

# Independent Environmental Audit 2019

## Bengalla Continuation Project



**for Bengalla Mining Company Pty Limited**

PO Box 5, Muswellbrook, New South Wales 2333

**MCW Environmental**

November 2020

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Document	Name	Company	Position Title
Prepared by	Tracey Ball	SLR	Associate
Prepared by	Martin Davenport	SLR	Associate
Prepared by	Clayton Richards	Minesoils	Principal – CPSS
Prepared by	Michael Woolley	MCW Environmental	Principal Environmental Engineer

**Report Issued by:**

MCW Environmental Consulting Pty Limited

[mcwenvironmental@bigpond.com.au](mailto:mcwenvironmental@bigpond.com.au)

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## Executive Summary

MCW Environmental Consulting Pty Ltd (MCW Environmental); SLR Consulting; and Minesoils were engaged by Bengalla Mining Company Pty Limited (BMC) to conduct an Independent Environmental Audit (IEA) of the Bengalla Continuation Project. Bengalla Mine is an open cut coal mine located near Muswellbrook in the Hunter Valley of NSW. The Bengalla Continuation Project allows access to coal resources west of the original project and extended the mine life by a further 24 years.

The IEA was conducted to meet the requirements of Development Consent SSD-5170 (as modified) Schedule 5 Condition 9. The Audit Team comprised Auditors from MCW Environmental; SLR Consulting and Minesoils. The Audit Team was approved by the Department of Planning, Industry and Environment (DPIE) to conduct the audit on 3 October 2019.

The IEA process was based on Post Approval Guidelines – Independent Audits (DPIE, 2015), the auditing standard AS/NZS ISO 19011:2014 and MCW Environmental's proposal to conduct the work dated 25 September 2019. This is the second IEA undertaken for the Bengalla Continuation Project in accordance with SSD-5170, as modified.

The IEA consisted of a detailed desktop review of documents supporting compliance, interviews with BMC personnel and site inspections of the Bengalla Mine and adjacent lands owned by the mine, over four days in December 2019.

The auditors consulted with NSW Department of Planning, Industry and Environment (DPIE Compliance); DPIE - Resources Regulator; NSW Environment Protection Authority (EPA); Muswellbrook Shire Council and the Independent Chair of the Consultative Community Committee (CCC) to discuss the scope of the IEA and discuss their views on the environmental performance of the mine. DPIE reviewed an earlier version of this report dated April 2020 and provided comment to Bengalla dated 6 October 2020. This final version of the report has been updated to address the DPIE comments.

The period of the IEA was from 10 February 2017 (the end of the previous audit period) to 18 December 2019 (the last day of the site visit of this IEA). The IEA methodology included:

- Initial discussions with BMC to organise the audit, including the provision of documentation, the site visit and timing;
- Review of documentation provided by BMC and preparation of compliance assessment checklists that included a list of conditions of key regulatory approvals to be assessed for compliance;
- Discussions with NSW Department of Planning, Industry and Environment (DPIE) regarding any concerns or areas for particular focus during the audit;
- Site inspections including review of documentation and interviews with key site personnel on 2-3 December and 17-18 December 2019;
- Consultation with key government agencies as presented in this report;
- Review of additional documentation provided by BMC after the site inspections;
- An assessment of environmental management performance through review of: the implementation of key environmental management strategies, plans and programs; non-compliances documented in annual reporting; regulatory actions; incidents; and complaints.
- An assessment of compliance was undertaken for each condition within the selected regulatory approvals based on a review of documentation, observations during site inspections, interviews, implementation of management plans, incidents, complaints and regulatory action.
- Submission of a draft audit report to BMC to provide an opportunity for additional information and / or correction of fact; and
- Finalisation of the report.

The independent environmental audit assessed compliance with relevant approvals, licences and management plans applicable to Bengalla Mine. Detailed compliance registers identifying audit findings, comments and recommendations are presented in **Appendices A to C**. Non-compliances identified against relevant approvals are identified and discussed in **Section 7.1**.

In addition, the scope of the audit included a review of the adequacy of the strategies, plans and programs required under the Development Consent. The findings of the adequacy review are presented in **Section 6.2**. A number of continuous improvement opportunities were identified and are presented.

A summary of recommended actions to improve environmental performance and compliance status are presented in **Section 7**.

# 1 Introduction

MCW Environmental Consulting Pty Ltd (MCW Environmental); SLR Consulting; and Minesoils were engaged by Bengalla Mining Company Pty Limited (BMC) to conduct an Independent Environmental Audit (IEA) of the Bengalla Continuation Project. Bengalla Mine is an open cut coal mine located near Muswellbrook in the Hunter Valley of NSW. The Bengalla Mine comprises the open cut and associated infrastructure, including the coal handling and preparation plant (CHPP), rail loop and loading facilities.

State Significant Development 5170 (SSD-5170, as modified) for the Bengalla Continuation Project was approved on 3 March 2015. This consent supersedes the former Development Consent DA 211/93 (as modified) and DA 273/2006. In accordance with Schedule 2, Condition 10 of SSD 5170 (as modified), DA 211/93 and DA 273/2006 were required to be surrendered by June 2016. All development and activities at Bengalla from June 2016 were to be undertaken in accordance with SSD-5170 (as modified), and DA 211/93 and DA 273/2006 were not relied upon to undertake development or activities beyond those encompassed by SSD-5170 (as modified). For this reason, DA 211/93 and DA 273/2006 were not assessed as part of this IEA.

SSD-5170 (as modified) allows BMC to continue the operations at Bengalla Mine approved under DA 211/93 and DA 273/2006.

The IEA was conducted to meet the requirements of the Bengalla Mine State Significant Development Consent SSD-5170 (SSD-5170, as modified) Schedule 5 Condition 9 requires that by 1 October 2016 and every 3 years thereafter, BMC must commission an IEA of the development. This is the second IEA undertaken at the Bengalla Mine in accordance with SSD-5170 (as modified) Condition 9.

The audit was completed in accordance with the requirements of SSD-5170 (as modified) Schedule 5 Condition 9; the Independent Audit Guideline 2015; and MCW Environmental's proposal to conduct the work dated 25 September 2019. This IEA covers the period from 10 February 2017 (the end of the previous audit period) to 18 December 2019 (the last day of the site visit of this IEA 2019).

MCW Environmental, SLR Consulting and Minesoils were each contracted individually by BMC to be part of the audit team. The audit team was approved by DPIE in a letter dated 3 October 2019.

DPIE reviewed an earlier version of this report dated April 2020 and provided comment to Bengalla dated 6 October 2020. This version of the report has been updated to address the DPIE comments.

This report presents the findings of this audit.

## 2 Methodology

### 2.1 Audit scope

The IEA was conducted in accordance with the requirements set out in SSD-5170 Schedule 5 Condition 9, as detailed in **Table 2-1**.

**Table 2-1: Development Consent SSD-5170 IEA Conditions**

Project Condition	Approval Requirement	IEA Reference
SSD-5170 Schedule 5 Condition 9	<i>Within 1 year of the commencement of development under this consent, and every 3 years thereafter, unless the Secretary directs otherwise, the Applicant must commission and pay the full cost of an Independent Environmental Audit of the development. This audit must:</i>	This Report
SSD-5170 Schedule 5 Condition 9 (a)	<i>be conducted by a suitably qualified, experienced and independent team of experts whose appointment has been endorsed by the Secretary;</i>	<b>Section 2.3</b>
SSD-5170 Schedule 5 Condition 9 (b)	<i>include consultation with the relevant agencies and CCC;</i>	<b>Section 4</b>
SSD-5170 Schedule 5 Condition 9 (c)	<i>assess the environmental performance of the development and assess whether it is complying with the requirements in this consent and any relevant EPL or Mining Lease (including any assessment, plan or program required under these approvals);</i>	<b>Sections 6, 7 and Appendices A – C</b>
SSD-5170 Schedule 5 Condition 9 (d)	<i>review the adequacy of strategies, plans or programs required under the abovementioned approvals; and;</i>	<b>Section 6.2</b>
SSD-5170 Schedule 5 Condition 9 (e)	<i>recommend appropriate measures or actions to improve the environmental performance of the development, and/or any assessment, plan or program required under the abovementioned approvals.</i>	<b>Section 7</b>
SSD-5170 Schedule 5 Condition 9	<i>Note: This audit team must be led by a suitably qualified auditor and include experts in any field specified by the Secretary.</i>	<b>Section 2.3</b>

Based on discussions with DPIE, an Independent Review of the Bengalla Mine and other mines in the area was to commence at a similar time to the audit and focus on air quality and dust management. The audit was to be commissioned under Condition 4; Schedule 4 of the Development Consent. It is understood that on this basis DPIE did not require an Air Quality specialist on the audit team, and that technical aspects of air quality would be addressed as part of this Independent Review.

### 2.2 Approach

The purpose of the IEA was to assess compliance with Conditions of Approval (CoA), licences and other approvals that apply to the development and review the adequacy of strategies, plans or programs required under the Development Consent.

The IEA was undertaken in general accordance with:

- Post Approval Guidelines: Independent Audits (NSW Government, 2015);
- AS/NZS ISO 19011:2014 Guidelines for auditing management systems; and
- MCW Environmental's proposal (dated 25 September 2019).

The IEA methodology included:

- Opening meeting with BMC management to discuss the approach and process of the IEA;
- Consultation with the following key government agencies on BMC's environmental performance:
  - NSW Department of Planning, Industry and Environment (DPIE Compliance);
  - NSW Department of Planning, Industry and Environment – Resources Regulator;
  - NSW Environment Protection Authority (EPA);
  - Natural Resources Access Regulator (NRAR); and
  - Muswellbrook Shire Council.
- Consultation with the Chairperson of the CCC;
- Preparation of compliance assessment checklists for the regulatory approvals listed in **Table 2-2**;
- Site inspections;
- Review of documentation and interviews with key site personnel;
- A review of environmental management performance including:
  - Environmental Management Strategy (EMS);
  - Environmental management plans including an assessment of compliance with the requirements of key management strategies, plans and programmes referred to in the approvals.
  - Incidents and complaints; and
  - Status of actions from the previous IEA.
- An assessment of compliance was undertaken for each condition within the regulatory approvals listed in **Table 2-2** based on a review of documentation, observations during site inspections, interviews, implementation of management and monitoring plans, incidents, complaints and regulatory action.
- An assessment of compliance was undertaken with the commitments from the environmental assessment documentation referred to in the Development Consent.
- Provision of recommendations for each non-compliance and for conditions that were assessed as compliant and where there was opportunity for continual improvement, an observation and recommendation was provided.
- Reporting: Provision of a draft IEA report to BMC to provide an opportunity to provide additional information and /or correct errors in fact; and finalisation of the IEA report. It is noted BMC has communicated with DPIE regarding the submission date for the IEA Report. In an email dated 26 March 2020, DPIE approved for the report submission date to be extended to 17 April 2020.
- Update of the report dated April 2020 to address the DPIE comments dated 6 October 2020.

This report provides a summary of findings including details of non-compliances identified in the audit, an audit score, and recommended actions to improve compliance status and / or environmental performance.

## 2.3 Audit Team

The IEA was conducted by the following qualified, experienced and independent auditors:

- Michael Woolley, Lead Auditor (MCW Environmental);
- Tracey Ball, Auditor (SLR Consulting Australia Pty Ltd [SLR]);
- Martin Davenport, Blast, Vibration and Noise Specialist (SLR); and
- Clayton Richards, Rehabilitation Specialist (Minesoils).

Michael Woolley is registered by Exemplar Global as a Certified Lead Auditor for Environmental Management Systems. Tracey Ball is also a certified and registered Principal Auditor. MCW Environmental, SLR Consulting and Minesoils were each contracted individually (with separate contracts) by BMC.

The auditors were approved by the Secretary in a letter dated 3 October 2019 (**Appendix E**). Besides the Specialists, the rest of the audit team are generalist auditors and are not specialists in any specific field.

## 2.4 Regulatory Approvals

BMC operates under the regulatory approvals, licences and authorisations listed in **Table 2-2**.

**Table 2-2: Regulatory Approvals**

Regulator	Reference	Description	Date granted, renewed or varied	Expiry
DPIE	SSD-5170	The Bengalla Continuation Project for mining beyond June 2016 and as modified on four occasions:	03/03/2015	28/02/2039
	MOD 1	Alterations to various water management infrastructure components including: <ul style="list-style-type: none"> <li>▪ Utilisation of the Satellite Pit as a temporary dirty water catchment dam;</li> <li>▪ Relocation of the Staged Discharge Dam Hunter River Salinity Trading Scheme staged discharge release point;</li> <li>▪ Construction of clean water diversion levees in locations other than those already approved; and</li> <li>▪ Revised locations for the proposed relocation of the Hunter River and Washery Dams.</li> </ul> <p>The modification was also for additional locations for the siting of the Explosives Storage Facility and the placement of fill from the excavation of Clean Water Dam 1 adjacent to it.</p>	16/12/2015	28/02/2039
	MOD 2	Alterations to the approved height of the Main Overburden Emplacement Area to improve visual amenity from primary viewing locations in and surrounding the township of Muswellbrook and Denman Road, in two selected locations (Visual Relief Areas): <ul style="list-style-type: none"> <li>▪ The Northern Relief Area constructed to a maximum height of Reduced Level 300; and</li> <li>▪ The Southern Relief Area constructed to a maximum height of Reduced Level 290.</li> </ul> <p>The modification also sought the establishment of a new gravel access road from Wybong Road to the Dry Creek Diversion Project Construction Site Office being a former homestead (Homestead Access).</p>	01/06/2016	28/02/2039
	MOD 3	Facilitate minor changes to the approved location of an explosives facility, reload facility, Hunter River pipeline and topsoil stockpiles.	23/2/2016	28/02/2039

Regulator	Reference	Description	Date granted, renewed or varied	Expiry
	MOD 4	The modification sought: <ul style="list-style-type: none"> <li>▪ Amendments to the approved water management system;</li> <li>▪ To temporarily store earthen materials associated with dam construction and other identified suitable clay material required for the future Dry Creek reinstatement;</li> <li>▪ Increase the capacity of (and an additional location for) Run of Mine (ROM) coal stockpiles; and</li> <li>▪ Additional storage locations for temporary emplacement of coal processing reject material.</li> </ul>	19/12/2018	28/02/2039
EPA	EPL 6538	Environment Protection Licence 6538 authorises and regulates the carrying out of activities at Bengalla Mine. Five variations have been approved during the period of the IEA:	02/12/2019	Renewed annually
RR	ML 1397	Mine pit, waste dump, office and coal stockpiles.	13/07/2018	27/06/2038
	ML 1450	Mine pit, rail loop, train loading facility and CHPP.	10/05/2019	11/06/2020
	ML 1469	North eastern corner of the waste dump.	10/05/2019	05/06/2021
	ML 1728	Western section of the greater mine area that includes the new water management facilities.	10/05/2019	10/02/2037
	ML 1711	Clean Water Dam 1.	10/05/2019	17/12/2031
	ML 1729	West of MACH ENERGY (Mount Pleasant Mine) rail loop.	10/05/2019	10/02/2037
NRAR	WAL001106	Hunter River Water Access Licence (1,880 units)	05/03/2012	Continuing
	20BL169798	Hunter Unregulated and Alluvial Water Source – Hunter Regulated River Alluvial Water Source (125 ML/year extraction limit)		31/10/2015
	20PE001354	Muswellbrook Water Source (109 ML/year extraction limit)	01/05/1997	Annual
C'lth DoEE	EPBC 2012/6378	Continuation of Bengalla Coal Mine	27/05/2015	31/12/2050

This IEA has focussed on the following selected regulatory approvals considered most relevant and a detailed assessment of compliance with their conditions and requirements has been undertaken:

- Development Consent SSD-5170 (as modified);
- Environment Protection Licence 6538;
- Mining Lease 1397;
- Mining Lease 1450;
- Mining Lease 1469;
- Mining Lease 1728;
- Mining Lease 1711; and
- Mining Lease 1729.

The NRAR licences and the EPBC Approval were not audited as part of this IEA.

## 2.5 Period of the IEA

The period of the IEA has been defined as 10 February 2017 (the end of the previous audit period) to 18 December 2019 (the last day of the site visit of this IEA 2019).

## 2.6 Site Inspections

IEA site inspections were undertaken on 2-3 December and 17-18 December 2019. During the IEA site inspections, the weather conditions were hot and very dry. The area of the mine and surrounds were in drought. Areas of the mine visited comprised:

- Coal stockpiles, dams and water transfer infrastructure, Licenced Discharge Point (LDP26), oil water separators, sewage treatment facility and dams, diesel refuelling areas, machinery washdown bay and workshop, equipment and materials storage areas, waste storage areas;
- Rehabilitated waste dump;
- Water filling point;
- European Heritage sites;
- Reject emplacement areas; and
- Selected environmental monitoring locations, including for noise, blast and air quality.

The following operations were occurring at Bengalla Mine during the site visit:

- Office, Workshop, maintenance and general support activities;
- Storage or equipment in various laydown areas;
- Water and sediment management;
- Stockpiling of coal;
- Mining of coal;
- Removal of silt from Wantana Dam.

No exploration activities were being conducted. Photographs taken during the site inspections in December 2019 are provided in **Section 5**.

Opening and closing meetings were held on site at the commencement and the end of the site inspections. The Mine Manager and other managers and relevant personnel attended the meetings.

## 2.7 Documents Reviewed

BMC provided the following information for review during the IEA:

- Environmental management strategy, plans, programmes;
- Copies of licences;
- Compliance documents as noted in the compliance tables;
- Selected site procedures and checklists;
- Selected records of inspections;
- Selected records of monitoring and review;
- Selected records of induction and training;
- Selected technical reports and annual reports; and
- Selected government agency correspondence.

Documents were also downloaded from the BMC website. These included:

- Environmental Management Plans;
- Environmental monitoring data;
- Approvals documentation;

- CCC meeting minutes;
- Complaints and incidents registers;
- Annual Reviews;
- Past audits; and
- Coal transport records.

Specific documents that were referenced during the IEA are listed within the compliance assessment checklists in **Appendices A to C**.

## 2.8 Interviews

During the site inspections, interviews were conducted with the following key site personnel:

- Environmental Superintendent;
- Environment Advisors;
- Drill and Blast Engineers;
- Drill and Blast Manager;
- CHPP Manager;
- Control Room personnel;
- Infrastructure and Maintenance Supervisor;
- Open Cut Examiner (OCE)/Supervisor; and
- Mechanical Engineer.

## 2.9 Compliance Assessment

The findings of the compliance assessment for each condition within the regulatory approvals listed in **Table 2-2** are summarised in **Section 6 and 7** and detailed compliance assessments, including verification evidence, are included in **Appendices A to C**.

Conditions that were assessed as non-compliant, and corresponding recommendations, are provided in **Table 7.2**. Conditions that were assessed as compliant and/or where opportunities were identified for continuous improvement, recommendations are provided in **Table 7.3**.

### 2.9.1 Criteria

Compliance for each condition of the regulatory approvals was based on the criteria in the Post Approval Guidelines: Independent Audits (NSW Government, 2015) provided in **Table 2-3** with an additional compliance criterion included for conditions not assessed.

Table 2-3: Compliance Assessment Criteria

Criteria	Definition
Compliant	Where the auditor has collected sufficient verifiable evidence to demonstrate that the intent and all elements of the requirement of the regulatory approval have been complied with within the scope of the audit.
Not verified	Where the auditor has not been able to collect sufficient verifiable evidence to demonstrate that the intent and all elements of the requirement of the regulatory approval have been complied with within the scope of the audit. In the absence of sufficient verification, the auditor may in some instances be able to verify by other means (visual inspection, personal communication, etc.) that a requirement has been met. In such a situation, the requirement should still be assessed as not verified. However, the auditor could note in the report that they have no reasons to believe that the operation is non-compliant with that requirement.
Non-compliant	Where the auditor has collected sufficient verifiable evidence to demonstrate that the intent of one or more specific elements of the regulatory approval have not been complied with within the scope of the audit.
Administrative non-compliance	A technical non-compliance with a regulatory approval that would not impact on performance and that is considered minor in nature (e.g. report submitted but not on the due date, failed monitor or late monitoring session). This would not apply to performance-related aspects (e.g. exceedance of a noise limit) or where a requirement had not been met at all (e.g. noise management plan not prepared and submitted for approval).
Not triggered	A regulatory approval requirement has an activation or timing trigger that had not been met at the time of the audit inspection, therefore a determination of compliance could not be made.
Observation	Observations are recorded where the audit identified issues of concern which do not strictly relate to the scope of the audit or assessment of compliance. Further observations are considered to be indicators of potential non-compliances or areas where performance may be improved.
Note	A statement or fact, where no assessment of compliance is required.
Not assessed	The condition was not assessed for reasons as stated on a case by case basis e.g. Auditors were not qualified to assess the condition. (Noted this criterion is not in the guideline and is only used for selected conditions).

## 2.10 Environmental Performance

An assessment of the environmental performance of BMC was undertaken and is summarised in **Section 6**. The assessment included a high-level review of:

- Environmental management system;
- Environmental management plans;
- Environmental monitoring;
- Inspections;
- Incidents and complaints; and
- Regulatory actions.

Environmental performance was assessed for the audit period 10 February 2017 to 18 December 2019.

## 2.11 Report Structure

The report is structured as follows:

- Section 1 introduces the IEA;
- Section 2 describes the IEA methodology;
- Section 3 summarises the description of operations;
- Section 4 summarises the consultation with key regulatory agencies and the CCC;
- Section 5 provides photographs taken during the site inspections;
- Section 6 provides an assessment of environmental management performance;
- Section 7 presents the findings of the compliance assessment including recommendations;
- Section 8 provides summarises the conclusions of the IEA
- Section 9 provides abbreviations and definitions used in the IEA; and
- Section 10 provides the limitations of the report.

**Appendices A to C** contain detailed tabulated results of the compliance assessments against the Development Consent, Environment Protection Licence and Mining Lease.

**Appendix D** comprises an assessment of the status of the actions undertaken to address recommendations of the previous 2017 Independent Environmental Audit report.

**Appendix E** NSW DPIE Auditor Approval.

### 3 Description of Operations

BMC has approval to extract up to 15 million tonnes per annum (Mtpa) of run of mine (ROM) coal until 2039. Bengalla currently extracts coal from the Warkworth seam to the Wynn seam (previously to the Edderton) which form part of the Whittingham Coal Measures. The main components of Bengalla Mine's existing operations are an open cut mine and supporting infrastructure. ROM coal is processed at the site's CHPP, stockpiled and then transferred to the train load out facility for export and domestic sale.

The Bengalla Continuation Project activities include:

- Continuation of open cut mining towards the west;
- Continued use of the existing dragline, truck fleet and excavator;
- An out of pit Overburden Emplacement Area (OEA) to the west of Dry Creek which may be utilised for excess spoil material until it is intercepted by mining;
- Various upgrades, relocations or additional new infrastructure to support the Project;
- Processing, handling and transportation of coal via the (upgraded) CHPP and rail loop for export and domestic sale;
- Continued rejects and tailings co-disposal in the Main OEA and temporary in pit reject emplacement;
- Relocation of a 6 km section of Bengalla Link Road at approximately Year 15 near the existing mine access road to facilitate coal extraction;
- The diversion of Dry Creek via dams and pipe work with a later permanent alignment of Dry Creek through rehabilitation areas when emplacement areas are suitably advanced;
- Relocation of water storage infrastructure as mining progresses through existing dams (including the Staged Discharge Dam and raw water dam); and
- A workforce of approximately 900 full time equivalent personnel (plus contractors) at peak production.



**Figure 3.1 Regional locality**

Source: *Continuation of Bengalla Mine, Environmental Impact Statement (EIS), Hansen Bailey, September 2013.*

## 4 Consultation with Key Government Agencies

As part of the audit process, MCW Environmental contacted the NSW Department of Planning, Industry and Environment (DPIE Compliance); NSW Department of Planning, Industry and Environment - Resources Regulator (RR); Department of Planning, Industry and Environment - Biodiversity and Conservation Division (BCD); NSW Environment Protection Authority (EPA); and the Independent Chair of the Community Consultative Committee (CCC) to discuss the scope of the IEA and discuss their views on the environmental performance of the mine. Feedback provided by the regulatory agencies is summarised below.

### 4.1 NSW Department of Planning, Industry and Environment (DPIE)

MCW Environmental discussed the scope of the Bengalla audit with DPIE (Compliance) on the 18 September 2019 via phone call. The DPIE Compliance Officer stated that a key focus was Rehabilitation and Noise/Vibration from blasting. On this basis DPIE requested that the audit team include a Blast, Vibration, and Noise Specialist, and a Rehabilitation Specialist to be part of the audit team.

It was further acknowledged that an Independent Review of the Bengalla Mine and other mines in the area was to commence at a similar time to the IEA and focus on air quality and dust management. The audit was to be commissioned under Condition 4; Schedule 4 of the Development Consent. It is understood that on this basis DPIE did not require an Air Quality specialist on the audit team, and that technical aspects of air quality would be addressed as part of this Independent Review.

### 4.2 NSW Department of Planning, Industry and Environment – Resources Regulator

MCW Environmental initially contacted the Resources Regulator on 20 November 2019. A second request was issued to the Resources Regulator on 10 February 2020 who responded by email on the same day with the following key aspects to be included in the audit scope:

Issue Raised	IEA Reference
Review relevant mining leases and exploration licences as agreed with Resources Regulator	Refer to Appendix C: Mining Lease ML 1397, ML 1450, ML 1469, ML 1728, ML 1711 and ML 1729. Exploration licences were not reviewed as part of the IEA.
Undertake an assessment of compliance against the conditions of title related to environmental management;	Refer to Appendix C: Mining Lease ML 1397, ML 1450, ML 1469, ML 1728, ML 1711 and ML 1729. Also refer to Appendix A: SSD-5170 (as modified)
Verify that there is a current Mining Operations Plan (MOP) in place and it has been approved by the Regulator - review compliance against any conditions of approval of the MOP	Refer to Appendix A: SSD-5170 (as modified) Schedule 3, Condition 46 Rehabilitation Management Plan requirements contained in current Mining Operations Plan (MOP).
Undertake a critical review of the MOP, including an assessment of its compatibility with the description of operations contained in the planning approval. In particular:	A review of the Current MOP and compatibility against the Development Consent (SSD-5170 [as modified]) has been undertaken as part of this audit. A full critical review is outside the scope of the audit. It is noted the RR issued a notice (NTCE0003919) under Section 240 of the Mining Act 1992, in regard to preparing and submitting a Mine Rehabilitation Report which aims to provide a critical review of the status of progressive rehabilitation.

Issue Raised	IEA Reference
<ul style="list-style-type: none"> <li>Review the rehabilitation strategy as outlined in the MOP to determine if it is consistent with the Project Approval in terms of progressive rehabilitation schedule; and proposed final land use(s);</li> </ul>	Refer to Appendix A: SSD-5170 (as modified) Schedule 3, Condition 44 Rehabilitation Objectives, and Condition 45 Progressive Rehabilitation.
<ul style="list-style-type: none"> <li>Review the rehabilitation objectives and completion criteria as outlined in the MOP to determine if they have been developed in accordance with the proposed final land use(s) as outlined in the Project Approval;</li> </ul>	Refer to Appendix A: SSD-5170 (as modified) Schedule 3, Condition 44 Rehabilitation Objectives.
<p>Review the development and implementation of any rehabilitation monitoring programs to assess performance against the nominated objectives and completion criteria - verified by reviewing monitoring reports and rehabilitation inspection records.</p>	<p>Rehabilitation monitoring at Bengalla Mine is undertaken annually through the implementation of the following:</p> <ul style="list-style-type: none"> <li>A transect-based monitoring program (the monitoring program); and</li> <li>A rehabilitation audit (the audit), consisting of a walk-through assessment of all rehabilitated lands. These monitoring events were noted as being undertaken during the audit period. In addition to these, site personnel undertake informal drive throughs on rehabilitated land as part of operational duties. The weed management and maintenance program also forms a part of the overall rehabilitation monitoring program, in respect to weed management.</li> </ul>
<p>Determine if a rehabilitation care and maintenance program has been developed and implemented based on the outcomes of monitoring program - verified by reviewing Annual Rehabilitation Programs or similar documentation.</p>	<p>BMC has engaged a suitably qualified rehabilitation consultant to provide guidance on transforming the Eastern face rehabilitation area from a pasture based community to high density woody vegetation. The monitoring results from the surface preparation trials feed into the development of the 'care and maintenance' program for this area. The weed management program implemented at Bengalla Mine, as detailed in the 2017 and 2018 Annual Reviews forms part of the 'care and maintenance' program.</p>
<p>Confirm that mining operations are being conducted in accordance with the approved MOP (production, mining sequence, topsoil management etc.), including within the designated MOP approval boundary- to be verified by site plans and site inspection.</p>	<p>MOP plans to the current year 2019, Annual Reviews and site inspections indicated Mining is being undertaken in general accordance with MOP Plans. Mining and rehabilitation areas are generally consistent with that scheduled, as shown in Plan 3C. There appears to be no areas where mining has occurred outside the MOP approval boundary during the Audit period. This finding is limited to comparisons of the MOP Plans with aerial imagery, Annual Reviews and site inspections. This finding also does not incorporate the areas of disturbance by the Mt Pleasant Rail Loop and associated infrastructure.</p>
<p>Confirm that rehabilitation progress is consistent with the approved MOP as verified by site plans and a site inspection. This should include an evaluation against rehabilitation targets and whether the final landform is being developed in accordance with conceptual final landform in the Project Approval</p>	<p>Refer to Appendix A: SSD-5170 (as modified) Schedule 3, Condition 44 Rehabilitation Objectives and Condition 45 Progressive Rehabilitation.</p>
<p>Based on a visual inspection, determine if there are any rehabilitation areas that appear to have failed or that have incurred an issue that may result in a delay in achieving the successful rehabilitation.</p>	<p>Refer to Appendix A: SSD-5170 (as modified) Schedule 3, Condition 44 Rehabilitation Objectives.</p>

Issue Raised	IEA Reference
In addition to the above, the audit should note observations where rehabilitation procedures, practices and outcomes represent best industry practice.	Refer to Appendix A: SSD-5170 (as modified) Schedule 3, Condition 44 Rehabilitation Objectives.

### 4.3 NSW Environment Protection Authority (EPA)

Feedback was sought from the EPA Regional Manager Operations on 20 November 2019. EPA responded with an email on 22 November 2019. The EPA noted that they encourage IEA toward proponents improving their environmental performance. They also noted that they do not provide input as their role is to set environmental objectives for environmental/conservation management and to manage outcomes.

The EPA referred MCW to the EPA register <http://www.epa.nsw.gov.au/prpoeo/index.htm> where a search for regulatory activity by the EPA for BMC's EPL 6538 can be undertaken. As part of this IEA a search of this database was undertaken, and the 2018 EPA Compliance Audit Report downloaded and reviewed.

### 4.4 Muswellbrook Shire Council

MCW Environmental contacted the Muswellbrook Shire Council (Council) on 20 November 2019 by email. Council responded by email on the 22 November 2019. In their email they noted that the audit should be completed against key statutory requirements outlined in Section 2 of the DPIE Independent Environmental Audit Guidelines (e.g. assess the environmental performance of the project and whether it is complying with the requirements development approvals and any relevant EPL or Mining Lease, including any assessment, plan or program required under these approvals) to address areas of concern/interest held by Council. These requirements are within the scope of this audit.

