR iii) Included in AEMR iv) Included in AEMR v) Included in AEMR	Not Compliant Administrative			
8	(8) AN EXTRACTION MEASUREMENT DEVICE MUST BE INSTALLED AND MAINTAINED ON EACH EXTRACTION DEVICE (PUMP) USED FOR EXTRACTION OF WATER UNDER THIS LICENCE, AND SUCH DEVICES MUST BE OF A TYPE AND STANDARD, AND MUST BE MAINTAINED IN A MANNER, WHICH IS ACCEPTABLE TO THE OFFICE OF WATER.	Devices installed, no NOW approval sighted as evidence, devices have not been calibrated.	Not Compliant	E	1	Medium
9	(9) AS PART OF THE INDEPENDENT ENVIRONMENTAL AUDITING REQUIRED UNDER THE DEVELOPMENT CONSENT, THE LICENCE HOLDER MUST ENSURE THAT THE AUDIT: (I) SEEKS INPUT FROM THE OFFICE OF WATER; (II) ASSESS COMPLIANCE WITH THE TERMS AND CONDITIONS OF THIS LICENCE; (III) ASSESS COMPLIANCE WITH THE WATER MANAGEMENT PLAN AND ANY SUB-PLANS UNDER THE DEVELOPMENT CONSENT; (IV) REVIEW REPORTED IMPACTS OF THE EXTRACTIONS ON ANY AQUIFERS, GROUNDWATER DEPENDENT ECO-SYSTEMS AND ANY STREAMS IN THE AREA; (V) ASSESS THE METHODOLOGY USED TO REPORT THE IMPACTS IN CONDITION 7 (IV); (VI) MAKE COMPARISONS BETWEEN REPORTED AND PREDICTED IMPACTS (MODELLED RESULTS); AND (VII) PROVIDE RECOMMENDATIONS REGARDING ANY WORKS THAT SHOULD BE PERFORMED OR ADDITIONAL OBLIGATIONS THAT SHOULD BE IMPOSED IN ORDER TO RECTIFY ANY IMPACTS ON GROUNDWATER OR ANY CONNECTED WATER DEPENDENT ASSETS.	i) Message sent to Mitchell Issacs @ NOW re input to the audit by lead auditor, 16-10-15 ii) This audit iii) This audit iv) These have been reviewed, nothing identified beyond EIS predictions so no mitigation required. v) Reviewed several documents relating to this most pertinent being SLRs review of final Void Water Quality and Quantity - <i>Groundwater Management Study, SLR 2015</i> . vi) The water levels in the final voids (<i>Groundwater Management Study, SLR 2015</i>) remain in the same order of magnitude as the levels developed by Coffey for the Final Void Management Plan though they are slightly lower, the 2002 EIS did not nominate final void water levels due to uncertainty regarding the proposed Sandy Creek Underground Mine. vii) No recommendation are made here though the site is developing further closure documentation supported by the SLR studies (surface water and groundwater).	Compliant			
10	(10) THE VOLUME OF GROUNDWATER EXTRACTED FROM THE WORKS AUTHORISED BY THIS LICENCE, SHALL NOT EXCEED 3000 MEGALITRES (ML) IN ANY 12 MONTH PERIOD COMMENCING 1ST JULY.	Results in the AEMRs indicate that the licence amounts have not been exceeded.	Compliant			

Reference	Condition	Requirement	Evidence	Audit Finding	Risk		
					Consequence	Likelihood	Risk
Spontaneous Combustion Management Plan, December 2010							
2 IDENTIFICATION OF CAUSES							
GENERAL GUIDELINES	2.2	As part of preparation for mining of areas affected by spontaneous combustion, higher risk areas will have been identified by: <ul style="list-style-type: none"> • examination of previous information records, accumulated over the last ten years, for occurrences of spontaneous combustion; • examination of the surface for any physical affects of spontaneous combustion such as brown or dying vegetation and increased surface temperature; • where appropriate use of infra-red photography to show areas of increased temperature; • measuring borehole temperatures for temperature increases; and • measuring surface temperatures. This predictive information will be summarised in a plan (to a 1:4000 scale or similar) and referenced by operating personnel prior to work commencement.	Survey draws this plan based on current information and the plan is updated after every blast.	Compliant			
3 DRILLING AND BLASTING							
MONITORING PROGRAM	3.1	Prior to work commencing in an area, the necessary information will be checked by the Technical Services staff before providing the information to the OCE. The OCE will, as part of the inspection prior to drilling commencing, assess appropriate equipment and a safe work procedure checklist for any surface signs of heating.	Reviewed OCE checklist (prestart) and spon comm issues were considered	Compliant			
PREVENTATIVE MEASURES	3.2	Preventative measures to reduce the incidence of spontaneous combustion within blast holes include the following: <ul style="list-style-type: none"> • have blast holes not drill through major coal seams; • stand off coal seams whenever feasible; • have holes drilled and loaded in the minimum time period; • no sleeping shots wherever possible; and • prevent the ingress of air to spontaneous combustion areas. 	Drilling through major seams occurs, through seam blasting now employed at the site. This has not increased spontaneous combustion rates to date. The other measures are all conducted as practicable. Interview with Mining Engineer responsible for Drill and Blast design.	Compliant			
Audit	3.3.7	The General Manager and Environmental Officer will review the short-term control process every three months to determine whether the control measures that have been implemented are successful or whether they require modification.	The process is reviewed for effectiveness on a daily basis at the management meeting and quarterly in the Spontaneous Combustion Reports (developed by the EO and reviewed by the GM).	Compliant			
4 OVERBURDEN AND COAL SPONTANEOUS COMBUSTION							
MONITORING PROGRAM	4.1	The OCE will investigate areas of spontaneous combustion as they occur and are brought to the attention of production team members. The OCE will assess the severity of the outbreak and implement the required mitigation measures. In addition, a bimonthly audit will be carried out by the Environmental Officer to determine the location of hot spots that require ongoing maintenance and areas that are of high risk for spontaneous combustion. This occurs for production areas of the pit and waste emplacements.	OCE and production staff control this, the EO only provides advice when required.	Not Compliant Administrative			
PREVENTATIVE MEASURES	4.2	Preventative measures to reduce the incidences of spontaneous combustion within overburden spoil emplacement areas include the following. <ul style="list-style-type: none"> • The mining of thin splits down to 0.25 metres thickness wherever practicable to reduce the overall carbon content in overburden spoil emplacement areas. • The mine planning engineer and geologists are responsible for scheduling the recovery of thin seams where possible. The OCE is responsible for ensuring that the efficient mining of thin seams is carried out. • Limiting overburden spoil emplacement lifts under normal conditions to height of 10 – 15 metres to increase stability and compaction. This will reduce the flow of oxygen and heat through the spoil. • The mine planning engineer is responsible for ensuring that overburden spoil emplacement lifts are normally kept to a height range of between 10 – 15 metres. • The selective placement of high carbonaceous material. This material will be deeply buried to prevent oxidation. • Rapid burial of carbonaceous material to prevent the time that it is exposed to the oxygen and heat. • Cooling the area affected by spontaneous combustion with water infusion before mining. • Removal of coal affected by spontaneous combustion before the heating can spread. • Minimising the areas of exposed coal which is likely to be affected by spontaneous combustion. 	These measures were confirmed in interviews with the Mining Engineer and Production Superintendent.	Compliant			
Priorities	4.3.3	Each of the areas requiring control works will be prioritised by the General Manager to indicate to production staff the order in which control works will be carried out. These areas will be noted in the minutes of the daily production meeting.	This occurs at the shift change meetings and at the morning management meeting.	Compliant			

Reference	Condition	Requirement	Evidence	Audit Finding	Risk		
					Consequence	Likelihood	Risk
5 PRODUCT COAL SPONTANEOUS COMBUSTION							
MONITORING PROGRAM	5.2.1	Visual inspections of all areas of product stockpiles are carried out daily by the OCE to identify: <ul style="list-style-type: none"> • status and effectiveness of spontaneous combustion control works in progress on product coal stockpiles; • areas where active spontaneous combustion is occurring; and • areas where spontaneous combustion has occurred within the previous week. Visual inspections should check for steam or smoke emissions, a heat haze or spontaneous combustion odour. The outcome of this inspection will be documented in the daily OCE shift report.	This information is included in the shift report	Compliant			
	5.2.1	Areas requiring spontaneous combustion control works will be referred to the General Manager and Environmental Officer.	This occurs at the shift change meetings and at the morning management meeting.	Compliant			
Control Measures	5.5						
Identification	5.5.2	The OCE will inspect the product stockpiles each shift to identify areas of spontaneous combustion.	The OCE reviews the CHPP in his daily inspection	Compliant			
	5.5.2	Technical Services staff will inspect the product stockpiles on a weekly basis,	Geologist does this	Compliant			
Review	5.5.6	During each inspection of mining areas subject to spontaneous combustion, senior management will review the remediation strategies and incorporate incomplete works into the next shift or week's schedule of priority works.	Site inspections by the Production Superintendent and OCEs identify issues and review the effectiveness of mitigation measures. This occurs at the shift change meetings and at the morning management meeting.	Compliant			
6 REPORTING							
		MCC will report on the environmental performance of the mine each year in an Annual Environmental Management Report (AEMR).	The AEMR does this.	Compliant			
		The following bodies and government departments are provided with AEMR reports: <ul style="list-style-type: none"> • Muswellbrook Shire Council (MSC) • Department of Mineral Resources (DMR) – currently known as the NSW Department of Industry and Investment (NSW DII) • Department of Environment and Conservation (DEC) – currently known as the Department of Environment, Climate Change and Water (DECCW) • Department of Infrastructure, Planning and Natural Resources (DIPNR) – currently known as the Department of Planning (DoP) • National Parks and Wildlife Service (NPWS) • Muswellbrook Coal Company Community Consultative Committee (MCCCCC) 	Cover letters provided as evidence of circulation.	Compliant			
		Quarterly reporting will be provided to the NSW DII in accordance with AEMR inspection requirements (2003/4) and to the DECCW as required by the Muswellbrook Coal Environment Protection Licence (No. 656).	Spontaneous Combustion reports for the audit period provided as evidence.	Compliant			
7 REVIEW							
		This SCMP shall be reviewed and updated every five (5) years or as directed by Muswellbrook Shire Council, in consultation with the relevant government agencies, in accordance with the Consent Conditions 3.2 (f). The Environmental Officer, in consultation with MCC operational staff and DPI, will undertake the review. This review is the first 5-year review of this document as advised to MSC in January 2010.	Currently under review in accordance with this requirement	Compliant			