In their email response they also raised two matters that should be addressed by the audit:

Issue Raised	IEA Reference
<ul style="list-style-type: none"> <li>Ongoing rehabilitation of disturbed areas, including interim rehabilitation where final rehabilitation may be a more long-term action. Conditions of approval require reasonable attempts to minimise the amount of disturbed land on the site.</li> </ul>	Appendix A, SSD-5170 Mod 4, Schedule 3, Condition 46
<ul style="list-style-type: none"> <li>Given the drought and adverse wind conditions over the past 2 years, visible dust has caused concern for the community. The dust does not solely originate from this site, but how these conditions are being addressed should be discussed in the audit.</li> </ul>	Appendix A, SSD-5170 Mod 4, Schedule 3, Condition 16, 19 & 20

Issue Raised	IEA Reference
<p>Mine Blast impacts.</p> <ul style="list-style-type: none"> <li>• There have been occasional blasts felt in the Muswellbrook Township, one in particular that was attributed to Bengalla Mine on 21 May 2019. Nothing has been felt/heard in more recent times, so council is not sure if the cooler weather is a factor for the May 2019 event. Craig White has shown Council the monitoring records for that day that show the blast vibration and over-pressure results were still within limits.</li> <li>• It would be good to look at the number of times the blasts on site produced vibration and overpressure results that were close to the limits and possibly see if this is attributable to anything that the Mine could do differently.</li> <li>• Craig White also agreed to start posting mine blast notices on Council's website on all occasions, not just when a road closure was required, which will help with transparency in the community on attribution of blasts to a particular mine.</li> </ul>	<p>Noted</p> <p>Appendix A, SSD-5170 (as modified), Schedule 3, Condition 8, 9, 10 &amp; 15</p> <p>Appendix A, SSD-5170 (as modified), Schedule 3, Condition 15</p>

#### 4.5 Community Consultative Committees (CCCs)

Discussions were held with Malcolm Ogg, Independent Chair of the Community Consultative Committee (CCC), on 20 November 2019. Malcolm indicated the following:

- The CCC has been working well and has been operating in general accordance with the CCC Guidelines.
- CCC members are mainly residents from around the mine. There has been challenges in the past to ensure a Council representative is always in attendance. CCC members are happy to raise their concerns and issues at the meetings.
- BMC has been supportive of the CCC, ensuring appropriate staff attend the meetings; that meetings are well planned and prepared; and that personnel attending are able to respond to questions raised by CCC members.
- Bengalla are supportive of the local RFS and provide fire trucks and training to the RFS in addition to regular meetings with services in close contact with Bengalla mine site and all services in close proximity to acquired land.
- Over the years, community complaints have reduced significantly. Bengalla has worked hard to resolve complaints and maintain a good community profile. It was noted not all complaints, once investigated, were attributable to Bengalla operations.
- The main community concern relating to the mine is dust from the operations, particularly given the very dry conditions (as of November 2019). Other concerns included light spill and blast noise.

The main concerns of the CCC have been addressed in the following sections of this IEA report:

- Dust – Appendix A, SSD-5170 Mod 4, Schedule 3, Condition 16, 19 & 20;
- Light Spill – Appendix A, SSD-5170 Mod 4, Schedule 3, Condition 36; and
- Blast noise - Appendix A, SSD-5170 Mod 4, Schedule 3, Condition 4, 6, and 7.

#### 4.6 Natural Resources Access Regulator (NRAR)

Feedback was sought from the Natural Resource Access Regulator (NRAR) on 10 February 2020. At the time of writing this IEA report no response had been received from NRAR, in regards to this audit.

## 5 Site Inspection Photographs

Photographs taken or referenced during the site inspections are included in **Table 5-1**. Site inspections were hosted by BMC personnel.

**Table 5-1: Site Inspection Photographs**



Photo No.	Comment	Photo
Photo 1.	Observations of the pit during Day 1 of the audit site inspection. Photo taken from the waste dump. Wind speed was above 10m/s and evident reduction of plant in the pit was observed as per the Trigger in the AQMP.	
Photo 2.	Dust observed during Day 2 of the audit. Photo taken from the Southern Lookout. Wind speed was less than 10m/s at the wind monitoring point and some plant was producing dust. Shut down of machinery was triggered by site management where dust was not localised.	
Photo 3.	Dust observed during Day 3 of the audit. Wind speed was low and there was only localised dust observed from haul trucks and other plant.	


Photo No.	Comment	Photo
Photo 4.	Observations during Day 4 of the audit with bushfire smoke impacting air quality.	
Photo 5.	Minor erosion (scouring) in creek bank adjacent to the intersection of Bengalla Road and Old Bengalla Road.	
Photo 6.	Two unbanded oil drums at the workshop area.	
Photo 7.	Weeds in and adjacent to the diversion levee.	

Photo No.	Comment	Photo
Photo 8.	Progressive rehabilitation has not been implemented in some areas which are suitable to undergo temporary rehabilitation (see middle ground).	
Photo 9.	Rill erosion and weeds (Galenia) noted on the south-eastern face of the waste dump, where limited groundcover is evident. The rill erosion has resulted in some contour banks carrying a high sediment load at the base of large rills, and reducing the banks' ability to transport water to the targeted drainage drop structures.	
Photo 10.	In-pit disposal of reject material (dark coloured material) with other waste to be used for capping.	
Photo 11.	Dry Creek East Dam; constructed during the audit period.	

Photo No.	Comment	Photo
Photo 12.	Rehabilitation undertaken at the Dry Creek East Dam.	
Photo 13.	Raw Water Dam, Washery Dam and staged discharge Dam, constructed during the audit period to allow mining progression to the west.	




Photo No.	Comment	Photo
Photo 14.	Blast Magazine Facility Buildings (at the bottom of the Geo-Fluv area), constructed during the audit period.	
Photo 15.	Erosion and sediment controls (rock armouring) in drainage line south of the newly relocated dams.	
Photo 16.	GeoFluv area under construction on the waste dump. Rock lined drainage channels recently constructed. Water cart spraying access track during high wind on Day 1.	



Photo No.	Comment	Photo
<p>Photo 17. Rehabilitation at the top of the waste dump. Majority of the eastern face comprised of pasture species, with patches of <i>Galenia pubescens</i> (Galenia). Stands of medium density trees also present on rehabilitation area. Drop structure was observed as stable with competent rock. High impact on ground cover by grazing kangaroos.</p>		
<p>Photo 18. Presence of <i>Galenia</i> on the rehabilitated waste dump. Noted to occur in dense patches mainly where less competition from pasture species exists.</p>		

Photo No.	Comment	Photo
Photo 19.	A typical noise monitor.	
Photo 20.	Blast monitoring device.	
Photo 21.	Bengalla Homestead, where renovation works have been undertaken during the audit period.	



Photo No.	Comment	Photo
Photo 22.	Historic items in one of the rooms at the Bengalla homestead.	
Photo 23.	Sealed and locked Overdene Homestead.	
Photo 24.	Labelled waste and recycling storage bins. These bins were observed to be used appropriately to segregate different materials.	

Photo No.	Comment	Photo
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Photo 25. Equipment being maintained in the workshop. Noise reducing mufflers and insulation used in plant was observed during the inspections.



Photo 26. Hydrocarbon spill at the diesel re-fuelling area.



Photo 27. Coal stackers and waste water treatment plant (WWTP) dams.



## 6 Environmental Performance

This section assesses the requirement of the scope of works to “assess the environmental performance of the development”. Measurement of environmental performance in this audit has been assessed by:

- Providing an overview of the environmental management system used by BMC to manage and monitor environmental performance;
- An assessment of compliance with the conditions of the Development Consent; EPLs and Mining Leases. This is detailed in **Section 7** and in **Appendices A to C**;
- Discussion of the environmental performance as reported in the BMC Annual Reviews;
- An assessment of environmental incidents, complaints and regulatory actions as an indicator of environmental performance.

This Section also fulfils the audit scope requirement to assess the adequacy of strategies, plans or programs required under the Development Consent. The implementation of the management plans / programs is discussed in **Appendix A**.

### 6.1 Environmental Management System

BMC has established an Environmental Management System. The Environmental Management System consists of a number of documents including:

- Environment Management Plans and Strategy - Management plans and strategies have been prepared in response to the requirements of conditions of SSD-5170 (as modified);
- Procedures - Procedures have been prepared for all mining related activities that have been deemed by BMS as having a significant impact on the environment;
- Monitoring Programs - Describes the types, locations and timing of monitoring activities and the relevant criteria that may apply; and
- Manuals - Reference books that may contain relevant information such as copies of Strategies, Plans, Programmes, Procedures or related instructions.

In accordance with SSD-5170 (as modified) Schedule 5, Condition 1, BMC have developed an Environmental Management Strategy (EMS) for the Bengalla Mine. The Bengalla Mine EMS has been assessed against the requirements of Schedule 5, Condition 1, as reported in **Appendix A**.

### 6.2 Environment Management Plans

BMC has developed a number of supporting environmental management plans as required of the Development Consent. At the time of the IEA the status of the management plans, programs and strategies required under SSD-5170 (as modified) is detailed in **Table 6.1**.

**Table 6-1: Status of management plans, strategies and programs required under SSD-5170 (as modified)**

SSD-5170 CoA	Management plans and programs	Status
S3-7	Noise Management Plan (NMP)	Submitted to DPIE 19 March 2019 Approved by DPIE 27 May 2019
S3-15	Blast Management Plan (BMP)	Submitted to DPIE 11 May 2017 Approved by DPIE 18 August 2017
S3-37	Visual Impact Management Plan (VIMP)	Submitted to DPIE 30/3/2016 Approved by DPIE 14/6/2016
S3-20	Air Quality Management Plan (AQMP)	Submitted to DPIE 21 April 2017 Approved by DPIE 18 August 2017 The revised AQMP, dated 29/4/2019, is currently under review by DPIE.
S3-25	Water Management Plan (WMP)	Submitted to DPIE 30 January 2019 Approved by DPIE 1 February 2019
S3-29	Biodiversity Management Plan	Submitted to DPIE 4 May 2017 Approved by DPIE 18 August 2017
S3-29	Biodiversity Offset Management Plan (BOMP)	Submitted to DPIE 27 April 2017 Approved by DPIE 18 August 2017
S3-31	Aboriginal Cultural Heritage Management Plan (ACHMP)	Submitted to DPIE 11 May 2017 Approved by DPIE 18 August 2017
S3-32	Historic Heritage Management Plan (HHMP)	Submitted to DPIE 11 May 2017 Approved by DPIE 18 August 2017
S3-46	Rehabilitation Management Plan (RMP) (superseded)	Submitted to DPIE 12 May 2017 and 13 October 2017 18 August 2017, and 8 November 2017
S5-1	Environmental Management Strategy (EMS)	Submitted to DPIE 29 July 2016 Approved by DPIE 5 September 2017 The revised EMS is currently under review by DPIE.

### 6.2.1 Adequacy Review of Key Management Plans

An assessment of the general adequacy of key management plans was undertaken and is provided in **Table 6.2**. It is noted, however, that MCW Environmental did not undertake a detailed or technical assessment of these management plans, with many of the plans having been developed by specialists. The compliance assessments in **Appendices A** have assessed the Plans against the Development Consent requirements.

Table 6-2: Adequacy review of key management plans and programs

Management plans and programs	Adequacy review and recommendations
Heritage Management Plans	<p>Both the ACHMP and HHMP were approved by DPIE on the 18/08/2017. These plans were prepared to address the requirements of SSD-5170 (as modified), Schedule 3, Condition 31 and 32.</p> <p>The ACHMP provides BMC with a consistent approach to ongoing consultation and involvement with Registered Aboriginal Parties (Section 4) and minimum standards and processes for management of Aboriginal sites (Section 5, 6 and 7).</p> <p>Protocols are included for Aboriginal consultation, management of non-impacted Aboriginal sites, archaeological salvage, roles and responsibilities, non-compliance and complaints management, reporting and auditing, and previously unrecorded aboriginal objects.</p> <p>As reported by BMC and determined from the review of documentation, all known Aboriginal sites with the Bengalla Mine Development boundary have been salvaged.</p> <p>The HHMP has been prepared to provide a framework for the management of heritage items within and adjacent to the Development (Bengalla Mine) boundary. It covers stakeholder consultation, identifies heritage sites and the impact to these from the Development, management measures, reporting &amp; auditing and responsibilities.</p> <p>Both plans were considered generally adequate for the site activities at Bengalla Mine conducted during the audit period. It is noted that Auditors are not specialists in the area of heritage.</p>
Noise Management Plan	<p>The DPIE approved the current version of the NMP on 27 May 2019. The NMP has been prepared in accordance with SSD 5170 (as modified), Schedule 3, Condition 7.</p> <p>Section 4 provides management measures. The implementation of these are discussed in Appendix A, against the NMP condition.</p> <p>Section 5 outlines the noise monitoring program at Bengalla Mine. The noise monitoring program consists of compliance attended, supplementary attended and real-time monitoring.</p> <p>Monitoring under EPL 6538 Condition M10.1 requires monthly attended noise monitoring at 3 locations.</p> <p>The approved NMP is considered to meet the noise monitoring requirements defined in EPL 6538.</p> <p>The NMP includes protocols for landowner notifications, mitigation &amp; acquisition, handling incidents, complaints and exceedances in Section 6 and 7. Section 7 also provides a Contingency Plan and a protocol for management plan review.</p> <p>Generally, the NMP appeared adequate for the operations and activities at Bengalla Mine.</p>
Blast Management Plan	<p>The DPIE approved the current version of the BMP on 18 August 2017. The BMP has been prepared in accordance with SSD 5170 (as modified), Schedule 3, Condition 15.</p> <p>Section 4 provides blast management measures. The implementation of these are discussed in Appendix A, against the BMP condition.</p> <p>Section 3 outlines the blast monitoring program at Bengalla Mine. As outlined by the BMP, the blast monitoring program consists of 11 real time blast monitors.</p> <p>The BMP includes protocols for stakeholder engagement, road closure, handling incidents, complaints and exceedances in Sections 2, 5 and 6. Section 6 also provides a Contingency Plan and Management Plan review requirements.</p>

Management plans and programs	Adequacy review and recommendations
	<p>The current version of the BMP does not include details about Mod 4. Besides this omission, the BMP generally appeared adequate for the operations and activities at Bengalla Mine.</p> <p>A Blast Fume Plan has also been prepared for the site, but this is an internal document. This Management Plan compliments the BMP and was updated during the audit period in response the 2017 IEA findings and recommendations.</p>
Visual Impact Management Plan	<p>The VIMP was approved by DPIE 14/6/2016. It was prepared in accordance with the requirements of SSD 5170 (as modified), Schedule 3, Conditions 37 to 39.</p> <p>Section 3 of the VIMP includes mitigation and visual treatment recommendations. The implementation of these are discussed in Appendix A, against the VIMP condition.</p> <p>The VIMP includes a methodology for stakeholder engagement, visual impact assessment and responsibilities.</p> <p>The VIMP is considered to generally meet the requirements of the development consent for management of visual impacts from the mine.</p>
Air Quality Management Plan	<p>The Bengalla Mine AQMP, August 2017 was prepared to address the requirements of SSD 5170 (as modified), Schedule 3, Condition 20. The current AQMP was approved by DPIE on 18 August 2017.</p> <p>Section 4 outlines the air quality monitoring program at Bengalla. Real-time monitoring is undertaken to continuously monitor dust levels. The air quality monitoring network comprises:</p> <ul style="list-style-type: none"> <li>• One (1) meteorological station and an inversion tower;</li> <li>• Nine (9) High Volume Air Samplers (HVAS) with five measuring TSP and four measuring PM10;</li> <li>• Six (6) real-time air quality monitors (four E-Bam monitors and two DustTrak monitors) linked to the Real Time Environmental Monitoring System (RTEMS); and</li> <li>• 28 Depositional Dust Gauges.</li> </ul> <p>An updated version of the AQMP, dated 29/4/2019, was submitted to DPIE via email on 29/4/2019. This AQMP includes revised details and an updated monitoring network.</p> <p>There were a number of observations made in regards to the AQMP, dated 2017:</p> <ul style="list-style-type: none"> <li>• The AQMP does not include details about SSD-5170, Mod 4;</li> <li>• Some references to sections in Table 1 are incorrect; and</li> <li>• The long-term criteria for particulate matter &lt;10 um (PM10) in the AQMP is incorrect. It does not match the criteria in the project consent.</li> </ul> <p>The draft updated version of the AQMP dated 29/4/2019 includes and addresses these noted omissions.</p> <p>BMC should keep progressing the approval of the revised AQMP in cooperation with DPIE.</p>
Water Management Plan	<p>The WMP, February 2018 was prepared to address the requirements of SSD 5170 (as modified), Schedule 3, Condition 25. The WMP was approved by DPIE on 1 February 2019.</p> <p>The WMP addresses specific Development Consent conditions and management requirements for the site in relation to surface water and groundwater. The WMP provides baseline data, a water management strategy, outlines the water monitoring program and water triggers. The WMP also covers the temporary dry creek diversion and provides a site water balance.</p> <p>Implementation of the WMP is discussed in Appendix A.</p>

Management plans and programs	Adequacy review and recommendations
Biodiversity Management Plans	<p>The layout of the water management system (as represented in the WMP) was verified during the site inspection.</p> <p>There were no off-site discharges reported by BMC during the audit period, although there were groundwater trigger events and the ground water bore (20BL169798) entitlement was exceeded.</p> <p>As outlined in the compliance checklist, there is a minor update required to the WMP to reflect the current regulator. Otherwise, the WMP is found to be generally adequate for the site operations.</p> <p>The Biodiversity Management Plan has been prepared to address the requirements of SSD 5170 (as modified), Schedule 3, Condition 29. DPIE approved the Management Plan in 18 August 2017.</p> <p>The Biodiversity Management Plan provides management actions, and protocols for ecological monitoring and inspections, reporting, document review and continuous improvement. The implementation of management actions is discussed against The Biodiversity Management Plan in Appendix A.</p> <p>The Biodiversity Offset Management Plan also addresses the requirements of SSD 5170 (as modified), Schedule 3, Condition 29. DPIE approved the Management Plan in 18 August 2017.</p> <p>The Biodiversity Management Plan describes the biodiversity offset areas, and provides objectives of the offset areas, a vegetation management strategy, conservation and land management measures and a biodiversity monitoring program.</p> <p>Both plans are considered generally adequate for the management of biodiversity on-site and within offset areas.</p>
Rehabilitation Management Plan	<p>The RMP has been superseded by the MOP. The MOP was approved by the Resources Regulator in 11/04/2019. The MOP has been prepared to address the requirements of SSD 5170 (as modified), Schedule 3, Condition 44, 45, 46.</p> <p>The general and detailed rehabilitation objectives outlined in the MOP are consistent with the objectives presented in condition 44.</p> <p>The progress towards these rehabilitation objectives are discussed in Appendix A.</p>

### 6.3 Environmental performance as reported in the Annual Reviews

Section 6 of the Bengalla Mine Annual Reviews provides an assessment of environmental performance that covers aspects including noise, air quality, contaminated land, biodiversity, heritage, visual amenity, lighting, blasting and waste. Section 7 of the Annual Reviews covers surface water and groundwater management. Each section summarises the performance outcomes from the monitoring undertaken.

Auditors have not relied on the summaries in these documents to assess environmental performance, however, it is considered that the Annual Reviews provide a reasonable summary of performance over the period.

To avoid duplication with the Annual Reviews, results are not repeated or discussed in this section.

Discussion regarding the Annual Reviews is provided in the compliance checklists (SSD-5170 Schedule 5 Condition 4).

DPIE and the Resources Regulator accepted the 2017 and 2018 Annual Reviews had been prepared in accordance with the required condition and noted several recommendations for inclusion in future

annual reviews. The Annual Reviews for 2017 and 2018 included sections that responded to these recommendations.

## 6.4 Regulatory actions

Annual Reviews for 2017 and 2018, consultation with regulatory agencies and review of the POEO Public Register on the EPA website indicate that during the audit period the following regulatory action (relating to DPIE, the Resources Regulator and / or EPA) was taken:

- EPA PIN - On 29 November 2018, the EPA issued to BMC a penalty infringement notice (PIN) for allegedly failing to comply with condition O1.1 of EPL 6538, and therefore allegedly contravening Section 64(1) of the POEO Act. The EPA alleged that the photos and video show "excessive dust emissions being generated from an excavator loading material into haul trucks" at the Bengalla Mine (Bengalla) premises. On 24 December 2018 BMC submitted to the EPA an application for review of the PIN. Per BMC communications Bengalla sought legal action in regards to the PIN, with EPA deciding not to pursue the PIN any further. BMC further noted that the PIN doesn't show up on the performance review and it is just a notice that has been issued.
- EPA Notice - Bengalla received an EPA Notice to Provide Information and/or Records (Notice Number 1574086), dated 15 January 2019. The information required was regarding EPL 6538 dust monitors EPA22, EPA23 and EPA24. Bengalla provided their response to the EPA Notice, including calibration records, monthly monitoring schedules, Purchase Orders and 2017, 2018 and 2019 AECOM environmental monitoring (including dust) proposals.
- DPIE PIN - PIN (No: 3121150616) was issued by DPIE on 16 June 2017 following a site inspection conducted on 18 January 2017. The PIN related to air quality management (minimising dust emissions). The PIN cover letter stated that "Bengalla failed to implement all reasonable and feasible measures to minimise dust emissions of the development and failed to minimise any visible air pollution generated by the development" and that "On 18 January 2017, seven other mines in the Hunter area were also observed and found to have adequately minimised visible air pollution".
- Resources Regulator request – On 29 August 2019, Environmental Inspectors from the Resources Regulator conducted an inspection of Bengalla Mine. From this inspection three separate notices under Section 240 of the *Mining Act 1992*, were issued, in relation to the management and rehabilitation of lands:
  - NTCE0003914 - In relation to soil resources, soil management practices and recommendations by a suitably qualified expert;
  - NTCE0003917 - In relation to undertaking a rehabilitation risk assessment; and
  - NTCE0003919 - In relation to undertaking a critical review of the MOP and progressive rehabilitation practices.

These three notices are being considered by Bengalla and in progress during the time of this audit. The final date for compliance with these notices was 3rd April 2020. It is understood Bengalla has engaged a suitably qualified expert to assist with the requirements of these notices.

- DPIE Request (Independent Dust Review) - The DPIE agreed with two landowners to undertake an Independent Review of dust impact on these two properties, in accordance with SSD 5170 Schedule 4 and Condition 4. DPIE requested that a suitably qualified, experienced and independent person undertake the Independent Review. At the time of the audit the auditors (for the Independent Review) had not been engaged, as the scope of works had not been finalised.
- In February 2020 (post the audit period) DPIE issued Notices to BMC stating that they were undertaking an investigation into compliance with Conditions 16 and 10 (Schedule 3) as well as the Air Quality Management Plan for the years 2018 and 2019. The Notices required BMC to provide requested information to assist the DPIE investigation.

## 6.5 Incidents and Complaints

### 6.5.1 Incidents

The Pollution Incident Response Management Plan (PIRMP) describes the requirements for reporting pollution incidents which cause, or threaten to cause material environmental harm. The PIRMP includes site plans with mine water storages, hazardous materials and emergency response information, and is available on the BMC website. During the period of the IEA, there were no incidents that triggered the PIRMP (according to site communications). Incidents that were reported externally during the period of the IEA are summarised in **Table 6-3**.

**Table 6-3: Summary of Externally Reported Incidents**

Issue	Date	Nature of Incident
Ground disturbance	June 2017	Ground disturbance of approximately 0.09 ha was undertaken under a partially completed Ground Disturbance Permit (GDP).
Ground disturbance	October 2017	Ground disturbance of approximately 1.4 ha area was undertaken without an approved GDP.
Air Quality	12/1/2017, 11/2/2017, 23/2/2017, 11/7/2017, 22/8/2017, 27/9/2017, 2/11/2017, 8/12/2017	Potential exceedances of the SSD-5170 (as modified) air quality criteria for short term (24 hour) PM10 impacts were recorded across eight days during the reporting period.
Air Quality	26 December 2017	A potential exceedance of the SSD-5170 (as modified) air quality criteria for long term (annual) TSP impacts was recorded at HV6 (Wybong Rd).
Dust	January 2018	The EPA undertook a dust inspection of Bengalla from Wybong Road. The EPA requested information about the activities that were occurring and dust controls that were being implemented at Bengalla on 10 January 2018. On 18 January 2018 BMC provided the EPA with the requested information.
Groundwater	May 2018	Groundwater seepage occurred in two areas (south of Wybong Road and west of Dry Creek; and CW1).
Spontaneous combustion	August 2018	Spontaneous combustion occurred over a small area of Bengalla.
Dust	September 2018	BMC received an 'Invitation to Show Cause' letter (dated 26 September 2018) from the EPA regarding "excessive dust emissions being generated from an excavator loading material into haul trucks" on 19 September 2018.
Groundwater	December 2018	BMC notified DPIE of the expected exceedance of water licence WAL 41547 allocation (currently 125 ML).
Groundwater	December 2018	Groundwater seepage occurred into CW1.

Issue	Date	Nature of Incident
Dust	1/1/2018, 13/1/2018, 19/1/2018, 25/1/2018, 31/1/2018, 6/2/2018, 12/2/2018, 18/2/2018, 2/3/2018, 20/3/2018, 25/5/2018, 24/7/2018, 23/8/2018, 22/9/2018, 9/11/2018, 27/11/2018, 9/12/2018, 27/12/2018	Potential exceedances of the SSD-5170 (as modified) air quality criteria for short term (24-hour average) PM10 impacts were recorded across 18 days during the reporting period.
Dust	27/12/2018	A potential exceedance of the SSD-5170 (as modified) air quality criteria for long term (annual average) PM10 impacts was recorded at PM10-1 and PM10-4.
Dust	27/12/2018	A potential exceedance of the SSD-5170 (as modified) air quality criteria for long term (annual average) TSP impacts was recorded at HV1, HV2 and HV6.
Dust	17/12/2018	A potential exceedance of the SSD-5170 (as modified) criterion for annual average total deposited dust was recorded at D20.
Dust	2/1/2019, 14/1/2019, 26/1/2019, 13/2/2019, 3/3/2019, 15/3/2019, 14/4/2019, 26/04/2019, 02/05/2019, 01/06/2019, 07/06/2019, 01/07/2019, 25/07/2019, 18/08/2019, 16/11/2019, 22/11/2019, 28/11/2019	Exceedances of the SSD-5170 (as modified) air quality criteria for short term (24-hour average) PM10 impacts were recorded across 17 days during the reporting period.
Dust	24/12/2019	Likely exceedance of the SSD-5170 (as modified) air quality criteria for long term (annual average) PM10, TSP and total deposited dust.
Groundwater	23/9/2019	BMC notified DPIE of the expected exceedance of water licence 20BL169798 allocation (currently 125 ML).

## 6.5.2 Complaints

A register of complaints and a 24-hour complaints hotline (1800 178 984) is maintained by BMC. The number is operated 24 hours, 7 days per week.

Complaints are recorded in the Complaints Register by the Environment Team. The Register includes a complaint number, date and time of complaint, mode of complaint, complainant number, nature of complaint, compliant details and action taken.

Complaints that were received by BMC during the period of the IEA have been reported in the 2017 and 2018 Annual Reviews, and the 2019 Complaints Register, and are summarised in **Table 6-4**.

**Table 6-4: Summary of Complaints**

Issue	Number of Complaints	Issue	Number of Complaints
<b>2017</b>			
Air Quality (Dust)	19	Noise	5
Blast (Vibration)	16	Other (Odour)	2
<b>2018</b>			
Air Quality (Dust)	43	Blast (Vibration)	8
Air Quality (Blast Fume)	3	Blast (Vibration & Overpressure)	13
Air Quality (Blast Dust)	1	Blast (Vibration & Dust)	1
Air Quality (Blast, Dust & Fume)	1	Noise	2
Air Quality (Dust & Odour)	1	Waste	1
Air Quality (Spontaneous Combustion)	1	Other	2
<b>2019</b>			
Blast (Vibration & Overpressure)	16	Air Quality (Dust)	26
Air Quality	1	Lighting	1
Visual (light)	6	Air Quality (Dust & Odour)	2
Blasting	2	Air Quality (Blast Fume)	1
Noise	5	Other	4
Water (Irrigation)	2		

## 6.6 Status of Non-Compliance Recommendations from 2016 IEA

BMC prepared an action plan for the recommendations for non-compliances with regulatory approvals listed in the previous IEA (Peter Horn, 2016). The status of implementation of these actions was reported in the 2017 Annual Review. A copy of the action plan and the current status of actions is included in **Appendix D**.

## 7 Compliance Assessment

The findings of the IEA compliance assessment for conditions within the regulatory approvals listed in **Table 2-2** are presented in this section. The detailed compliance assessments, including verification evidence, are included in:

- **Appendix A:** Development Consent - SSD-5170 (as modified);
- **Appendix B:** EPL 6538;
- **Appendix C:** Mining Leases – ML 1397 (2018), ML 1397, ML 1450, ML 1469, ML 1728, ML 1711 and ML 1729.

The compliance status was assessed by application of the criteria from the Post Approval Guidelines: Independent Audits (NSW Government, 2015) provided in **Table 2-3**.

The compliance assessment was based on visual observations of the BMC operations being undertaken on site, interviews with site personnel and interpretation of the documentation provided by BMC. Opinions expressed in the compliance assessment apply to the operations as they existed at the time of the IEA and from information provided by site personnel. Changes to this information of which the auditors are not aware, and have not had the opportunity to assess, have not been considered in the compliance assessment.

### 7.1 Non-Compliances

Where the compliance assessment identified that the intent of specific elements of the regulatory instrument approval had not been met, an assessment of 'non-compliance' has been made. The non-compliances and corresponding recommendations are summarised in **Table 7-1** and detailed in **Appendices A – C**.

The compliance assessment resulted in the following 11 non-compliances:

- SSD-5170 (Conditions of Approval): 7 non-compliances from a total of 92 conditions;
- Three non-compliances against the EIS and SEE commitments; and
- EPL 6538 one non-compliance from a total of 92 conditions.

There were 11 conditions that for various reasons were considered Not Verified.

There were no non-compliances for the site's MLs.

Some of the non-compliances related to the same issue which, due to the duplication of requirements between approval documents, raised the same non-compliance multiple times.

Further recommendations and Opportunities for Improvement (OFI) are summarised in **Table 7-2**.

Table 7-1: Non-compliances and conditions not verified

CoA	Compliance Status	Summary of Findings	Recommendation
<b>SSD-5170</b>			
S2-2 Terms of Consent	Non-Compliant (Low Risk)	<p>(a) Appendix A.1 comprises a checklist considering the EIS &amp; SEE commitments. Reference is made to this checklist for a detailed assessment of compliance with the EIS and SEE commitments. Not all aspects of each of the documents was assessed, with a focus of the compliance assessment on the items covered in the checklist defined in Appendix A1. BMC were considered Non-compliant with some commitments as detailed in the checklist.</p> <p>(b) This SSD-5170 checklist (outlined below) comprises a compliance assessment with the conditions of the Development Consent. Conditions considered Non-Compliant or Not Verified are noted and colour coded. Observations were raised for a number of conditions generally considered to be compliant.</p> <p>Based on there being some Non-Compliant conditions, BMC were considered to be Non-Compliant with the condition. The Non compliances are detailed below.</p>	Refer to below recommendations
S2-15 Updating and Staging submission of strategies, plans or programs.	Admin Non-Compliant	BMC was found to be non-compliant with this condition as they had not ensured that the existing operations on site (approved by Mod 3 and 4) were covered by all the Management Plans. Some management plans excluded either Mod 4 requirements or both Mod 3 & Mod 4 requirements.	<b>Rec-2019-01:</b> Update Management Plans and strategies (including the BMP, AQMP, ACHMP, BOMP, RMP and the EMS) so they cover all of the operations and activities described in all Modifications.
S3-12	Not Verified	Property Inspections were completed for one resident following a request under this condition. One of the reports issued on 6/10/20 was titled an inspection and included many aspects of what would be considered to comprise an investigation, such as consideration of causes for the observed building condition. It could not be verified that the report comprised a "Property Investigation" under the condition as there is no definition of an investigation within the project approval.	<b>Rec-2019-01A:</b> That BMC ensure that any report that purports to be an investigation under Condition 12, Schedule 3 of the Project Approval clearly indicate in the title that it is an Investigation.

CoA	Compliance Status	Summary of Findings	Recommendation
S3-16 Air Quality Criteria	Not Verified	<p>There have been exceedances of the criteria, however on each occasion BMC have engaged experts (ERM and Todoroski Air Sciences) to assess the BMC contribution to these exceedances. These assessments have reported that the Bengalla Mine contribution to the dust levels are below the criteria. On this basis BMC argue that they are compliant with the condition. This audit has not assessed this position on technical grounds as Auditors are not technical specialists in air quality. It is noted that air quality in the region and mine contribution to dust in air are being assessed under the Independent Review required by Schedule 4, Condition 4. Further, Notices have been issued by DPIE in February 2020 for BMC to provide information to DPIE as part of ongoing investigations into compliance with this condition. This study and investigations are expected to contribute further to the assessment of this issue. Given the above, Auditors were not able to confirm compliance or non-compliance with the approach used; consider the Independent Review and DPIE Investigation will cover relevant issues; and have determined the condition as Not Verified.</p>	<p><b>Rec-2019-01B:</b></p> <p>That BMC confirm in writing with any person who requests a property Investigation under Condition 12, Schedule 3 of the Project Approval that they agree to the person nominated to undertake the investigation.</p> <p><b>Rec-2019-01C:</b></p> <p>That prior to any investigation as required of Condition 12, Schedule 3 of the Project Approval, BMC consult with DPIE regarding their requirements for the conduct of such an investigation, given an absence of any guidance for what an investigation is to comprise in the Conditions of Approval.</p> <p><b>Rec-2019-02:</b></p> <p>DPIE to further consider the argument by BMC that they are compliant with the criteria of this condition.</p> <p><b>Rec-2019-03:</b></p> <p>PM<sub>2.5</sub> is required to be measured as detailed in the AQMP and reported in future Annual Reviews.</p> <p><b>Rec-2019-04:</b></p> <p>It is recommended that BMC be pro-active and undertake PM<sub>2.5</sub> monitoring prior to the AQMP being approved by the DPIE to ensure compliance with the condition.</p> <p><b>Rec-2019-05:</b></p> <p>Ensure that all recommendations of the Independent Review as required of Schedule 4, Condition 4 are implemented appropriately once completed.</p> <p><b>Rec-2019-06:</b></p>

CoA	Compliance Status	Summary of Findings	Recommendation
			<p>Ensure information requests relating to air quality as issued by DPIE are complied with.</p> <p><b>Rec-2019-07:</b></p> <p>Ensure that all reasonable and feasible avoidance and mitigation measures are employed so that the particulate emissions generated by the development are minimised.</p>
S3-19 Air Quality – Operating Conditions	Non-Compliant (Low Risk)	Condition 19a) is considered not to have been complied with based on PIN No: 3121150616 on 16/06/2017 stating "Bengalla failed to implement all reasonable and feasible measures to minimise dust emissions of the development and failed to minimise any visible air pollution generated by the development". Site inspections identified observations where BMC could improve dust management practices. It is noted that further comments on dust management may be an outcome of the Independent Review as required under Condition Schedule 4, Condition 4. It is further noted that DPIE has issued BMC with Notices in February 2020 to provide information in respect of an investigation into compliance with this condition.	<p><b>Rec-2019-08:</b></p> <p>During wind levels marginally below the trigger criteria of 10m/s, BMC conduct further mitigation to improve dust management. This could include increased frequency of visual monitoring of dust levels and increased re-assignment/shut-down of trucks and equipment when significant dust is observed; as well as re-assignment of water carts (essentially more frequent and responsive implementation of existing controls).</p>
S3-20 Air Quality Management Plan	Not Verified	Many aspects of the mitigation measures defined in the AQMP plan were being implemented. As per discussion for Condition 19, it was considered that on day 2 of the site inspections, some measures could have been implemented more rapidly to minimise dust generation in some areas of the operation. It is noted that DPIE has issued Notices that require BMC to provide information to DPIE as part of an investigation into BMC's compliance with the AQMP (February 2020). It is understood BMC are preparing these documents for issue. As this matter is being investigated by DPIE, it is considered inappropriate to pre-empt the investigation by determining compliance for this condition. As such, the condition compliance status is deemed "Not Verified".	<p><b>Rec-2019-08: As Above</b></p>
S3-25 Water Management Plan	Non-Compliant (Low Risk)	BMC are considered Non-Compliant with the condition on the basis that groundwater inflows to the Bengalla mine open cut exceeded the annual entitlement under 20BL 169798.	<p><b>Rec-2019-09:</b></p> <p>Continue to work with the Natural Resources Access Regulator (NRAR) to increase the annual entitlement under 20BL 169798.</p>

CoA	Compliance Status	Summary of Findings	Recommendation
S3-29 Biodiversity Management Plan	Non-Compliant (Low Risk)	On two occasions it was reported that BMC had not fully implemented the Bengalla Biodiversity Management Plan, with the Ground Disturbance Permit (GDC) process not implemented twice in 2017 and seed not harvested during the audit period. On this basis BMC are considered Non-Compliant with the condition.	<b>Rec-2019-10:</b> Ensure full implementation of the Ground Disturbance Permit process in the future. <b>Rec-2019-11:</b> Collect seed from site, to be used in future revegetation works, as required in the Biodiversity Management Plan.
S3-30 Conservation Bond	Admin Non-Compliant	BMC did not lodge a conservation bond with DPIE within 6 months of the approval of the Biodiversity Management Plan, as required of the condition.	<b>Rec-2019-12:</b> Lodge a conservation bond with DPIE as required of the condition.
S4-3 Notification of Landowners/ Tenants	Not Verified	<p>When air quality criteria exceedances occurred, BMC conducted assessments and received specialist feedback from Todoroski and ERM, which determined that the Bengalla mine's contribution to levels of particulates monitored was below the relevant criterion. On this basis BMC considered that there were no exceedances attributable to the Bengalla Mine, and hence did not advise landowners of the exceedances or follow through with the requirements of this condition. Air Quality criteria exceedances and BMC's response is further discussed under Condition 16, Schedule 3.</p> <p>This audit has not assessed BMC's position on technical grounds as Auditors are not technical specialists in air quality. It is noted that air quality in the region and mine contribution to dust in air are being assessed under the Independent Review required by Schedule 4, Condition 4. Further, Notices have been issued by DPIE in February 2020 for BMC to provide information to DPIE as part of ongoing investigations into compliance with conditions relating to air quality. This study and investigations are expected to contribute further to the assessment of this issue. Given the above, Auditors consider the Independent Review and DPIE Investigation will cover relevant issues; and have determined the condition as Not Verified.</p>	-
S4-4 Independent Review	Admin Non-Compliant	A suitably qualified, experienced and independent person was not commissioned to undertake the Independent Dust Review within 2 months of the DPIE agreeing with landowners to undertake the review.	<b>Rec-2019-13:</b>

CoA	Compliance Status	Summary of Findings	Recommendation
			Engage a suitably qualified, experienced and independent person to undertake the Independent Dust Review.
S5-6	Admin Non-Compliant	Section 3.2 of the Community Consultative Committee Guideline: State Significant Projects (January 2019) requires the Independent Chairperson to "report annually to the Department on the Operation of the committee". In correspondence received by the Auditors from DPIE following their review of a previous version of this audit report dated 6 October 2020, DPIE reported that they had not received any annual reports of the operation of the CCC during the audit period. Bengalla reported that they had spoken with the CCC Chair and confirmed that no annual reports were prepared for 2017, 2018 or 2019. On this basis, this aspect of the guideline was not complied with and it is considered Bengalla are Non-Compliant with this condition.	<b>Rec-2019-13A:</b> Ensure that the Community Consultative Committee (CCC) Chairperson reports to DPIE Annually on the operation of the Committee.
<b>EIS &amp; SEE Commitments</b>			
Install TEOMs to largely replace HVAS	Not Verified	According to site communications TEOMs will be installed once revised Air Quality Management Plan (AQMP) is approved by DPIE.	-
Adjustment of the monitoring network as the site proceeds west.	Not Verified	According to site communications monitoring network to be adjusted once the revised AQMP is approved by DPIE.	-
8.11.4	Non-Compliant (Low Risk)	The Land Disturbance Permit Process was not used during two occasions in June 2017 and October 2017. On this basis BMC are considered Non-Compliant with this condition.	-
6.1.2	Not Verified	During the audit inspection it was observed that the Dry Creek East Dam had been installed, but the liner of the dam was not inspected as it was full of water.	-
6.5	Non-Compliant (Low Risk)	BMC has not continued to manage all ecological matters on-site in accordance with the Bengalla Biodiversity Management Plan (BMC, 2016c), with the GDC process not implemented twice in 2017 and seed not harvested during the audit period.	<b>Rec-2019-14:</b> Undertake weed management work at the site to control outbreaks of <i>Galenia pubescens</i> . <b>Rec-2019-11:</b>

CoA	Compliance Status	Summary of Findings	Recommendation
<b>EPL 6538</b>			
O3.2, O3.3 Dust	Not Verified	Refer to Conditions 16, 19 and 20 (Schedule 3) of the Development Consent, which discusses dust management.	<b>Rec-2019-02</b> <b>Rec-2019-03</b> <b>Rec-2019-04</b> <b>Rec-2019-05</b> <b>Rec-2019-06</b> <b>Rec-2019-07</b> <b>Rec-2019-08</b>
M9.4 Monitoring	Non-Compliant (Low Risk)	Monitoring point 26 is incorrectly marked as point 1.	<b>Rec-2019-15:</b> Mark monitoring point 26 as required of the EPL.
<b>ML1397 (2018)</b>			
2	Not Verified	On the basis that the Notices have been issued and are responses have not been considered as part of this IEA, compliance with this condition (specifically the satisfaction of the Minister) could not be verified.	-
<b>ML1397</b>			
8	Not Verified	On the basis that the Notices have been issued and are responses have not been considered as part of this IEA, compliance with this condition (specifically the satisfaction of the Minister) could not be verified.	-
<b>ML1450</b>			
8	Not Verified	On the basis that the Notices have been issued and are responses have not been considered as part of this IEA, compliance with this condition (specifically the satisfaction of the Minister) could not be verified.	-

CoA	Compliance Status	Summary of Findings	Recommendation
<b>ML1469</b>			
19	Not Verified	On the basis that the Notices have been issued and are responses have not been considered as part of this IEA, compliance with this condition (specifically the satisfaction of the Minister) could not be verified.	-

## 7.2 Continual Improvement Opportunities

Conditions that were assessed as compliant and/or where opportunities were identified for continuous improvement are provided in **Table 7-2**.

Table 7-2: Recommendations and Opportunities for Improvement

CoA	Rec / Opportunity	Recommendation / Opportunities for Improvement
<b>SSD-5170</b>		
S2-15	<b>Rec-2019-16</b>	Where relevant, update Management Plans to incorporate measures to improve the environmental performance of the development and reflect current best practice in the mining industry.
S2-17	<b>Rec-2019-17</b>	Update Appendix A 'Regulatory Correspondence' in the Water Management Plan (WMP) to include consultation letter from NRAR.
	<b>Rec-2019-18</b>	Update the Biodiversity Management Plan to include the consultation letter from NRAR.
S3-15	<b>Rec-2019-19</b>	Update Figure 3 in the BMP such that the 'SDD' & 'CW1' blast monitors in one location (near Bengalla Homestead) are shown as an inset, so they are not overlapping.
	<b>Rec-2019-20</b>	When plans are updated for other requirements, ensure Management Plans reference current regulator names, including the Department of Planning, Infrastructure and Environment (DPIE).
S3-16, S5-4	<b>Rec-2019-21</b>	Ensure future Annual Reviews refer to the correct PM <sub>10</sub> criteria.
S3-19	<b>Rec-2019-22</b>	It is suggested that an air quality specialist review and confirm that the wind speed trigger (detailed in the AQMP) based over a 1-hour period is appropriate.
	<b>Rec-2019-23</b>	It is suggested that a suitable specialist review the location of the wind monitor referred to in Table 11 of the AQMP and determine if it is providing data that is representative, given it is not near operational areas of the mine. As required, update the relevant sections of the AQMP following this review to address the discrepancy in the AQMP Table 11 which states 10m/s wind speed on site, versus actual gauge which is near the racecourse rather than at the mine.
	<b>Rec-2019-24</b>	Include the CER allocated emissions baseline of 443,494 t CO <sub>2</sub> -e, that is used as an upper limit for GHG management, in the GHG section of the AQMP.
S3-20	<b>Rec-2019-25</b>	Keep progressing the approval of the revised AQMP in cooperation with DPIE.
S3-24, S3-25	<b>Rec-2019-26</b>	Investigate repairing the scouring in the creek bank adjacent to the intersection of Bengalla Road and Old Bengalla Road.

CoA	Rec / Opportunity	Recommendation / Opportunities for Improvement
	<b>Rec-2019-27</b>	Ensure all hydrocarbon products are stored in bunded areas in accordance with the relevant Australian Standards.
	<b>Rec-2019-28</b>	Develop site specific in-stream water quality objectives in accordance with ANZECC 2000 and Using the ANZECC Guidelines and Water Quality Objectives in NSW procedures (DECC 2006), or its latest version, when Dry Creek is re-instated.
	<b>Rec-2019-29</b>	Implement recommendations from the 2019 Stream and Riparian Vegetation Assessment to address bank stability issues identified.
S3-25	<b>Rec-2019-30</b>	Continue to undertake groundwater monitoring at the site and undertake investigations (using third party technical specialists as appropriate) if groundwater level and groundwater quality criteria are triggered. Respond as appropriate to any triggers.
S3-32	<b>Rec-2019-31</b>	Investigate ways in which historic items in the Bengalla homestead could be better conserved/preserved or passed on to a local historic society.
S3-40	<b>Rec-2019-32</b>	Determine how many trees have been lost from the Roxburgh tree screen and replant missing trees.
S3-45	<b>Rec-2019-33</b>	It is recommended that BMC consider a staged approach to be undertaken to achieve High Density Woody Vegetation (HDWV), with 'patches' of HDWV applied each year over the 10+ years. BMC should aim to establish approximately 40 ha of HDWV each year. This would provide for small manageable areas for maintenance purposes (weed control and watering), especially in the first critical few years of establishment of each patch. Noted this approach may require DPIE/Resources Regulator approval.
	<b>Rec-2019-34</b>	Trials should be established in the first years of rehabilitating to HDWV to assess the best establishment techniques including: supplemental tree planting, spraying out pasture, re-ripping and direct tree seeding, ripping directly into pasture and seeding. It is understood Bengalla have already engaged a suitably qualified expert to prepare these trials.
	<b>Rec-2019-35</b>	The unrehabilitated area on the northern face that remains disturbed should be shaped and rehabilitated promptly. Recent rainfall has provided reasonable and feasible conditions for both temporary and permanent rehabilitation efforts in this area. These conditions were not present during most of the audit period. If the area requires additional overburden material for permanent rehabilitation, then dump scheduling should prioritise the additional material needed in this area for final volumes and levels, so final shaping can commence, and permanent rehabilitation established. If scheduling does not prioritise this area for additional material, then temporary rehabilitation must be undertaken immediately to provide some surface cover to reduce dust and stabilise the surface material, as required by this condition. Any future modifications to an Authority must prioritise this area for rehabilitation.
S3-46	<b>Rec-2019-36</b>	The MOP should be amended to reflect the rehabilitation staged approach (once agreed) and submitted for approval.

CoA	Rec / Opportunity	Recommendation / Opportunities for Improvement
	<b>Rec-2019-37</b>	Undertake temporary rehabilitation on areas that have been left disturbed for years or areas that may not be scheduled for permanent rehabilitation and are not in the forecasted dump schedule.
	<b>Rec-2019-38</b>	That the management recommendations and practices for soil and rehabilitation contained in the approved management plans must continue to be implemented in accordance with the approved plans.
S5-3	<b>Rec-2019-39</b>	In future revisions of management plans, check the accuracy of section references in management plan requirements tables of the BMC management plans.
	<b>Rec-2019-40</b>	Include an all "Management Plans Requirement" table in the ACHMP, VIMP and HHMP, with references to sections of each management plan where each condition is addressed.
S5-4	<b>Rec-2019-41</b>	Include monitoring results of previous years for noise, blast and surface water in future Annual Reviews.
	<b>Rec-2019-42</b>	Include a comparison of noise, blast, GHG and surface water results against relevant predictions in the EIS in future Annual Reviews
	<b>Rec-2019-43</b>	Describe in future Annual Reviews what actions were (or are being) taken to ensure non-compliance/incidents do not occur again.
	<b>Rec-2019-44</b>	Include a discussion for trends for air quality, blast, noise and surface water monitoring data in future Annual Reviews. Include in Section 6 Environmental Management & Performance and Section 7 Water Management of future Annual Reviews what measures will be implemented over the next year to improve the environmental performance of the development.
<b>EIS &amp; SEE Commitments</b>		
8.2.4	<b>Rec-2019-45</b>	Monitor the fuel efficiency of diesel equipment.
8.19.4	<b>Rec-2019-46</b>	Continue current practices regarding GDP; soil testing and management.
	<b>Rec-2019-38</b>	(As above) That the management recommendations and practices for soil and rehabilitation contained in the approved management plans must continue to be implemented in accordance with the approved plans.

CoA	Rec / Opportunity	Recommendation / Opportunities for Improvement
8.21.9	<b>Rec-2019-47</b>	The change of vegetation type in much of the rehabilitation to HDWV means trials on agricultural land rehabilitation will be pushed back several years. There are learnings from current research trials which should be reviewed and adopted in pasture rehabilitation intended for future grazing.
	<b>Rec-2019-48</b>	Continue monitoring rehabilitation to ensure it is tracking towards final completion criteria.
6.4.2	<b>Rec-2019-49</b>	Determine how many trees have been lost from the Roxburgh tree screen and replant missing trees.
	<b>Rec-2019-50</b>	Conduct in-fill tree planting along Wybong Road.
<b>EPL 3538</b>		
P1.3	<b>Rec-2019-51</b>	Update "EPL Monitoring Points -Water" figure such that it excludes EPA point 1 and includes EPA points 25 and 26.
	<b>Rec-2019-52</b>	Update Water Management Plan (WMP) Figure 4 figure such that it excludes EPA point 1 and includes EPA points 25 and 26.
O1.1	<b>Rec-2019-53</b>	Prevent hydrocarbon spills and clean up spills promptly when they occur.
<b>Mining Leases</b>		
1397 Condition 14	<b>Rec-2019-54</b>	Repair erosion on the south-eastern face of the waste dump.
ML 1397 & ML 1450, Condition 22, ML 1469, Condition 47	<b>Rec-2019-55</b>	Ensure that Notices are responded to within the required timeframes.
ML 1397 (2018), Condition 3 ML 1469, Condition 2,	<b>Rec-2019-36</b>	(As above) The MOP should be amended to reflect the rehabilitation staged approach (once agreed) and submitted for approval.

CoA	Rec / Opportunity	Recommendation / Opportunities for Improvement
ML 1728, Condition 3,  ML 1711, Condition 3, ML 1729, Condition 3.		
ML 1469, Condition 29	<b>Rec-2019-50</b>	(As above) Conduct in-fill tree planting along Wybong Road.

## 8 Conclusions

An IEA of the Bengalla Mine was undertaken to meet SSD-5170 Schedule 5, Condition 9. The IEA process was based on Post Approval Guidelines – Independent Audits (DPIE, 2015), the auditing standard AS/NZS ISO 19011:2014 and MCW Environmental's proposal to conduct the work dated 25 September 2019.

The requirements for the IEA within SSD-5170 Schedule 5, Condition 9, have been met and are summarised as:

- The period of the IEA was from 10 February 2017 to 18 December 2019.
- This is the second IEA undertaken for SSD-5170 and was commissioned within 3 years of completion of the previous IEA (Peter Horn, 2017).
- The IEA was conducted by qualified, experienced and independent experts and Specialists.
- Consultation on BMC environmental performance was undertaken, prior to conducting the site inspections, with regulators and stakeholders.
- To assess compliance of the Bengalla Mine with regulatory approvals and the current status of environmental performance, the IEA process included with SSD-5170 Condition 7B (Schedule 5).
- The IEA consisted of a detailed desktop review of documents supporting compliance, interviews with BMC staff and site inspections of the Bengalla Mine over four days in December 2019.
- The compliance assessment, recommendations and observations are detailed in **Section 7** and in **Appendices A to C** of this report.

## 9 Abbreviations and Definitions

### 9.1 Abbreviations

Abbreviation	Description
ACHMP	Aboriginal Cultural Heritage Management Plan
AQMP	Air Quality and Greenhouse Gas Management Plan
BMC	Bengalla Mining Company
BMP	Blast Management Plan
BOMP	Biodiversity Offset Management Plan
CCC	Community Consultation Committee
CHPP	Coal handling preparation plant
DPIE	NSW Department of Planning, Industry and Environment
EA	Environmental Assessment
EIS	Environmental Impact Statement
EMP	Environmental Management Plan
EMS	Environmental Management Strategy
EP&A Act	<i>Environmental Planning and Assessment Act 1979</i> (NSW)
EPA	NSW Environment Protection Authority
EPBC Act	<i>Environmental Protection Biodiversity Conservation Act 1999</i> (Commonwealth)
EPL	Environment Protection Licence
ESCP	Erosion and Sediment Control Plan
HDWV	High Density Woody Vegetation
HHMP	Historic Heritage Management Plan
HVAS	High Volume Air Sampler
IEA	Independent Environmental Audit
INP	Industrial Noise Policy
LDP	Licensed Discharge Point
MCW	MCW Environmental Consulting Pty Ltd
mm	millimetre
m	metre
ML	Mining Lease
Mtpa	Million tonnes per annum
NMP	Noise Management Plan
NRAR	Natural Resources Access Regulator
NSW	New South Wales
OEH	Office of Environment and Heritage
PIRMP	Pollution Incident Response Management Plan
POEO Act	<i>Protection of the Environment Operations Act 1997</i> (NSW)
ROM	Run of Mine
RR	Resource Regulator
Secretary	Secretary of Department of Planning and Environment or delegate
SoC	Statement of Commitments from the EA
SSD	State Significant Development
SSD-5170	Development Consent for Bengalla Mine Continuation Project
TARP	Trigger Action Response Plan
TSP	Total Suspended Particulate
TSS	Total Suspended Solids
VIMP	Visual Impact Management Plan
WAL	Water Access Licence

<b>Abbreviation</b>	<b>Description</b>
WMP	Water Management Plan

## 9.2 Definitions

<b>Abbreviation</b>	<b>Description</b>
Approval	A relevant regulatory approval instrument such as a Development Consent (including commitments in environmental assessments referred to Development Consents), Environment Protection Licence, Mining Lease, or Water Access Licence.
Conditions	Conditions of the Development Consent and commitments made within Environmental Assessments and Statement of Environmental Effects.
Development	A development which is the subject of a consent under the Environmental Planning and Assessment Act 1979.
Period of the IEA	10 February 2017 to 18 December 2019
Proponent	Bengalla Mining Company

## 10 Limitations of Report

MCW Environmental Consulting Pty Limited (MCW Environmental); SLR Consulting and Minesoils have conducted this Independent Environmental Audit (IEA) and generated this report in accordance with the usual care and thoroughness of the consulting profession for the use of Bengalla Mining Company Pty Ltd and only those third parties who have been authorised in writing by MCW Environmental; SLR Consulting; and Minesoils to rely on this Report.

It is based on generally accepted practices and standards at the time it was prepared. No other warranty, expressed or implied, is made as to the professional advice included in this Report. This IEA report did not assess any aspects relating to safety at the site.

The IEA Report is prepared in accordance with the scope of work and for the purpose outlined in the MCW Environmental Proposal dated 25 September 2019; the signed contract executed between MCW Environmental and Bengalla Mining Company Pty Ltd as well as contracts with SLR Consulting and Minesoils.

Where this IEA Report indicates that information has been provided to Auditors by third parties, MCW Environmental; SLR Consulting and Minesoils have made no independent verification of this information except as expressly stated in the Report. MCW Environmental; SLR Consulting and Minesoils assumes no liability for any inaccuracies in or omissions to that information.

This IEA Report was prepared between December 2019 and April 2020 and is based on the conditions encountered and information reviewed at the time of the site visits on 2-3 and 17-18 December 2019 (noting minor updates to the report were made following DPIE comments received in October 2020). MCW Environmental; SLR Consulting and Minesoils disclaims responsibility for any changes that may have occurred after this site visit.

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

Except as required by law, no third party may use or rely on this IEA Report unless otherwise agreed by MCW Environmental; SLR Consulting and Minesoils in writing. Where such agreement is provided, MCW Environmental; SLR Consulting and Minesoils will provide a letter of reliance to the agreed third party in the form required by MCW Environmental; SLR Consulting and Minesoils.

To the extent permitted by law, MCW Environmental; SLR Consulting and Minesoils expressly disclaims and excludes liability for any loss, damage, cost or expenses suffered by any third party relating to or resulting from the use of, or reliance on, any information contained in this IEA Report. MCW Environmental; SLR Consulting and Minesoils does not admit that any action, liability or claim may exist or be available to any third party.

Except as specifically stated in this section, MCW Environmental; SLR Consulting and Minesoils do not authorise the use of this IEA Report by any third party.

It is the responsibility of third parties to independently make inquiries or seek advice in relation to their particular requirements and proposed use of the site.

Any estimates of potential costs which have been provided are presented as estimates only as at the date of the IEA Report. Any cost estimates that have been provided may therefore vary from actual costs at the time of expenditure.

# Appendix A

## Compliance Assessment:

### Development Consent

#### Table Appendix A.1 Bengalla Continuation Project Development Consent SSD-5170

- Development Consent (SSD-5170)
- MOD 1 (December 2015)
- MOD 2 (July 2016)
- MOD 3 (December 2016)
- MOD 4 (December 2018)

## BMC-SSD-5170 Mod 4

Condition Number	Condition	Compliance Status	Evidence	Recommended Action
<b>Schedule 2</b>				
<b>Administrative Conditions</b>				
1	<b>OBLIGATION TO MINIMISE HARM TO THE ENVIRONMENT</b> In addition to meeting the specific performance measures and criteria established under this consent, the Applicant must implement all reasonable and feasible measures to prevent, and if prevention is not reasonable and feasible, minimise, any material harm to the environment that may result from the construction and operation of the development and any rehabilitation required under this consent.	Compliant	*According to site communications and review of site documentation, no material harm to the environment occurred at the Development site during the audit period. No material harm events were reported in Annual Reviews prepared by BMC. Various incidents are discussed in this checklist and in the main report.	
2	<b>TERMS OF CONSENT</b> The Applicant must: (a) carry out the development generally in accordance with the EIS, SEE (Mod 1), SEE (Mod 2), SEE (Mod 3) and SEE (Mod 4); and (b) comply with the conditions of this consent and the Development Layout.  Note: The Development Layout is shown in Appendix 2.	Non-Compliant (Low Risk)	(a) Appendix A.1 comprises a checklist considering the EIS & SEE commitments. Reference is made to this checklist for a detailed assessment of compliance with the EIS and SEE commitments. Not all aspects of each of the documents was assessed, with a focus of the compliance assessment on the items covered in the checklist defined in Appendix A1. BMC were considered Non-compliant with some commitments as detailed in the checklist.  (b) This SSD-5170 checklist (outlined below) comprises a compliance assessment with the conditions of the Development Consent. Conditions considered Non-Compliant or Not Verified are noted and colour coded. Observations were raised for a number of conditions generally considered to be compliant.  Based on there being some Non-Compliant conditions, BMC were considered to be Non-Compliant with the condition. The Non-compliances are detailed in this checklist below.  No non-compliance was observed with the Development layout.	
3	Consistent with the requirements in this consent, the Secretary may make written directions to the Applicant in relation to: (a) the content of any strategy, study, system, plan, program, review, audit, notification, report or correspondence submitted under or otherwise made in relation to this consent, including those that are required to be, and have been, approved by the Secretary; and (b) the implementation of any actions or measures contained in any such document referred to in paragraph 3(a) above.	Compliant	In accordance with site comments, Bengalla Mining Company Pty Ltd (BMC) has indicated that other than correspondence regarding the Annual Review, the Independent Environmental Audit and follow up queries regarding monitoring reports, there has been no known directions from the DPIE. Besides approving the Management Plans (refer to each management plan for reference to DPIE approval letters), there have been no written directions from DPIE in regards to the Management Plans. Note: Within one month of approval of the VIMP (approval granted 14/6/2016) BMC was required by DPIE to advise the owners of the visual receptors identified in the VIMP of the additional visual mitigation measures they were entitled to, however this is outside of the audit period.	
4	The conditions of this consent and directions of the Secretary prevail to the extent of any inconsistency, ambiguity or conflict between them and a document/s listed in condition 2(a) above. In the event of an inconsistency, ambiguity or conflict between any of the document/s listed in condition 2(a) the most recent document prevails to the extent of the inconsistency, ambiguity or conflict.	Note		
<b>LIMITS ON CONSENT</b>				
5	<b>Mining Operations</b> The Applicant may carry out mining operations on the site until 28 February 2039.  Note: Under this consent, the Applicant is required to rehabilitate the site and perform additional undertakings to the satisfaction of either the Secretary or the DRG. Consequently this consent will continue to apply in all other respects other than the right to conduct mining operations until the rehabilitation of the site and these additional undertakings have been carried out satisfactorily.	Compliant	* Site is currently operating * Rehabilitation ongoing	
6	<b>Coal Extraction</b> The Applicant must not extract and/or process more than 15 million tonnes of ROM coal on site in any calendar year.	Compliant	* 2017 Annual Review reports 10.9 million tonnes of ROM coal extracted/processed * 2018 Annual Review reports 11.3 million tonnes of ROM coal extracted/processed * December 2019 Weekly Report dated 17/12/2019 indicates 11.8 million tonnes of ROM coal was extracted from 1/01/2019 to 15/12/2019.	
7	<b>Coal Transport</b> The Applicant must: (a) only transport coal from the site by rail; and (b) restrict train movements from the Bengalla load point to a maximum of 16 laden trains a day.	Compliant	(a) 2017 and 2018 Annual Reviews indicate that coal is transported from site using trains - Trains being loaded at the site noted during the site inspection. (b) 2017 Annual Review reports the total number of train movements was 1,008 with a maximum of six train movements in a day. - 2018 Annual Review reports the total number of train movements was 1,050 with a maximum of six train movements in a day. - Email from BMC Coal Quality and Logistics Superintendent, dated 17 December 2019, indicates that from 1/1/2019 and 15/12/19 there have been 1078 rail movements from BMC (dependent on reporting cut off times).	
8	<b>Bengalla Link Road Construction Hours</b> The Applicant must only construct the Bengalla Link Road between the hours of 7 am to 6 pm, Monday to Friday and 8 am to 1 pm on Saturdays.	Not triggered	* Outside of the audit period	
9	<b>NOTICE OF COMMENCEMENT</b> Prior to carrying out any development under this consent, the Applicant must: (a) certify that it has obtained all the necessary approvals required to commence development; and (b) notify the Secretary in writing of the date of commencement of development under this consent.	Not triggered	* Outside of the audit period	
10	<b>SURRENDER OF EXISTING DEVELOPMENT CONSENT</b> By the end of June 2016, unless the Secretary agrees otherwise, the Applicant must surrender the existing development consent for mining operations on site in accordance with Section 104A of the EP&A Act. Prior to the surrender of this consent, the conditions of this consent (once operational) shall prevail to the extent of any inconsistency with the conditions of this consent.	Not triggered	* Outside of the audit period. The 2017 IEA Report, dated 5/8/2017 (by Peter Horn) states that the Development Consent was surrendered on 22/12/2016.	
11	<b>STRUCTURAL ADEQUACY</b> All new buildings and structures, and any alterations or additions to existing buildings and structure, are constructed in accordance with: (a) the relevant requirements of the BCA; and (b) any additional requirements of SA NSW where the building or structure is located on land within a declared Mine Subsidence District.  Notes: • Under Part 6 of the EP&A Act, the Applicant is required to obtain construction and occupation certificates for the proposed building works. • Part 8 of the EP&A Regulation sets out the requirements for the certification of the development. • The development is located in the Muswellbrook Mine Subsidence District. Under section 21 of the Coal Mine Subsidence Compensation Act 2017, the Applicant is required to obtain the Chief Executive of SA NSW's approval before carrying out certain development in a Mine Subsidence District.	Not triggered	* No buildings or structures were constructed, nor any alterations or additions to existing buildings and structures was undertaken during the audit period, according to site communications. - 2017 and 2018 Annual Reviews confirm no construction or alterations to buildings or structures.  * A new explosives compound was constructed at the beginning of 2017 (PHOTO 14), however, BMC reported that this facility was built in accordance with another Australian Standard (AS); AS 2187:1998 Explosives - Storage, Transport and Use – Storage. BMC provided photographs of the compliance plates for each of the 4 magazines.	