Reference	Condition	Requirement	Evidence	Audit Finding	Risk		
					Consequence	Likelihood	Risk
Environmental Management Strategy, December 2010							
8.0 Audit and Review Process							
Compliance report	8.1	Condition 1.2 of the Development Consent requires that a compliance report detailing compliance with all relevant conditions of the Development Consent be submitted for the approval of Manager, Environmental Services (MSC) at least two weeks prior to the commencement of operations. This was supplied in 2005 to MSC.	Not in the audit period	Not Applicable			
Periodic Internal Environmental Audits	8.2	Throughout the operation of the mine, the Environmental Officer will conduct an internal audit annually on operations to ensure that all activities are in compliance with the conditions of the Development Consent. The results will be distributed internally within MCC.	This has not occurred in the audit period	Not Compliant	E	3	Low
AEMR Compliance Audit	8.3	An Annual Environmental Management Report (AEMR) is to be submitted throughout the mine life and for five years after the completion of mining in the Project area in accordance with Condition 9.2 of the Development Consent Conditions. An annual compliance audit of the performance of the project against the conditions of the Development Consent and statutory approvals is to be included in the AEMR.	The AEMR does not include an annual compliance audit of the performance of the project.	Not Compliant Administrative			
Periodic Review of the Environmental Management Plans	8.7	Condition 3.2(f) of the Development Consent Conditions requires that each Environmental Management Plan is to be reviewed and updated every five years or at other times as directed by MSC. This review will consider changing environmental requirements or changes in technology or operational practices.	4 plans have been revised and submitted for review, 5 more are in draft not yet submitted for approval/review, the rest are scheduled for review	Compliant			
10. COMPLAINT MANAGEMENT AND CONFLICT RESOLUTION							
Complaint Handling Procedures	10.1	Muswellbrook Coal Company responds to community complaints in accordance with the Complaints Mechanism on dealing with complaints, which is included in the "Draft Guidelines for Community Consultative Committees Operating in the Muswellbrook Shire", prepared by Muswellbrook Shire Council in 2004. The mechanism is detailed below: 1. On receiving a complaint, MCC staff shall investigate the source of the complaint and report back to the complainant with the findings in a timely and professional manner, along with any follow-up action that is required; 2. Where complainant not satisfied with the response from MCC, the complainant or MCC can refer the complaint to MSC; 3. If referred to MSC, MSC discusses the complaint with MCC and the complainant to determine the actions, if any, which are required to be taken to resolve the cause of the complaint. MSC informs the chairperson of the MCCCC of the complaint; 4. If complaint still not resolved, MSC reports the matter to the relevant Government Agency to determine whether MCC is operating within the terms of Development Consent Conditions and/or relevant Standards; 5. Where compliance has been determined, MSC will respond to complainant and MCC that no further action is required. MCC may be willing, at its discretion, to take action in response to a complaint even though the Government Agencies have determined that compliance with statutory requirements have been achieved; 6. Where compliance is not determined, the complaint is referred to the Consent Authority for appropriate action in accordance with the Conditions of Development Consent and/or relevant Standards.	This process is followed as a general rule, some complainants have contacted the EPA directly but the process is still followed when the complaint is put back to MCC.	Compliant			
	10.1	Muswellbrook Coal Company operate a free 24-hour Environmental Contact Line, where residents can either be connected directly to MCC staff, or leave details about an inquiry they may have regarding mining operations. The Environmental Contact Line number is 1800 600 205 and is regularly advertised in the Muswellbrook Chronicle and the Hunter Valley News throughout the wider Muswellbrook community.	This line is in place	Compliant			
	10.1	MCC has a Blast Information Service Line that contains a recorded message that is updated each mine working day on the proposed blasting program for the day.	This line is in place	Compliant			
	10.1	Information relating to complaints and follow up actions are recorded in a complaints register. This information is reported to the Community Consultative Committee meeting and annually as part of the Annual Environmental Management Report.	Confirmed elsewhere in this audit	Compliant			

Reference	Condition	Requirement	Evidence	Audit Finding	Risk		
					Consequence	Likelihood	Risk
ARCHAEOLOGY and CULTURAL HERITAGE MANAGEMENT PLAN, December 2010							
6. PROCEDURE							
Standard Work Practices for Risk Control	6.4.1	MCC's on-going risk management approach for its cultural resources should involve the following management performance objectives: <ul style="list-style-type: none"> Sites must be kept intact and preserved until they are ready to be salvaged, (eg collected, excavated etc); Sites must be actively managed to avoid accidental impacts; Staff (including contractors) must be trained and made aware of their responsibilities concerning sites and operational activities; Work practices should spell out clearly roles and responsibilities of all staff in managing cultural resources on the mine site; Sites must be clearly identified in the field. Areas need to be fenced and appropriate signage used; Supervisors and plant operators should be aware of the location of sites and the boundaries; All plans and operation notes must clearly show the location of known sites. 	Largely compliant, signpost for single remaining site was not in good condition (on ground) but EO was aware of this and the risk was managed.	Compliant			
Measuring Success of Risk Control	6.4.2	<ul style="list-style-type: none"> The above performance objectives should be measured using regular internal audits and monitoring; and The Annual Environmental Management Report should contain a section on the cultural management. 	Internal Audits didn't cover the remaining site. AEMRs contained a section on cultural heritage management.	Not Compliant	E	1	Medium
Emergency Response Procedure	6.4.3	<ul style="list-style-type: none"> If a site is accidentally damaged, work should stop immediately and the incident reported to the Environmental Officer of MCC. It is the responsibility of MCC to report the incident to the DEC and relevant Aboriginal community groups should also be contacted as part of community consultation; In the event that any human skeletal remains are uncovered during work, all work must stop. Human skeletal remains can be subject to three different acts: <i>Coroner's Act 1980, The National Parks & Wildlife Act 1974 and the Heritage Act 1977</i>; In the event that artifacts are found work must stop. If Aboriginal, contact the DECCW. If European, contact Heritage Officer, Muswellbrook Shire Council. 	No works in the vicinity of the remaining site and no damage reported in the audit period.	Not Applicable			
8. TRAINING							
		Muswellbrook Coal has a site-orientated induction program for all staff and contractors who will require training in cultural heritage risk management. Training and induction sessions will aim to make staff and contractors aware of their obligations regarding the preservation of items that are of Aboriginal and Cultural Heritage significance.	Reviewed the induction program, cultural heritage is covered.	Compliant			
		Records of the employees and contractors that have been trained in archaeology and cultural heritage management shall be maintained in the Muswellbrook Coal induction database.	Reviewed training records, Inductions are noted.	Compliant			
9. RECORD MANAGEMENT							
		No sites remain within the No.1 Open Cut Extension however, if additional sites are discovered, MCC shall maintain all cultural heritage site records within a central on-site register. These site records shall be used during internal audits. Construction plans and work instructions shall identify sites and how they are to be avoided during mine operational work. Incident reports shall be kept up to date and shall be auditable.	No new sites had been identified in the audit period	Not Applicable			

Reference	Condition	Requirement	Evidence	Audit Finding	Risk		
					Consequence	Likelihood	Risk
FLORA and FAUNA MANAGEMENT PLAN, December 2010							
5 MANAGEMENT SAFEGUARDS AND AMELIORATIVE ACTIONS							
Management of Remnant Vegetation	5.2	Prior to the commencement of any clearing activities associated with this development, MCC is to identify areas of remnant vegetation that are to be protected. These areas should preferably be in close proximity to the areas proposed for clearing, or have some form of connectivity that will provide a migration path for fauna that needs to be relocated.	No remnant vegetation clearing in the audit period	Not Applicable			
Pre-Clearance Inspections and Clearing Regime	5.4	Prior to any disturbance to vegetation and topsoil stripping, MCC or its consultants shall, if it is safe to do so, inspect the areas of vegetation. The inspection of vegetated areas earmarked for clearing will enable MCC to minimise the amount of clearing required and identify and mark hollow bearing trees and other habitat structures such as stags, logs and stumps that may be of use for replacement in rehabilitated areas. Vegetation surrounding the marked habitat structures will be cleared and the marked structures will be left for a period of 24 hours to allow wildlife to leave the area. After clearing marked vegetation will be inspected for any injured wildlife and carefully stockpiled in a designated area for re-use in the rehabilitation process.	No remnant vegetation clearing in the audit period. Rehab that was cleared did not contain fauna structural components to salvage or require monitoring.	Not Applicable			
Seed Collection	5.5	MCC is to arrange for the collection of seeds from areas identified for clearing activities, in order that those local seed provenances can be utilised in the reconstruction of indigenous bushland.	No seed collection locally, no vegetation cleared in the audit period.	Not Applicable			
Process if Threatened Flora or Fauna are Identified	5.6	A booklet identifying possible threatened species on the site will be supplied to mine workers and contractors. The booklet and a discussion of the significance of threatened species will be provided during site induction and training.	Booklet is in existence, but not provided to employees in induction	Not Compliant	E	2	Low
	5.6	Vegetation clearing operations will be monitored under the supervision of MCC or its consultants. If any threatened flora and fauna species are identified in the pre-clearance inspections or during clearing activities and were not previously identified in the EIS, vegetation clearing operations will immediately cease whilst an investigation is carried out. Operations may resume once MSC and NPWS are satisfied that the matter has been resolved.	Only rehab cleared in the audit period	Not Applicable			
Establishment of Micro-Habitats	5.8	Tree hollows, stags and stumps that were identified and removed will be, where practical, relocated to areas adjacent to the mining operations that lack appropriate micro-habitat structures. Micro-habitat structures will contribute to the faster establishment of ecosystem reconstruction on rehabilitated areas.	Sighted in site inspection	Compliant			
	5.8	During vegetation clearing activities some of the larger trees that are felled will be segregated, if practicable, into a separate stockpile for use in the rehabilitation of the mine site. Those trees that have been stockpiled will be placed to aid in the connection of the various vegetation communities by providing habitat escape corridors and pathways.	Sighted in site inspection	Compliant			
Establishment of Nesting Boxes	5.9	Artificial roosting and nesting boxes will be installed in areas adjacent to the mining operations to encourage the relocation of native fauna. MCC or its consultant shall nominate the type, number and location of boxes to be installed. The boxes are intended to assist all fauna, not just threatened species. The number of artificial roosts, den and nest boxes to be established will be determined by the provision of at least one bat roost box, one medium sized mammal den box, one larger sized den box for large mammals and one nest box for every five hectares of woodland that is cleared. The boxes will be placed in established woodland adjacent to areas that will be disturbed.	6 monthly inspection of nest boxes. Inspection shows 8 nest boxes designed for a range of animals. Occupancy rates are low.	Compliant			
	5.9	The roost and nest boxes are to be inspected bi-annually by MCC or its consultants.	Nest box inspection checklist sighted.	Compliant			
	5.9	MCC shall report on the status and occupation of nesting boxes in the Annual Environmental Management Report.	AEMR reports on this.	Compliant			
Vegetation Management and Monitoring	5.11	Revegetation techniques will be continually developed and improved through a process of trialling and monitoring.	Cattle grazing trial planned, trials have been conducted previously	Compliant			
		A program to establish potential foraging resources for threatened species will be initiated. This includes the provision of sap producing Acacias and Redgum species, such as Grey Gum (Eucalyptus punctata) and Forest Redgum (E. tereticornis) in lower drainage lines. Rough-barked Angophora (Angophora floribunda) will be planted in the riparian zones.	The program has not been established yet.	Not Applicable			
6 MONITORING, REPORTING AND REVIEW							
Monitoring & Reporting	6.1	The Environmental Officer is to report on the following activities as part of the Annual Environmental Management Report in accordance with the latest Department of Mineral Resource's Guidelines to the Mining, Rehabilitation and Environmental Management Process <ul style="list-style-type: none"> The area cleared for mining operations; The area of remnant vegetation identified prior to clearing; The results of any flora or fauna studies undertaken during the reporting period; The results of the roosting and den box monitoring programs; The area of rehabilitated land developed during the reporting period; and The results of monitoring and the effectiveness of site restoration and rehabilitation works 	The AEMR includes these details when they have occurred in the reporting period.	Compliant			
Review Process	6.2	This Management Plan shall be reviewed and updated every five (5) years or at other times as directed by Muswellbrook Shire Council, in consultation with the relevant government agencies, in accordance with Consent Condition 3.2 (f). This review is the first 5-year review of this document as advised to MSC in January 2010.	Currently under review (due this year)	Compliant			