12	<p><b>DEMOLITION</b> The Applicant must ensure that all demolition work is carried out in accordance with Australian Standard AS 2601-2001: The Demolition of Structures, or its latest version.</p>	Compliant	<p>* According to site communications the only demolition works undertaken during the audit period were at the Dairy Compound Area, Manager's Residence, Iron Shed, Glenore House and Dairyman's House.  * Fenech Demolition Pty Ltd Quote: 02019712 for demolition and clean up works at the Dairy Compound Area, Manager's Residence, Iron Shed, Glenore House and Dairyman's House, dated 12 March 2019, notes all demolition works will be undertaken in accordance to Australian Standards (AS).  * According to site communications a copy of AS 2601-2001: The Demolition of Structures was provided to Fenech Demolition by hand during the scoping inspection of the areas to be demolished.  * Safe Work Method Statement: Demolition Works for the concrete slab at the dairy, dated 8 April 2019 refers to the AS 2601-2001.  * Safe Work Method Statement: Demolition Works for the Dairy Compound Area, Manager's Residence, Iron Shed, Glenore House and Dairyman's House, dated 12 March 2019 refers to the AS 2601-2001.  * Clearance (asbestos) letter from AECOM to BMC for the Managers Residence, dated 5 April 2019. The letter confirms a visual pre inspection (prior to asbestos removal works) and a clearance inspection was undertaken following the removal of asbestos containing materials.  * Clearance (asbestos) letter from AECOM to BMC for the dairy, dated 3 April 2019. The letter confirms a visual pre inspection (prior to asbestos removal works) and a clearance inspection was undertaken following the removal of asbestos containing materials.</p>	
13	<p><b>PROTECTION OF PUBLIC INFRASTRUCTURE</b> Unless the Applicant and the applicable authority agree otherwise, the Applicant must:  (a) repair, or pay the full costs associated with repairing, any public infrastructure that is damaged by the development; and  (b) relocate, or pay the full costs associated with relocating, any public infrastructure that needs to be relocated as a result of the development.  <i>Note:</i> This condition does not apply to any damage to roads caused as a result of general road usage.</p>	Not triggered	<p>* According to site communications public infrastructure was not damaged or required relocation as part of the development.  * According to 2017 and 2018 Annual Reviews no public infrastructure was not damaged or required relocation as part of the development.</p>	
14	<p><b>OPERATION OF PLANT AND EQUIPMENT</b> The Applicant must ensure that all plant and equipment used on site, and any equipment used offsite to monitor the performance of the development, is:  (a) maintained in a proper and efficient condition; and  (b) operated in a proper and efficient manner.</p>	Compliant	<p>(a) Maintenance schedule '52 Week Schedule 2019' for plant and equipment provided.  * Records indicating maintenance and calibration work undertaken by Benchmark Monitoring at the BMC weather station, dated 24/11/2017, 29/11/2019, 5/3/2018, 23/5/2018, 6/9/2018, 7/2/2019, 7/6/2019, 31/7/2019, 2/12/2019, 13/12/2019 and 31/12/2019.  * During the site inspection noted equipment being maintained in the workshop (PHOTO 25).  (b) During the site inspection noted equipment appeared to be operated in a proper and efficient manner:  * Noted trucks parked up nearby to pit operations, when operations had to cease during high wind conditions (on 2/12/2019) i.e. did not drive too far away.  * Noted ROM pad located in relatively close proximity to where coal is being extracted, allowing for efficient operations.  * In-pit re-fuelling station, allowing for efficient refuelling.  * Procedures for proper and efficient operation of equipment provided:  - PRO-0069 'Tipping and Dumping of Materials';  - PRO-0263 'Dragline Operation';  - PRO-0266 'Watercart Operation';  - PRO-0273 'Excavation Operation'; and  - PRO-0576 'Loading of Reject in Haul Trucks'.  * Site personnel are trained to operate equipment in a proper and efficient manner. Induction training and training packages:  - 'Bengalla Environmental Training - Site Environmental Management';  - 'BMC Training Air Quality - Operators and Contractors';  - 'Environmental Training - Air Quality Management - Coal Stockpiles';  - 'February 2018 - Dust Awareness';  - 'UDAY - Environmental Training - Dust';  - 'UDAY - Environmental Training'; and  - 'Bengalla Mining Company Environment Induction Slides'.  It is noted Auditors did not conduct a complete review of all plant and equipment and took a sampling approach as detailed above. Based on what was sighted, it is considered BMC are generally compliant with the condition.</p>	
15	<p><b>UPDATING &amp; STAGING SUBMISSION OF STRATEGIES, PLANS OR PROGRAMS</b> The Applicant must regularly review the strategies, plans and programs required under this consent and ensure that these documents are updated to incorporate measures to improve the environmental performance of the development and reflect current best practice in the mining industry. To facilitate these updates, the Applicant may at any time submit revised strategies, plans or programs for the approval of the Secretary. With the agreement of the Secretary, the Applicant may also submit any strategy, plan or program required by this consent on a staged basis.  With the agreement of the Secretary, the Applicant may prepare a revision or stage of any strategy, plan or program required under this consent without undertaking consultation with all parties nominated under the applicable condition in this consent.  <i>Notes:</i>  * While any strategy, plan or program may be submitted on a staged basis, the Applicant must ensure that the existing operations on site are covered by suitable strategies, plans or programs at all times.  * If the submission of any strategy, plan or program is to be staged, then the relevant strategy, plan or program must clearly describe the specific stage to which the strategy, plan or program applies, the relationship of this stage to any future stages, and the trigger for updating the strategy, plan or program.</p>	Administrative Non-Compliance	<p>Existing operations on site are covered by a number of strategies, plans and programs, including:  * Noise Management Plan (NMP) - Dated 19/3/2019;  * Blast Management Plan (BMP) - Dated 11/5/2017;  * Post Blast Fume Generation Mitigation and Management Plan - Dated 14/12/2017;  * Air Quality Management Plan (AQMP) - Dated 12/5/2017;  * Water Management Plan (WMP) - Dated 14/1/2019;  * Biodiversity Management Plan - Dated 19/6/2017;  * Biodiversity Offset Management Plan (BOMP) - Dated 27/2/2017;  * Aboriginal Cultural Heritage Management Plan (ACHMP) - Dated 9/5/2017;  * Historic Heritage Management Plan (HHMP) - Dated 9/5/2017;  * Environmental Management Strategy (EMS) - Dated 27/1/2016;  * Rehabilitation Management Plan (RMP) - Dated 12/5/2017 (superseded by the MOP);  * Mining Operations Plan (MOP) Amendment A - Dated February 2019;  * Visual Impact Management Plan (VIMP) - Dated 30/3/2016; and  * Pollution Incident Response Plan (PIRMP) - Dated 2/4/2019.  BMC reported that plans were reviewed and "where necessary" revised. No evidence of this review was provided.  Administrative Non-compliance: Some Management Plans do not cover existing operations approved under Modifications 3 and 4. The BMP and ACHMP do not include Modification (Mod) 4. The BOMP, RMP and the EMS does not include Mod 3 and Mod 4.</p> <p>Observation: Only the Post Blast Fume Generation Mitigation and Management Plan has been updated during the audit period to improve the environmental performance of the development, in response to the Y1 Independent Environmental Audit, according to the document control page. No other Management Plans updated to improve environmental performance. Updates to Management Plans were mostly in response to project approvals (Mods) granted.  * The AQMP has been updated but remains as a draft as it awaits regulatory approval. The draft revised AQMP, dated 29/4/2019, was submitted to DPIE on 29/4/2019.</p> <p>Non-Compliance Summary - BMC was found to be non-compliant with this condition as they had not ensured that the existing operations on site (approved by Mod 3 and 4) were covered by all the Management Plans. Some management plans excluded either Mod 4 requirements or both Mod 3 &amp; Mod 4 requirements.</p>	<p>* Update Management Plans and strategies (including the BMP, AQMP, ACHMP, BOMP, RMP and the EMS) so they cover all of the operations and activities described in all Modifications.  * Where relevant, update Management Plans to incorporate measures to improve the environmental performance of the development and reflect current best practice in the mining industry.</p>
16	<p><b>VOLUNTARY PLANNING AGREEMENT</b> By the end of December 2015, or as otherwise agreed by the Secretary, the Applicant must enter into a VPA for the development with Council in accordance with:  (a) Division 6 of Part 4 of the EP&amp;A Act; and  (b) the terms of the Applicant's offer in Appendix 3.</p>	Not Triggered	<p>* Condition requirement is outside the audit period.  * "Bengalla VPA Payment Listing" listed all VPA payments made from 13/11/2014 to 15/3/2019.  * Muswellbrook Shire Council VPA invoices (most stamped processed) dated 23/11/2017, 15/2/2018, 8/6/2018 and 21/11/2018.</p>	

17	<p>Where conditions of this consent require consultation with an identified party, the Applicant must:</p> <p>(a) consult with the relevant party prior to submitting the subject document; and</p> <p>(b) provide details of the consultation undertaken including:</p> <p>(i) the outcome of that consultation, matters resolved and unresolved; and</p> <p>(ii) details of any disagreement remaining between the party consulted and the Applicant and how the Applicant has addressed the matters not resolved.</p>	Observation	<p>Consultation is discussed in each management plan/strategy:</p> <ul style="list-style-type: none"> <li>* NMP - Consulted with EPA (Section 2.1), outcomes discussed in Appendix B and consultation letters provided. No disagreements;</li> <li>* BMP - Consulted with EPA &amp; Council (Section 2.1), outcomes discussed in Sections 2.1.1 and 2.1.2, and no disagreements;</li> <li>* Post Blast Fume Generation Mitigation and Management Plan - No consultation requirements;</li> <li>* WMP -</li> </ul> <p><b>Observation:</b> Consultation letter from EPA, dated 5/2/2019, provided in Appendix A 'Regulatory Correspondence' but the consultation letter from NRAR is not provided in Appendix A. Documentation control page indicates Rev 5 of the WMP was prepared in response to DPI-Water (NRAR) comments.</p> <ul style="list-style-type: none"> <li>* Biodiversity Management Plan - Consulted with Office of Environment and Heritage (OEH) (Section 2.1.2), and outcomes discussed in Section 2.1.2. No details of disagreement.</li> </ul> <p><b>Observation:</b> Consultation letter from OEH not included in Appendix A 'Regulatory Correspondence'.</p> <ul style="list-style-type: none"> <li>* BOMP - Consulted with OEH (Section 2.1) and outcomes discussed in Appendix A 'Regulatory Correspondence' and consultation letters provided. No disagreements;</li> <li>* ACHMP - Consulted with OEH and registered Aboriginal Parties (Sections 4.1.1, 4.1.2 and Appendices B &amp; C). No disagreements;</li> <li>* HHMP - Consulted with OEH and Council (Section 3.1.1 and Appendix A);</li> <li>* EMS - No consultation requirement;</li> <li>* RMP - Consulted with DPIE, Resources Regulator (RR) (formerly Department of Industry (DoI) - Resource and Energy), OEH, Council and Community Consultative Commitment (CCC) (Section 2.1.1 - 2.1.6) and outcomes discussed in Appendix A and consultation letters provided. No disagreements; and</li> <li>* VIMP - No consultation requirement.</li> </ul>	<ul style="list-style-type: none"> <li>* Update Appendix A 'Regulatory Correspondence' in the WMP to include consultation letter from NRAR.</li> <li>* Update Biodiversity Management Plan to include consultation letter from NRAR.</li> </ul>
18	<p><b>COMPLIANCE</b></p> <p>The Applicant must ensure that all of its employees, contractors (and their sub-contractors) are made aware of, and are instructed to comply with, the conditions of this consent relevant to activities they carry out in respect of the development.</p>	Compliant	<p>BMC inform required stakeholders through the following methods:</p> <ul style="list-style-type: none"> <li>* Induction training and training packages:             <ul style="list-style-type: none"> <li>- 'Bengalla Environmental Training - Site Environmental Management';</li> <li>- 'BMC Training Air Quality - Operators and Contractors';</li> <li>- 'Environmental Training - Air Quality Management - Coal Stockpiles';</li> <li>- 'February 2018 - Dust Awareness';</li> <li>- 'UDAY - Environmental Training - Dust';</li> <li>- 'UDAY - Environmental Training'; and</li> <li>- 'Bengalla Mining Company Environment Induction Slides.</li> </ul> </li> <li>* Training Attendance Sheet, dated 27/2/2017, listing operators and contractors undertaking air quality (UDAY dust) training. The course content, as described by the Training Attendance Sheet, included:             <ul style="list-style-type: none"> <li>- Bengalla authorities;</li> <li>- EPL obligations and material harm to the environment; and</li> <li>- Air quality, noise, water and blast management.</li> </ul> </li> <li>* During the site inspection on 3/12/2019 despatch requested the shut down of a digger from the BMC southern look out.</li> </ul>	
19	<p><b>APPLICABILITY OF GUIDELINES</b></p> <p>References in the conditions of this consent to any guideline, protocol, Australian Standard or policy are to such guidelines, protocols, Standards or policies in the form they are in as at the date of this consent. However, consistent with the conditions of this consent and without altering any limits or criteria in this consent, the Secretary may, when issuing directions under this consent in respect of ongoing monitoring and management obligations, require compliance with an updated or revised version of such a guideline, protocol, Standard or policy, or a replacement of them.</p>	Note		

**Schedule 3**  
**Environmental Performance Conditions**

1	<p><b>ACQUISITION UPON REQUEST</b></p> <p>Upon receiving a written request for acquisition from the owner of the land listed in Table 1, the Applicant must acquire the land in accordance with the procedures in conditions 5 and 6 of schedule 4.</p>	Compliant	<p>Written request for acquisition from Receiver 152 received by BMC in March 2015. BMC made an offer to acquire the land in June 2015. Subsequent offer made via email, dated 16/01/2018, to acquire Receiver 152. The offer was rejected by the landowner, via email dated 05/04/2018.</p>														
	<p>Table 1: Land subject to acquisition upon request</p> <table border="1"> <thead> <tr> <th>Acquisition Basis</th> <th>Receiver No</th> </tr> </thead> <tbody> <tr> <td>Noise</td> <td>152, 153, 156E, 156S</td> </tr> <tr> <td>Noise and Air Quality</td> <td>154</td> </tr> </tbody> </table>	Acquisition Basis	Receiver No	Noise	152, 153, 156E, 156S	Noise and Air Quality	154	Compliant	<p>Written request for acquisition from Receiver 152 received by BMC in March 2015. BMC made an offer to acquire the land in June 2015. Subsequent offer made via email, dated 16/01/2018, to acquire Receiver 152. The offer was rejected by the landowner, via email dated 05/04/2018.</p>								
Acquisition Basis	Receiver No																
Noise	152, 153, 156E, 156S																
Noise and Air Quality	154																
2	<p>If the Applicant receives a written request for acquisition from the owner of the land listed in Table 2 and if that land is no longer subject to acquisition upon request under the relevant development consent or project approval shown in Table 2, then the Applicant must acquire the land in accordance with the procedures in conditions 5 and 6 of schedule 4.</p>	Not triggered	<p>No receivers listed in Table 2 provided a written request to BMC to acquire their land.</p>														
	<p>Table 2: Land subject to acquisition upon request</p> <table border="1"> <thead> <tr> <th>Acquisition Basis</th> <th>Receiver No</th> <th>Mine</th> </tr> </thead> <tbody> <tr> <td>Noise</td> <td>120</td> <td rowspan="2">Mt Arthur</td> </tr> <tr> <td>Noise and Air Quality</td> <td>112, 113, 114, 117, 118, 119, 155</td> </tr> <tr> <td>Noise</td> <td>166</td> <td rowspan="2">Mt Pleasant</td> </tr> <tr> <td>Noise and Air Quality</td> <td>168, 171</td> </tr> </tbody> </table> <p>Notes: To interpret the land referred to in Table 2, see the applicable figure in Appendix 4.</p>	Acquisition Basis	Receiver No	Mine	Noise	120	Mt Arthur	Noise and Air Quality	112, 113, 114, 117, 118, 119, 155	Noise	166	Mt Pleasant	Noise and Air Quality	168, 171	Not triggered	<p>No receivers listed in Table 2 provided a written request to BMC to acquire their land.</p>	
Acquisition Basis	Receiver No	Mine															
Noise	120	Mt Arthur															
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Noise	166	Mt Pleasant															
Noise and Air Quality	168, 171																
3	<p><b>ADDITIONAL MITIGATION UPON REQUEST</b></p> <p>Upon receiving a written request from the owner of any residence on the land listed in Table 1 (unless the landowner of that land has requested acquisition), Table 2 (if acquisition or additional mitigation by the mine listed in Table 2 is no longer available for the landowner of that land) and on the land listed in Table 3, the Applicant must implement additional:</p> <p>(a) noise mitigation measures (such as double-glazing, insulation and/or air conditioning); and/or</p> <p>(b) air quality mitigation measures (such as air filters, a first flush roof water drainage system and/or air conditioning), at any residence in consultation with the owner.</p> <p>These measures must be reasonable and feasible, and directed towards reducing the noise and/or air quality impacts of the development on any residence. The Applicant must also be responsible for the reasonable costs of ongoing maintenance of these additional mitigation measures until the cessation of mining operations.</p> <p>If within 3 months of receiving this request from the owner, the Applicant and the owner cannot agree on the measures to be implemented, or there is a dispute about the implementation of these measures, then either party may refer the matter to the Secretary for resolution.</p>	Compliant	<p>Receiver 152 requested (in consultations) a letter from BMC regarding mitigation rights. BMC sent a letter, dated 13 June 2019, in accordance to receiver 152's request. BMC reported that a response to this letter had not been received at the time of this audit.</p> <p>Receiver 146 requested noise mitigation works to be carried out at her property. Email from BMC regarding this request, dated 3 August 2019. Purchase order BS427590 from BMC and invoices (No's: 16553 &amp; 23659) from Superior Building Solutions indicate that two windows and exterior blinds were fitted to the property</p>														

	<p><b>Table 3: Land subject to additional noise and/or air quality mitigation upon request</b></p> <table border="1"> <thead> <tr> <th>Mitigation Basis</th> <th>Receiver</th> </tr> </thead> <tbody> <tr> <td>Noise and Air Quality</td> <td>109<sup>1</sup></td> </tr> <tr> <td>Noise</td> <td>105, 106<sup>1</sup>, 108, 110<sup>1</sup>, 126N, 167, 169<sup>1</sup>, 180, 184</td> </tr> <tr> <td>Air Quality</td> <td>66<sup>1</sup>, 120<sup>1</sup>, 152, 156E, 156S</td> </tr> </tbody> </table> <p><i>Notes:</i>  1. To interpret the land referred to in Table 3, see the applicable figure in Appendix 4.  2. The Applicant is only required to provide additional mitigation for this property if these rights are no longer available under the development consent for the Mt Pleasant mine.  3. The Applicant is only required to provide additional mitigation for this property if these rights are no longer available under the project approval for the Mt Arthur mine.</p>	Mitigation Basis	Receiver	Noise and Air Quality	109 <sup>1</sup>	Noise	105, 106 <sup>1</sup> , 108, 110 <sup>1</sup> , 126N, 167, 169 <sup>1</sup> , 180, 184	Air Quality	66 <sup>1</sup> , 120 <sup>1</sup> , 152, 156E, 156S	<p>Note</p>																																																					
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<p>4</p>	<p><b>NOISE</b></p> <p><b>Noise Criteria</b>  Except for the noise-affected land in Tables 1 and 2, the Applicant must ensure that the noise generated by the development does not exceed the criteria in Table 4 at any residence on privately-owned land.</p>	<p>Note</p>																																																													
	<p><b>Table 4: Noise Criteria dB(A)</b></p> <table border="1"> <thead> <tr> <th rowspan="2">Location</th> <th>Day</th> <th>Evening</th> <th colspan="2">Night</th> </tr> <tr> <th>L<sub>Aeq</sub> (15 min)</th> <th>L<sub>Aeq</sub> (15 min)</th> <th>L<sub>Aeq</sub> (15 min)</th> <th>L<sub>A1</sub> (1 min)</th> </tr> </thead> <tbody> <tr> <td>108, 109, 110</td> <td>40</td> <td>40</td> <td>40</td> <td>45</td> </tr> <tr> <td>106</td> <td>39</td> <td>39</td> <td>39</td> <td>45</td> </tr> <tr> <td>169</td> <td>39</td> <td>39</td> <td>38</td> <td>45</td> </tr> <tr> <td>105, 126N</td> <td>38</td> <td>38</td> <td>38</td> <td>45</td> </tr> <tr> <td>167, 180, 184,</td> <td>38</td> <td>38</td> <td>35</td> <td>45</td> </tr> <tr> <td>102, 126C, 146</td> <td>37</td> <td>37</td> <td>37</td> <td>45</td> </tr> <tr> <td>186N</td> <td>37</td> <td>37</td> <td>35</td> <td>45</td> </tr> <tr> <td>43, 44, 130, 145, 126S</td> <td>36</td> <td>36</td> <td>36</td> <td>45</td> </tr> <tr> <td>186S, 189</td> <td>36</td> <td>36</td> <td>35</td> <td>45</td> </tr> <tr> <td>All other privately-owned residences</td> <td>35</td> <td>35</td> <td>35</td> <td>45</td> </tr> </tbody> </table>	Location	Day	Evening	Night		L <sub>Aeq</sub> (15 min)	L <sub>Aeq</sub> (15 min)	L <sub>Aeq</sub> (15 min)	L <sub>A1</sub> (1 min)	108, 109, 110	40	40	40	45	106	39	39	39	45	169	39	39	38	45	105, 126N	38	38	38	45	167, 180, 184,	38	38	35	45	102, 126C, 146	37	37	37	45	186N	37	37	35	45	43, 44, 130, 145, 126S	36	36	36	45	186S, 189	36	36	35	45	All other privately-owned residences	35	35	35	45	<p>Compliant</p>	<p>* Monitoring is conducted at three representative locations during the night-time period in accordance with the approved NMP.  * Based on monitoring reports provided to the Auditors, no exceedances of the applicable criteria were recorded during the audit period.</p>	
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	<p><i>Note: To interpret the land referred to in Table 4, see the applicable figure in Appendix 4.</i></p> <p>However, these criteria do not apply if the Applicant has a written agreement with the relevant landowner to exceed the noise criteria, and the Applicant has advised the Department in writing of the terms of this agreement.</p> <p>Noise generated by the development is to be measured in accordance with the relevant requirements of the NSW Industrial Noise Policy. Appendix 5 sets out the meteorological conditions under which these criteria apply and the requirements for evaluating compliance with these criteria.</p>	<p>Compliant</p>																																																													
<p>5</p>	<p><b>Construction Noise</b>  The Applicant must manage the noise associated with the construction of the Bengalla Road realignment and the Homestead Access Road in accordance with the noise management levels in Table 2 of the Interim Construction Noise Guideline.</p>	<p>Not triggered</p>	<p>No construction works for these projects occurred during the audit period.</p>																																																												
<p>6</p>	<p><b>Operating Conditions</b>  The Applicant must:  (a) implement best noise management practice, which includes implementing all reasonable and feasible noise mitigation measures to minimise the construction, operational, road and rail noise of the development;  (b) operate a comprehensive noise management system on site that uses a combination of predictive meteorological forecasting and real-time noise monitoring data to guide the day-to-day planning of mining operations and the implementation of both proactive and reactive noise mitigation measures to ensure compliance with the relevant conditions of this consent;  (c) minimise the noise impacts of the development during meteorological conditions when the noise criteria in this consent do not apply (see Appendix 5);  (d) co-ordinate noise management at the Bengalla mine with the noise management at the Mt Arthur and Mount Pleasant mines to minimise cumulative noise impacts; and  (e) carry out regular attended monitoring in accordance with Appendix 5 (unless otherwise agreed with the Secretary), to determine whether the development is complying with the relevant conditions of this consent, to the satisfaction of the Secretary.</p>	<p>Compliant</p>	<p>(a) The NMP details best management practice along with mitigation measures to minimise noise where reasonable and feasible.  (b), (c), (d) The site inspection showed that the site uses predicted weather conditions and real-time noise monitoring data to guide the day to day operations and alter operational activities as required. Data sharing with Mt Pleasant and Mt Arthur coal mines is also conducted to minimise the potential for adverse cumulative noise impacts.  (e) Monthly operator attended compliance monitoring in accordance with the approved NMP is conducted to determine compliance with consent conditions.</p>																																																												
<p>7</p>	<p><b>Noise Management Plan</b>  The Applicant must prepare a Noise Management Plan for the development to the satisfaction of the Secretary. This plan must:  (a) be prepared in consultation with the EPA, and submitted to the Secretary for approval within 6 months of the date of this consent;  (b) describe the measures that would be implemented to ensure compliance with the relevant conditions of this consent;  (c) describe the proposed noise management system in detail; and  (d) include a noise monitoring program that:  * evaluates and reports on:  o the effectiveness of the noise management system;  o compliance against the noise criteria in this consent; and  o compliance against the noise operating conditions;  * includes a program to calibrate and validate the real-time noise monitoring results with the attended monitoring results over time (so the real-time noise monitoring program can be used as a trigger for further attended monitoring where there is a risk of non-compliance with the noise criteria in this consent); and  * defines what constitutes a noise incident, and includes a protocol for identifying and notifying the Department and relevant stakeholders of any noise incidents.</p> <p>The Applicant must implement the management plan as approved by the Secretary.</p>	<p>Compliant</p>	<p><u>Preparation:</u>  (a) Evidence of consultation with EPA and approval from DPE within NMP. NMP approved by DPIE within 6 months of MOD4 consent approval date. NMP approved by DPIE on 27/5/2019.  (b) NMP Section 4.4.  (c) NMP Section 4.4.  (d) NMP Section 5.0 and NMP Section 7.6</p> <p><u>Implementation:</u>  * During the site inspection it was noted that equipment was progressively shut down and/or relocated as weather conditions changed. This was done in response to real-time noise monitoring and observations from the control room.  * Supplementary noise monitoring results sighted.  * Complaints register reviewed and actions (where appropriate) noted.  * Maintenance schedule '52 Week Schedule 2019' for plant and equipment provided.  * During the site inspection noted:  - Noise bund adjacent to the CHPP;  - Real-time noise monitoring equipment (PHOTO 19); and  - Equipment being maintained.</p> <p>* Noted during site inspection conveyors are enclosed.</p>																																																												
<p>8</p>	<p><b>BLASTING</b></p> <p><b>Blasting Criteria</b>  The Applicant must ensure that blasting on the site does not cause exceedances of the criteria in Table 5.</p>	<p>Note</p>																																																													

Table 5 Blasting criteria		Ground vibration (mm/s)	Allowable exceedance	Compliant	
Location	Airblast overpressure (dB(Lin Peak))				
	Residence on privately owned land <sup>a</sup>	10	0%		
		5	5% of the total number of blasts over a period of 12 months		
	However, these criteria do not apply if the Applicant has a written agreement with the relevant owner for higher levels, and has advised the Department in writing of the terms of this agreement.			Note	
9	<b>Blasting Hours</b> The Applicant must only carry out blasting on site between 7 am and 5 pm Monday to Saturday inclusive. No blasting is allowed on Sundays, public holidays, or at any other time without the written approval of the Secretary.			Compliant	All blasting conducted within approved hours, according to the 2017 & 2018 Annual Reviews and Bengalla Mine Monthly Monitoring Data Summaries.
10	<b>Blasting Frequency</b> The Applicant must only carry out a maximum of: (a) 2 blasts a day; and (b) 6 blasts a week, averaged over a calendar year, on the site.  This condition does not apply to blasts that generate ground vibration of 0.5 mm/s or less at any residence on privately owned land, blast misfires or blasts required to ensure the safety of the mine, its workers or the general public.  <b>Notes:</b> • For the purposes of this condition, a blast refers to a single blast event, which may involve a number of individual blasts fired in quick succession in a discrete area of the mine. • For the avoidance of doubt, should an additional blast be required after a blast misfire, this additional blast and the blast misfire are counted as a single blast. • In circumstances of recurring unfavourable weather conditions (following planned but not completed blast events), to avoid excess explosive sleep times and minimise any potential environmental impacts, the Applicant may seek agreement from the Secretary for additional blasts to be fired on a given day.			Compliant	Blast results indicate: a) At times up to three (3) blasts were conducted on any given day. During these blast events at least one blast resulted in vibration levels of 0.5mm/s or less at the compliance monitoring locations. As such blasting operations are considered compliant with this restriction. b) Average of 2.9 blasts per week in 2017. An average of 3.3 blasts per week in 2018 and 3.6 blasts per week in 2019 (to 17 December).
11	<b>Property Inspections</b> If the Applicant receives a written request from the owner of any privately-owned land within 3 kilometres of the approved open cut mining pit on site for a property inspection to establish the baseline condition of any buildings and/or structures on his/her land, or to have a previous property inspection updated, then within 2 months of receiving this request the Applicant must: (a) commission a suitably qualified, experienced and independent person, whose appointment is acceptable to both parties to: • establish the baseline condition of any buildings and other structures on the land, or update the previous property inspection report; and • identify measures that should be implemented to minimise the potential blasting impacts of the development on these buildings and/or structures; and (b) give the landowner a copy of the new or updated property inspection report. If there is a dispute over the selection of the suitably qualified, experienced and independent person, or the Applicant or the landowner disagrees with the findings of the property inspection report, either party may refer the matter to the Secretary for resolution.			Observation	BMC reported that the resident at 234 Roxburgh Road requested (by phone - not in writing) Bengalla to conduct a building condition survey at the property. In response Bengalla commissioned WSP to conduct the assessment with the property inspected on 21/10/2019. (Property Condition Report by WSP, dated 17/12/2019). * The WSP report was prepared by a Senior Structural Engineer. * The report defines the baseline condition of a property and water tanks at 234 Roxburgh Road. * <b>Observation:</b> The report does not identify measures that should be implemented to minimise the potential blasting impacts of the Development on the property or tanks.
12	<b>Property Investigations</b> If the owner of any privately-owned land claims that buildings and/or structures on his/her land have been damaged as a result of blasting on the site, then within 2 months of receiving this claim the Applicant must: (a) commission a suitably qualified, experienced and independent person, whose appointment is acceptable to both parties to investigate the claim; and (b) give the landowner a copy of the property investigation report.  If this independent property investigation confirms the landowner's claim, and both parties agree with these findings, then the Applicant must repair the damage to the satisfaction of the Secretary.  If there is a dispute over the selection of the suitably qualified, experienced and independent person, or the Applicant or the landowner disagrees with the findings of the independent property investigation, then either party may refer the matter to the Secretary for resolution.			Not verified	The owner of the property at 7 Sheppard Avenue requested a "Property investigation" of his property to be undertaken as triggered by Condition 12, Schedule 3 (ref: letter from property owner to BMS, not dated). In response, BMC commissioned WSP to undertake inspections at 7 Sheppard Ave. The site visit for the inspections was conducted on 31/07/2018. BMC reported that at the time, the owner of the property did not object to WSP undertaking the works and that the owner of the property provided WSP access to the property to conduct the inspections. BMC were unable to provide evidence that the landowner agreed that WSP were "acceptable" to conduct the inspections, as required by condition 12. Two separate reports were prepared by WSP (ref: Bengalla Mining Company Pty Ltd Bengalla Mine Structural Survey Report, undated) - one covering the residence and garage; the other covering stables on the property. The reports were issued to the owner of the property on 6/10/2018 (ref: email from BMC to the property owner, dated 06/10/2018) and contained building particulars; background to the report, descriptive factors; details of cracks and general comments; and numerous photos of points of interest on the buildings.  In addition, a third WSP report was issued to the owner on 6/10/2018. This report was titled: Inspection of residence and stables, 7 Sheppard Avenue, Muswellbrook, dated 18/09/2018 (ref: email from BMC to the property owner, dated 06/10/2018) and includes: • Scope of work "included preparation of a dilapidation survey report and a letter to provide comment on particular areas of concern to the owner and the possible mechanisms and causes for that damage. This letter also comments on whether there is potential that the observed defects could be attributed to effects from blasting." • General discussion: "Cracking of brickwork and plasterboard identified in the inspection is in the same or similar locations to that identified in the 1997 and 1998 inspections. The degree and locations of cracking identified with widths less than 1.0mm is considered typical for the building age and form of construction. These cracks may be caused by one or more of the following mechanisms: — building movements due to thermal expansion/ contraction of building materials — differential ground movements due to expansion/ contraction of the supporting soil." • Section 4.2 of the report goes into detail on parts of the house and stables, and considers possible causes for the observed cracking such as drought; damp and dry areas of soil etc. The report states "Note that the downpipes on the southern side of the house are discharging to ground immediately beside the house which may result in variability in moisture content in the soil supporting and surrounding the house. It is normal practice to install a flexible sealant at construction or control joints in masonry walls to allow for movement which is not installed at these joints resulting in cracking and separation of the mortar." Other similar comments further considering the reason for the cracking. • The report states that no geotechnical investigations were undertaken. • The report refers to research findings related to the potential impacts of ground vibration on buildings to compare vibration levels recorded at the house against findings of the research. • The conclusion of the report is that "Based on the recent inspection and above discussion the defects observed are not able attributed to the effects of blasting".
12	<b>Property Investigations (Cont'd)</b>				In summary, the WSP Report dated 18/09/2018 contains more detail than the two inspection reports prepared after the site visit on 31/07/2018. The discussion in the WSP report dated 18/09/2018 regarding potential causes of the observed cracking and other damage; discussion of vibration levels; and their potential to be a cause of the observed cracking has been assessed as demonstrating a level of investigation. It is noted that the Conditions of Approval do not contain a definition for a "property investigation" or what such an investigation is to comprise. The auditors are not specialists in property impacts or property investigations, hence are not able to determine if the report is considered to adequately address the requirements of being a "property investigation" for the purposes of this condition.  On the basis that BMC could not provide evidence of the owner agreeing to WSP conducting the investigation; and a lack of a definition regarding what constitutes an investigation within the project approval; MCW Environmental was not able to fully determine if the report provided met the requirements of a property investigation under this condition. Given this, compliance with this condition was Not Verified.  It is noted that under this condition, either party can refer the matter to DPIE Compliance should there be any dispute over the selection of a suitably qualified person; or if the landowner disagrees with the findings. Correspondence on this matter post the audit period have not been assessed in this report.

13	<p><b>Operating Conditions</b>                  During mining operations on site, the Applicant must:                  (a) implement best management practice to:                  • protect the safety of people and livestock in the surrounding area;                  • protect public or private infrastructure/property in the surrounding area from any damage; and                  • minimise the dust and fume emissions of any blasting;                  (b) ensure that blasting on site does not damage historic heritage sites (see the figure in Appendix 6);                  (c) minimise the frequency and duration of any road closures, and avoid road closures for blasting during peak traffic periods;                  (d) operate a suitable system to enable the public and Council to get up-to-date information on the proposed blasting schedule on site and associated road closures;                  (e) co-ordinate the timing of blasting on site with the timing of blasting at the Mt Arthur and Mount Pleasant mines to minimise any cumulative blasting impacts; and                  (f) monitor and report on compliance with the relevant blasting conditions in this consent, to the satisfaction of the Secretary.</p>	Compliant	<p>a) The BMP details best management practice along with protocols/measures to minimise impacts of blasting.                  b, c, d, e) No damage to historic heritage sites from blasting was reported by BMC. The site inspection showed that the site uses predicted weather conditions and real-time meteorological data to guide the blast as required. Blast notifications are presented on the Muswellbrook shire Council website. Data sharing with Mt Pleasant and Mt Arthur coal mines is also conducted to minimise the potential for adverse cumulative blasting impacts.                  f) A comprehensive blast monitoring network is in place to measure each blast event with results made available on the Bengalla website and reported in accordance with the approved BMP.</p>	
14	<p>The Applicant must not undertake blasting on site within 500 metres of:                  (a) any public road;                  (b) the Ulan – Muswellbrook railway line; or                  (c) any land outside the site that is not owned by the Applicant,                  unless:                  • the Applicant has a written agreement with the applicable infrastructure authority or landowner to allow blasting to be carried out closer to the infrastructure or land, and the Applicant has advised the Department in writing of the terms of this agreement; or                  • the Applicant has:                  o demonstrated to the satisfaction of the Secretary that the blasting can be carried out closer to the infrastructure or land without compromising the safety of people or livestock, or damaging buildings and/or structures; and                  o updated the Blast Management Plan to include the specific measures that would be implemented while blasting is being carried out within 500 metres of the road or land.</p>	Compliant	<p>The BMP details measures to be implemented within 500 metres of public roads.                  In accordance with the 2017 &amp; 2018 Annual Review "BMC has blasting agreements or similar in place to facilitate blasting within 500 m of these areas, including specific procedures and vibration limits as required to protect people, livestock and infrastructure. Assessment of compliance with blast criteria for privately owned residences and public infrastructure is undertaken at three blast monitors located on non-mine owned land. During the reporting period, results from the blast monitors on non-mine owned land did not exceed relevant impact criteria for overpressure or ground vibration."                  No evidence was observed that the site was not compliant with this condition.                  An agreement is in place between ARTC and land owned by MACH energy.</p>	
15	<p><b>Blast Management Plan</b>                  The Applicant must prepare a Blast Management Plan for the development to the satisfaction of the Secretary. This plan must:                  (a) be prepared in consultation with the EPA and Council, and submitted to the Secretary for approval within 6 months of the date of this consent;                  (b) describe the measures that would be implemented to ensure compliance with the blasting criteria and operating conditions of this consent;                  (c) propose and justify any alternative ground vibration limits for any public infrastructure in the vicinity of the site (if relevant); and                  (d) include a monitoring program for evaluating and reporting on compliance with the blasting criteria and operating conditions.                  The Applicant must implement the management plan as approved by the Secretary.</p>	Observation	<p><u>Preparation:</u>                  Blast Management Plan (BMP) dated 11/5/2017.                  * Letter from DPIE dated 18/8/2017 approving the BMP provided in Appendix B of the Plan.                  (a) Outside audit period. Section 2 and Appendix B of the BMP indicates consultation with EPA and Council.                  (b) Section 4.                  (c) N/A - No alternative ground limits proposed.                  (d) Monitoring program for evaluating and reporting on compliance with the blasting criteria and operating conditions - Sections 3, 6.1 and 6.4.1.  <u>Observation:</u> The BMP does not include details about SSD-5170, Mod 4.                  BMC are still compliant with this BMP as Mod 4 did not change mining or blasting practices.  <u>Observation:</u> Figure 3 of the BMP has a number of 'SDD' &amp; 'CW1' blast monitors in one location (near Bengalla Homestead), so that they are overlap.  <u>Observation:</u> The BMP refers to the Department of Planning and Environment (DPE).  <u>Implementation:</u>                  * A blast was witnessed on 3/12/2019 by the audit team. It was observed that the blast was managed in accordance with the BMP including:                  - Implementation of blast risk assessment;                  - Monitoring of weather conditions;                  - Review environmental forecast system; and                  - Recording of vibration results and meteorological conditions.                  * An inspection of the blast monitoring network revealed that blast monitoring equipment is appropriately maintained and in representative locations (PHOTO 20) .</p> <p>* A review of the complaints register indicates that appropriate action by appropriate Bengalla personnel upon receipt of blast related complaints.                  * The Audit team checked the council website on 12/2/2020 and the blast notices for Bengalla were posted.</p>	<p>* Include details in regards to SSD-5170, Mod 4, in the BMP.                  * Update Figure 3 in the BMP such that the 'SDD' &amp; 'CW1' blast monitors in one location (near Bengalla Homestead) are shown as an inset, so they are not overlapping.                  * When plans are updated for other requirements, ensure Management Plans reference current regulator names, including the Department of Planning, Infrastructure and Environment (DPIE)..</p>
16	<p><b>AIR QUALITY</b>  <b>Air Quality Criteria</b>                  Except for the air-affected land in Tables 1 and 2, the Applicant must ensure that all reasonable and feasible avoidance and mitigation measures are employed so that the particulate emissions generated by the development do not exceed the criteria listed in Tables 6, 7 and 8 at any residence on privately-owned land.</p>			

	<p>Table 6: Long term criteria for particulate matter</p> <table border="1"> <thead> <tr> <th>Pollutant</th> <th>Averaging period</th> <th>Criterion</th> </tr> </thead> <tbody> <tr> <td>Total suspended particulate (TSP) matter</td> <td>Annual</td> <td><sup>a,d</sup>90 µg/m<sup>3</sup></td> </tr> <tr> <td>Particulate matter &lt; 10 µm (PM<sub>10</sub>)</td> <td>Annual</td> <td><sup>a,d</sup>25 µg/m<sup>3</sup></td> </tr> <tr> <td>Particulate matter &lt; 2.5 µm (PM<sub>2.5</sub>)</td> <td>Annual</td> <td><sup>a,d</sup>8 µg/m<sup>3</sup></td> </tr> </tbody> </table>	Pollutant	Averaging period	Criterion	Total suspended particulate (TSP) matter	Annual	<sup>a,d</sup> 90 µg/m <sup>3</sup>	Particulate matter < 10 µm (PM <sub>10</sub> )	Annual	<sup>a,d</sup> 25 µg/m <sup>3</sup>	Particulate matter < 2.5 µm (PM <sub>2.5</sub> )	Annual	<sup>a,d</sup> 8 µg/m <sup>3</sup>	Not verified	<p>*According to 2017 Annual Review:                      - TSP (annual average) - Annual Average TSP reading for HV6 exceeded TSP criteria. Reading in the order of 96.4 ug/m3. According to the 2017 Annual Review BMC investigated the elevated TSP level recorded at HV-6. The investigation report concluded that BMC employed all practicable dust mitigation measures and that the elevated result was largely a result of neighbouring operations in the vicinity of the monitor. BMC submitted the investigation report to DPE on 17/01/18.                      - PM10 (annual average) - Annual Average PM10 reading for PM10-4 exceeded. Reading in the order of 28.0 ug/m3. Further investigations by Todoroski Air Sciences (TAS) determined that BMC would have had a minor contribution to this exceedance.                       Note: In SSD-5170 Mod 3 the PM10 (annual average) criterion is 30ug/m3. This criterion applied up until November 2018, when Mod 4 was approved and changed the criterion to 25ug/m3. Mod 4 also introduced the requirement to monitor PM2.5.                       Observation: 2018 Annual Review refers to the applicable PM10 criteria as 30 ug/m3. This is incorrect. SSD-5170 specifies the PM10 criteria as 25 ug/m3.                      * The 2018 Annual Review doesn't report PM2.5 readings for 2018.                       *According to 2018 Annual Review:                      - TSP (annual average) - Annual Average TSP reading for HV1, HV2 and HV6 exceeded TSP criteria. Readings in the order of 94.3 ug/m3, 91.4 ug/m3 and 122 ug/m3, consecutively.                      - PM10 (annual average) - Annual Average PM10 reading for PM10-1, PM10-2, PM10-3 and PM10-4 exceeded. Readings in the order of 33.3 ug/m3, 27.1 ug/m3, 27.5 ug/m3 and 38.2 ug/m3.</p> <p>BMC engaged ERM to investigate the elevated annual average PM10 and TSP (Elevated Annual Averages Report by ERM, dated 7/2/2019).                      This report concluded that:                      "During the period 1 January to 31 December 2018, Bengalla recorded annual average concentrations of TSP (at HV1, HV2 and HV6), PM10 (at PM1 and PM4) and dust deposition (at D20) that were above the relevant annual average air quality criteria under Condition 16 of Schedule 3 of SSD-5170 for Bengalla.                      This review concludes that the elevated concentrations are due to a combination of:                      * the estimated increase in background concentrations (5 ug/m3 for PM10; 15 ug/m3 for TSP; 0.6 g/m2/month for dust deposition), likely resulting from the extraordinary climate (low rainfall and high temperatures) experienced in 2018;                      * mining activity at Bengalla and Mt Arthur;                      * the localised construction work at Bengalla Dam near dust deposition gauge D20; and                      * the localised construction work at Mt Pleasant near monitors HV1, HV6 and PM4.                      As presented in Table 11, when the extraordinary climate and Bengalla's contribution are taken into consideration, all the data comply with the relevant criterion. "</p>	<p>* Ensure future Annual Reviews refer to the correct PM10 criteria.                      * DPIE to further consider the argument by BMC that they are compliant with the criteria of this condition.</p>
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Particulate matter < 10 µm (PM <sub>10</sub> )	Annual	<sup>a,d</sup> 25 µg/m <sup>3</sup>														
Particulate matter < 2.5 µm (PM <sub>2.5</sub> )	Annual	<sup>a,d</sup> 8 µg/m <sup>3</sup>														
	<p>Table 7: Short term criterion for particulate matter</p> <table border="1"> <thead> <tr> <th>Pollutant</th> <th>Averaging period</th> <th>Criterion</th> </tr> </thead> <tbody> <tr> <td>Particulate matter &lt; 10 µm (PM<sub>10</sub>)</td> <td>24 hour</td> <td><sup>b</sup>50 µg/m<sup>3</sup></td> </tr> <tr> <td>Particulate matter &lt; 2.5 µm (PM<sub>2.5</sub>)</td> <td>24 hour</td> <td><sup>b</sup>25 µg/m<sup>3</sup></td> </tr> </tbody> </table>	Pollutant	Averaging period	Criterion	Particulate matter < 10 µm (PM <sub>10</sub> )	24 hour	<sup>b</sup> 50 µg/m <sup>3</sup>	Particulate matter < 2.5 µm (PM <sub>2.5</sub> )	24 hour	<sup>b</sup> 25 µg/m <sup>3</sup>	Not verified	<p>BMC engaged Todoroski Air Sciences (TAS) to undertake a further review of specific air quality criteria exceedances in 2018. This report concluded that                      "On this basis it is considered that the mine operated appropriately to mitigate dust levels and its activities did not lead to any exceedance of the applicable criteria."                      *According to monthly environmental monitoring data for 2019:                      - TSP (annual average) - Annual Average TSP reading for all sites (HV1, HV2, H4 and HV6) exceeded TSP criteria. Readings in the order of 123.2 ug/m3, 112.2 ug/m3, 94.6 ug/m3 and 146 ug/m3, consecutively.                      - PM10 (annual average) - Annual Average PM10 reading for PM10-1, PM10-2, PM10-3 and PM10-4 exceeded. Readings in the order of 49.3 ug/m3, 38.1 ug/m3, 39.9 ug/m3 and 49.9 ug/m3.                      - PM2.5 (annual average) - Not Verified: PM2.5 data for February 2017 to December 2019 could not be provided. According to site communications the measurement of PM2.5 will occur when the location of the PM2.5 monitoring sites is approved as part of the AQMP by the DPIE.                       *According to 2017 Annual Review:                      - PM10 - Exceedances of the PM10 criterion reported for PM10-3 (on 11/2/2017, 27/9/2017) and PM10-4 (on 23/2/2017, 11/7/2017, 22/8/2017, 27/9/2017, 2/11/2017 and 8/12/2017). Further investigations by Todoroski Air Sciences (TAS) determined that BMC would have had a minor contribution to these exceedances.                       *According to 2018 Annual Review:                      - PM10 - Exceedances of the PM10 criterion reported on multiple occasions (1/1/2018, 13/1/2018, 19/1/2018, 25/1/2018, 31/1/2018, 6/2/2018, 12/2/2018, 18/2/2018, 02/03/2018, 20/03/2018, 25/05/2018, 24/07/2018, 23/08/2018, 22/09/2018, 09/11/2018, 27/11/2018, 09/12/2018, and 27/12/2018) and different monitoring sites. BMC engaged Pacific Environment Pty Limited (PE) and then Environmental Resources Management Pty Limited (ERM) to investigate these exceedances. BMC was not found to be the dominant contributor and that BMC would have not exceeded the criterion.                       * According to monthly environmental monitoring data for 2019:                      - Exceedances of the PM10 criterion reported on multiple occasions and at all the monitoring sites.                       - PM2.5 - Not Verified: PM2.5 data for February 2017 to December 2019 could not be provided. According to site communications the measurement of PM2.5 will occur when the location of the PM2.5 monitoring sites is approved as part of the AQMP by the DPIE.</p>	<p>* PM2.5 is required to be measured as detailed in the AQMP and reported in future Annual Reviews.                      * It is recommended that BMC be pro-active and undertake PM2.5 monitoring prior to the AQMP being approved by the DPIE so as to ensure compliance with the condition.</p>			
Pollutant	Averaging period	Criterion														
Particulate matter < 10 µm (PM <sub>10</sub> )	24 hour	<sup>b</sup> 50 µg/m <sup>3</sup>														
Particulate matter < 2.5 µm (PM <sub>2.5</sub> )	24 hour	<sup>b</sup> 25 µg/m <sup>3</sup>														
	<p>Table 8: Long term criteria for deposited dust</p> <table border="1"> <thead> <tr> <th>Pollutant</th> <th>Averaging period</th> <th>Maximum increase in deposited dust level</th> <th>Maximum total deposited dust level</th> </tr> </thead> <tbody> <tr> <td>Deposited dust</td> <td>Annual</td> <td><sup>b</sup>2 g/m<sup>2</sup>/month</td> <td><sup>a</sup>4 g/m<sup>2</sup>/month</td> </tr> </tbody> </table>	Pollutant	Averaging period	Maximum increase in deposited dust level	Maximum total deposited dust level	Deposited dust	Annual	<sup>b</sup> 2 g/m <sup>2</sup> /month	<sup>a</sup> 4 g/m <sup>2</sup> /month	Not verified	<p>* According to 2017 Annual Review, annual average deposited dust level below 4 g/m2/month at all monitoring points.                      * According to 2018 Annual Review, annual average deposited dust at D20 exceeded 4 g/m2/month. BMC engaged ERM to investigate the elevated annual average depositional dust levels. Elevated Annual Averages Report by ERM, dated 7/2/2019. According to site communications, BMC then engaged Todoroski Air Sciences (TAS) to undertake a third party review of air quality exceedances in 2018.                      * According to monthly environmental monitoring data for 2019 annual average deposited dust at D20 exceeded 4 g/m2/month at all sites except D01, D02 and D23B.                       In summary, there have been exceedances of the criteria, however on each occasion BMC have engaged experts (ERM and Todoroski Air Sciences) to assess the BMC contribution to these exceedances. These assessments have reported that the BMC contribution to the dust levels are below the criteria. On this basis BMC argue that they are compliant with the condition. This audit has not assessed this position on technical grounds as Auditors are not technical specialists in air quality. It is noted that air quality in the region and mine contribution to dust in air are being assessed under the Independent Review required by Schedule 4, Condition 4. Further, Notices have been issued by DPIE in February 2020 for BMC to provide information to DPIE as part of ongoing investigations into compliance with this condition. This study and investigations are expected to contribute further to the assessment of this issue. Given the above, Auditors were not able to confirm compliance or non compliance with the approach used; consider the Independent Review and DPIE Investigation will cover relevant issues; and have determined the condition as Not Verified.</p>	<p>Ensure that all recommendations of the Independent Review as required of Schedule 4, Condition 4 are implemented appropriately.                      Ensure information requests relating to air quality as issued by DPIE are complied with.                      Ensure that all reasonable and feasible avoidance and mitigation measures are employed so that the particulate emissions generated by the development are minimised.</p>				
Pollutant	Averaging period	Maximum increase in deposited dust level	Maximum total deposited dust level													
Deposited dust	Annual	<sup>b</sup> 2 g/m <sup>2</sup> /month	<sup>a</sup> 4 g/m <sup>2</sup> /month													
<p>Notes for Tables 6 to 8:                      • a Total impact (i.e. incremental increase in concentrations due to the development plus background concentrations due to other sources);                      • b Incremental impact (i.e. incremental increase in concentrations due to the development on its own);                      • c Deposited dust is to be assessed as insoluble solids as defined by Standards Australia, AS/NZS 3580.10.1:2003: Methods for Sampling and Analysis of Ambient Air - Determination of Particulate Matter - Deposited Matter - Gravimetric Method; and                      • d Excludes extraordinary events such as bushfires, prescribed burning, dust storms, sea fog, fire incidents, illegal activities or any other activity agreed to by the Secretary.</p>		Note														

<p>18</p>	<p><b>Mine-owned Land</b></p> <p>The Applicant must ensure that all reasonable and feasible avoidance and mitigation measures are employed so that particulate matter emissions generated by the development do not cause exceedances of the criteria in Tables 6, 7 and 8 at any occupied residence on mine-owned land (including land owned by another mining company) unless:</p> <p>(a) the tenant or landowner (if the residence is owned by another mining company) has been notified of any health risks associated with such exceedances in accordance with the notification requirements in schedule 4 of this consent;</p> <p>(b) the tenant of any land owned by the Applicant can terminate their tenancy agreement without penalty at any time, subject to giving reasonable notice;</p> <p>(c) air quality monitoring is regularly undertaken to inform the tenant or landowner (if the residence is owned by another mining company) of the actual particulate emissions at the residence; and</p> <p>(d) data from this monitoring is presented to the tenant or landowner (if the residence is owned by another mining company) in an appropriate format for a medical practitioner to assist the tenant or landowner in making informed decisions on the health risks associated with occupying the residence, to the satisfaction of the Secretary.</p>	<p>Not Triggered</p>	<p>18 Not triggered as (a) email from Warburton Estate Agents to BMC dated 24/12/2019 confirming that tenants of BMC owned properties are provided with a copy of the Residential Tenancy Agreement (RTA), Bengalla Mining development consent conditions and a "Mine Dust and You" Fact sheet when signing a lease.</p> <p>(b) Not triggered. According to site communications no tenants of any BMC owned land have terminated their tenancy agreement.</p> <p>(c) Regular air quality monitoring is undertaken at sites near residences, as shown on Figure 4 of the AQMP, dated August 2017. Air quality monitoring results are available on the BMC website.</p> <p>(d) Per (c)</p>	
<p>19</p>	<p><b>Operating Conditions</b></p> <p>The Applicant must:</p> <p>(a) implement all reasonable and feasible measures to minimise the:</p> <ul style="list-style-type: none"> <li>• odour, fume and dust emissions of the development; and</li> <li>• release of greenhouse gas emissions from the site;</li> </ul> <p>(b) minimise any visible air pollution generated by the development;</p> <p>(c) minimise the surface disturbance of the site;</p> <p>(d) operate a comprehensive air quality management system that uses a combination of predictive meteorological forecasting, predictive air dispersion modelling and real-time air quality monitoring data to guide the day-to-day planning of mining operations and implementation of both proactive and reactive air quality mitigation measures to ensure compliance with the relevant conditions of this consent;</p> <p>(e) minimise the air quality impacts of the development during adverse meteorological conditions and extraordinary events (see note d to Tables 6-8 above);</p> <p>(f) implement all reasonable and feasible measures to co-ordinate the air quality management at the Bengalla mine with the air quality management at the Mt Arthur and Mount Pleasant mines to minimise any cumulative air quality impacts; and</p> <p>(g) monitor and report on compliance with the relevant air quality conditions in this consent, to the satisfaction of the Secretary.</p>	<p>Non-Compliant (Low Risk)</p>	<p>(a) Measures to minimise:</p> <ul style="list-style-type: none"> <li>• Odour: Section 3.7 of the AQMP outlines odour control measures.</li> <li>• Odour complaints were received by BMC on 23/03/2017 and 19/04/2017. According to the detail contained in the 2017 Complaints Register, the complaints were more than likely the result of mine activity. Odour complaints also received and recorded in the 2018 &amp; 2019 Complaints Registers.</li> <li>• During the site inspection noted: <ul style="list-style-type: none"> <li>- Collection of general waste in appropriate bins (PHOTO 24);</li> <li>- Lids on general rubbish bins;</li> <li>- Did not note any sewage odour;</li> <li>- No spontaneous combustion;</li> </ul> </li> <li>• Fume: Specific management system and controls to minimise fume from blasts at the site, including; monitoring weather, maximum amount of time that packed blast holes will be left;</li> <li>• Dust emissions:</li> </ul> <p>During inspections of the open cut and waste dumps, the following observations were made by the auditors:</p> <ul style="list-style-type: none"> <li>- On the first day of the site inspection wind speed was above 10m/s at the monitoring location and plant was observed to be shut down progressively across the pit other than for coal transport, which was low in the pit. This showed good implementation of the response to triggers as defined in the AQMP and successful control of dust generation (see PHOTO 1).</li> <li>- On the second day of the site inspection the wind speed was just less than 10m/s and some plant was observed to be producing dust. Some plant and operations were progressively shut down including the dragline activities. During the pit site inspections mine management identified further dust generating plant (as winds increased during the morning) and modified operations further, by shutting down machinery where dust was not localised. It was not clear that the shutting down of plant would have been carried out to the same extent had the site inspections not been occurring (see PHOTO 2). Water carts were observed to be regularly and proactively wetting down haul roads.</li> <li>- On the third and fourth days of the site inspection the wind speed was low and there was only localised dust observed. Controls in these conditions were adequate ( see PHOTO 3) . No dust generation was observed in the coal stockpile area on any days.</li> </ul> <p>Processes by BMC were observed or documented as follows:</p> <ul style="list-style-type: none"> <li>* Inspections of pit undertaken typically by Open Cut Examiners with observations reported in the Dragline and Drills and Load and Haul Air Quality Assessment Reports. Air Quality Assessment Reports sighted for 27/12/2019, 28/12/2019 and 29/12/2019.</li> <li>* External dust inspections undertaken by BMC staff. Photos from 31/12/2018 morning and afternoon dust inspections provided.</li> <li>* Power point presentation of dust control measures presented to the CCC, showing video of sprays around the dragline.</li> </ul> <p>* <b>Non-compliant:</b> PIN (No: 3121150616) issued by DPIE on 16 June 2017 following a site inspection conducted on 18 January 2017. PIN related to air quality management (minimising dust emissions). The PIN cover letter stated that "Bengalla failed to implement all reasonable and feasible measures to minimise dust emissions of the development and failed to minimise any visible air pollution generated by the development" and that "On 18 January 2017, seven other mines in the Hunter area were also observed and found to have adequately minimised visible air pollution".</p> <p><b>Observation:</b> Wind speed, that triggers dust management measures, is based on an average over 1 hour. This trigger could delay BMC's response to excessive dust brought about by high wind events (over 10m/s) at the start of the 1hr period and sustained for that period and onwards. In order to ensure this is an appropriate approach, it is suggested an air quality specialist review and confirm that this trigger is appropriate.</p> <p><b>Observation:</b> Wind speed that determines the trigger for reduced activities under the AQMP is monitored off-site near the racecourse and not near the mining operations. This is not clear in the AQMP, which notes a 10m/s trigger on site. Wind monitoring data therefore may not be representative of what is occurring at the site (the monitoring location is much lower than some of the mining operations and in the lee of the waste dumps in a westerly wind). It is suggested a specialist review the location of the weather station and determine if it is providing data that is representative at mine activities. The AQMP should be updated to be clear as to whether the 10m/s trigger is near mine activities or at the racecourse.</p> <ul style="list-style-type: none"> <li>* GHG emissions reported in 2017 and 2018 Annual Reviews. Scope 1 and Scope 2 emissions during 2017 decreased from the year prior by 16% and 8%, and during 2018 decreased from the year prior by 1% and 4%.</li> <li>* The Clean Energy Regulator (CER) allocated a reported-emissions baseline of 443,494 t CO<sub>2</sub>-e to BMC based on the NGER emissions reported in the 2010 FY. 2017 and 2018 Annual Reviews report that this baseline was not exceeded.</li> <li>* The AQMP covers GHG and GHG management in Section 7. Observation: The CER allocated emissions baseline of 443,494 t CO<sub>2</sub>-e that is used as an upper limit for GHG management is not included in the GHG section of the AQMP.</li> </ul> <p>According to site communications BMC employs reasonable and feasible measures to minimise greenhouse gas emissions from site as targets are not required by Mod 4. For example, consideration of fuel efficiency during procurement, mine planning to optimise haul distances and maintaining equipment so fuel use is minimised. BMC through 2019 has undertaken a program of exploration drilling to acquire more fugitive gas emissions data with the intent to construct a new gas model to allow for more accurate fugitive gas determinations and potential mitigation measures over the life of the mine. BMC participates in COAL21 to encourage research into greenhouse gas reductions by investing in minimising emissions from coal-fired power production and developing carbon capture and storage to support cost-effective, reliable and cleaner energy. BMC make quarterly payments to the fund with a screenshot of the 2017, 2018 and 2019 records of payment provided.</p> <p>(e) During the site inspection noted that during windy conditions (where measured wind speed was greater than 10m/s at the monitoring location) machinery working in the higher areas of the pit was shut down.</p> <p>(f) According to site communications:</p> <ul style="list-style-type: none"> <li>* Data sharing with Mt Arthur Coal (inversion data shared);</li> <li>* Meeting minutes provided by BMC;</li> <li>* HVAS data was shared from Mt Arthur. Mt Arthur stopped monitoring and BMC took over the monitoring; and</li> <li>* Meetings are held with Mt Arthur Coal and Mt Pleasant Mine.</li> </ul> <p>(g) Air quality monitoring results are reported in the 2017 &amp; 2018 Annual Reviews, 2016-2017, 2017-2018 and 2018-2019 Annual Returns and published monthly on the BMC website, as monitoring summaries.</p> <p><b>Non-Compliance Summary</b> - Condition 19a) is considered not to have been complied with based on PIN No: 3121150616 on 16/06/2017 stating "Bengalla failed to implement all reasonable and feasible measures to minimise dust emissions of the development and failed to minimise any visible air pollution generated by the development". Site inspections identified observations where BMC could improve dust management practices. It is noted that further comments on dust management may be an outcome of the Independent Review as required under Condition Schedule 4, Condition 4. It is further noted that DPIE has issued BMC with Notices in February 2020 to provide information in respect of an investigation into compliance with this condition.</p>	<p>* It is suggested that an air quality specialist review and confirm that the wind speed trigger (detailed in the AQMP) based over a 1-hour period is appropriate.</p> <p>* During wind levels marginally below the trigger criteria of 10m/s, BMC conduct further mitigation to improve dust management. This could include increased frequency of visual monitoring of dust levels and increased re-assignment/shut-down of trucks and equipment when significant dust is observed; as well as re-assignment of water carts (essentially more frequent and responsive implementation of existing controls).</p> <p>* It is suggested that a weather specialist review the location of the wind monitor referred to in Table 11 of the AQMP and determine if it is providing data that is representative. As required, update the relevant sections of the AQMP following this review to address the discrepancy in the AQMP Table 11 which states 10m/s wind speed on site, versus actual gauge which is near the racecourse rather than at the mine.</p> <p>* Include the CER allocated emissions baseline of 443,494 t CO<sub>2</sub>-e, that is used as an upper limit for GHG management, in the GHG section of the AQMP.</p>

<p>20</p>	<p><b>Air Quality Management Plan</b> The Applicant must prepare a detailed Air Quality Management Plan for the development to the satisfaction of the Secretary. This plan must:</p> <p>(a) be prepared in consultation with the EPA and Council, and submitted to the Secretary for approval within 6 months of the date of this consent; (b) describe the measures that would be implemented to ensure compliance with air quality criteria and operating conditions of this consent; (c) describe the proposed air quality management system; and (d) include an air quality monitoring program that:</p> <ul style="list-style-type: none"> <li>* uses a combination of real-time monitors and supplementary monitors to evaluate the performance of the development against the air quality criteria in this consent;</li> <li>* adequately supports the proactive and reactive air quality management system;</li> <li>* evaluates and reports on:             <ul style="list-style-type: none"> <li>o the effectiveness of the air quality management system; and</li> <li>o compliance with the air quality operating conditions; and</li> </ul> </li> <li>* defines what constitutes an air quality incident, and includes a protocol for identifying and notifying the Department and relevant stakeholders of any air quality incidents.</li> </ul> <p>The Applicant must implement the management plan as approved by the Secretary.</p>	<p>Not Verified</p>	<p><u>Preparation:</u> Air Quality Management Plan (AQMP) dated 12/5/2017. * Letter from DPIE dated 21/3/2017 approving the AQMP provided in Appendix B. * The AQMP has since been updated but remains as a draft as it awaits regulatory approval. The draft revised AQMP, dated 29/4/2019, was submitted to DPIE via email on 29/4/2019.</p> <p>(a) N/A - Outside audit period. Section 2.1 discusses consultation with EPA &amp; Council. (b) Measures that would be implemented to ensure compliance with air quality criteria and operating conditions - Section 3. (c) Air quality management system - Section 3 to 8. (d) • Combination of real-time monitors and supplementary monitors to evaluate the performance of the development against the air quality criteria - Sections 4.2.1 to 4.2.3. • Adequately supports the proactive and reactive air quality management system - Section 4.3. • Evaluates and reports on: o The effectiveness of the air quality management system - Section 7.1. o Compliance with the air quality operating conditions - Section 7.1. • Defines what constitutes an air quality incident, and includes a protocol for identifying and notifying the Department and relevant stakeholders of any air quality incidents - Sections 7.4.1 and 7.5.1.</p> <p><u>Observation:</u> The AQMP does not include details about SSD-5170, Mod 4. <u>Observation:</u> Some references to sections in Table 1 are incorrect. <u>Observation:</u> The long-term criteria for particulate matter &lt;10 um (PM10) in the AQMP is incorrect. It does not match the criteria in the project consent. The draft updated version of the AQMP dated 29/4/2019 includes all of these.</p> <p><u>Implementation:</u> * Bengalla received an EPA Notice to Provide Information and/or Records (Notice Number 1574086), dated 9 January 2019. The information required was regarding EPL 6538 dust monitors EPA22, EPA23 and EPA24. The BMC provided their response to the EPA Notice, including calibration records, monthly monitoring schedules, Purchase Orders and 2017, 2018 and 2019 AECOM environmental monitoring (including dust) proposals. * Dispatch record from 4/12/2019 indicates that the excavator (Ex 4) was moved and works in rehabilitation area were stopped due to high winds. * During site inspection noted: - Water cart watering haul roads-sized correctly. Sizing based on the results of a Water Cart Fill Point Selection report, dated November 2017; - Air quality monitoring devices in the field (including deposition gauges); and - During windy days (greater than 10m/s at the wind measuring location) machinery in outer and higher areas of the pit were shut down. Coal was still being hauled.</p> <p>* Machinery shutdowns in and outside of the pit were undertaken on 2 December 2019 and 3 December 2019. Measures undertaken on 2 December 2019 appeared to be more effective than measures being undertaken on 3 December 2019. On 2 December wind was higher than 10m/s and this triggered the requirement to shut down operating machinery in and near the pit. On 3 December wind was less than 10m/s and BMC only shut down machinery where dust was not localised.</p> <p>* Further discussion of dust control measures and site observations are included in condition 19.</p> <p><u>Observation:</u> AQMP Table 11 states 10m/s dust on site, versus actual gauge which is not on mine but near racecourse.</p> <p><u>Summary:</u> Many aspects of the mitigation measures defined in the AQMP plan were being implemented as described above. As per discussion for Condition 19, it was considered that on day 2 of the site inspections, some measures could have been implemented more rapidly to minimise dust generation in some areas of the operation. It is noted that DPIE has issued Notices that require BMC to provide information to DPIE as part of an investigation into BMC's compliance with the AQMP (February 2020). It is understood BMC are preparing these documents for issue. As this matter is being investigated by DPIE, it is considered inappropriate to pre-empt the investigation by determining compliance for this condition. As such, the condition compliance status is deemed "Not Verified".</p>	<p>* Keep progressing the approval of the revised AQMP in cooperation with DPIE. * Refer to recommendations for Condition 19 above.</p>
<p>21</p>	<p><b>METEOROLOGICAL MONITORING</b> During the life of the development, the Applicant must ensure that there is a suitable meteorological station operating in the vicinity of the site that:</p> <p>(a) complies with the requirements in the Approved Methods for Sampling of Air Pollutants in New South Wales guideline; and (b) is capable of continuous real-time measurement of temperature lapse rate in accordance with the NSW Industrial Noise Policy, unless a suitable alternative is approved by the Secretary following consultation with the EPA.</p>	<p>Compliant</p>	<p>a) The Meteorological station was considered to be operated in accordance with the Approved Methods for Sampling of Air Pollutants in New South Wales guideline based on the Monthly Meteorological Report, dated 11/1/2018, that refers to the guideline. b) Screen shot of the Environmental Monitoring Station Desktop indicates that real-time temperature is monitored.</p> <p>* In regards to appropriate positioning of the meteorological station: - Letter from BMC to DECC (now EPA), dated 22/8/2007, in regards to the relocation of the meteorological station to its current position. - Letter from DECC (now EPA) to BMC, dated 30/8/2007, approving the relocated position of the meteorological station.</p>	
<p>22</p>	<p><b>WATER</b> <b>Water Supply</b> The Applicant must ensure that it has sufficient water during each stage of the development, and if necessary, adjust the scale of mining operations to match its available water supply.  Note: Under the Water Act 1912 and/or the Water Management Act 2000, the Applicant is required to obtain necessary water licences for the development.</p>	<p>Compliant</p>	<p>* Two main Water Access Licence (WALs) (41547 and 1106) held for the site by BMC. WALs permit access to 6,017 units of water. *According to the 2017 Annual Review: - Water Balance was in excess. *According to the 2018 Annual Review: - Water Balance was in deficient * 2019 Water Balance not available at the time of the audit (not verified). * Operations reported that they minimise the use of water, for example, water from the WWTP and CHPP is recycled. Recycled water is used in the CHPP and also used on haul roads. * According to site communications the approximately 1,500 ML of water is used each year.</p>	
<p>23</p>	<p><b>Water Pollution</b> Unless an EPL or the EPA authorises otherwise, the Applicant must comply with section 120 of the POEO Act and the Protection of the Environment Operations (Hunter River Salinity Trading Scheme) Regulation 2002.</p>	<p>Not Triggered</p>	<p>* According to 2017 &amp; 2018 Annual Reviews no water discharges occurred during these reporting periods. * BMC reported that there were no water discharges from the site during the audit period. Based on this it is concluded that there were no water related pollution events during the audit period.</p>	
<p>24</p>	<p><b>Water Management Performance Measures</b> The Applicant must ensure mining operations comply with the performance measures in Table 12 to the satisfaction of the Secretary.</p>		<p>Refer to responses below:</p>	