Reference	Condition	Requirement	Evidence	Audit Finding	Risk		
					Consequence	Likelihood	Risk
EROSION & SEDIMENT CONTROL PLAN, December 2010							
5. MANAGEMENT SAFEGUARDS AND AMELIORATIVE ACTIONS							
Operations	5.2	Sediment mobilisation and erosion is minimised by the incorporation of the following controls: <ul style="list-style-type: none"> • an environmental induction for personnel involved in earthworks and on-going environmental training; • the installation of erosion and sediment controls, if required, prior to disturbance of any land; • the restriction of the extent of disturbance to the minimum that is practical and in accordance with the Mining Operations Plan (MOP); • the progressive rehabilitation of disturbed land in accordance with the MOP and the construction of drainage controls to improve the stability of rehabilitated land; • the protection of natural drainage lines and watercourses by the construction of erosion control devices such as diversion banks and channels and sediment retention dams as necessary; and • the restriction of access to rehabilitated areas. • management of erosion and sediment control of affected surface watercourses/waterbodies, including creeklines within or adjacent to the DA area. 	Topsoils stockpiles signposted. Light vehicles only in rehab areas. Training in induction. Confirmed the rest of the items in the site inspection.	Compliant			
Clean Water Diversion	5.3	Water from undisturbed catchments in the Open Cut Extension area will be diverted around mining operations by diversion banks and channelled into adjacent watercourses. Appropriate protection will be established where diverted waters enter the natural water system. Surface and road runoff will be directed away from fill batters and drainage lines. Bank stability will be achieved through the planting of grass, small shrubs and riparian tree species. The diversion channel will connect to a retention dam to control velocities and to collect sediment, especially during the early stages of rehabilitation.	Observed in site inspection, no clean water catchments of significance that are not diverted, no banks that are eroding to a significant degree.	Compliant			
Disturbed Area Run-off	5.4	All disturbed or newly rehabilitated areas will contain diversion banks to control the flow of water from catchment areas and to contain dirty runoff on the mine site. There shall be two types of banks constructed: <ul style="list-style-type: none"> • Major graded banks – these shall be constructed in accordance with the NSW Department of Land and Water Conservation 1999 - Guidelines for the Design of Stable Drainage Lines on Rehabilitated Minesites (Draft). They will be constructed to fall by up to 1.0%. This will be enforced through the surveying of the banks to ensure that they are dipping the correct way and into appropriate water treatment structures. Banks that have the potential for erosion or scouring will be rock-lined or stabilised to reduce water runoff velocity and direct water flow in a more controlled manner. Major graded banks will be maintained for an extended period and are intended to be permanent features after mining and rehabilitation ceases; • Minor graded banks – these are temporary pasture furrows which are used to assist in site management during the first stage of rehabilitation. 	Observed in site inspection	Compliant			
	5.4	Water from the graded banks will be directed to detention dams with low flow pipes incorporated into the design strategy which will ensure that storm event peak discharges are reduced due to temporary runoff containment which in turn will be slowly released to either downstream detention, sediment control dams or waterway systems. The waterway systems will channel water downslope and will be either rock lined or stabilised with erosion matting, if necessary. Geofabric will be placed under all rock lined structures.	Observed in site inspection	Compliant			
Salinity Management	5.5	Soils will be characterised by a programme of analysis. The analysis will include such parameters as Electrical Conductivity (EC), pH, Cation Exchange Capacity (CEC), total Sodium and gypsum requirements. The results of the analysis will characterise the soil and determine what action, if necessary, is required. In cases where high salinity has been detected, the area will be topdressed with an adequate thickness and concentration of a suitable material, such as gypsum, then sown to either trees or pasture.	Rehab is tested as part of the LFA monitoring. Topsoiling is tested when required based on observation.	Compliant			
Dam Design and Construction	5.6	Dams will be constructed with the outlet located as far as possible from the inlet to minimise the potential for short-circuiting.	Generally compliant based on site inspection	Compliant			
	5.6	Runoff from disturbed or newly rehabilitated areas will report to sediment control dams to be constructed at the base of the spoil emplacement areas, or along graded banks or waterways as appropriate.	This is occurring, observed in site inspection	Compliant			
	5.6	Typically stormwater runoff from disturbed areas will be directed to sediment control dams built with a capacity to retain maximum runoff from a 1 in 20 year (24-hour) storm event. These structures will be regularly cleaned out to maintain maximum volume and ensure efficient settlement of solids from stormwater.	No sediment structures with an overload of sediment noted in the site inspection.	Compliant			
6. MONITORING, REPORTING AND REVIEW							
Inspection and Monitoring	6.1	Water quality monitoring results of sedimentation dams will indicate when waters are no longer required to go through the treatment process. Once this has been determined runoff from rehabilitated areas will be discharged offsite into the adjacent catchment areas. Waters will only be discharged offsite without treatment if monitoring results indicate that Total Suspended Solids (TSS) is less than 120 ppm (parts per million).	Noted - 120ppm seems high, no sediment dams associated with this DA are no longer required.	Not Applicable			
Reporting	6.2	Performance outcomes from the objectives of the ESCP and the EIS will be reported in the AEMR. These include: <ul style="list-style-type: none"> • Disturbance is restricted to those areas identified in the Mining Operations Plan (MOP). • Surface water discharges from disturbed areas are captured by sediment control systems. • No active erosion is observable in stabilised areas. • There is no increase in erosion / siltation in downstream watercourses. • The water quality in downstream watercourses and water bodies is within acceptable limits. 	The AEMR includes the required reporting elements.	Compliant			

Reference	Condition	Requirement	Evidence	Audit Finding	Risk		
					Consequence	Likelihood	Risk
Review	6.3	The Erosion and Sediment Control Plan will be reviewed and updated every five years or at other times as directed by MSC, in consultation with the relevant government agencies, in accordance with Consent Condition 3.2 (f).	Currently under review (due this year)	Compliant			
Appendix C							
	2	All sediment dams will be inspected regularly to ensure they have sufficient capacity available for runoff/sediment retention. Dams will be desilted as soon as practicable. Sediment will be removed by an excavator and where practicable, loaded onto trucks and taken to an area where it can be deposited, stabilised and re-used in the rehabilitation.	Quarterly EO inspections cover this issue. OCEs also inspect dams regularly.	Compliant			
	3	Visual inspection of sediment and erosion control safeguards (dams, sediment traps, contour banks, channels, diversions, silts fences and hay bales) will be undertaken regularly and after periods of heavy rainfall to ensure their structural integrity. Excess sediment will be removed from banks and drains and from behind sediment trapping devices. Repairs will be undertaken as necessary.	OCEs daily inspections	Compliant			
	4	The results of the erosion and sediment control monitoring program and the effectiveness of sediment and erosion management will be assessed progressively and will be reported in the AEMR.	See point 6.2 above.	Compliant			

Reference	Condition	Requirement	Evidence	Audit Finding	Risk		
					Consequence	Likelihood	Risk
SOIL STRIPPING MANAGEMENT PLAN, December 2010							
5. SOIL MANAGEMENT							
Stripping		Soil stripping operations will be conducted in accordance with in situ conditions. The stripping of topsoil will be undertaken in two stages to reduce the inadvertent cross contamination of the A-1 and A-2 horizons.	No topsoil stripping has occurred in the audit period.	Not Applicable			
Stockpiling		Where possible, topsoil material stripped will be directly re-spread on reshaped surfaces in a single operation.	No topsoil stripping has occurred in the audit period.	Not Applicable			
		Stockpiled topsoil material will be located away from mining operations and drainage lines. Contour banks and divergent drains will be implemented around the stockpiles to prevent erosion.	Reviewed in the site inspections	Compliant			
		Topsoil stockpiles will be limited to a height of no more than three (3) metres.	Reviewed in the site inspections	Compliant			
		The A1 and A2 soil horizons will be segregated into designated stockpile areas.	Evidence of segregation of A1 and A2 horizons in signposting indicating type and horizon	Compliant			
		Stockpiles will be revegetated as soon as possible to minimise loss of soil quality.	Reviewed in the site inspections	Compliant			
		Stockpiles will be inspected regularly by the Environmental Officer to monitor the stockpiles for weed infestation and success of erosion control measures.	Stockpiles are inspected quarterly	Compliant			
Topsoil Spreading		Prior to the re-spreading of topsoil material, the prepared surface of the overburden spoil will be rock raked to remove all rocks that are greater than 200mm in diameter.	Rehabilitation procedure does not include rock raking	Not Compliant Administrative			
		Selective placement of topsoil material will be done in accordance with the properties of the soil. The A-2 horizon will form the underlying capping material, with the A-1 horizon topsoil forming the surface soil structure, where practicable.	Rehabilitation procedure does not include selective emplacement of horizons	Not Compliant Administrative			
		The use of the A-2 horizon subsoil will be avoided, where practicable, on sloping or high erosion potential areas.	Rehabilitation procedure does not include selective emplacement of horizons based of rehab area gradient	Not Compliant Administrative			
		Topsoil material will be respread in even layers of thickness, to a nominal 10cm in thickness, according to the landform and land capability of the area to be rehabilitated.	Rehab procedure refers to the Topsoil Stripping MP which reflects the 10cm requirement	Compliant			
		Soil treatments will be added to address deficiencies or irregularities where necessary. This may include the application of gypsum, lime or biosolids as required.	Testing tested elsewhere - MCC add the ameliorants in agreement with the testing, confirmed in interview with the EO	Compliant			
		Topsoil stripped from cleared and pastured areas will be used for traditional pasture rehabilitation, where possible. However, topsoil stripped from remnant vegetation areas will be, where possible, used in habitat re-instatement areas.	Segregation of pasture and remnant veg topsoils was apparent in the site inspection, signposting indicates type	Compliant			
6. REPORTING AND REVIEW							
Reporting		The reporting of the effectiveness of the soil stripping methods and performance against objectives contained in this SSMP will be detailed in the Annual Environmental Management Report (AEMR). Results of the assessments will be incorporated into future rehabilitation planning to continually improve the success of the program.	There are references to soil stripping in the AEMR but no critical review of the effectiveness of the Management Plan as there was no topsoil stripping in the audit period.	Not Applicable			
		The AEMR report will include the following: <ul style="list-style-type: none"> • areas of soil stripped; • volume of soil recovered; • volume of soil directly respread on rehabilitated areas; • volume of soil stockpiles; • volume of soil recovered from stockpiles and spread on rehabilitated areas; • results of soil stockpile inspections and monitoring; • weed control measures; • recommendations for any future improvements in soil stripping management. 	The AEMR includes most of this detail, the topsoil area is not included but could be deduced from the Rehabilitation Summary Table. There was no topsoil stripping in the audit period.	Compliant			
Review		The SSMP shall be the subject of review and updating every five (5) years or at times as directed by Muswellbrook Shire Council, in consultation with the relevant government agencies, in accordance with Development Consent Condition 3.2 (f). This review is the first 5-year review of this document as advised to MSC in January 2010.	Currently under review (due this year)	Compliant			
APPENDIX A							
Topsoil signage	10	Designate each topsoil stockpile with appropriate signage (eg 'Topsoil Stockpile') to ensure the resource is identifiable to all mine staff	Topsoil stockpiles are signposted.	Compliant			
		Implementation of Appendix A	Procedure implementation reviewed onsite, found compliant through interviews with staff and review of rehabilitated areas and soil stockpiles.	Compliant			