<p>o mine water management systems;</p> <ul style="list-style-type: none"> <li>o detailed plans, including design objectives and performance criteria, for: <ul style="list-style-type: none"> <li>o design and management of final voids;</li> <li>o design and management of the emplacement of coal reject materials;</li> <li>o design and management of the temporary Dry Creek diversion infrastructure and discharge points;</li> <li>o reinstatement of drainage lines on the rehabilitated areas of the site; and</li> <li>o control of any potential water pollution from the rehabilitated areas of the site;</li> </ul> </li> <li>o performance criteria for the following, including trigger levels for investigating any potentially adverse impacts associated with the development: <ul style="list-style-type: none"> <li>o mine water management system;</li> <li>o surface water quality of the Hunter River;</li> </ul> </li> <li>o a program to monitor and report on: <ul style="list-style-type: none"> <li>o the effectiveness of the mine water management system; and</li> <li>o surface water flows and quality, stream and riparian vegetation health in the Hunter River potentially affected by the development;</li> </ul> </li> <li>o a plan to respond to any exceedances of the performance criteria, and mitigate and/or offset any adverse surface water impacts of the development; and</li> </ul>	<p>Non-Compliant (Low Risk)</p>	<p>o Surface water quality of the Hunter River - Section 3.7.</p> <ul style="list-style-type: none"> <li>o A program to monitor and report on: <ul style="list-style-type: none"> <li>o The effectiveness of the mine water management system - Section 3.7.</li> <li>o Surface water flows and quality, stream and riparian vegetation health in the Hunter River potentially affected by the development - Section 3.7.</li> </ul> </li> <li>o A plan to respond to any exceedances of the performance criteria, and mitigate and/or offset any adverse surface water impacts of the development - Section 7.1 &amp; Appendix E.</li> </ul> <p><b>Observation:</b> The WMP refers to the DPE and Department of Industry - Water (DoI-Water) rather than their current names.</p> <p><b>Implementation:</b></p> <ul style="list-style-type: none"> <li>* BMC reported that there has been no discharge of water off-site during the audit period.</li> <li>* Letter from WSP dated 28/11/2019 confirms compliance with the following performance measures: clean water diversion and storage infrastructure; sediment dams; and mine water storages.</li> <li>* During site inspection noted new dams, clean water diversions and erosion and sediment controls.</li> <li>* <b>Observation:</b> during the site inspection noted minor scouring in the creek bank adjacent to the intersection of Bengalla Road and Old Bengalla Road (PHOTO 5).</li> <li>* The 2017 and 2018 Bank Stability, Stream and Riparian Vegetation Assessments for sites outside or on the boundary of the project site indicate that water quality and baseline channel stability for the sites monitored was maintained from 2017 to 2018. <b>Observation:</b> The draft 2019 Stream and Riparian Vegetation Assessment indicated that there was a reduction in bank stability and water quality at sites monitored (See condition 24 above for more detailed discussion)</li> <li>* According to site communications drains around the CHPP are cleaned out every 4 weeks. Screen shot provided of upcoming and past Work Tickets for clearing out drains. The Work tickets cover a 12 month period.</li> <li>* Annual inspections of WWTP by GHD attached to 2017-2018 Annual Return and 2018-2019 Annual Return.</li> </ul>	<p>Bengalla Road and Old Bengalla Road.</p> <ul style="list-style-type: none"> <li>* See above recommendation related to bank stability.</li> </ul>															
<p>(iii) Groundwater Management Plan, which includes:</p> <ul style="list-style-type: none"> <li>o detailed baseline data on groundwater levels, yield and quality in the region, and privately- owned groundwater bores, that could be affected by the development;</li> <li>o groundwater impact assessment criteria, including trigger levels for investigating any potentially adverse groundwater impacts;</li> <li>o a program to monitor and report on: <ul style="list-style-type: none"> <li>o the seepage/leachate from water storages, emplacements, backfilled voids, and final voids;</li> <li>o the impacts of the development on: <ul style="list-style-type: none"> <li>o groundwater inflows to the open cut pits;</li> <li>o regional aquifers;</li> </ul> </li> <li>o groundwater supply of potentially affected landowners;</li> <li>o the Hunter River alluvial aquifer; and</li> <li>o any groundwater dependent ecosystems and riparian vegetation; and</li> <li>o base flows to the Hunter River;</li> </ul> </li> <li>o a program to validate the groundwater model for the development, including an independent review of the model with every independent environmental audit, and compare the monitoring results with modelled predictions; and</li> <li>o a plan to respond to any exceedances of the groundwater assessment criteria.</li> </ul> <p>The Applicant must implement the management plan as approved by the Secretary.</p>	<p>Non-Compliant (Low Risk)</p>	<p><b>Preparation:</b> Groundwater Management Plan (included in the WMP, dated January 2019).</p> <ul style="list-style-type: none"> <li>* Detailed baseline data on groundwater levels, yield and quality in the region, and privately- owned groundwater bores, that could be affected by the development - Sections 6.2 &amp; 6.3.</li> <li>* Groundwater impact assessment criteria, including trigger levels for investigating any potentially adverse groundwater impacts - Sections 6.6 &amp; Appendix E.</li> <li>* A program to monitor and report on: <ul style="list-style-type: none"> <li>o The seepage/leachate from water storages, emplacements, backfilled voids, and final voids - Sections 6.5 &amp; 8.0.</li> <li>o The impacts of the development on: <ul style="list-style-type: none"> <li>o Groundwater inflows to the open cut pits - Sections 6.5 &amp; 8.0.</li> <li>o Regional aquifers - Sections 6.5 &amp; 8.0.</li> <li>o Groundwater supply of potentially affected landowners - Sections 6.5 &amp; 8.0.</li> <li>o The Hunter River alluvial aquifer - Sections 6.5 &amp; 8.0.</li> </ul> </li> <li>o Any groundwater dependent ecosystems and riparian vegetation - Section 7.0 of the BMC Biodiversity Assessment includes the requirement of ecological monitoring.</li> <li>o Base flows to the Hunter River - Section 6.5.</li> </ul> </li> <li>* A program to validate the groundwater model for the development, including an independent review of the model with every independent environmental audit, and compare the monitoring results with modelled predictions - Section 6.4.</li> <li>* A plan to respond to any exceedances of the groundwater assessment criteria - Section 7.1 &amp; Appendix E.</li> </ul> <p><b>Implementation:</b></p> <ul style="list-style-type: none"> <li>* Groundwater monitoring program undertaken during the audit period, with results reported in the 2017 and 2018 Annual Reviews. Comparison with modelled predictions included in 2017 &amp; 2018 Annual Reviews.</li> <li>* <b>Non-compliant:</b> Groundwater inflows to the Bengalla mine open cut exceeded the annual entitlement under 20BL 169798, as reported in the 2018 Incident Register and 2017 and 2018 Annual Reviews. BMC reported that they lodged an application in 2015 with the then Office of Water NSW to increase the allocation to 325ML. The increase has not yet been allocated to BMC.</li> <li>* <b>Observation:</b> The 2017 Annual Review reported that "three regional alluvium bores triggered the exceedance protocol due to low water levels in 2017" and that there was groundwater quality trigger events for pH and EC values at various bores.</li> <li>- <b>Observation:</b> The 2018 Annual Review reported that two sites (BG3 and BG5) had groundwater level trigger events in 2018 and that ten sites had groundwater quality trigger events in 2018.</li> <li>* 2018 Incident Register noted in May 2018 groundwater seepage was occurring in two areas: <ul style="list-style-type: none"> <li>- An area south of Wybong Road and west of Dry Creek; and</li> <li>- Clean Water Dam 1 western cut wall.</li> </ul> </li> <li>DPIE, EPA and the Dam Safety Committee (DSC) were advised, investigations were undertaken and the incident closed out, with no further action required.</li> <li>* 2018 Incident Register noted in May 2018 groundwater seepage events occurred in two areas: an area south of Wybong Road and west of Dry Creek and Clean Water Dam 1 western cut wall. An investigation report was prepared by BMC and issued to DPIE, EPA and DSC. DSC requested in a letter dated 14/12/2018 that BMC address the recommendations in the investigation report. BMC reported (in the Incident Report) that no further action required and monitoring continuing.</li> <li>* No groundwater incidents noted in the 2019 Incident Register.</li> </ul> <p>Auditors have not completed any technical assessment of the groundwater issues reported and have relied on third party reports to assess compliance. Auditors have not made any recommendations in relation to addressing any groundwater issues on site.</p> <p>BMC are considered Non Compliant with the condition on the basis that groundwater inflows to the Bengalla mine open cut exceeded the annual entitlement under 20BL 169798.</p>	<ul style="list-style-type: none"> <li>* Continue to work with the Natural Resources Access Regulator (NRAR) to increase the annual entitlement under 20BL 169798.</li> <li>* Continue to undertake groundwater monitoring at the site and undertake investigations (using third party technical specialists as appropriate) if groundwater level and groundwater quality criteria are triggered. Respond as appropriate to any triggers.</li> </ul>															
<p>26</p> <p><b>BIODIVERSITY</b></p> <p><b>Biodiversity Offset Strategy</b></p> <p>The Applicant must implement the biodiversity offset strategy as outlined in Table 13 and as generally described in the EIS (and shown in Appendix 7), to the satisfaction of the Secretary.</p>	<p>Observation</p>	<p><b>Preparation:</b></p> <p>Biodiversity Offset Management Plan (BOMP) dated February 2017.</p> <ul style="list-style-type: none"> <li>* Letter from Department of the Environment and Energy (DoEE) dated 8/03/2017 approving the BOMP.</li> <li>* Offsets areas and required management: Section 5.1 and Figure 5 BOMP.</li> </ul> <p><b>Observation:</b> The BOMP has not been updated to reflect Mod 3 &amp; Mod 4.</p> <p><b>Implementation:</b></p> <ul style="list-style-type: none"> <li>* 2017 &amp; 2018 Annual Reviews reported a number of management programs at offset properties and ecological monitoring undertaken at these sites during 2017 and 2018.</li> <li>* Pre- and Post- Grazing Assessment of the Kenalea Biodiversity Offset Area by Cumberland Ecology indicates controlled grazing undertaken at the site.</li> <li>* According to site communications pulse (control) grazing at the Kenalea Biodiversity Offset Area was undertaken around January 2018.</li> <li>* 2018 Weed Inspection Reports indicate results of weed inspections undertaken at offset areas in 2018.</li> <li>* 2017 Weed Control Reports indicate weed control works undertaken at offset areas in 2017.</li> <li>* Ecological monitoring has been undertaken at offset properties in 2017, 2018 &amp; 2019; as indicated by the 2017, 2018 and 2019 Biodiversity Offsets Areas Annual Monitoring Reports, by Cumberland Ecology.</li> </ul>	<ul style="list-style-type: none"> <li>* Update the BOMP to reflect Mod 3 &amp; Mod 4.</li> </ul>															
<p>Table 13 Biodiversity Offset Strategy</p> <table border="1"> <thead> <tr> <th>Area</th> <th>Offset Type</th> <th>Minimum Size (hectares)</th> </tr> </thead> <tbody> <tr> <td>Kenalea Properties Offset Area</td> <td>Existing vegetation to be managed and enhanced</td> <td>4,096</td> </tr> <tr> <td>Black Mountain Offset Area</td> <td>Existing vegetation to be managed and enhanced</td> <td>1,222</td> </tr> <tr> <td>Merriva River Offset Area</td> <td>Existing vegetation to be managed and enhanced</td> <td>897</td> </tr> <tr> <td><b>Total</b></td> <td></td> <td><b>6,215</b></td> </tr> </tbody> </table> <p>Note: To identify the areas referred to in Table 13 refer to the applicable figures in Appendix 7.</p>	Area	Offset Type	Minimum Size (hectares)	Kenalea Properties Offset Area	Existing vegetation to be managed and enhanced	4,096	Black Mountain Offset Area	Existing vegetation to be managed and enhanced	1,222	Merriva River Offset Area	Existing vegetation to be managed and enhanced	897	<b>Total</b>		<b>6,215</b>	<p>Note</p>	<p>Noted</p>	
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27	<p>The Applicant must ensure that the offset strategy and/or rehabilitation strategy is focused on the establishment of:</p> <p>(a) significant and/or threatened plant communities, including:</p> <ul style="list-style-type: none"> <li>• Box Gum Woodland;</li> <li>• Central Hunter Ironbark – Spotted Gum – Grey Box Woodland;</li> <li>• Hunter Floodplain Red Gum Woodland;</li> </ul> <p>(b) significant and/or threatened plant species, including the:</p> <ul style="list-style-type: none"> <li>• Tiger Orchid (<i>Cymbidium canaliculatum</i>);</li> <li>• Pine Donkey Orchid (<i>Diuris tricolor</i>);</li> <li>• Weeping Myall (<i>Acacia pendula</i>);</li> <li>• River Red Gum (<i>Eucalyptus camaldulensis</i>);</li> <li>• Austral Toadflax (<i>Thesium australe</i>); and</li> </ul> <p>(c) habitat for significant and/or threatened fauna species, including the:</p> <ul style="list-style-type: none"> <li>• Brown Treecreeper;</li> <li>• Speckled Warbler;</li> <li>• Black-chinned Honeyeater;</li> <li>• Grey-crowned Babbler;</li> <li>• Squirrel Glider; and</li> <li>• Yellow-bellied Sheath-tail-bat.</li> </ul>	Compliant	<p><u>Preparation:</u> BOMP dated 23/2/2017.</p> <p>(a) BOMP - Section 5.1, MOP - Refers to BOMP. (b) BOMP - Section 5.1, MOP - Refers to BOMP. (c) BOMP - Section 5.1, MOP - Refers to BOMP.</p> <p><u>Implementation:</u></p> <ul style="list-style-type: none"> <li>* 2017 &amp; 2018 Annual Reviews report ecological monitoring being undertaken at offset areas to build a dataset such that key performance criteria for these areas can be assessed.</li> <li>* Invoices for weed, pest and fire management activities undertaken at offset areas, during 2017, 2018 and 2019.</li> <li>* 31/7/2018 invoice for installation of signage at offset areas.</li> <li>* 2017, 2018 &amp; 2019 Offsets Ecological Monitoring Reports report on the health of the relevant plant communities.</li> </ul>	* Include in 2019 Annual Review an assessment against key performance criteria for the offset areas based on ecological monitoring data collected from 2016 onwards.
28	<p>Long Term Security of Offsets</p> <p>28. Within 2 years of the commencement of development under this consent, unless otherwise agreed with the Secretary, the Applicant must make suitable arrangements to provide appropriate long term security for the land within the Biodiversity Offset Strategy identified in Table 13 through a Biobanking Agreement under the Threatened Species Conservation Act 1995 (or an alternative mechanism agreed with OEH), to the satisfaction of the Secretary.</p>	Compliant	<ul style="list-style-type: none"> <li>* Letter to DPIE from BMC, dated 17 August 2018, in regards to an extension of time for the Long Term Security of Offsets.</li> <li>* Letter from DPIE dated 29/9/2019 granted an extension of time to finalise and secure a Biobanking Agreement. The time extension was until 1 October 2018.</li> <li>* Letter from DPIE dated 25/9/2018 approved extension until 30/9/2019, to allow for BMC to look at an alternative to a Long Term Security for the offset areas.</li> <li>* Letter from DPIE dated 27/9/2019 approved further extension until 30/9/2020.</li> </ul>	
29	<p><b>Biodiversity Management Plan</b></p> <p>The Applicant must prepare a Biodiversity Management Plan for the development to the satisfaction of the Secretary. This plan must:</p> <p>(a) be prepared in consultation with OEH, and submitted to the Secretary for approval within 6 months of the date of this consent;</p> <p>(b) describe how the implementation of the offset strategy would be integrated with the overall rehabilitation of the site;</p> <p>(c) establish baseline data for the existing habitat in the biodiversity offset areas and on the site;</p> <p>(d) include:</p> <p>(i) a description of the short, medium, and long term measures that would be implemented to:</p> <ul style="list-style-type: none"> <li>• implement the biodiversity offset strategy; and</li> <li>• manage the remnant vegetation and habitat on the site;</li> </ul> <p>(ii) include detailed performance and completion criteria for evaluating the performance of the biodiversity offset strategy and triggering remedial action (if necessary);</p> <p>(iii) a detailed description of the measures that would be implemented over the next 3 years, including the procedures to be implemented for:</p> <ul style="list-style-type: none"> <li>• enhancing the quality of existing vegetation and fauna habitat in the biodiversity offset areas;</li> <li>• restoring native vegetation and fauna habitat on the biodiversity offset areas and rehabilitation areas through focusing on assisted natural regeneration, targeted vegetation establishment and the introduction of naturally scarce fauna habitat features (where necessary);</li> <li>• collecting and propagating seed;</li> <li>• protecting vegetation outside the disturbance area;</li> <li>• managing salinity;</li> <li>• undertaking pre-clearance surveys;</li> <li>• managing impacts on fauna;</li> <li>• salvaging and reusing material from the site for habitat enhancement;</li> <li>• translocation of threatened flora from the site in accordance with the Guidelines for the Translocation of Threatened Plants in Australia (Vallee et al., 2004);</li> <li>• controlling weeds and feral pests;</li> <li>• managing grazing and agriculture;</li> <li>• controlling access; and</li> <li>• bushfire management;</li> </ul> <p>(iv) include a seasonally-based program to monitor and report on the effectiveness of these measures, and progress against the detailed performance and completion criteria;</p> <p>(v) identify the potential risks to the successful implementation of the biodiversity offset strategy, and include a description of the contingency measures that would be implemented to mitigate these risks; and</p> <p>(vi) include details of who would be responsible for monitoring, reviewing, and implementing the plan.</p> <p>The Applicant must implement the management plan as approved by the Secretary.</p>	Non-Compliant (Low Risk)	<p><u>Preparation:</u> Biodiversity Management Plan dated 19/6/2017.</p> <ul style="list-style-type: none"> <li>* Letter from DPIE dated 18/8/2017 approving the Biodiversity Management Plan provided in Appendix A.</li> <li>(a) Prepared in consultation with OEH, and submitted to the Secretary for approval within 6 months of the date of this consent - N/A - Outside audit period. Section 2.2 &amp; Appendix A.</li> <li>(b) Describe how the implementation of the offset strategy would be integrated with the overall rehabilitation of the site - Biodiversity Offset Management Plan (BOMP) Section 5.3.</li> <li>(c) Establish baseline data for the existing habitat in the biodiversity offset areas and on the site - Biodiversity Management Plan Section 3 &amp; BOMP Section 4.0.</li> <li>(d) Include:</li> <li>(i) A description of the short, medium, and long term measures that would be implemented to:</li> <ul style="list-style-type: none"> <li>• Implement the biodiversity offset strategy - BOMP Sections 6.0 &amp; 7.0.</li> <li>• Manage the remnant vegetation and habitat on the site - Biodiversity Management Plan Section 4.0.</li> </ul> <li>(ii) Include detailed performance and completion criteria for evaluating the performance of the biodiversity offset strategy and triggering remedial action (if necessary) - BOMP Sections 9.3, 9.4 and 9.5.</li> <li>(iii) A detailed description of the measures that would be implemented over the next 3 years, including the procedures to be implemented for:</li> <ul style="list-style-type: none"> <li>• Enhancing the quality of existing vegetation and fauna habitat in the biodiversity offset areas - BOMP Sections 6.0 and 7.0.</li> <li>• Restoring native vegetation and fauna habitat on the biodiversity offset areas and rehabilitation areas through focusing on assisted natural regeneration, targeted vegetation establishment and the introduction of naturally scarce fauna habitat features (where necessary) - BOMP Sections 6.2 and 7.0.</li> <li>• Collecting and propagating seed - Biodiversity Management Plan Section 4.2.5.</li> <li>• Protecting vegetation outside the disturbance area - Biodiversity Management Plan Sections 4.2.1 &amp; 4.2.2.</li> </ul> </ul> <p>• Managing salinity - BOMP Section 7.1.</p> <p>• Undertaking pre-clearance surveys - Biodiversity Management Plan Section 4.2.1.</p> <p>• Managing impacts on fauna - Biodiversity Management Plan Section 4.2.</p> <p>• Salvaging and reusing material from the site for habitat enhancement - Biodiversity Management Plan Section 4.2.3.</p> <p>• Translocation of threatened flora from the site in accordance with the Guidelines for the Translocation of Threatened Plants in Australia (Vallee et al., 2004) - Biodiversity Management Plan Section 4.2.</p> <p>• Controlling weeds and feral pests - Biodiversity Management Plan Sections 4.3 and 4.4.</p> <p>• Managing grazing and agriculture - BOMP Sections 7.1 and 8.3.</p> <p>• Controlling access - BOMP Section 8.1.</p> <p>• Bushfire management - BOMP Section 8.4.</p> <p>(iv) Include a seasonally-based program to monitor and report on the effectiveness of these measures, and progress against the detailed performance and completion criteria - BOMP Sections 9.0 and 10.3.</p> <p>(v) Identify the potential risks to the successful implementation of the biodiversity offset strategy include a description of the contingency measures that would be implemented to mitigate these risks - BOMP Section 8.8 and Appendix C.</p> <p>(vi) Include details of who would be responsible for monitoring, reviewing, and implementing the plan - BOMP Section 11.</p> <p><u>Observation:</u> The Biodiversity Management Plan has not been updated in accordance with Mod 4.</p> <p><u>Observation:</u> The presence of <i>Galenia pubescens</i> was observed across many areas of the mine, notably in area of disturbance and rehabilitation.</p> <p><u>Implementation:</u></p> <p><u>Non-Compliant:</u> As reported in the 2017 Annual Review, an area of approximately 1.4 ha area was cleared in October 2017 without the approval of a Ground Disturbance Permit (GDP). Area identified as a woodland vegetation community with exotic understorey.</p> <p>An area of 0.09 ha was also cleared in June 2017 without a GDP. Area cleared was identified as a Derived Native Grassland vegetation community.</p> <p><u>Non-Compliant:</u> Seed has not been harvested during the audit period, in accordance with Section Table 8 of the Biodiversity Management Plan.</p> <p>* <u>Observation</u> - <i>Galenia pubescens</i> outbreaks at the site.</p> <ul style="list-style-type: none"> <li>* 2017 and 2018 Annual Reviews indicate weed and pest management work undertaken at the mine site.</li> <li>* 2017, 2018 and 2019 Weed Action Plans indicates planned weed management and monitoring works.</li> <li>* Invoices for weed and pest management activities undertaken at mine areas, during 2017, 2018 and 2019.</li> <li>* According to site communications 2020 Weed Action Plan will focus on the site and adjacent dairy.</li> <li>* Salvaged material (tree limbs etc) near to the "dehab" site and also on top of the dump.</li> <li>* Clearance and Pre-Clearance Survey Reports dated 2017, 2018 &amp; 2019 for various areas across the mine operations.</li> <li>* Selection of completed Ground Disturbance Permits provided for the audit report.</li> </ul> <p><u>Non-Compliance Summary:</u> On two occasions it was reported that BMC had not fully implemented the Bengalla Biodiversity Management Plan, with the GDC process not implemented twice in 2017 and seed not harvested during the audit period. On this basis BMC are considered Non Compliant with the condition.</p>	<ul style="list-style-type: none"> <li>* Undertake weed management work across the mine and the land managed by BMC to control outbreaks of <i>Galenia pubescens</i>.</li> <li>* Collect seed from site, to be used in future revegetation works, as required in the Biodiversity Management Plan.</li> <li>* Update the Biodiversity Management Plan in accordance with Mod 4.</li> <li>* Ensure full implementation of the Ground Disturbance Permit process in the future.</li> </ul>

29A	During construction and maintenance of the Northern Diversion Levee, the Applicant must ensure that impacts to native vegetation (particularly EECs) are minimised as far as is reasonable and feasible, to the satisfaction of the Secretary.	Observation	<p>BMP section 4.5.3.</p> <ul style="list-style-type: none"> <li>* Prior to the clearing of any native vegetation for the construction of the levee, BMC utilise GDP procedure, including pre-clearance and clearance surveys. Pre-clearance survey report for an area west of the Northern Diversion Levee (BF-01), dated 5/11/2019 was sighted. Survey Report indicated that no clearing was required.</li> <li>* The MOP does not have any rehabilitation requirements for the Northern Diversion Levee nor adjoining areas.</li> <li>* <u>Observation:</u> During the site inspection weeds were noted in and adjacent to the diversion levee (PHOTO 7).</li> </ul>	* Undertake weed management works throughout the site, including at to the northern diversion levee.
30	<p><b>Conservation Bond</b> Within 6 months of the approval of the Biodiversity Management Plan, the Applicant must lodge a conservation bond with the Department to ensure that the biodiversity offset strategy is implemented in accordance with the performance and completion criteria of the Biodiversity Management Plan. The sum of the bond shall be determined by: (a) calculating the full cost of implementing the biodiversity offset strategy (other than land acquisition costs); and (b) employing a suitably qualified quantity surveyor to verify the calculated costs, to the satisfaction of the Secretary.</p> <p>The calculation of the conservation bond must be submitted to the Department for approval at least 1 month prior to lodgement of the final bond.</p> <p>If the offset strategy is completed generally in accordance with the completion criteria in the Biodiversity Management Plan to the satisfaction of the Secretary, the Secretary will release the bond.</p> <p>If the offset strategy is not completed generally in accordance with the completion criteria in the Biodiversity Management Plan, the Secretary will call in all, or part of, the conservation bond, and arrange for the satisfactory completion of the relevant works.</p> <p><u>Notes:</u></p> <ul style="list-style-type: none"> <li>* Alternative funding arrangements for long term management of the biodiversity offset strategy, such as provision of capital and management funding as agreed by OEH as part of a Biobanking Agreement or transfer to conservation reserve estate (or any other mechanism agreed with OEH) can be used to reduce the liability of the conservation bond.</li> <li>* The sum of the bond may be reviewed in conjunction with any revision to the biodiversity offset strategy or the completion of major milestones within the approved plan.</li> </ul>	Administrative Non-Compliance	<ul style="list-style-type: none"> <li>* "Bengalla Conservation Bond" dated 17/11/2016 indicates how the conservation bond for Bengalla Mine was calculated.</li> <li>* Letter from DPIE dated 29/9/2017 states that the calculation of the conservation bond is due to the department on 18/11/2018 and the final bank guarantee must be lodged by 18/2/2018.</li> <li>* Email from BMC to DPIE dated 12/1/2018 provided the calculation of the conservation bond and the conservation bond quantity surveyor review.</li> <li>* Email from DPIE to BMC dated 16/1/2018 requests an amendment of the bond calculation and re-lodgement of the calculation by 2/2/2018.</li> <li>* Email from BMC to DPIE dated 2/02/2018 re-lodging the bond calculation.</li> <li>* Email from DPIE to BMC dated 6/2/2018 approving the conservation bond calculation.</li> <li>* Email from BMC to DPIE dated 1/3/2019 noting that the payment of the bond may take up to one month.</li> <li>* <u>Non-compliant:</u> Email from DPIE dated 2/3/2018 noted that "the lodgement of the bond has been delayed" and that "the deadline of 18/2/2018 has passed and the Department is unable to extend this deadline"</li> <li>* Email from BMC dated 29/11/2018 noted that the conservation bond had been paid.</li> </ul> <p><u>Non-Compliance Summary:</u> BMC did not lodge a conservation bond with DPIE within 6 months of the approval of the Biodiversity Management Plan, as required of the condition.</p>	* Lodge a conservation bond with DPIE as required of the condition.
31	<p><b>HERITAGE</b></p> <p><b>Aboriginal Heritage Management Plan</b> The Applicant must prepare an Aboriginal Heritage Management Plan for the development to the satisfaction of the Secretary. This plan must: (a) be prepared in consultation with OEH and the relevant Registered Aboriginal Parties, and submitted to the Secretary for approval within 6 months of the date of this consent; (b) include a program/procedures for: * salvage, excavation and/or management of Aboriginal sites and potential archaeological deposits within the project disturbance area; * assessment and removal of scarred trees; * protection and monitoring of Aboriginal sites outside the project disturbance area; * managing the discovery of any new Aboriginal objects or skeletal remains during the development; * maintaining and managing access to archaeological sites by the Registered Aboriginal Parties; and * ongoing consultation and involvement of the Registered Aboriginal Parties in the conservation and management of Aboriginal cultural heritage on the site.</p> <p>The Applicant must implement the management plan as approved by the Secretary.</p>	Compliant	<p><u>Preparation:</u> Aboriginal Cultural Heritage Management Plan (ACHMP), dated 9/5/2017.</p> <p>(a) ACHMP Appendix B. The ACHMP was approved on 18/8/29017. (b) Include a program/procedures for: * Salvage, excavation and/or management of Aboriginal sites and potential archaeological deposits within the project disturbance area - ACHMP Section 6; * Assessment and removal of scarred trees - ACHMP Section 6.3; * Protection and monitoring of Aboriginal sites outside the project disturbance area - ACHMP Section 5.2; * Managing the discovery of any new Aboriginal objects or skeletal remains during the development - ACHMP Section 7; * Maintaining and managing access to archaeological sites by the Registered Aboriginal Parties (RAPs) - ACHMP Section 5.4; and * Ongoing consultation and involvement of the RAPs in the conservation and management of Aboriginal cultural heritage on the site - ACHMP Section 4.1.2.</p> <p><u>Implementation:</u> * According to Section 6.1 of the ACHMP the AECOM Bengalla Continuation of Mining Project: Aboriginal Archaeological Salvage Program (Salvage Report), dated 14 February 2017, "advises no further surface collection is required within the Project Disturbance area at Bengalla." * Letter from OEH to BMC dated 29/5/2017 notes that the Salvage Report satisfies Section 6.3.4 of the of the ACHMP, in accordance with Schedule 3, Condition 31 of SSD 5170. The letter also notes that they have no concerns with respect to the Aboriginal archaeological salvage conducted at the Bengalla Continuation of Mining Project. * Sited salvaged artefacts stored on-site in a locked cupboard during site inspection. * According to site communications all artefacts at the site have been salvaged. * According to site communications no unexpected finds and no skeletal remains found during audit period.</p> <p>* According to site communications no scar trees assessed or removed during the audit period. No mention of scar trees in the 2017 &amp; 2018 Annual Reviews. * The 2017 Annual Review notes that Aboriginal heritage sites on BMC land were preserved, Aboriginal Heritage Awareness included into the site induction package, the Salvage Report was distributed to the BMC RAPs and a temporary 'keeping place' at Bengalla has been provided for salvaged Aboriginal heritage items. * The 2018 Annual Review notes areas disturbed in the course of Bengalla's activities in 2018 were assessed for potential impacts to Aboriginal archaeology as part of the GDP process and that BMC advised the RAP representatives on 19/11/2018 that the salvaged Aboriginal Artefacts are securely stored within the BMC offices. * 2017, 2018 &amp; 2019 Environmental Incident Register notes no incidents regarding Aboriginal heritage items.</p>	* Work with Registered Aboriginal Parties (RAPs) to determine if any party wants the salvaged artefacts currently stored within the BMC offices.
32	<p><b>Historic Heritage Management Plan</b></p> <p>The Applicant must prepare a Historic Heritage Management Plan for the development to the satisfaction of the Secretary. This plan must: (a) be prepared in consultation with the Heritage Branch and Council, and submitted to the Secretary for approval within 6 months of the date of this consent; (b) include the following for the management of other historic heritage on site: * conservation management plans for the Bengalla and Overdene homesteads; * measures to minimise the visual impacts of the development on the Edinglassie and Rous Lench Homesteads; and * a program/procedures for: o photographic and archival recording of potentially affected historic heritage items; o protection and monitoring of historic heritage items outside the project disturbance area; o monitoring, notifying and managing the effects of blasting on potentially affected historic heritage items; and o additional archival recording of any significant historic heritage items requiring demolition (including the Stockyard).</p> <p>The Applicant must implement the management plan as approved by the Secretary.</p>	Observation	<p><u>Preparation:</u> Historic Heritage Management Plan (HHMP), dated 9/5/2017.</p> <p>* Letter from DPIE to BMC dated 18/8/2017 approving the HHMP.</p> <p>(a) Prepared in consultation with the Heritage Branch and Council - Section 3.1 &amp; Appendix A. (b) Conservation management plans for the Bengalla and Overdene homesteads - Section 6.1 and Appendices C and D. * Measures to minimise the visual impacts of the development on the Edinglassie and Rous Lench Homesteads - Section 6.2.1. * A program/procedures for: o Photographic and archival recording of potentially affected historic heritage items - Section 6.7. o Protection and monitoring of historic heritage items outside the project disturbance area - Section 6.0 and Table 5. o Monitoring, notifying and managing the effects of blasting on potentially affected historic heritage items - Section 6.2.2. o Additional archival recording of any significant historic heritage items requiring demolition (including the Stockyard) - Section 6.7.</p> <p><u>Implementation:</u> * During the site inspection the Bengalla homestead, the Overdene homestead (PHOTO 23) and the Keys Family Private Cemetery were viewed. * Photos of the Bengalla homestead, taken during the site inspection, (PHOTO 21 &amp; 22) compared with photographs included in Appendix B of the HHMP, dated 2011, it is apparent that since 2011 significant restoration works have been undertaken by BMC at the homestead. * <u>Observation:</u> Historical items storage appeared disorganised, with some items observed on the floor in one of the rooms at the Bengalla homestead (PHOTO 22). * According to site communications during the audit period expensive work has been undertaken at the Bengalla homestead, and that there is budget allocated to continue restoration works in the years to come. * According to site communications a site inspection of the Keys Cemetery is undertaken every 3 months and maintenance works is undertaken. The cemetery appeared to be well maintained. * 2017 &amp; 2018 Annual Reviews provide details of works undertaken at the Bengalla homestead and Overdene homestead during the audit period. * 2017, 2018 &amp; 2019 Bengalla Homestead Dilapidation Reports by WSP indicate there appears to be no further major degradation since the 2016 inspection. * 2017, 2018 &amp; 2019 Overdene Homestead Dilapidation Reports by WSP indicate there appears to be no further major degradation since the 2016 inspection.</p>	* Investigate ways in which historic items in the Bengalla homestead could be better conserved/preserved or passed on to a local historic society.