Reference	Condition	Requirement	Evidence	Audit Finding	Risk		
					Consequence	Likelihood	Risk
VISUAL AMENITY and LANDSCAPE MANAGEMENT PLAN, December 2010							
5.5 Maintenance Program							
		For the relocation of the administration building, workshop and bathhouse, the colour and texture of external materials of the buildings will be chosen to ensure they blend in to the natural surroundings. In this regard, neutral non reflective material shall be used in all external finishes	White maintenance building does not comply	Not Compliant	D	3	Medium
		New native species planting will be made to integrate the new infrastructure components into the natural surroundings.	No planting of natives has occurred around the new infrastructure area	Not Compliant	E	1	Medium
6. REVIEW							
		This Visual Amenity and Landscaping Management Plan shall be reviewed and updated every five (5) years or at other times as directed by Muswellbrook Shire Council, in consultation with the relevant government agencies, in accordance with the Development Consent Condition 3.2 (f). This review is the first 5-year review of this document	Currently under review (due this year)	Compliant			

Reference	Condition	Requirement	Evidence	Audit Finding	Risk		
					Consequence	Likelihood	Risk
FINAL VOID MANAGEMENT PLAN, December 2010							
4 FINAL VOID LANDSCAPE							
Community Consultation	4.4	A community consultation program will be commenced in 2011 to canvas the community's and other stakeholder's requirements and expectations for the final void management and future land use if a decision is made not to utilise the void as an alternative entry point to the Sandy Creek Underground Mine.	The decision had not been made regarding the entry to Sandy Creek UG.	Not Applicable			
		Discussions will continue over the intervening period with the MCC Community Consultative Committee.	Closure MOP and FVMP have been discussed with CCC	Compliant			
5 SURFACE AND GROUND WATER IMPACTS							
Potential Impact on Local and Regional Ground Water	5.2	Coffey Geosciences Pty Ltd (2005) reported that, given the prevailing climate and available data, there are two potential impacts on the local groundwater system. These consist of: <ul style="list-style-type: none"> Permanently lowered water levels in the surrounding aquifers; and Progressive salinity increase in the void lake. 	SLR report reflects this.	Noted			
6 LONG TERM MANAGEMENT STRATEGY							
Void Water Quality & Fertiliser Application	6.17	Surface water will be diverted around the void minimising the void catchment area.	The MOP and site inspection of surface water did not indicate any non-compliance with this.	Compliant			
		Areas in the void catchment will be topsoiled to reduce fertiliser requirements and to obtain vigorous initial growth. The void catchment will be rehabilitated using pasture and native trees and shrubs. Additional maintenance fertiliser will not be used in the void catchment unless rehabilitation cover is less than 70%.	The MOP indicates that this is planned but the final catchments are not yet in place.	Not Applicable			
		There will be no aerial application of fertiliser in this area.	Not yet required.	Not Applicable			
8 SPONTANEOUS COMBUSTION							
		Overburden spoil emplacement area faces showing signs of spontaneous combustion will be battered off and covered with inert material. Treatment of spoil emplacement dumps will be in accordance with the guidelines used in the mine closure works for the No.2 Open Cut.	Inert materials stockpiles for this purpose, sighted in audit site inspection	Compliant			
10 MONITORING, REPORTING & REVIEW							
		Monitoring will be conducted on the retained void water. This will assist in future review of the groundwater modelling to refine the impact predictions. Monitoring will continue for four years after closure.	Monitoring is occurring currently, closure not yet occurred.	Not Applicable			
Monitoring and Reporting	10.1	The following monitoring program will be undertaken after mine closure: <ul style="list-style-type: none"> Monthly gauging of water levels in the No.1 Open Cut Extension final void (to AHD) for a period of two years following mine closure, and quarterly gauging of water levels for an additional two years. Annual water quality monitoring in the No.1 Open Cut Extension final void for five years following mine closure, to monitor for increases in salinity or other dissolved analytes. Analytes monitored will include pH, Electrical Conductivity, Total Dissolved Solids, Total Suspended Solids, Principal Cations (Na, K, Mg, and Ca), Principal Anions (Sulphate, Chloride, and Bi-carbonate) and Nutrients (Total Phosphorous and Nitrogen). 	Mine closure currently to be in 2018.	Not Applicable			
Review Process	10.2	The collected data will be reviewed after the first 3 years of monitoring. The review will include the following: <ul style="list-style-type: none"> Remodel the water balance of the void; An assessment of water quality and future quality impacts; and Revision of the Final Void Management Plan if significant changes to the initial water balance and quality modelling are evident. 	The SLR report has only been recently completed and the implications of the findings have not yet been considered.	Not Applicable			

Reference	Condition	Requirement	Evidence	Audit Finding	Risk		
					Consequence	Likelihood	Risk
BUSHFIRE MANAGEMENT PLAN, December 2010							
6. MANAGEMENT CONTROLS & AMELIORATIVE ACTIONS							
Ameliorative Actions	6.1						
Mining Activities		Heavy vehicles shall be restricted to identified vehicle routes to reduce the risk of spark emissions.	SOPs	Compliant			
		Activities that create sparks or hot particles, such as metal grinding and welding shall be limited to workshops and hardstand or areas clear of vegetation by a minimum of 20 metres.	Hot works procedure does not specifically reflect this requirement. The procedure does protect against the issues raised.	Compliant			
Electricity Transmission		MCC shall liaise with the owner of the electrical transmission infrastructure with regards to vegetation management within the easement.	email indicating communication provided as evidence.	Compliant			
External Fire		The risk of bushfires in the north-western adjacent lands spreading to MCC land will be minimized by the provision of firebreaks along boundary fences, where practical.	Firebreaks run right around the site boundary	Compliant			
		The boundary fence between MCC and the residential area in North Muswellbrook shall be regularly slashed.	Slashing underway during site inspection	Compliant			
Transport Corridors		The mine site access road and the haul road shoulders will be regularly slashed and maintained to reduce the potential for vegetation to ignite from exposed low exhausts of vehicles turning, pulling off the roads or from lit cigarettes thrown from vehicles.	Slashing underway during site inspection	Compliant			
		The risk of accidental bushfire ignition such as lit cigarettes thrown from cars shall be incorporated in site inductions.	The site induction does not include this.	Not Compliant	D	3	Medium
Management Safeguards	6.2	Personnel, trucks and other equipment shall be made available on request to RFS and emergency services for use on the mine site in cases of bushfire incidents.	No fire incidents in the audit period where the RFS were involved.	Not Applicable			
Fire Breaks and Perimeter Trails		Access tracks will be inspected by the Open Cut Examiner and maintained if necessary. Access to dams and water supply will be inspected by the Open Cut Examiner and maintained if necessary.	OCE inspection list does not specifically cover access tracks and access to dams	Not Compliant	E	3	Low
Inspections		The RFS and MCC shall conduct an annual inspection and bushfire risk assessment, preferably during winter, to assess fuel loads and fire hazards. The inspection shall report on: • Accessibility of roads and tracks, having due regard to safety considerations in the operation of the mine; • Potential interference with electricity transmission lines from vegetation; • Condition of fire breaks; • Accessibility to water supplies (creeks, dams, hydrants); • Assessment of fuel loads and fire hazards in general.	Bushfire inspection conducted but not in conjunction with the RFS.	Not Compliant Administrative			
Training Ground		MCC will allow continued access for RFS personnel to conduct fire training on the concrete hardstand at MCC owned land at the former Muswellbrook Power Station site.	No requests in recent time but site is available for use.	Compliant			
7. REPORTING & REVIEW							
Reporting	7.1	Reporting will consist of: • Investigation Report - this will be prepared in respect to each outbreak of fire on the mine site; • The Annual Environmental Management Report (AEMR) - this will report on any outbreaks of bushfires and bushfire management. • The annual inspection and risk assessment report, which will be sent to the RFS and will address detailed issues identified and / or enacted during the preceding year.	No outbreaks of fire in the audit period. See AEMR, no fires. Annual inspection not sent to RFS	Not Compliant Administrative			
Review	7.2	The Bushfire Management Plan will be reviewed and updated every five (5) years or at other times as directed by MSC, in consultation with the relevant government agencies, in accordance with the Development Consent Condition 3.2 (f).	Currently under review (due this year)	Compliant			
APPENDIX A - Emergency List of Contacts							
		Environmental Contact Number 1800 600 205 (24-hour free call) Administration Office (Week days 8am - 5pm) 02 6543 2799 Mine Manager Direct 02 6542 2301 (Carl Gibson) Mobile 0429 771 135 Environmental Officer Direct 6542 2312 (Chris Knight) Mobile 0403 058 777 Safety and Training Manager Direct 02 6542 2311 (Warren Edwards) Mobile 0428 288 660 Open Cut Examiner Mobile 0409 007 525 Workshop/Maintenance Foreman Mobile 0409 159 715 Workshop (After Hours) Direct 02 6543 2790	Most of these numbers are not current (Environment Hotline, Training Manager, Maintenance Supervisor and OCE are correct)	Not Compliant Administrative			

Reference	Condition	Requirement	Evidence	Audit Finding	Risk		
					Consequence	Likelihood	Risk
LAND MANAGEMENT PLAN, December 2010							
5. LAND MANAGEMENT							
Pastoral Grassland	5.1.1	Gently sloping areas of the rehabilitated overburden emplacement will be suitable for the establishment of pastoral grassland. These will have a minimum of 10cm of topdressing and are considered to have a Class IV capability.	Areas of rehabilitation observed don't look like they will reach Class IV land capability. This is an unrealistic expectation, potentially due to Agricultural Classification Vs Agricultural Capability classifications. Land Class 4 is grazing only. Land Capability 4 is grazing with some cropping, so a classification of Land Capability 5 would be more accurate.	Not Compliant Administrative			
		These areas will be sown during Spring and Autumn, and gypsum and fertilizer will be applied at an appropriate rate dependant on soil condition	Generally the practise at site with some variation when conditions are beneficial.	Compliant			
		Reapplication of fertilizer will occur as required dependant on pasture establishment and cover.	Has not been required as yet.	Not Applicable			
		Scattered stands of trees will be sown within the pasture areas to provide shade and shelter for livestock.	Observed onsite and in the MOP plans, more like bands that stands but still adequate for the commitment	Compliant			
		These areas will be fenced to prevent the inadvertent access of grazing stock into habitat reinstatement areas	No cattle introduced as yet.	Not Applicable			
Habitat Reinstatement Areas	5.1.2	The location of native vegetation re-instatement will be designed to incorporate continuous corridors across the mine site that link in Bells Mountain and Skelletar Ridge remnant vegetation.	See MOP plans	Compliant			
Vegetation Management	5.2	In keeping with the principles of ecologically sustainable development the management of the vegetative material derived from the clearing operations includes the following strategies: <ul style="list-style-type: none"> Assessment of the site for identification of trees and vegetative material that would provide harvestable material for use as fencing and/or lumber. This will be achieved by requesting commercial contractors to assess the availability of commercial timber and inviting them to tender for the removal of suitable timber for productive use; Investigation of harvesting fallen material for timber and/or fencing material; Consideration of chipping of a proportion of the remaining vegetative material for mulch on topsoil stockpiles, environmental bunds, emplacements for erosion control and enhancement of revegetation programs; Investigation of harvesting suitable material for endemic seed, habitat enhancement through placement of logs and for control of unauthorised vehicle traffic; Identification of potential hollows, which will require inspection for native fauna at time of clearing; Double stripping of select areas of soil, if present, to capture maximum soil seed load; and Minimise the areas of clearing and open exposed land at any one time through the construction stage. 	No native vegetation clearing in the audit period. Salvaged materials observed stockpiled around the site ready for installation into rehab.	Not Applicable			
Feral Animal Control	5.6	Feral animal control will be undertaken on an annual or as required basis depending on the severity of feral animal populations. Control programs, such as baiting programs, will be developed in consultation with relevant authorities and neighbouring landowners to ensure that all legislative requirements are addressed and domestic animals are not exposed to any control regimes.	Evidence re coordination between programs provided. Evidence of programs involving neighbours provided.	Compliant			
		A Vermin Eradication Plan will be developed for the site, within three (3) months from the commencement of operations. The principles for the selected control strategies for feral animal management will be: <ul style="list-style-type: none"> Define the management objectives; Select the management options; Develop management strategies; and Monitor the success of the program against the stated objectives. 	This has not been developed, though vermin / feral animal control appears to be adequate.	Not Compliant Administrative			
Weed Control	5.7	A Weed Eradication Plan will be developed for the site, within three (3) months from commencement of operations. The Plan will include: <ul style="list-style-type: none"> Consultation with interested parties including environmental staff, local Council weeds officers and other stakeholders; A desktop study of the site and field assessment to define the extent of the weed infestation including distribution, density and species occurrence; List the noxious weed species that occur on site as per the 'Noxious Weeds Act (1993); Mapping of the noxious and environmental weed species, their abundance and distribution; Suggested methodologies to manage and control the noxious and environmental weed species which occur across the site, including preferred timing of works, control methods, priorities for work and constraints to suggested methodologies; and A works program that links mine rehabilitation, pastoral activities, feral animal control, and erosion and sediment control to weed control at the site. 	This has not been developed, though weed control appears to be adequate.	Not Compliant Administrative			
		Weed inspections shall be conducted at 6 monthly intervals, and reporting of weed control will be included in the Annual Environmental Management Report.	Weed inspections occur annually with the Rehabilitation Monitoring, not six monthly	Not Compliant	E	2	Low
		To reduce the potential spread of weed species, a site survey will be undertaken for all topsoil prestripping operations. Where weed species are recorded, control mechanisms will be undertaken to reduce the risk of the contamination of topsoil stockpiles with seed and vegetative weed material.	No topsoil stripped in the audit period	Not Applicable			