33	<p><b>TRANSPORT</b></p> <p><b>Monitoring of Coal Transport</b></p> <p>The Applicant must keep records of the:</p> <p>(a) amount of coal transported from the site in each calendar year;  (b) number of coal haulage train movements generated by the development (on a daily basis); and  (c) make these records available on its website at the end of each calendar year.</p>	Compliant	<p>(a) Coal Transport Reports indicate that 8,899,580 tonne and 9,149,103 tonne of coal was transported from the site during 2017 and 2018, respectively.  - Email from BMC dated 17/12/2019 noted that approximately 9,541,378 tonne of coal was transported from site from 1/1/2019 to 15/12/2019.  (b) Coal Transport Reports indicate that there was 1,008 and 1,050 train movements generated by the site during 2017 and 2018, respectively.  - Email from BMC dated 17/12/2019 noted that there was 1,078 train movements generated by the site from 1/1/2019 to 15/12/2019.  (c) Copies of 2017 &amp; 2018 Coal Transport Reports included on the BMC website.</p>			
34	<p><b>Road Works</b></p> <p>Prior to mining within 200 metres of the Bengalla Link Road, the Applicant must design and construct the realigned road and associated intersections as shown conceptually in Appendix 8 (unless otherwise agreed by Council) to the satisfaction of Council.</p>	Not Triggered	* Outside of the audit period.			
35	<p><b>Road Upgrades and Maintenance</b></p> <p>The Applicant must contribute to the upgrade and maintenance of Thomas Mitchell Drive and its intersections with Denman Road and the New England Highway, proportionate to its impact (based on usage) on that infrastructure, in accordance with the Contributions Study prepared by GHD titled, "Thomas Mitchell Drive Contributions Study, December 2013" (or its latest version), unless otherwise agreed by the Secretary.</p> <p>The road or intersection upgrades referred to in this condition may be satisfied through funding the required upgrades, subject to the agreement of the applicable roads authority, and subject to providing the funding such that the upgrades can be completed within the stated timeframe.</p> <p>For Thomas Mitchell Drive, the contributions must be paid to Council in accordance with the upgrade and maintenance schedule established in accordance with the Contributions Study during the life of the development, unless otherwise agreed with Council.</p> <p>If there is any dispute between the Applicant and Council or the RMS in relation to the funding or completion of the upgrades, then any of the parties may refer the matter to the Secretary for resolution.</p> <p><i>Note:</i> In making a determination about the applicable maintenance contributions for Thomas Mitchell Drive, the Secretary shall take into account the contributions already paid and currently required to be paid towards the maintenance of the local road network surrounding Muswellbrook under this consent and the voluntary planning agreement summarised in Appendix 3.</p>	Not Triggered	<p>* The Contributions Study prepared by GHD titled, "Thomas Mitchell Drive Contributions Study, December 2013"  * According to site communications and receipt dated 18/11/2015 indicates initial contributions for Stages 1, 2 and 3 and 50% of Stage 4 were made within the previous audit period summary.  * According to site communications the contribution for the remaining 50% of Stage 4 has not occurred as these works have not commenced.</p>			
36	<p><b>VISUAL</b></p> <p><b>Visual Amenity and Lighting</b></p> <p>The Applicant must:</p> <p>(a) implement all reasonable and feasible measures to mitigate the visual and off-site lighting impacts of the development;  (b) ensure no outdoor lights shine above the horizontal; and  (c) ensure that all external lighting associated with the development complies with relevant Australian Standards, including Australian Standard AS4282 (INT) 1997 – Control of Obtrusive Effects of Outdoor Lighting, to the satisfaction of the Secretary</p>	Compliant	<p>(a) Lighting managed by the implementation of controls included in the Bengalla procedure PRO-0365 Management of Lighting Impacts from Operations, dated 23/1/2017.  *During the site inspection noted the following at the site:  - Visual bund adjacent to the CHPP;  - Rehabilitation of the waste emplacement; and  - Planting of tree screens around the site.  (b) According to site communications lighting sets are inspected when in operation each shift. The OCE Shift Inspection Report for night shift, dated 23/12/2019, indicates that lighting sets were inspected.  (c) Bengalla PRO-0365, dated 23/1/2017, is consistent with Australian Standard AS4282 (INT) 1997 – Control of Obtrusive Effects of Outdoor Lighting.</p>			
37	<p><b>Additional Visual Impact Mitigation</b></p> <p>Within 6 months of the commencement of development under this consent, the Applicant must prepare a Visual Impact Mitigation Plan for the development to the satisfaction of the Secretary. This plan must:</p> <p>(a) identify the visual receptors within the western and southern view sectors that are likely to have significant direct views of the development;  (b) include a site specific visual impact assessment of each of the visual receptors identified in Table 14, and any other receptors identified during the site verification process, to determine the severity of the visual impact;  (c) describe the additional mitigation measures that could be implemented to reduce the visual impacts of the development on these visual receptors.</p>	Compliant	<p><u>Preparation:</u> Visual Impact Management Plan (VIMP), dated 30/3/2016.  * Letter from DPIE to BMC, dated 14/6/2016, approving the VIMP.</p> <p>(a) Identify the visual receptors within the western and southern view sectors that are likely to have significant direct views of the development - Section 3.3 and Table 1.  (b) Include a site specific visual impact assessment of each of the visual receptors identified in Table 14, and any other receptors identified during the site verification process, to determine the severity of the visual impact - Section 3.4.1.  (c) Describe the additional mitigation measures that could be implemented to reduce the visual impacts of the development on these visual receptors - Section 3.4.2.</p> <p><u>Implementation:</u>  *During the site inspection noted the following at the site:  - Visual bund adjacent to the CHPP;  - Rehabilitation of the waste emplacement; and  - Planting of tree screens around the site.</p>			
	<p>Table 14: Visual receptors</p> <table border="1"> <thead> <tr> <th>Receiver</th> </tr> </thead> <tbody> <tr> <td>106, 105, 109, 112S, 113, 114, 117, 118, 119, 120, 108, 152, 153, 154, 155, 156E, 156S, 168</td> </tr> </tbody> </table> <p><i>Note:</i> To interpret the land referred to in Table 14, see the applicable figure in Appendix 4.</p>	Receiver	106, 105, 109, 112S, 113, 114, 117, 118, 119, 120, 108, 152, 153, 154, 155, 156E, 156S, 168	Note		
Receiver						
106, 105, 109, 112S, 113, 114, 117, 118, 119, 120, 108, 152, 153, 154, 155, 156E, 156S, 168						
38	<p>Within 1 month of the approval of the Visual Impact Mitigation Plan, the Applicant must advise the owners of the visual receptors identified in the plan that they are entitled to additional mitigation measures to reduce the visibility of the development from these visual receptors.</p>	Not Triggered	* Outside audit period.			
39	<p>Upon receiving a written request from the owner of a visual receptor identified in this plan, the Applicant must implement additional visual impact mitigation measures (such as landscaping treatments or vegetation screens) at the visual receptor in consultation with the landowner, and to the satisfaction of the Secretary.</p> <p>These mitigation measures must be reasonable and feasible.</p> <p>If within 3 months of receiving this request from the owner, the Applicant and the owner cannot agree on the measures to be implemented, or there is a dispute about the implementation of these measures, then either party may refer the matter to the Secretary for resolution.</p> <p><i>Note:</i> The additional visual impact mitigation measures must be aimed at reducing the visibility of the development from the identified affected receptors and do not necessarily require measures to reduce visibility of the development from other locations on the affected properties. The additional visual impact mitigation measures do not necessarily have to include measures on the affected property itself (i.e. the additional measures may consist of measures outside the affected property boundary that provide an effective reduction in visual impacts).</p>	Not Triggered	* No visual impact mitigation measures were requested by residents during the audit period, per site communications and the 2017 & 2018 Annual Reviews.			

<p>40</p>	<p><b>Tree Plantings Along Public Roads</b></p> <p>Within 2 years of the commencement of development under this consent, unless the Secretary agrees otherwise, the Applicant must plant tree screening along those sections of Denman Road, Roxburgh Road and Wybong Road that will have direct views of mining operations on site. This screening must be planted, in consultation with Council (and where relevant the RMS), and maintained to the satisfaction of the Secretary.</p>	<p>Observation</p>	<p>* During the site inspection auditors sighted the tree screen recently planted along Roxburgh Road.</p> <p><u>Observation:</u> Auditors noted that there were some trees missing from the Roxburgh Road tree screen.</p> <p>* During site inspection noted the visual bund established along Wybong Road.</p> <p>* BMC have not been able to plant tree screening along Denman Road. Mt Arthur Coal Mine was approached by BMC to plant trees on their land adjacent to Denman Road reserve, due to reserve constraints. Approval was not granted by Mt Arthur to plant the tree screen. BMC prepared a Visual Impact Review Report, dated 7/11/2019, for Denman Road and the report was provided to DPIE in a letter from BMC dated 8/11/2019. According to the 8/11/2019 email, BMC will await DPIE's review of the Report before taking further steps.</p> <p>* BMC submitted a Section S138 notice to Muswellbrook Shire Council in December 2019, in regards to planting visual tree screens within the Denman Road reserve, in accordance with this condition. The works are proposed to be undertaken during February/March 2020.</p> <p>* Meeting Minutes dated 13/12/2017 indicated that BMC consulted with Council in regards to the Roxburgh Road tree screening. According to site communications Roxburgh Road is owned by Muswellbrook Shire Council therefore consultation with RMS is not required.</p> <p>* Four visual complaints received during the audit period. Complaints received on 15/3/2019, 9/5/2019, 1/8/2019 and 14/8/2019.</p>	<p>* Determine how many trees have been lost from the Roxburgh tree screen and replant missing trees.</p>																		
<p>41</p>	<p>At least five years prior to construction of the Bengalla Link Road realignment, or as otherwise agreed by the Secretary, the Applicant must plant tree screening along the proposed Bengalla Link Road realignment. This screening must be planted in consultation with Council and maintained to the satisfaction of the Secretary.</p> <p><i>Note: The planting of tree screening in areas of constructed fill embankments associated with the road realignment shall be undertaken as soon as practicable after completion of the constructed landform</i></p>	<p>Not Triggered</p>	<p>* Not yet undertaken.</p>																			
<p>42</p>	<p><b>BUSHFIRE MANAGEMENT</b></p> <p>The Applicant must:</p> <p>(a) ensure that the development is suitably equipped to respond to any fires on site; and</p> <p>(b) assist the Rural Fire Service and emergency services as much as possible if there is a fire in the surrounding area.</p>	<p>Not Assessed</p>	<p>Noted that Auditors are not bushfire experts and are not competent to assess this condition. Part a of this condition was not assessed.</p> <p>(a) Bengalla Bushfire Management Procedure PRO-0684, dated 1/9/2017, describes firefighting equipment installed and help at the site.</p> <p>* During the site inspection noted the fire truck (LV178) that is kept at the site.</p> <p>(b) Email from BMC to RFS dated 9/9/2019 indicating BMC willingness to help support Rochel Fire Brigade, Wybong Rural Fire Brigade and Stewarts Brook Rural Fire Brigade in the event of a fire, by attending the fire in the site's fire truck.</p>																			
<p>43</p>	<p><b>WASTE</b></p> <p>The Applicant must:</p> <p>(a) implement all reasonable and feasible measures to minimise the waste (including coal reject) generated by the development;</p> <p>(b) ensure that the waste generated by the development is appropriately stored, handled and disposed of;</p> <p>(c) manage on-site sewage treatment and disposal in accordance with the requirements of Council; and</p> <p>(d) monitor and report on effectiveness of the waste minimisation and management measures each calendar year, to the satisfaction of the Secretary.</p>	<p>Compliant</p>	<p>(a) Noted recycling bins throughout the site, including co-mingled recycling bins and scrap steel bin, during the site inspection.</p> <p>* Co-disposal of rejects, sited during the site inspection.</p> <p>* Re-use of wastewater from CHPP.</p> <p>* Re-use of treated wastewater from the WWTP.</p> <p>(b) During the site inspection noted that waste is stored in an appropriate manner, with waste sorted out separately into different bins.</p> <p>* During the site inspection viewed the pulse system that is used to manage waste on site.</p> <p>* Remondis is the principal subcontractor that removes waste on-site. Noted Remondis waste truck on-site during the site inspection. Monthly Waste Management Reports from Remondis provided.</p> <p>(c) Remondis invoice for effluent removal from the site dated 31/1/2019.</p> <p>(d) 2017 &amp; 2018 Annual Reviews report on the effectiveness of waste minimisation and management measures.</p>																			
<p>44</p>	<p><b>REHABILITATION</b></p> <p><b>Rehabilitation Objectives</b></p> <p>The Applicant must rehabilitate the site to the satisfaction of the DRG. The rehabilitation must comply with the objectives in Table 15 and be consistent with the conceptual final landform plan shown in Appendix 9.</p>	<p>Not Triggered</p>	<p>Rehabilitation ongoing however the final requirement for the Resources Regulator (RR Secretary) to be satisfied is not yet triggered. Ongoing progress towards satisfaction is factored into conditions below. The Annual Reviews provide rehabilitation details for the previous year. This is reviewed by the Secretary and approved as a reporting document, however this is not signed off under this condition.</p>																			
	<p>Table 15: Rehabilitation Objectives</p> <table border="1"> <thead> <tr> <th>Feature</th> <th>Objective</th> </tr> </thead> <tbody> <tr> <td>Mine site (as a whole)</td> <td> <ul style="list-style-type: none"> <li>Safe, stable and non-polluting</li> <li>Final landforms designed to incorporate natural micro-relief and natural drainage lines, which, where reasonable and feasible, further avoid straight run drainage drop structures, to integrate with surrounding landforms</li> </ul> </td> </tr> <tr> <td>Overburden Emplacement Area – exposed to Muswellbrook and Denman</td> <td> <ul style="list-style-type: none"> <li>Rehabilitate the entire face with high density woody vegetation as soon as practicable following the completion of mining operations</li> </ul> </td> </tr> <tr> <td>Final void</td> <td> <ul style="list-style-type: none"> <li>Designed as a long term groundwater sink and to maximise groundwater flows across back-filled pits to the final void</li> <li>Minimise to the greatest extent practicable:                             <ul style="list-style-type: none"> <li>the size and depth of the final void</li> <li>the drainage catchment of the final void</li> <li>any high wall instability risk</li> <li>risk of flood interaction (flows in and out of the void)</li> </ul> </li> <li>Maximise to the greatest extent practicable the final void landform to be in keeping with the natural terrain features of the surrounding landscape</li> </ul> </td> </tr> <tr> <td>Agricultural land</td> <td> <ul style="list-style-type: none"> <li>Restore or maintain land capability generally as described in the EIS and shown conceptually in Appendix 9</li> </ul> </td> </tr> <tr> <td>Revegetation areas</td> <td> <ul style="list-style-type: none"> <li>Restore a minimum 10% treed coverage at the mine site</li> <li>Higher density planting along the riparian zone of the Dry Creek reinstatement, and around the final void</li> </ul> </td> </tr> <tr> <td>Dry Creek reinstatement</td> <td> <ul 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socio-economic effects associated with mine closure</li> </ul>	<p>Not Triggered</p>	<p><u>Mine site (as a whole)</u> - The site had non-compliances reported in 2017 Annual Review (Table 1 and Table 3). Two separate instances of clearing were undertaken, totalling 1.49ha, without the approval of a Ground Disturbance Permit (GDP). The GDP provides for rehabilitation considerations such as salvage of trees, topsoil and subsoil depths and soil management. The 2018 Annual Review indicated no breaches in relation to pollution. The site is currently considered safe, stable and non-polluting under active management during mining.</p> <ul style="list-style-type: none"> <li>The landform appears stable with only a few areas where earthworks maintenance is required on contour banks to increase freeboard on the North-East facing dump.</li> <li>Soil appears to be holding in position in areas of contour ripping and seeding, at adequate depths.</li> <li>Soil stockpiles within required parameters. Seeding of stockpiles for long term storage should be undertaken.</li> <li>The salvage and use of subsoil within the geofluv designed landform was noted, and encouraged for material within desirable non-erosive parameters.</li> <li>Geofluv design being implemented well, with neat rock lined drainage channels (PHOTO 16).</li> <li>Existing rock lined drains are holding up well, with competent rock (PHOTO 15). Only small fraction of rock in drains is unsuitable and becoming brittle.</li> <li>Tree screens are implemented and effective. New screens being planted.</li> <li>Groundcover on rehabilitation is adequate despite drought conditions. Significant browsing by kangaroos on site was noted.</li> <li>Slopes on dump at the Endwall Dam appear steeper than approved limit.</li> <li>Weeds: Galenia is dense in some areas and will require significant maintenance and control (PHOTO 17). Also the pasture species on site may be considered a problematic weed now that rehabilitation is targeting dense woody vegetation (see below).</li> </ul> <p><u>Overburden Emplacement Area</u> - The objective for the entire face to be rehabilitated with high density woody vegetation is currently not trajectory to compliance. Due to the legacy of previous approved rehabilitation goals to create pasture areas with a mix of woodland, the rehabilitation in this area requires significant intervention to establish high density woody vegetation (HDWV).</p> <ul style="list-style-type: none"> <li>Vegetation establishing well for grassland with scattered trees and areas of tree clumps for stock shelter and windbreaks, however final target vegetation community now changed to HDWV.</li> <li>Large areas of pure grassland on eastern face. Need significant work to establish forest community.</li> </ul> <p><u>Final Void</u> - Not Triggered.</p> <p><u>Agricultural Land</u> - The land capability classes on the rehabilitation appear to be consistent with the EIS, however the Rural Land Capability Scheme is a subjective assessment and will require Certified Professional Soil Scientist (CPSS) to verify the achievement of required classes for the Resources Regulator (RR) satisfaction of this condition. The area of Class 3 rehabilitation was assessed in 2017 and was verified Class 3 land.</p> <p><u>Revegetation Areas</u> - Not Triggered, however with the proposed rehabilitation plans the framework to achieve this is in place.</p> <p><u>Dry Creek Re-instatement</u> - Not Triggered as the project is not yet underway.</p> <p><u>Surface Infrastructure</u> - Not Triggered.</p> <p><u>Community</u> - Not Triggered, however the site is currently well fenced and signposted.</p> <p>A specialist has been engaged to recommend methods of rehabilitating to achieve high density woody vegetation (HDWV). The timeframe to achieve HDWV rehabilitation is approximately 20 years.</p>	<p>Undertake a contour bank audit to ensure adequate freeboard is available to prevent overtopping and rill/gully erosion through banks.</p> <p>Capture any low lying areas within contours which may prevent free draining and result in ponding. Any such areas found require repair to prevent tunnelling and erosion.</p> <p>The outcomes of the specialist report should be implemented as soon as possible, given the large areas requiring significant intervention.</p> <p>It is recommended that BMC consider a staged approach to be undertaken to achieve HDWV, with 'patches' of HDWV applied each year over the 20 years. For example, BMC could aim to establish approximately 40 ha of HDWV each year. This would provide for small manageable areas for maintenance purposes (weed control and watering), especially in the first critical few years of establishment of each patch. Noted this approach may require DPIE/Resources Regulator approval.</p>
Feature	Objective																					
Mine site (as a whole)	<ul style="list-style-type: none"> <li>Safe, stable and non-polluting</li> <li>Final landforms designed to incorporate natural micro-relief and natural drainage lines, which, where reasonable and feasible, further avoid straight run drainage drop structures, to integrate with surrounding landforms</li> </ul>																					
Overburden Emplacement Area – exposed to Muswellbrook and Denman	<ul style="list-style-type: none"> <li>Rehabilitate the entire face with high density woody vegetation as soon as practicable following the completion of mining operations</li> </ul>																					
Final void	<ul style="list-style-type: none"> <li>Designed as a long term groundwater sink and to maximise groundwater flows across back-filled pits to the final void</li> <li>Minimise to the greatest extent practicable:                             <ul style="list-style-type: none"> <li>the size and depth of the final void</li> <li>the drainage catchment of the final void</li> <li>any high wall instability risk</li> <li>risk of flood interaction (flows in and out of the void)</li> </ul> </li> <li>Maximise to the greatest extent practicable the final void landform to be in keeping with the natural terrain features of the surrounding landscape</li> </ul>																					
Agricultural land	<ul style="list-style-type: none"> <li>Restore or maintain land capability generally as described in the EIS and shown conceptually in Appendix 9</li> </ul>																					
Revegetation areas	<ul style="list-style-type: none"> <li>Restore a minimum 10% treed coverage at the mine site</li> <li>Higher density planting along the riparian zone of the Dry Creek reinstatement, and around the final void</li> </ul>																					
Dry Creek reinstatement	<ul style="list-style-type: none"> <li>No net loss of creek length</li> <li>Restore, maintain and/or improve hydrological and ecological function, quality and geomorphic stability</li> <li>Incorporate erosion control measures based on vegetation and engineering revelements</li> <li>Revegetate with suitable native species</li> </ul>																					
Surface infrastructure	<ul style="list-style-type: none"> <li>To be decommissioned and removed, unless DRG agrees otherwise</li> </ul>																					
Community	<ul style="list-style-type: none"> <li>Ensure public safety</li> <li>Minimise the adverse socio-economic effects associated with mine closure</li> </ul>																					

<p>45</p>	<p><b>Progressive Rehabilitation</b></p> <p>The Applicant must carry out rehabilitation progressively, that is, as soon as reasonably practicable following disturbance (particularly on the face of emplacements that are visible off-site). Interim stabilisation measures must be implemented where reasonable and feasible to control dust emissions in disturbed areas that are not active and which are not ready for final rehabilitation.</p> <p><i>Note: It is accepted that parts of the site that are progressively rehabilitated may be subject to further disturbance in future.</i></p>	<p>Observation</p>	<p>Rehabilitation of available areas was scheduled, undertaken and reported in the 2017 and 2018 Annual Reviews. The majority of the site has been progressively rehabilitated, especially the southern face and dump top within the audit period. This rehabilitation has been undertaken in accordance with the MOP.</p> <p>Much of the rehabilitation has been progressively undertaken in previous years targeting a mix of grass/pasture land and woodland communities, in accordance with previously approved rehabilitation targets. Given that under the current approval the target has changed to HDWV for much of this area, the current progressive rehabilitation must now be viewed as temporary. With the understanding that a revised rehabilitation program will be undertaken over the next 10+ years to establish HDWV.</p> <p>Approximately 400 ha of legacy grassland/pastureland rehabilitation on the eastern face of the overburden area is required to be rehabilitated with HDWV (PHOTO 17). A specialist has been engaged to recommend methods of rehabilitating to achieve high density woody vegetation (HDWV).</p> <p><b>Observation:</b> It was observed that a section of the northern face of the overburden emplacement has been classified as active 'overburden emplacement' in the MOP. This area was raised as a concern during the audit as it did not display evidence of recent active dumping, however it is understood that additional material is required for final shaping. No final shaping or rehabilitation efforts had been made on this section of the Overburden Emplacement during the Audit period. The area appears to have been dumped out without final shaping or rehabilitation since 2013 (PHOTO 8). BMC consider that the schedule for rehabilitation of the northern face is in accordance with the approved Mining Operations Plan 2017 – 2021 Amendment A. BMC explained that during the audit period, severe drought conditions made any efforts to temporarily or permanently rehabilitate this section of 'overburden emplacement' not 'reasonable and feasible', given the potential dust generated from these activities would be higher than if they operated in accordance with the MOP and maintain the area as overburden emplacement. The Rehabilitation Specialist also understands that the areas that are visible to Muswellbrook were of greater community concern and therefore prioritised in the approved MOP scheduling. Whilst this area is not as visible from Muswellbrook as the Eastern face, final dumping, reshaping and rehabilitation should be prioritised in any future amendments to any authority, such as a MOP amendment.</p>	<p>It is recommended that BMC consider a staged approach to be undertaken to achieve HDWV, with 'patches' of HDWV applied each year over the 10+ years. BMC should aim to establish approximately 40 ha of HDWV each year. This would provide for small manageable areas for maintenance purposes (weed control and watering), especially in the first critical few years of establishment of each patch. Noted this approach may require DPIE/Resources Regulator approval.</p> <p>Trials should be established in the first years of rehabilitating to HDWV to assess the best establishment techniques including: supplemental tree planting, spraying out pasture, re-ripping and direct tree seeding, ripping directly into pasture and seeding. It is understood Bengalla have already engaged a suitably qualified expert to prepare these trials.</p> <p>The unrehabilitated area on the northern face that remains disturbed should be shaped and rehabilitated promptly. Recent rainfall has provided reasonable and feasible conditions for both temporary and permanent rehabilitation efforts. These conditions were not present during most of the audit period. If the area requires additional overburden material for permanent rehabilitation, then dump scheduling should prioritise the additional material needed in this area for final volumes and levels, so final shaping can commence and permanent rehabilitation established. If scheduling does not prioritise this area for additional material, then temporary rehabilitation must be undertaken immediately to provide some surface cover to reduce dust and stabilise the surface material, as required by this condition. Any future modifications to an Authority must prioritise this area for rehabilitation.</p>
<p>46</p>	<p><b>Rehabilitation Management Plan</b></p> <p>The Applicant must prepare a Rehabilitation Management Plan for the development to the satisfaction of the DRG. This plan must:</p> <ul style="list-style-type: none"> <li>(a) be submitted to the DRG for approval within 6 months of the date of this consent;</li> <li>(b) be prepared in consultation with the Department, DoI, OEH, Council and the CCC;</li> <li>(c) be prepared in accordance with relevant DRG guidelines;</li> <li>(d) describe how the rehabilitation of the site would be integrated with the implementation of the biodiversity offset strategy;</li> <li>(e) include detailed performance and completion criteria for evaluating the performance of the rehabilitation of the site, including over the long term following completion of mining operations, and triggering remedial action (if necessary);</li> <li>(f) describe the design specifications and measures that would be implemented to ensure compliance with the relevant conditions of this consent, and address all aspects of rehabilitation including mine closure, final landform including final voids, and final land use;</li> <li>(g) include interim rehabilitation where necessary to minimise the area exposed for dust generation;</li> <li>(h) include a research program that seeks to improve the understanding and application of rehabilitation techniques and methods in the Hunter Valley;</li> <li>(i) include a schedule for establishment of native vegetation corridors and habitat linkages across the site;</li> <li>(j) include a landscape management plan for the proposed Bengalla Link Road realignment;</li> <li>(k) include a plan for the reinstatement of Dry Creek including:             <ul style="list-style-type: none"> <li>o detailed design specifications for the reinstatement of the creek;</li> <li>o a schedule of works describing how the reinstatement work would be staged and integrated with mining operations and the final landform;</li> <li>o a revegetation program;</li> <li>o hydrological, ecological and geomorphic performance and completion criteria for the reinstated creek based on the assessment of baseline conditions; and</li> <li>o a program to monitor, maintain and/or improve the hydrological and ecological function, quality and geomorphic stability of the reinstated creek;</li> </ul> </li> <li>(l) include a program to monitor, independently audit and report on the effectiveness of the measures, and progress against the detailed performance and completion criteria; and</li> <li>(m) build to the maximum extent practicable on other management plans required under this consent.</li> </ul> <p>The Applicant must implement the management plan as approved by the Secretary.</p>	<p>Observation</p>	<p><b>Preparation:</b> Rehabilitation Management Plan (RMP) covered in Section 1.5.3 of the MOP, dated 8/2/2019.</p> <ul style="list-style-type: none"> <li>a) The current approved MOP (with modifications) signed off by RR in April 2019.</li> <li>b) MOP Section 1.5.4 Consultation.</li> <li>c) MOP Section 1 was prepared in accordance with ESG3: Mining Operations Plan (MOP) Guidelines, September 2013.</li> <li>d) MOP Section 1.3 refers to the Biodiversity Offset Strategy, but does not provide any detail on how the Strategy will be integrated.</li> <li>e) MOP Section 6. The performance indicators and completion criteria are provided as a guide and have not been developed or designed to form a framework for the purpose of assessing compliance.</li> <li>f) This is covered throughout the MOP.</li> <li>g) MOP Section 5.1.1.6 states this may be applied based on operational needs.</li> <li>h) MOP Section 9 covers research programs adequately.</li> <li>i) Not Triggerred, not covered in current MOP.</li> <li>j) Not Triggerred, not covered in current MOP.</li> <li>k) Not Triggerred, not covered in current MOP.</li> <li>l) MOP Sections 8 and 11 cover monitoring and auditing respectively.</li> <li>m) MOP Section 1.3 states the MOP builds on other management plans, but no detail provided.</li> </ul> <p><b>Implementation:</b></p> <p>The implementation of the MOP (Rehabilitation Management Plan) is occurring on site as mining progresses. The recent areas available for rehabilitation are designed using the geomorphic natural landform software 'GeoFluv'. This provides for a more natural surface water drainage system on the rehabilitated landform. The older areas of rehabilitation are being maintained and inspected regularly for surface water drainage and revegetation issues. Given the change in target vegetation structure on the 400ha of the Eastern face, the implementation of the MOP will require these areas to be revisited to establish high density woody vegetation (HDWV). This means implementation will include new areas made available as mining progresses, as well as revisiting existing areas previously considered in the ecosystem establishment phase.</p> <p><b>Observation:</b> There are areas which are suitable to undergo temporary rehabilitation that have been left disturbed for years, such as the Northern Bund.</p> <p>The management recommendations and practices for soil and rehabilitation contained in the approved management plans covers all aspects identified in the audit.</p>	<p>The MOP should be amended to reflect the rehabilitation staged approach (once agreed) and submitted for approval.</p> <p>Undertake temporary rehabilitation on areas that have been left disturbed for years or areas that may not be scheduled for permanent rehabilitation and are not in the forecasted dump schedule.</p> <p>It must be emphasised that the management recommendations and practices for soil and rehabilitation contained in the approved management plans must continue to be implemented in accordance with the approved plans.</p>