Reference	Condition	Requirement	Evidence	Audit Finding	Risk		
					Consequence	Likelihood	Risk
		Neighbours will be contacted on an annual basis and they will be provided with information on MCC's weed management strategy.	This does not happen.	Not Compliant	E	3	Low
Review	5.1	The Land Management Plan shall be reviewed and updated every five (5) years or at other times as directed by Muswellbrook Shire Council, in consultation with the relevant government agencies, in accordance with Development Consent Condition 3.2 (f).	Currently under review (due this year)	Compliant			

Reference	Condition	Requirement	Evidence	Audit Finding	Risk		
					Consequence	Likelihood	Risk
SITE WATER MANAGEMENT PLAN and SURFACE and GROUNDWATER MONITORING PLAN, November 2013.							
5. POTENTIAL IMPACTS & MITIGATION MEASURES							
Mitigation Measures - Surface Waters	5.2	Clean water will be diverted into adjacent catchments wherever possible away from the active mine areas. Diversion banks will be created around active working areas to prevent the loading of additional water to the system and ensure clean water passage into the surrounding catchment areas.	This was observed on the site. Note that no major catchments ran into the current mining area.	Compliant			
		Storm water runoff from newly rehabilitated areas will pass through a series of sediment settling dams and natural causeways to filter excess sediment. This storm water will be staged discharged into surrounding catchments.	This was observed during the site inspection.	Compliant			
		All mine or dirty water will be diverted into the mine water management system where it will be utilised in dust suppression, mine use or pumped underground to assist in cooling areas subject to spontaneous combustion.	No breaches of this commitment observed during the site inspection.	Compliant			
		Within the new MIA area, stormwater runoff from the workshop and hardstand areas are collected and treated in the hydrocarbon separator unit located at the wash down bay.	Observed in site inspection	Compliant			
		An EPA approved contractor regularly services the hydrocarbon separator unit who collects and transfers the collected hydrocarbon offsite.	Sighted the collections receipts and tracking documentation	Compliant			
		All drainage of stormwater from the administration offices and car park is directed towards the No.1 Open Cut Void.	Observed in site inspection	Compliant			
Sediment and Erosion Control Structures	5.2.1	All runoff diversion drains and contour banks are inspected regularly and maintenance is carried out according to need.	EO quarterly inspection.	Compliant			
Trigger Level Establishment	5.4.4	A groundwater level trigger will be initiated if the groundwater level in a piezometer fluctuates by greater than 5% from the historical minimum and maximum standing water level over at least a 3 month period. In addition, to initiate the trigger, the reduction in water level will also need to be at a level that is deeper than the natural variability measured across all monitoring bores for each aquifer.	No triggers in the audit period	Not Applicable			
		Electrical Conductivity (EC) and pH are the main species regularly analysed at the groundwater monitoring sites to monitor water quality. Both will be used to set trigger levels to assist in determining groundwater impacts. The trigger levels are set at a variation of >15% from the baseline minimum and maximum EC and +/- 0.5 pH units from the baseline minimum and maximum pH.	No triggers in the audit period	Not Applicable			
Response Plan	5.4.5	If a groundwater trigger is initiated, Muswellbrook Coal will evaluate the results. If the next sample event continues to identify a trigger then a suitably qualified and experienced hydrologist will be commissioned to review the data and determine any mining related impacts. The review will then be provided to NOW for consultation.	No triggers in the audit period	Not Applicable			
		Following the confirmation of mining related impacts to groundwater quality or quantity by NOW, Muswellbrook Coal will initiate discussions with the affected landowner to determine the appropriate mitigation measures.	No triggers in the audit period	Not Applicable			
Mitigation Measures	5.4.6	In the event that a mining related impact causes the reduction in groundwater quantity or quality, Muswellbrook Coal will undertake to: • Re-establish the standing water level in the affected bores through bore deepening; • Establishment of additional bores to provide a yield at least equivalent to the affected bore prior to mining; • Provision of access to alternative sources of water; and • Compensation to reflect increased water extraction costs eg due to lowering pumps or installation of additional or alternative pumping equipment.	No triggers in the audit period	Not Applicable			
		The compensatory water supply measures will provide an alternative long-term supply of water that is equivalent to the loss attributed to the mining project. If Muswellbrook Coal and the landowner cannot agree on the compensatory measures to be implemented, or there is a dispute about the implementation of the agreed measures, then either party may refer the matter to the DOP Director General for resolution.	No triggers in the audit period	Not Applicable			
6.0 WATER MANAGEMENT							
Saline Water	6.3.2	Saline water is water with elevated salinity and suspended sediment, generated from disturbed catchments where coal is mined or handled such as the open cuts, the underground mines, coal stockpiles, the CHPP, workshop and haul roads. The strategy for the management of saline water streams is as follows: • Saline water will be kept separate from clean water runoff and will be collected and re-used for process water in preference to other water sources; and • Saline water is not planned to be discharged from the site but any future requirement will be in accordance with the requirements of the Hunter River Salinity Trading Scheme and the Environmental Protection Licence.	Observed in site inspection	Compliant			

Reference	Condition	Requirement	Evidence	Audit Finding	Risk		
					Consequence	Likelihood	Risk
Dirty Water	6.3.3	Dirty water is non saline stormwater with increased sediment loads principally from disturbed catchments and non-vegetated rehabilitation areas. The strategy for management of dirty water streams is: <ul style="list-style-type: none"> Minimise volumes of dirty water by diverting clean water from upslope; Collect runoff from disturbed areas using drains and bunds; Store dirty water until suitable for discharge from site or re-use for dust suppression or process water; Maintain sufficient operating freeboard in stormwater detention ponds to accommodate the runoff for the design storm event; and Only discharge the stormwater offsite if water quality is demonstrated to be within target criteria and licence conditions. 	Strategy implementation observed in site inspection.	Compliant			
Contaminated Waters and Wastewater	6.3.4	Contaminated water from the Lube Bay will be collected by a trench drain along the entire concrete slab which will discharge into a purpose built contaminant bund. Water contaminated with oils, greases or hydrocarbons is collected and removed from site by an EPA licensed waste removal contractor.	Reviewed and confirmed by inspection	Compliant			
		Contaminated waters from the workshop will be collected by a spoon drain which will discharge into the sediment pit prior to the oil water separator which is part of the Washdown Bay Facility.	Reviewed and confirmed by inspection	Compliant			
		A new Washdown Bay Facility for LV and HV equipment has been designed and will incorporate an "Ultraspin" model S1 oil skimmer and 650 litre oil storage tank. Hydrocarbons collected by the oil water separator will be collected and removed from site by an EPA licensed waste removal contractor.	Reviewed and confirmed by inspection	Compliant			
		Sewage effluent will be stored in septic tanks and pumped into road tankers and taken offsite by an EPA licensed contractor.	This occurred, reviewed stores records and observed Transpacific removing septic whilst onsite.	Compliant			
7.0 MONITORING PROGRAM							
Flow Monitoring	7.1	Flow meters have been installed on the following pipelines: <ul style="list-style-type: none"> Pipeline from No. 2 Open Cut to Dam No. 1; Pipeline from Borehole Pump 1 and Borehole Pump 2 (No. 2 Underground) to Dam No. 2; Pipeline that supplies water for dust suppression; and Pipeline from Final Settling Pond to No.1 Open Cut Void. 	Sighted the first and last of these in the site inspection.	Compliant			
		Each flow meter shall be read and recorded at least on a monthly basis.	Done quarterly. SWMP revised to correct, data is still collected.	Not Compliant Administrative			
		The water levels in Dam No. 2 and the Final Settling Pond will be recorded at least monthly. The levels will be recorded by survey RL or appropriate measuring boards.	Surveyor did this, confirmed at interview. Fed into the water balance.	Compliant			
Groundwater Monitoring	7.2	The groundwater monitoring program is based on two bores located in the No.2 Underground workings (Bore RDH522) and St Heliers Colliery workings (Bore RDH614). Refer Appendix A for the groundwater monitoring locations. Monitoring is conducted on a monthly basis and will measure: <ul style="list-style-type: none"> Standing water level; pH; and Electrical Conductivity (EC). A comprehensive analysis of the water quality at these two locations will be undertaken on an annual basis for the species listed in Table 4.	RDH 614 is not monitored, this looks as though it may be a typographical error as there are other bores in the St Heliers Colliery workings.	Not Compliant Administrative			
		The Sandy Creek area groundwater bores and wells will be monitored at quarterly intervals for groundwater level. The alluvial bores will also have pH and electrical conductivity monitored.	AEMRs indicate quarterly monitoring occurred for the Sandy Creek boreholes.	Compliant			
Surface Water Monitoring	7.3	A contingency plan will be put in place for managing any adverse impacts on surface and groundwater quality. The contingency plan will include: <ul style="list-style-type: none"> Should monitoring of surface and ground water produce results outside acceptable ranges or long term averages resulting in unforeseen adverse impacts, an impact investigation will be conducted by specialists in surface and groundwater management, in consultation with State Water; Groundwater impacts in the Sandy Creek area have trigger requirements identified in Section 5.4.4. If the investigation shows impacts from the operation, appropriate remedial measures or contingency plans will be put in place to alleviate any environmental impact. The results of these actions will be reported on and presented in the Annual Environmental Management Report. 	No triggers in the audit period.	Not Applicable			
Decommissioning	7.5	On rehabilitated areas, the following decommissioning will apply to the water management structures: <ul style="list-style-type: none"> Major contour banks – permanent structures; Waterways and rock-lined drains – permanent structures; Minor contour banks – temporary, until vegetation established; Sediment retention dams – temporary, until rehabilitation is completed and water quality is suitable, after which they can be de-commissioned as farm use consumptive dams. 	Not yet required, noted.	Not Applicable			
9. REPORTING AND REVIEW							
Reporting	9.1	Water management and monitoring results will be reported every quarter to the Muswellbrook Coal Community Consultative Committee.	Noted in Minutes from CCC	Compliant			
		Water management and monitoring results will also be produced in the AEMR.	These were included in the AEMR	Compliant			

Reference	Condition	Requirement	Evidence	Audit Finding	Risk		
					Consequence	Likelihood	Risk
		The AEMR will be provided to MSC, DIPNR, EPA, NPWS, DMR and the CCC.	The AEMR was distributed to these organisations	Compliant			
		<p>Reporting in the AEMR will include:</p> <ul style="list-style-type: none"> • A basic statistical analysis (mean, range, variance, standard deviation) of the results for the parameters measured in individual bores/wells and as a subset of the aquifer; • An interpretation and review of the results in relation to cut-off criteria and predictions made in the EIS; • An interpretation of the water quality results and changes in time for water quality and water levels (supported with graphs and contour plots showing changes in aquifer pressure levels (when data from 3 or more piezometers in the same aquifer are available)); • An interpretation of the water balance for water make and usage including assessing the mine pit inflows compared to the Part 5 licence (required under Part V of the <i>Water Act 1912</i>), and predictions made in the EIS (Tables 5, 6 and 7 in the Water Management Study, Appendix K) or previous AEMR. • A catenary transect of groundwater levels through hard rock to the alluvial system. • Water monitoring results are published on MCC's website at www.idemitsu.com.au. 	<p>All of these requirements were met in the AEMRs.</p> <p>The website had the water monitoring results</p>	Compliant			
Review	9.2	This SWMP shall be reviewed and updated every five (5) years or at other times as directed by MSC, in consultation with the relevant government agencies, in accordance with the Consent Condition 3.2 (f).	<p>Regular review due in 2018.</p> <p>MSC had not asked for revisions to the 2013 version of the SWMP.</p>	Compliant			
		Condition 4.2 (k) of the Development Consent also requires that the Groundwater Management Plan (GWMP) component of the SWMP be submitted to DIPNR on an annual basis. This submission will review the efficacy of the current GWMP and propose any improvements that MCC believes needs to be incorporated. The GWMP annual review will be included in the AEMR.	<p>Submission of the AEMR including the Site Water Balance which included extraction compared with license limits.</p>	Compliant			

Reference	Condition	Requirement	Evidence	Audit Finding	Risk		
					Consequence	Likelihood	Risk
WASTE MANAGEMENT PLAN, December 2010							
5. WASTE MANAGEMENT STRATEGIES							
Site Waste Management	5.3	The following actions or strategies will be implemented to minimise the generation of waste on site: <ul style="list-style-type: none"> All personnel working at the mine site are to be inducted. The induction program is to include waste management practices to be used on the site; All waste areas are to be clearly identified as waste storage areas; Clear written instructions are to be erected at appropriate locations detailing recycling and waste segregation principles. 	Included in induction Waste areas are delineated Written instructions are provided, training and auditing by waste contractor.	Compliant			
Waste Minimisation	5.4	The following methods are adopted to minimise waste production: <ul style="list-style-type: none"> Specifications of construction material quantities for contractors are as accurate as possible to avoid the over-ordering of materials and potential wastage; The ordering of stock during the operation of the mine is regularly reviewed to ensure efficient stock control and avoid wastage; Develop programmes to involve and encourage employees and contractors to minimise waste. 	Confirmed with stores at interview. Recycling, Induction training.	Compliant			
Recycling	5.5	The Environmental Officer undertakes regular inspection to ensure appropriate classification of the waste is acceptable. All waste is tracked as required.	EO quarterly inspection includes waste stream segregation. Transpacific inspect waste segregation weekly.	Compliant			
Transportation, Disposal and Record Keeping	5.8	The Purchasing Officer is responsible for the recording of all information relating to the tracking of waste for disposal or recycling.	Confirmed at interview	Compliant			
6. MONITORING, REPORTING & REVIEW							
		The Environmental Officer is responsible for the collection, collation, reporting and analysis of data related to waste management on site.	Monthly report from Transpacific, other details in the AEMR	Compliant			
		The quantities of waste generated on site will be reported annually in the Annual Environmental Management Report (AEMR).	Included in the AEMR	Compliant			
		The Environmental Officer is also responsible for monitoring the progress of waste management activities on site through a structured program of site inspections and audits.	Quarterly Audits, the Waste Contractor conducted more regular audits	Compliant			
		This Management Plan shall be reviewed and updated every five (5) years or as directed by Muswellbrook Shire Council, in consultation with the relevant government agencies, in accordance with the Consent Conditions 3.2 (f).	Currently under review (due this year)	Compliant			

Reference	Condition	Requirement	Evidence	Audit Finding	Risk		
					Consequence	Likelihood	Risk
DUST MANAGEMENT PLAN, August 2015							
3.0 DUST MITIGATION AND CONTROL PROCEDURES							
DUST CONTROL PROCEDURES	3.2						
Control Procedures for Wind Blown Dust	Table 7						
Areas disturbed by mining		Disturb only the minimum area necessary for mining	Review and consider plan versus actual to ensure resources are put into rehab at the right points to keep on plan.	Compliant			
		Reshape, topsoil and rehabilitate completed overburden emplacement areas after the completion of overburden tipping.	Only areas where this is not occurring are the two out of pit emplacements of inert matl for pushing back over the highwall and areas where further work was expected.	Compliant			
Coal Handling and Coal Stockpile Areas		Maintain coal handling areas in a moist condition using water carts to minimise windblown and traffic generated dust.	Site inspection indicates this is compliant	Compliant			
		Clean-up after any spillage event.	Site inspection - no significant spills observed	Compliant			
		Water carts to operate around the coal stockpile area to suppress dust on roadways and the coal stockpiles	Site inspection - observed and stockpile area was damp and not generating dust.	Compliant			
Control Procedures for Mining Generated Dust Sources	Table 8						
Haul road dust		All roads and traffic areas will be watered using water carts to minimise the generation of dust.	Site inspection noted very little dust from mining fleet, roads well watered.	Compliant			
		Long term haul roads will be sheeted with hard wearing material	Haul roads looked adequate in the site inspection	Compliant			
Minor roads		Development of minor roads will be limited to be only as required by mining.	No excessive road surfaces left unrehabilitated	Compliant			
		Minor roads used regularly for access will be watered.	Road to the tanker fill point only used by water tankers but was watered. Other minor roads were not generating excessive dust levels.	Compliant			
Topsoil stockpiling		All topsoil stockpiles will be located and shaped to minimise the area exposed to prevailing winds	No evidence of soil stockpile erosion, all were well vegetated.	Compliant			
		Long term topsoil stockpiles, not used for over 6 months will be revegetated	Soil stockpiles were all were well vegetated.	Compliant			
Drilling		Dust aprons will be lowered during drilling	Drills not operating at time of site inspection, use of aprons confirmed at interview	Compliant			
		Drills will be equipped with dust extraction cyclones or water injection systems	Drills not operating at time of site inspection, use of water injection and cyclones confirmed at interview	Compliant			
		Water injection or dust suppression sprays will be used when high levels of dust are being generated	Discussed with production superintendent, water injection used on heated areas and suppression used too. Sighted during discussion	Compliant			
Blasting		Stemming will be used at all times.	Yes, confirmed at interview	Compliant			
		Blasting will occur in accordance with the Blast-Vibration Management Plan relating to meteorological conditions	Blast Checklist confirms and records this	Compliant			
Raw Coal Reveal Bin		Sprays are to be used when tipping raw coal into the reveal bin during high wind events	Sprays are fitted, they are triggered manually.	Compliant			
Coal Handling and Preparation Plant		Sprays are fitted at transfer points	Sighted in site inspection	Compliant			
SHORT TERM EPISODIC EVENTS	3.3						
Control Measures for Short Term Episodic Events	Table 9						
Wind speeds greater than 5m/s from the mining		Initial warning provided to OCE.	OCE - Production Superintendent confirmed the process in interview	Compliant			
		OCE to confirm that all available water trucks and fixed spray systems are operational.	OCE - Production Superintendent confirmed the process in interview	Compliant			
		Blasting may be deferred	OCE - Production Superintendent confirmed the process in interview	Compliant			
		OCE to inspect operations to identify any operations that are generating dust emissions and identify further mitigation measures	OCE - Production Superintendent confirmed the process in interview	Compliant			
Wind speeds greater than 10m/s.		All topsoil stripping and/or placement activities are to be stopped	OCE - Production Superintendent confirmed the process in interview	Compliant			
		All operations on out-of-pit overburden dumps are to cease	OCE - Production Superintendent confirmed the process in interview	Compliant			
		Blasting will be deferred	OCE - Production Superintendent confirmed the process in interview	Compliant			
		Maximum availability of dust suppression equipment to be used	OCE - Production Superintendent confirmed the process in interview	Compliant			
		OCE to inspect operations to identify any activities that are causing excessive dust emissions and stop these activities	OCE - Production Superintendent confirmed the process in interview	Compliant			
4.0 DUST MONITORING PROGRAM							
WEATHER MONITORING	4.1	The following weather data is captured on a real time basis at all stations: <ul style="list-style-type: none"> • wind speed; • wind direction; • air temperature; • humidity; • barometric pressure; and • rainfall. In addition atmospheric inversion is calculated and is based on air temperature measurements from two stations, RTEM2 (Site 2) and the MMS (Site 4).	Recorded in AEMRs, all parameters captured.	Compliant			

Reference	Condition	Requirement	Evidence	Audit Finding	Risk		
					Consequence	Likelihood	Risk
6.0 EXTERNAL RELATIONS							
COMMUNITY CONSULTATION	6.1	Community consultation in respect to dust management occurs by: <ul style="list-style-type: none"> Dust monitoring data is made available on MCC's website; Dust monitoring data is provided to the Community Consultative Committee (CCC) and the minutes of the meeting are made available to the public on MCC's website; The results of environmental monitoring are published in the AEMR; Timely responses are provided to residents in the event of a complaint or inquiry; and The CCC receives reports at each committee meeting on the number of dust-related complaints and the action taken. 	This all occurs, see AEMRs, CCC Minutes, website data and review of complaints.	Compliant			
7.0 INCIDENT REPORTING							
		In the event that an initial investigation concludes that a dust related incident has occurred the incident will be reported to MSC and EPA within 24 hours of confirming the incident.	No such events in the audit period	Not Applicable			
		Within 6 days of notifying MSC and EPA of an incident, MCC will submit a written report that: <ol style="list-style-type: none"> Describes the date, time, and nature of the incident; Identifies the cause (or likely cause) of the incident; Describes what action has been taken to date; and Describes the proposed measures to address the incident. 	No such events in the audit period	Not Applicable			
		In the event that the criteria shown in Table 2 to Table 4 are exceeded at a non-mine residence from MCC operations alone MCC shall notify the resident of the results and discuss the results.	No such events in the audit period	Not Applicable			
8.0 INDEPENDENT DUST INVESTIGATION							
		In the event that a landowner or occupier considers that dust from MCC at their dwelling is in excess of the criteria detailed in Table 2 to Table 4, and MSC is satisfied that an investigation is required, MCC shall upon the receipt of a written request from MSC: <ul style="list-style-type: none"> consult with the landowner or occupant affected to determine their concerns; determine whether any modification to the mining activity needs to be acted on or take other steps in accordance with the DMP if exceedances are demonstrated by the independent investigations to result in part from MCC's activities; and conduct follow up investigation(s) to the satisfaction of the MSC, where necessary. 	This has not occurred in the audit period	Not Applicable			
9.0 EXTERNAL REPORTING							
		Within 2 weeks of approval of this DMP, a copy will be made available to the Community Consultative Committee (CCC), relevant agencies and for public viewing via the MCC website	New DMP not approved by MSC yet, no other revision of the DMP in the audit period.	Not Applicable			
ANNUAL ENVIRONMENTAL MANAGEMENT REPORT	9.1	The AEMR will include a summary of: <ul style="list-style-type: none"> Dust monitoring results and comparison to the criteria, monitoring results from previous years and predictions in the Environmental Impact Statement; Summary of dust related complaints and management measures undertaken; Identification of any trends in the monitoring results; Measures undertaken during the period to monitor compliance; Identification of any non-compliance, and management measures undertaken; and Review of the performance of management measures and the monitoring program. 	The AEMR covers air quality thoroughly.	Compliant			
11.0 REVIEW OF MANAGEMENT PLAN							
		The DMP will be reviewed; <ul style="list-style-type: none"> Within 3 months of changes to Development Consent or licence conditions relating to dust management; Following reportable incidents at MCC relating to dust management; Following an independent environmental audit which recommends changes to the DMP; If there is a relevant change in technology or legislation; and Every five years, or as directed by MSC, in accordance with Condition 3.2(f) of the Development Consent Conditions. 	No changes to DA relevant to dust. No reportable incidents in the audit period. The previous audit did not recommend changes to the DMP. Review is currently underway in accordance with the 5 yearly review requirement.	Compliant			

Reference	Condition	Requirement	Evidence	Audit Finding	Risk		
					Consequence	Likelihood	Risk
BLAST-VIBRATION MANAGEMENT PLAN, August 2015							
4.0 MANAGEMENT SAFEGUARDS AND AMELIORATIVE ACTIONS							
Measures to Protect Surface Facilities and Underground Utilities	4.1	The Mine Engineer responsible for blast design will: <ul style="list-style-type: none"> Identify all infrastructure within 500 metres of potential blast zones; Contain the MIC to a level that will comply with the abovementioned criteria; and Periodically monitor critical infrastructure to verify that the ground vibration criteria is being achieved. 	Drill and Blast Engineer - Shot design includes timing and MIC, electronic timing used where appropriate. Monitoring of powerlines has been conducted by consultants but not recently	Compliant			
Best Practice Drill and Blast	4.2	Best practice in drill and blast activities at MCC include: <ul style="list-style-type: none"> A high degree of accuracy in the placement of drill holes to achieve design spacing and burden; Management of surface and groundwater in the drill holes (to reduce fume and odour issues); Regular inspections to identify any geological abnormalities that may create a path for the uncontrolled release of gaseous products from explosive material; Loading of the explosive material so that holes are not loaded in excess of the design; Proper placement of decking charges if required; Effective placement of good quality stemming material to contain the blast; Reduce the sleep time of the blast pattern to minimise the potential for deterioration of the explosive material; Take into account any adverse meteorological conditions that may be prevailing at the time of the blast and, defer or modify the blast to accommodate those conditions; Video recording of blasts to identify any causal factors contributing to any aberration from the predicted outcomes; and Regular reviews of actual blast results to identify any patterns in those instances where the actual blast results varied from the predicted outcomes. 	Holes are surveyed from the design. Water is managed by the use of appropriate product Geology is tracked carefully Decking charges are used though only recently, gamma survey of each hole is fed into the design to ensure appropriate targeting. Blast checklist and morning meeting. All blasts are videoed. Blast reviews occur after every blast	Compliant			
Timing of Blasts	4.4	All routine blasts are to occur between the hours of 9:00am to 5:00pm Monday to Friday. No blasts are planned to occur outside of these hours unless the Senior Operations Manager determines that safety-related issues dictate an emergency blast.	Reviewed the blast register all blasts were within the required period in the audit period.	Compliant			
		An emergency blast outside of the approved hours shall not to be initiated until MCC have utilised their best endeavours to gain specific approval from MSC. If approval can't be gained despite MCC's best endeavours the Senior Operations Manager can approve for the blast to go ahead.	None in the audit period	Compliant			
Pre-Blast Notifications	4.5	MCC operates a toll-free telephone Blast Information Service Line which contains recorded information that provides residents with proposed blasting times for that particular day.	1800772799 tested whilst on site (does not work for mobile phones)	Compliant			
		A nominated MCC employee will update the message on the Blasting Information Service Line prior to 9am on the day of each blast (Monday-Friday). If the blast time is changed by more than 2 hours, the message shall be updated as soon as practicable after the decision to vary the blast time is made.	Drill and Blast Engineer (Mining Engineer) is responsible.	Compliant			
		The message shall include the following information for the blast planned for that day: <ul style="list-style-type: none"> Date; Approximate time range; Location; and Predicted vibration levels at the Queen Street blast monitor at North Muswellbrook. 	All put through, the vibration level is nominated as less than 2mm/s at Queen St as a standard response.	Compliant			
Pre-Blast Environmental Checklist	4.7	MCC utilised a daily weather forecasting system to assist with identifying the weather conditions at the time of blasting. This involves a summary daily email to personnel on site and access to a webpage for further detail. Prior to granting approval for the initiation of a blast, the Mine Engineer shall complete the pre-blast section of the Blasting Environmental Checklist. This checklist includes the recording of <ul style="list-style-type: none"> date, wind speed and direction, temperature inversion, cloud cover, location of the blast and the quantity of explosive used in the blast. 	The weather and blasting are discussed at the crew meetings at shift change and at the morning management meeting where the environment officer and mining engineer are present. Date, wind, speed and direction, inversion, Cloud cover, Location, and quantity of explosive all recorded on blast checklist.	Compliant			
		If the weather conditions are potentially adverse a review of the weather conditions, and the location and type of blast will be undertaken by relevant personnel to assess the risk of this blast. If the Senior Operations Manager determines that the risk is low they can approve for the blast to proceed.	Blasting is discussed at the daily review meeting and consideration of weather conditions is considered. Blast timing can be shifted to suit weather changes. Operations Manager usually only becomes involved if there are safety issues associated with the blast	Compliant			
Blast Monitoring	4.8	Blast monitoring instrumentation is installed and maintained in accordance with relevant standards (AS2187.2) or as otherwise prescribed by EPA. Monitoring units are calibrated annually in accordance with the relevant standards.	Calibration certificates provided, installation sighted in site inspection.	Compliant			
Fume Management	4.9	All blasting activities at MCC are rated with a fume category rating scale, using the rating system in Appendices 2 and 3 of AEISG Code of Practice – Prevention and Management of Blast Generated NOx Gases in Surface Blasting. The rating is given to the greatest extent of the post blast fume.	Blast checklist has a section for fume rating, checklist is stored on the blast file for each blast.	Compliant			

Reference	Condition	Requirement	Evidence	Audit Finding	Risk		
					Consequence	Likelihood	Risk
Post-Blast Review	4.1	The Mine Engineer shall undertake a Post-Blast Review and take the following actions: <ul style="list-style-type: none"> • If any flyrock lands outside of the Mine Lease or the Zone of Exclusion, the Mine Engineer shall investigate the cause of the incident and report to the Senior Operations Manager. The Mines Inspector will be notified as well; • If any complaints are received in respect to vibration, noise, dust or fumes associated with the blast, the Mine Engineer and Environmental Coordinator are to investigate the cause of the incident and provide a report to the Senior Operations Manager. If required, corrective action will be taken to reduce the potential of a recurrence; and • If the actual ground vibration recorded at the Queen St monitor varies from the advertised predicted level by more than 0.5mm/s, the Mine Engineer shall investigate the cause of the variance. If necessary, an independent expert, as agreed by MSC, shall be engaged to investigate the need to adjust the site constant in the site-specific vibration curves (and equations). 	None of these actions have been required in the audit period	Not Applicable			
5.0 COMPLAINT MANAGEMENT							
		The Mine Engineer shall record the number and nature of complaints received on the relevant Blasting Environmental Checklist.	Recorded on the blast checklist.	Compliant			
		MCC will consult with other mines in the nearby area for blast related complaints, if required, to assist in determining and reducing the potential cumulative related blast impacts.	This has not been necessary in the audit period as all site blasts have complied, there has been no contact with other operations except the Daracon quarry.	Compliant			
Property Inspections	5.1	If a private landholder has concerns that buildings and/or structures on their land have been damaged as a result of blasting activities at MCC, a review of the damage will be undertaken by MCC. If required, a qualified and experienced independent expert may be engaged to undertake this review. If the review confirms the landholder's claim, and both parties agree with these findings, MCC will repair the damages. However if the landholder or MCC disagree with the findings of the report, either party may refer the matter to MSC for resolution.	This has not occurred in the audit period.	Compliant			
6.0 RECORDS							
		The Mine Engineer shall maintain a Blast File for each individual blast. A misfire is considered part of the original blast. The Blast File shall contain the following information: <ul style="list-style-type: none"> • The drill hole layout plan; • MIC calculation; • Drill records; • Shotfirer's dip sheets; • Stemming records; • Tie up/surface initiation plan; • Charge sheets; • Quantities and types of explosives; • Video of blast; • Actual fume rating; • Results from all blast monitors versus predictions; and • Blasting Environmental Checklist. 	File included all these items	Compliant			
7.0 EXCEEDANCE REPORTING							
		In the event that an initial investigation concludes that a blast exceedance was directly attributed to MCC's activities the event will be reported to MSC and EPA within 24 hours of detecting the exceedance.	There have been no blast exceedances in the audit period	Not Applicable			
		Within 6 days of notifying MSC and EPA of an exceedance, MCC will submit a written report that: <ol style="list-style-type: none"> Describes the date, time, and nature of the exceedance; Identifies the cause (or likely cause) of the exceedance; Describes what action has been taken to date; and Describes the proposed measures to address the exceedance. 	There have been no blast exceedances in the audit period	Not Applicable			
8.0 EXTERNAL REPORTING							
		Within 2 weeks of approval of this BVMP, a copy will be made available to the Community Consultative Committee (CCC), relevant agencies and for public viewing via the MCC website.	Not in the audit period.	Not Applicable			
Annual Environmental Management Report	8.1	The AEMR will include a summary of: <ul style="list-style-type: none"> • Blast monitoring results and comparison to the criteria, monitoring results from previous years and predictions in the Environmental Impact Statement; • Summary of blast related complaints and management measures undertaken; • Identification of any trends in the monitoring results; • Measures undertaken during the period to monitor compliance; • Identification of any non-compliance, and management measures undertaken; and • Review of the performance of management measures and the monitoring program. 	The AEMR includes all the information required but the identification of trends and the review of performance could be stated more clearly.	Compliant			

Reference	Condition	Requirement	Evidence	Audit Finding	Risk		
					Consequence	Likelihood	Risk
EPL Annual Return	8.2	The Annual Return for EPL656 will include the following; <ul style="list-style-type: none"> • The date and time of the blast; • The blast monitoring results at each blast monitoring station; and • An explanation for any exceedances or missing blast monitoring results. 	The Annual Return includes all this data though one Annual Return (2011-12) had the vibration results in the overpressure column and visa versa, which could have resulted in some confusion....	Compliant			
10.0 REVIEW OF MANAGEMENT PLAN							
		The Blast-Vibration Management Plan will be reviewed; <ul style="list-style-type: none"> • Within 3 months of changes to Development Consent or licence conditions relating to blast management or monitoring; • Following reportable incidents at MCC relating to blasting; • Following an independent environmental audit which recommends changes to the Blast -Vibration Management Plan; • If there is a relevant change in technology or legislation; and • Every five years, or as directed by MSC, in accordance with Condition 3.2(f) of the Development Consent Conditions. 	This has not been required in the audit period. Note - this requirement was not as comprehensive in the 2010 revision	Compliant			

Reference	Condition	Requirement	Evidence	Audit Finding	Risk		
					Consequence	Likelihood	Risk
NOISE MANAGEMENT PLAN August 2015							
3.0 MANAGEMENT SAFEGUARDS AND AMELIORATIVE ACTIONS							
IDENTIFICATION OF PROPERTIES AFFECTED BY NOISE	3.1	MCC regularly reviews the results obtained from the Attended Noise Monitoring Program to identify any significant variations from the predictions in the EIS and, if variations are identified, report this in the AEMR.	The AEMRs and noise monitoring reports provided as evidence for the audit period indicate no exceedances of criteria when the INP is applied thus no additional reporting required.	Not Applicable			
NOISE MITIGATION MEASURES	3.2	A number of mitigation measures have been developed to reduce the operational noise impacts on surrounding landholders. These include the following measures: <ul style="list-style-type: none"> • Use of excavators to "place" rather than "dump" material into trucks; • Mining operations will be modified during unfavourable climatic conditions, if necessary; • Mobile plant and machinery will be fitted with sound attenuation equipment, where necessary; • Mobile plant and machinery shall be maintained and operated in a proper and efficient manner; • Mobile equipment are fitted with smart alarms, which adjust tonal noise to suit the ambient noise conditions; and • Regular road maintenance shall be carried out to minimise noise associated with corrugated or deteriorated road conditions. 	Excavators sighted operating appropriately Mining operations modification noted at a number of points in the audit and confirmed in complaint responses and at interview. There has been little need to fit sound attenuation to plant to date. Reviewed maintenance with Maintenance Planner. Smart alarms are not fitted Roads were observed to be in good condition in the site inspection.	Not Compliant	E	1	Medium
4.0 NOISE MONITORING PROGRAM							
ATTENDED NOISE MONITORING	4.1	Attended noise monitoring is undertaken approximately every six months.	Monitoring reports from Global	Compliant			
		Noise levels during attended measurements will be taken in third-octave bands with an instrument that has Type 1 characteristics as defined in AS1259-1990 "Acoustics - Sound Level Meters". This instrument will have current calibration as per manufacturer's instructions and calibration will also be confirmed prior to and at the completion of measurements with a Sound Level Calibrator	Monitoring reports from Global	Compliant			
		Each attended noise survey will be conducted so that each of the Day, Evening and Night periods are monitored	See monitoring reports from Global	Compliant			
		If it is identified during the noise monitoring that the mining noise from the operation is 1dB(A) below the criteria or exceeding the criteria, MCC will be notified and the operations will be modified as required. Monitoring at the location(s) where the noise levels are elevated will be undertaken again with a minimum break of 75 minutes between monitoring.	This was seen in the Global Acoustics monitoring reports	Compliant			
		Field notes are to be taken at the time of the measurement, recording the time and duration of noise events, noise levels (dB), frequency (Hz), and source. Weather details and operational information will be recorded in the report.	This was seen in the Global Acoustics monitoring reports	Compliant			
EQUIPMENT NOISE MONITORING	4.2	Where the actual noise measurements vary from those modelled in the EIS by more than 2dB(A), MCC will undertake an investigation into the difference and identify if any additional noise mitigation is required. As part of this investigation a review of the attended noise monitoring results and noise complaints will be included.	This has not been required in the audit period	Not Applicable			
6.0 EXTERNAL RELATIONS							
COMMUNITY CONSULTATION	6.1	Community consultation in respect to noise management occurs by: <ul style="list-style-type: none"> • Noise monitoring data is made available on MCC's website; • Noise monitoring data is provided to the Community Consultative Committee (CCC) and the minutes of the meeting are made available to the public on MCC's website; • The results of environmental monitoring are published in the AEMR; • Timely responses are provided to residents in the event of a complaint or inquiry; and • The CCC receives reports at each committee meeting on the number of noise related complaints and the action taken. 	These actions are all in place and have been verified at various points through the audit	Compliant			
7.0 INCIDENT REPORTING							
		In the event that an initial investigation concludes that a noise related incident has occurred the incident will be reported to MSC and EPA within 24 hours of confirming the incident.	No investigations in the audit period have identified incidents	Not Applicable			
		Within 6 days of notifying MSC and EPA of an incident, MCC will submit a written report that: <ol style="list-style-type: none"> Describes the date, time, and nature of the incident; Identifies the cause (or likely cause) of the incident; Describes what action has been taken to date; and Describes the proposed measures to address the incident. 	No investigations in the audit period have identified incidents	Not Applicable			
		In the event that the criteria shown in Table 2 to Table 3 are exceeded at a non-mine residence from MCC operations alone MCC shall notify the resident of the results and discuss the results.	No investigations in the audit period have identified incidents	Not Applicable			

Reference	Condition	Requirement	Evidence	Audit Finding	Risk		
					Consequence	Likelihood	Risk
8.0 INDEPENDENT NOISE INVESTIGATION							
		In the event that a landowner or occupier considers that noise from MCC at their dwelling is in excess of the criteria detailed in Table 2 and Table 3 and MSC is satisfied that an investigation is required, MCC shall upon the receipt of a written request from MSC: <ul style="list-style-type: none"> undertake consultation with the landowner or occupant affected to address their noise concerns. MCC will contract independent acoustical consultants to conduct noise surveys to quantify noise impacts and determine the noise source. The consultants will follow the noise monitoring protocol outlined in this NMP. MCC will follow up the complaint and take reasonable action if noise from the Project is found to exceed the Noise Criteria at residences; conduct follow up investigations to the satisfaction of MSC, where necessary. If necessary, the follow up investigations should be conducted 3 months after the initial investigation to give MCC time to implement the recommended noise control. 	None required in the audit period	Not Applicable			
		If the landowner or occupant is not satisfied with the actions taken by MCC, the requirements in condition 6.4.4 of DA205/2002 will apply. If the independent investigations confirm that noise levels from MCC alone are in excess of the relevant criteria and if additional measures do not reduce the noise levels, from MCC alone, below the relevant criteria, or if agreement cannot be reached, MCC shall at the written request of the owner acquire the relevant property. Acquisition shall be in accordance with the procedures set out in DA205/2002.	None required in the audit period	Not Applicable			
9.0 EXTERNAL REPORTING							
		Within 2 weeks of approval of this NMP, a copy will be made available to the Community Consultative Committee (CCC), relevant agencies and for public viewing via the MCC website.	No new revisions approved by MSC in the audit period	Not Applicable			
ANNUAL ENVIRONMENTAL MANAGEMENT REPORT	9.1	The AEMR will include a summary of: <ul style="list-style-type: none"> Noise monitoring results and comparison to the criteria, monitoring results from previous years and predictions in the Environmental Impact Statement; Summary of noise related complaints and management measures undertaken; Identification of any trends in the monitoring results; Measures undertaken during the period to monitor compliance; Identification of any non-compliance, and management measures undertaken; and Review of the performance of management measures and the monitoring program. 	The AEMR addresses these requirements	Compliant			
11.0 REVIEW OF MANAGEMENT PLAN							
		The NMP will be reviewed; <ul style="list-style-type: none"> Within 3 months of changes to Development Consent or licence conditions relating to noise management; Following reportable incidents at MCC relating to noise management; Following an independent environmental audit which recommends changes to the NMP; If there is a relevant change in technology or legislation; and Every five years, or as directed by MSC, in accordance with Condition 3.2(f) of the Development Consent Conditions. 	No DA changes. No reportable incidents. No recommendations from the previous audit. No change in technology or legislation 5 years due this year, revised NMP with MSC for approval	Compliant			

Reference	Condition	Requirement	Evidence	Audit Finding	Risk		
					Consequence	Likelihood	Risk
LIGHTING MANAGEMENT PLAN, December 2010							
5. MITIGATION MEASURES							
		Lighting will be directed away from residences and roadways to the satisfaction of MSC during mining operations.	No lighting impacts observed, one lighting complaint in the three year audit period.	Compliant			
Lighting Standards	5.3	The design, placement and directional control of all lighting on site will conform with the most current Australian Standard AS 4282 – <i>Control of the Obtrusive Effects of Outdoor Lighting</i> .	No audits of lighting compliance are conducted	Not Compliant	E	2	Low
		MCC will conduct lighting assessments on at least an annual basis to ensure compliance with this standard.	No audits of lighting compliance are conducted	Not Compliant	E	2	Low
Mobile Lighting Towers	5.4	Care will be exercised in the location of lighting plant, especially if located on the edge of highwalls, so that direction of illumination is away from residences, residential areas or public roads. Any mobile lighting towers positioned on or near the skyline will be fitted with shields to minimise the potential for accidental spillage of light.	Acting Production Superintendent (Normally an OCE) confirmed the practise at interview (note only one lighting complaint in the audit period).	Compliant			
		The Open Cut Examiner is responsible to ensure that lighting plants are placed in such positions as to facilitate safety and security of plant and personnel, whilst minimising the impact of light spillage on neighbouring residences and / or personnel travelling on public roads.	Acting Production Superintendent (Normally an OCE) confirmed the practise at interview (note only one lighting complaint in the audit period).	Compliant			
Mobile Plant and Equipment	5.5	Where possible, operations such as rehabilitation works are conducted outside of this zone and will be limited to daylight hours only.	Acting Production Superintendent (Normally an OCE) confirmed the practise at interview (note only one lighting complaint in the audit period).	Compliant			
6 COMPLAINT RESOLUTION							
		On receiving a complaint, MCC staff will promptly investigate and isolate the source of the complaint and report back to the complainant with the findings. The process of Complaints Handling is detailed in the Environmental Management Strategy.	Reviewed several recent complaints, all comply with this requirement	Compliant			
		Information relating to complaints and follow up actions are recorded and reported annually as part of the Annual Environmental Management Report.	Included in the AEMR	Compliant			
		Operational and mine planning personnel are provided with the details of complaints regarding mining operations in order to improve operations to reduce impact on adjacent landholders. The same process is utilised in respect to lighting complaints	Discussed in the Morning Meeting (auditor attended on 20-10-15)	Compliant			
7 MONITORING, REPORTING & REVIEW							
		The Environmental Officer is responsible for monitoring the success of the Lighting Management Plan. This will be achieved through regular reviews of lighting assessments required as part of this EMP, and reviews of any lighting complaints.	No lighting assessments	Not Compliant			
		This Management Plan shall be reviewed and updated every five (5) years or at other times as directed by Muswellbrook Shire Council, in consultation with the relevant government agencies, in accordance with Consent Condition 3.2 (f).	Due in 2015, MP reviews currently underway.	Compliant			