**Schedule 4**

<p>1</p>	<p><b>NOTIFICATION OF LANDOWNERS/TENANTS</b></p> <p>Within 1 month of the date of this consent, the Applicant must:</p> <ul style="list-style-type: none"> <li>(a) notify in writing the owners of:             <ul style="list-style-type: none"> <li>* the land listed in Table 1 of schedule 3 that they have the right to require the Applicant to acquire their land at any stage during the development and/or request the Applicant to ask for additional noise and/or air quality mitigation measures (whichever is relevant) to be installed at their residence at any stage during the development (if they have not requested acquisition);</li> <li>* the land listed in Table 2 of schedule 3 that, if they no longer have an acquisition right for that land under the mining approval of the mine listed in Table 2, they have the right to require the Applicant to acquire their land at any stage during the development and/or request the Applicant to ask for additional noise and/or air quality mitigation measures (whichever is relevant) to be installed at their residence at any stage during the development (if they have not requested acquisition from any mine, or the installation of mitigation measures by another mine);</li> <li>* any residence on the land listed in Table 3 of schedule 3 that they have the right to request the Applicant to ask for additional noise and/or air quality mitigation measures (whichever is relevant) to be installed at their residence at any stage during the development (if they have not requested the installation of mitigation measures by another mine); and</li> <li>* any privately-owned land within 3 kilometres of the approved open cut mining pit/s that they are entitled to ask for an inspection to establish the baseline condition of any buildings or structures on their land, or to have a previous property inspection report updated;</li> </ul> </li> <li>(b) notify the tenants of any mine-owned land of their rights under this consent (see condition 18 of schedule 3); and</li> <li>(c) send a copy of the NSW Health fact sheet entitled "Mine Dust and You" (as may be updated from time to time) to the owners and/or existing tenants of any land (including mine-owned land) where the predictions in the EIS identify that dust emissions generated by the development are likely to be greater than the relevant air quality criteria in</li> </ul>	<p>Not Triggerred</p>	<p>Outside of the audit period.</p>	
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	schedule 3 at any time during the life of the development.		
2	<p>Prior to entering into any tenancy agreement for any land owned by the Applicant that is predicted to experience exceedances of the recommended dust and/or noise criteria, or for any of the land listed in condition 1 that is subsequently purchased by the Applicant, the Applicant must:</p> <p>(a) advise the prospective tenants of the potential health and amenity impacts associated with living on the land, and give them a copy of the NSW Health fact sheet entitled "Mine Dust and You" (as may be updated from time to time); and</p> <p>(b) advise the prospective tenants of the rights they would have under this consent.</p>	Compliant	Email from Warburton Estate Agents to BMC dated 24/12/2019 confirming that tenants of BMC owned properties are provided with a copy of the Residential Tenancy Agreement (RTA), Bengalla Mining development consent conditions and a "Mine Dust and You" Fact sheet when signing a lease.
3	<p>As soon as practicable after obtaining monitoring results showing:</p> <p>(a) an exceedance of any relevant criteria in schedule 3, the Applicant must notify the affected landowners in writing of the exceedance, and provide regular monitoring results to these landowners until the development is again complying with the relevant criteria; and</p> <p>(b) an exceedance of any relevant air quality criteria in schedule 3, the Applicant must send a copy of the NSW Health fact sheet entitled "Mine Dust and You" (as may be updated from time to time) to the affected landowners and/or existing tenants of the land (including the tenants of any mine-owned land).</p>	Not verified	<p>* The Air quality criteria were exceeded during the audit period, however affected landowners and/or tenants were not advised of these in writing, nor provided monitoring results or sent a copy of the NSW Health fact sheet.</p> <p>* When air quality criteria exceedances occurred, BMC conducted assessments and received specialist feedback from Todoroski and ERM, which determined that the Bengalla mine's contribution to levels of particulates monitored was below the relevant criterion. On this basis BMC considered that there were no exceedances attributable to the Bengalla Mine, and hence did not advise landowners of the exceedances or follow through with the requirements of this condition. Air Quality criteria exceedances and BMC's response is further discussed under Condition 16, Schedule 3.</p> <p>*This audit has not assessed BMC's position on technical grounds as Auditors are not technical specialists in air quality. It is noted that air quality in the region and mine contribution to dust in air are being assessed under the Independent Review required by Schedule 4, Condition 4. Further, Notices have been issued by DPIE in February 2020 for BMC to provide information to DPIE as part of ongoing investigations into compliance with conditions relating to air quality. This study and investigations are expected to contribute further to the assessment of this issue. Given the above, Auditors consider the Independent Review and DPIE Investigation will cover relevant issues; and have determined the condition as Not Verified.</p>
4	<p><b>INDEPENDENT REVIEW</b></p> <p>If an owner of privately-owned land considers the development to be exceeding the relevant criteria in schedule 3, then he/she may ask the Secretary in writing for an independent review of the impacts of the development on his/her land.</p> <p>If the Secretary is satisfied that an independent review is warranted, then within 2 months of the Secretary's decision the Applicant must:</p> <p>(a) commission a suitably qualified, experienced and independent person, whose appointment has been approved by the Secretary, to:</p> <ul style="list-style-type: none"> <li>* consult with the landowner to determine his/her concerns;</li> <li>* conduct monitoring to determine whether the development is complying with the relevant criteria in schedule 3;</li> <li>* if the development is not complying with these criteria then identify the measures that could be implemented to ensure compliance with the relevant criteria; and</li> <li>* in cases where there is an exceedance of any air quality criteria, and more than one mine is responsible for the exceedance, determine the relative share of each mine regarding the impact of the development;</li> </ul> <p>(b) give the Secretary and landowner a copy of the independent review with a plan which details the proposed measures to be implemented in response to the independent review; and</p> <p>(c) implement the necessary measures as directed by the Secretary.</p> <p>However, if at the end of this period, the Applicant and landowner cannot agree on the acquisition price of the land and/or the terms upon which the land is to be acquired, then either party may refer the matter to the Secretary for resolution.</p> <p>Upon receiving such a request, the Secretary will request the President of the NSW Division of the Australian Property Institute to appoint a qualified independent valuer to:</p> <ul style="list-style-type: none"> <li>*consider submissions from both parties;</li> <li>*determine a fair and reasonable acquisition price for the land and/or the terms upon which the land is to be acquired, having regard to the matters referred to in paragraphs (a)-(c) above;</li> <li>*prepare a detailed report setting out the reasons for any determination; and</li> <li>*provide a copy of the report to both parties.</li> </ul> <p>Within 14 days of receiving the independent valuer's report, the Applicant must make a binding written offer to the landowner to purchase the land at a price not less than the independent valuer's determination.</p> <p>However, if either party disputes the independent valuer's determination, then within 14 days of receiving the independent valuer's report, they may refer the matter to the Secretary for review. Any request for a review must be accompanied by a detailed report setting out the reasons why the party disputes the independent valuer's determination. Following consultation with the independent valuer and both parties, the Secretary will determine a fair and reasonable acquisition price for the land, having regard to the matters referred to in paragraphs (a)-(c) above, the independent valuer's report, the detailed report of the party that disputes the independent valuer's determination and any other relevant submissions.</p> <p>Within 14 days of this determination, the Applicant must make a binding written offer to the landowner to purchase the land at a price not less than the Secretary's determination.</p> <p>If the landowner refuses to accept the Applicant's binding written offer under this condition within 6 months of the offer being made, then the Applicant's obligations to acquire the land shall cease, unless the Secretary determines otherwise.</p>	Administrative Non-Compliance	<p>* The DPIE agreed with two landowners to undertake an Independent Review of dust impact on these two properties.</p> <p>* Letter from DPIE to BMC, dated 6/6/2019, endorsing the suitably qualified, experienced and independent person to undertake the independent review.</p> <p>* Various emails in regards to refining the Independent Review scope of works for the Independent Review provided by BMC.</p> <p>* Email from DPIE to BMC dated 30/8/2019 stipulated that BMC had till 6/9/2019 to provide further comments. BMC provided comments on 16/9/2019.</p> <p>* BMC met with DPIE on 26/9/2019 in regards to the scope of works.</p> <p>* At the time of the audit the auditors had not been engaged, as the scope of works had not been finalised.</p> <p>* According to site communications, the commissioning of the of Independent Review was completed with concurrence of DPIE.</p> <p>* The condition does not allow for extension subject to DPIE agreement.</p> <p><b>Admin Non-compliant:</b> A suitably qualified, experienced and independent person was not commissioned to undertake the Independent Dust Review within 2 months of the DPIE agreeing with landowners to undertake the review.</p>
			Engage a suitably qualified, experienced and independent person to undertake the Independent Dust Review.

5	<p>Within 3 months of receiving a written request from a landowner with acquisition rights, the Applicant must make a binding written offer to the landowner based on:</p> <p>(a) the current market value of the landowner's interest in the land at the date of this written request, as if the land was unaffected by the development, having regard to the:</p> <ul style="list-style-type: none"> <li>- existing and permissible use of the land, in accordance with the applicable planning instruments at the date of the written request; and</li> <li>- presence of improvements on the land and/or any approved building or structure which has been physically commenced at the date of the landowner's written request, and is due to be completed subsequent to that date, but excluding any improvements that have resulted from the implementation of the additional noise and/or air quality mitigation measures in condition 2 of schedule 3;</li> </ul> <p>(b) the reasonable costs associated with:</p> <ul style="list-style-type: none"> <li>- relocating within the Muswellbrook, Cessnock or Singleton local government area, or to any other local government area determined by the Secretary; and</li> <li>- obtaining legal advice and expert advice for determining the acquisition price of the land, and the terms upon which it is to be acquired; and</li> </ul> <p>(c) reasonable compensation for any disturbance caused by the land acquisition process.</p> <p>However, if at the end of this period, the Applicant and landowner cannot agree on the acquisition price of the land and/or the terms upon which the land is to be acquired, then either party may refer the matter to the Secretary for resolution.</p> <p>Upon receiving such a request, the Secretary will request the President of the NSW Division of the Australian Property Institute to appoint a qualified independent valuer to:</p> <ul style="list-style-type: none"> <li>- consider submissions from both parties;</li> <li>- determine a fair and reasonable acquisition price for the land and/or the terms upon which the land is to be acquired, having regard to the matters referred to in paragraphs (a)-(c) above;</li> <li>- prepare a detailed report setting out the reasons for any determination; and</li> <li>- provide a copy of the report to both parties.</li> </ul> <p>Within 14 days of receiving the independent valuer's report, the Applicant must make a binding written offer to the landowner to purchase the land at a price not less than the independent valuer's determination.</p> <p>However, if either party disputes the independent valuer's determination, then within 14 days of receiving the independent valuer's report, they may refer the matter to the Secretary for review. Any request for a review must be accompanied by a detailed report setting out the reasons why the party disputes the independent valuer's determination. Following consultation with the independent valuer and both parties, the Secretary will determine a fair and reasonable acquisition price for the land, having regard to the matters referred to in paragraphs (a)-(c) above, the independent valuer's report, the detailed report of the party that disputes the independent valuer's determination and any other relevant submissions.</p> <p>Within 14 days of this determination, the Applicant must make a binding written offer to the landowner to purchase the land at a price not less than the Secretary's determination.</p> <p>If the landowner refuses to accept the Applicant's binding written offer under this condition within 6 months of the offer being made, then the Applicant's obligations to acquire the land shall cease, unless the Secretary determines otherwise.</p>	Not Triggered	<ul style="list-style-type: none"> <li>* According to site communications during the previous audit period (March 2015) receiver 152 requested BMC acquire their property. BMC sent a letter or offer to acquire the property in June 2015.</li> <li>* BMC sent a new letter of offer, dated 15/1/2018, to the receiver for the original property and one additional property.</li> <li>* Receiver rejected the BMC offer via email, dated 5/4/2018.</li> </ul>	
6	<p>The Applicant must pay all reasonable costs associated with the land acquisition process described in condition 5 above, including the costs associated with obtaining Council approval for any plan of subdivision (where permissible), and registration of this plan at the Office of the Registrar-General.</p>	Not Triggered	<ul style="list-style-type: none"> <li>* Land was not acquired during the audit period.</li> </ul>	

**Schedule 5**  
**Environmental Management, Reporting and Auditing**

<p><b>ENVIRONMENTAL MANAGEMENT</b></p> <p><b>Environmental Management Strategy</b></p>				
1	<p>1. The Applicant must prepare an Environmental Management Strategy for the development to the satisfaction of the Secretary. This strategy must:</p> <ul style="list-style-type: none"> <li>(a) be submitted to the Secretary for approval within 6 months of the date of this consent;</li> <li>(b) provide the strategic framework for environmental management of the development;</li> <li>(c) identify the statutory approvals that apply to the development;</li> <li>(d) describe the role, responsibility, authority and accountability of all key personnel involved in the environmental management of the development;</li> <li>(e) describe the procedures that would be implemented to: <ul style="list-style-type: none"> <li>* keep the local community and relevant agencies informed about the operation and environmental performance of the development;</li> <li>* receive, handle, respond to, and record complaints;</li> <li>* resolve any disputes that may arise during the course of the development;</li> <li>* respond to any non-compliance;</li> <li>* respond to emergencies; and</li> </ul> </li> <li>(f) include: <ul style="list-style-type: none"> <li>* references to any strategies, plans and programs approved under the conditions of this consent; and</li> <li>* a clear plan depicting all the monitoring required to be carried out in relation to the development.</li> </ul> </li> </ul> <p>The Applicant must implement the approved strategy as approved from time to time by the Secretary.</p>	Observation	<p><u>Preparation:</u> Environmental Management Strategy (EMS), dated September 2017.</p> <ul style="list-style-type: none"> <li>* Letter dated 5/9/2017 from DPIE to BMC in regards to the approval of the EMS.</li> <li>* The EMS has been revised and the draft revised document has been submitted to DPIE via email on 27/11/2019.</li> </ul> <p>(a) Outside audit period. The DPIE approved the EMS on 5/9/2017.</p> <p>(b) Strategic framework for environmental management of the development - Section 2.</p> <p>(c) Identify the statutory approvals that apply to the development - Section 2.</p> <p>(d) The role, responsibility, authority and accountability of all key personnel involved in the environmental management of the development - Section 4.1.</p> <p>(e) Procedures to:</p> <ul style="list-style-type: none"> <li>* Keep the local community and relevant agencies informed - Section 4.3.2.</li> <li>* Receive, handle, respond to, and record complaints - Section 4.3.3.</li> <li>* Resolve any disputes - Section 4.3.4.</li> <li>* Respond to any non-compliance - Section 4.3.5.</li> <li>* Respond to emergencies - Section 4.3.6.</li> </ul> <p>(f) References to any strategies, plans and programs - Section 3.</p> <ul style="list-style-type: none"> <li>* Clear plan depicting all the monitoring required - Appendix B.</li> </ul> <p><u>Implementation:</u></p> <ul style="list-style-type: none"> <li>* Copies of CCC meeting notes and community newsletters indicate how local community is informed.</li> <li>* According to site communications every year BMC have an open day for the public. 2019 Bengalla community Open Day Flyer sighted.</li> <li>* 2017, 2018 and 2019 complaints registers include proper management of complaints.</li> <li>* Approved management plans reviewed (refer to above relevant conditions). Management plans include accountability and responsibility sections.</li> <li>* Job descriptions for environmental roles note responsibilities, authority and accountability.</li> <li>* Non-compliances and response to these is described in the 2017, 2018 and 2019 Annual Reviews.</li> </ul> <p><u>Observation:</u> The correct procedure for notifying incidents hasn't been undertaken (refer to Condition 7 below).</p>	<ul style="list-style-type: none"> <li>* Undertake the procedure for notifying incidents (in accordance with the Environmental Management Strategy [EMS]).</li> </ul>
2	<p><b>Adaptive Management</b></p> <p>The Applicant must assess and manage development-related risks to ensure that there are no exceedances of the criteria and/or performance measures in schedule 3. Any exceedance of these criteria and/or performance measures constitutes a breach of this consent and may be subject to penalty or offence provisions under the EP&amp;A Act or EP&amp;A Regulation.</p> <p>Where any exceedance of these criteria and/or performance measures has occurred, the Applicant must, at the earliest opportunity:</p> <ul style="list-style-type: none"> <li>(a) take all reasonable and feasible steps to ensure that the exceedance ceases and does not recur;</li> <li>(b) consider all reasonable and feasible options for remediation (where relevant) and submit a report to the Department describing those options and any preferred remediation measures or other course of action; and</li> <li>(c) implement remediation measures as directed by the Secretary, to the satisfaction of the Secretary.</li> </ul>	Compliant	<p>Where air quality criteria exceedances have occurred during the audit period BMC have undertaken the following reasonable and feasible steps to ensure that the exceedances cease:</p> <ul style="list-style-type: none"> <li>* Training in dust management (UDAY) has been undertaken;</li> <li>* According to site communications seeking improvements around dust, including sprayers around drag line;</li> <li>* Future improvement will be compliance monitors running at the site 24/7, once the AQMP has been approved by the DPIE; and</li> <li>* BMC currently working with DPIE to finalise scope of the Independent Dust Review (Refer to Condition 4, Schedule 4).</li> </ul> <p>Exceedances in groundwater criteria (annual entitlement, water quality and water levels) (refer to schedule 3, condition 25).</p> <ul style="list-style-type: none"> <li>* According to site communications BMC have been trying to contact NRAR in regards to the water allocation licence.</li> <li>* The AGE Annual Groundwater Monitoring Report 2018, dated March 2018, in Appendix G of the 2018 Annual Review provides recommendations in regards to future groundwater monitoring.</li> </ul> <p>Groundwater exceedances are reported to DPIE via Annual Reviews.</p>	<ul style="list-style-type: none"> <li>* Provide a status update in regards to the progress of monitoring recommendations (included in the AGE Annual Groundwater Monitoring Report, dated March 2018) in the 2019 Annual Review.</li> </ul>

<p>3</p>	<p><b>Management Plan Requirements</b></p> <p>The Applicant must ensure that the management plans required under this consent are prepared in accordance with any relevant guidelines, and include:</p> <p>(a) a summary of baseline data;</p> <p>(b) a description of:</p> <ul style="list-style-type: none"> <li>the relevant statutory requirements (including any relevant approval, licence or lease conditions);</li> <li>any relevant limits or performance measures/criteria;</li> <li>the specific performance indicators that are proposed to be used to judge the performance of, or guide the implementation of, the development or any management measures;</li> </ul> <p>(c) a description of the measures that would be implemented to comply with the relevant statutory requirements, limits, or performance measures/criteria;</p> <p>(d) a program to monitor and report on the:</p> <ul style="list-style-type: none"> <li>impacts and environmental performance of the development;</li> <li>effectiveness of any management measures (see c above);</li> </ul> <p>(e) a contingency plan to manage any unpredicted impacts and their consequences;</p> <p>(f) a program to investigate and implement ways to improve the environmental performance of the development over time;</p> <p>(g) a protocol for managing and reporting any:</p> <ul style="list-style-type: none"> <li>incidents;</li> <li>complaints;</li> <li>non-compliances with statutory requirements; and</li> <li>exceedances of the impact assessment criteria and/or performance criteria; and</li> </ul> <p>(h) a protocol for periodic review of the plan.</p> <p><i>Note: The Secretary may waive some of these requirements if they are unnecessary or unwarranted for particular management plans.</i></p>	<p>Observation</p>	<p>Based on a brief review of the Management Plans, the following comments are made:</p> <ul style="list-style-type: none"> <li>Noise Management Plan (NMP) - Compliant.</li> <li>Blast Management Plan (BMP) - Compliant.</li> <li>Post Blast Fume Generation Mitigation and Management Plan - Not a consent requirement so it doesn't need to comply.</li> <li>Air Quality Management Plan (AQMP) - Compliant.</li> <li>Water Management Plan (WMP) - Compliant.</li> <li>Biodiversity Management Plan - Compliant.</li> <li>Biodiversity Offset Management Plan (BOMP) - Compliant.</li> <li>Aboriginal Cultural Heritage Management Plan (ACHMP) - Compliant.</li> <li>Historic Heritage Management Plan (HHMP) - Compliant.</li> <li>Environmental Management Strategy (EMS) - Strategy therefore management plan requirements do not need to be addressed in the document.</li> <li>Rehabilitation Management Plan (RMP) - Dated 12/5/2017 (superseded by MOP); and</li> <li>Visual Impact Mitigation Plan (VIMP) - Compliant (includes relevant details).</li> </ul> <p>- <b>Observation:</b> Some of the section references in the management plan requirements table in a number of management plans is incorrect.</p> <p>- <b>Observation:</b> The ACHMP, VIMP and HHMP do not include an all "Management Plans Requirement" table with references to sections of each management plan where each condition is addressed. This table has been included in all the other SSD-5170 required management plans.</p>	<p>* In future revisions of management plans, check the accuracy of section references in management plan requirements tables of the BMC management plans.</p> <p>* Include an all "Management Plans Requirement" table in the ACHMP, VIMP and HHMP, with references to sections of each management plan where each condition is addressed.</p>
<p>4</p>	<p><b>Annual Review</b></p> <p>By the end of March each year (or as otherwise agreed by the Secretary), the Applicant must review the environmental performance of the development for the previous calendar year to the satisfaction of the Secretary. This review must:</p> <p>a) describe the development (including any rehabilitation) that was carried out in the past calendar year, and the development that is proposed to be carried out over the current calendar year;</p> <p>b) include a comprehensive review of the monitoring results and complaints records of the development over the past year, which includes a comparison of these results against the:</p> <ul style="list-style-type: none"> <li>relevant statutory requirements, limits or performance measures/criteria;</li> <li>monitoring results of previous years; and</li> <li>relevant predictions in the EIS;</li> </ul> <p>c) identify any non-compliance over the last year, and describe what actions were (or are being) taken to ensure compliance;</p> <p>d) identify any trends in the monitoring data over the life of the development;</p> <p>e) identify any discrepancies between the predicted and actual impacts of the development, and analyse the potential cause of any significant discrepancies; and</p> <p>f) describe what measures will be implemented over the next year to improve the environmental performance of the development.</p>	<p>Observation</p>	<p>Emails to DPIE from BMC submitting the 2017 and 2018 Annual Reviews on 30/3/2018 and 30/3/2019, respectively.</p> <p><b>2017 Annual Review:</b> 2017 Annual Review approved by DPIE; letter from DPIE to BMC, dated 7/8/2018, states that the 2017 Annual Review satisfies the requirements of the Project Approval.</p> <p>a) Describe the development and the development that is proposed to be carried out over the current calendar year - Section 4 and Section 8.</p> <p>b) Include a comprehensive review of the monitoring results (Section 6 and 7) and complaints records (Section 9.2) which includes a comparison of these results against the:</p> <ul style="list-style-type: none"> <li>Relevant statutory requirements, limits or performance measures/criteria - Section 6 and 7.</li> <li><b>Observation:</b> Monitoring results of previous years for noise, blast and surface water not included in the 2017 Annual Review.</li> <li><b>Observation:</b> Comparison of noise, GHG and surface water results against relevant predictions in the EIS have not been included in the 2017 Annual Review.</li> </ul> <p>c) Non-compliances: Section 1 and Section 11.</p> <p><b>Observation:</b> The 2017 Annual Review does not identify what actions were being taken to ensure a ground disturbance incident (such as the June 2017 event) would not occur again.</p> <p>d) <b>Observation:</b> A discussion for trends for air quality, blast, noise and surface water monitoring data is not included in the 2017 Annual Review.</p> <p>e) Refer to b)</p> <p>f) A discussion about what measures will be implemented over the next year to improve the environmental performance of the development - Section 6 and 7.</p> <p><b>2018 Annual Review:</b> 2018 Annual Review approved by DPIE; letter from DPIE to BMC, dated 20/6/2019, states that the 2018 Annual Review generally satisfies the requirements of the Consent.</p> <p>a) Describe the development and the development that is proposed to be carried out over the current calendar year - Section 4 and Section 8.</p> <p>b) include a comprehensive review of the monitoring results (Section 6 and 7) and complaints records (Section 9.3) of the development over the past year, which includes a comparison of these results against the:</p> <ul style="list-style-type: none"> <li>Relevant statutory requirements, limits or performance measures/criteria.</li> <li><b>Observation:</b> Monitoring results of previous years for noise and blast not included in the 2018 Annual Review.</li> <li><b>Observation:</b> Comparison of blast and GHG results against relevant predictions in the EIS have not been included in the 2018 Annual Review.</li> </ul> <p>c) Non-compliances: Section 1 and Section 11.</p> <p>d) <b>Observation:</b> A discussion for trends for air quality, blast and noise is not included in the 2018 Annual Review.</p> <p>e) Refer to b)</p> <p>f) A discussion about what measures will be implemented over the next year to improve the environmental performance of the development - Section 6 and 7.</p> <p><b>Observation:</b> 2018 Annual Review refers to the applicable PM10 criteria as 30 ug/m3. This is incorrect. SSD-5170 specifies the PM10 criteria as 25 ug/m3.</p> <p>* The 2018 Annual Review doesn't report PM2.5 readings for 2018.</p>	<p>In respect of Management Plans, the following is recommended:</p> <ul style="list-style-type: none"> <li>Ensure future Annual Reviews refer to the correct PM10 criteria.</li> <li>Report PM2.5 in future Annual Reviews.</li> <li>Include monitoring results of previous years for noise, blast and surface water in future Annual Reviews.</li> <li>Include a comparison of noise, blast, GHG and surface water results against relevant predictions in the EIS in future Annual Reviews.</li> <li>Describe in future Annual Reviews what actions were (or are being) taken to ensure non-compliance/incidents do not occur again.</li> <li>Include a discussion for trends for air quality, blast, noise and surface water monitoring data in future Annual Reviews.</li> <li>Include in Section 6 Environmental Management &amp; Performance and Section 7 Water Management of future Annual Reviews what measures will be implemented over the next year to improve the environmental performance of the development.</li> </ul>
<p>5</p>	<p><b>Revision of Strategies, Plans and Programs</b></p> <p>Within 3 months of the submission of:</p> <p>(a) an annual review under Condition 4 above;</p> <p>(b) an incident report under Condition 7 below;</p> <p>(c) an audit report under Condition 9 below; or</p> <p>(d) any modification to the conditions of this consent (unless the conditions require otherwise),</p> <p>the Applicant must review, and if necessary revise, the strategies, plans, and programs required under this consent to the satisfaction of the Secretary.</p> <p>Where this review leads to revisions in any such document, then within 4 weeks of the review, unless the Secretary agrees otherwise, the revised document must be submitted to the Secretary for approval.</p> <p><i>Note: This is to ensure the strategies, plans and programs are updated on a regular basis, and incorporate any recommended measures to improve the environmental performance of the development.</i></p>	<p>Compliant</p>	<p>Reviews were sighted as having been completed after:</p> <p>(a) Annual review;</p> <p>(b) Incident report;</p> <p>(c) Audit report - Last audit conducted in 6 to 9 February 2017; and</p> <p>(d) Modification to the conditions of this consent.</p> <ul style="list-style-type: none"> <li>Noise Management Plan (NMP) - Dated 19/3/2019 - Compliant.</li> <li>Blast Management Plan (BMP) - Dated 11/5/2017 - Compliant.</li> <li>Air Quality Management Plan (AQMP) - Dated 12/5/2017 - Compliant.</li> <li>Water Management Plan (WMP) - Dated 14/1/2019 - Compliant.</li> <li>Biodiversity Management Plan - Dated 19/6/2017 - Compliant.</li> <li>Biodiversity Offset Management Plan (BOMP) - Dated 27/2/2017 - Compliant.</li> <li>Aboriginal Cultural Heritage Management Plan (ACHMP) - Dated 9/5/2017 - Compliant.</li> <li>Historic Heritage Management Plan (HHMP) - Dated 9/5/2017 - Compliant.</li> <li>Environmental Management Strategy (EMS) - Dated 27/1/2016 - The EMS has been revised and the draft revised document has been submitted to DPIE via email on 27/11/2019.</li> <li>Visual Impact Management Plan (VIMP) - Dated 30/3/2016 - Compliant.</li> <li>Post Blast Fume Generation Mitigation and Management Plan - Dated 14/12/2017 (not a consent required management plan).</li> <li>Rehabilitation Management Plan (RMP) - Superseded by the MOP.</li> <li>Mining Operations Plan (MOP) Amendment A - Dated February 2019 (not management plan).</li> <li>Pollution Incident Response Plan (PIRMP) - Dated 2/4/2019 (not a SSD-5170 required management plan).</li> </ul>	<p>* Include a statement in Section 3.2. "Status of Management Plans" of future Annual Reviews that the management plans have reviewed, once this has been completed for the end of the reporting period.</p> <p>* Update relevant management plans with findings from this Independent Environmental Audit (IEA).</p>

6	<p><b>Community Consultative Committee</b></p> <p>The Applicant must operate a Community Consultative Committee (CCC) for the development to the satisfaction of the Secretary. This CCC must be operated in general accordance with the Community Consultative Committee Guidelines: State Significant Projects (2016).</p> <p>Notes:</p> <ul style="list-style-type: none"> <li>The CCC is an advisory committee. The Department and other relevant agencies are responsible for ensuring that the Applicant complies with this consent.</li> <li>In accordance with the guideline, the Committee should be comprised of an independent chair and appropriate representation from the Applicant, affected councils and the local community.</li> </ul>	Non Compliant (low risk)	<ul style="list-style-type: none"> <li>Community Consultative Committee (CCC) meeting minutes for the audit period included on the BMC website.</li> <li>Per the Community Consultative Committee Guideline: State Significant Projects (January 2019): <ul style="list-style-type: none"> <li>CCC made up of an independent chair, representatives from BMC, Muswellbrook Council and the local community.</li> <li>CCC meetings held on a regular basis (every quarter).</li> <li>Minutes of the meetings are prepared.</li> </ul> </li> <li>According to site communications BMC sought guidance from DPIE around how to minute the CCC meetings.</li> </ul> <p>Section 3.2 of the Community Consultative Committee Guideline: State Significant Projects (January 2019) requires the Independent Chairperson to "report annually to the Department on the Operation of the committee". In correspondence received by the Auditors from DPIE following their review of a previous version of this audit report dated 6 October 2020, DPIE reported that they had not received any annual reports of the operation of the CCC during the audit period. Bengalla could not provide evidence of annual reports having been prepared. On this basis, this aspect of the guideline was not complied with and it is considered Bengalla are Non-Compliant with this condition. It is noted that other aspects of the role were considered to be generally in accordance with the Community Consultative Committee Guideline: State Significant Projects (January 2019).</p>	Ensure that the Community Consultative Committee (CCC) Chairperson reports to DPIE Annually on the operation of the Committee.
7	<p><b>Incident Notification</b></p> <p>The Applicant must immediately notify the Department and any other relevant agencies immediately after it becomes aware of an incident. The notification must be in writing to compliance@planning.nsw.gov.au and identify the development (including the development application number and name) and set out the location and nature of the incident.</p>	Compliant	<ul style="list-style-type: none"> <li>BMC advised DPIE of the following dust exceedances: <ul style="list-style-type: none"> <li>Email from BMC to DPIE dated 7/2/2017 in regards to a PM10 HVAS monitoring exceedance on 12 January 2017 that BMC had become aware of on 6/2/2017.</li> <li>Email from BMC to DPIE dated 21/2/2017 in regards to an exceedance at the Mount Arthur Coal Constable HVAS that BMC become aware of on 20/2/2017.</li> <li>Email from BMC to DPIE dated 10/3/2017 in regards to an exceedance at the PM10-4 (Ex Smiths) monitor on 23/2/2017. BMC became aware of the exceedance on 10/3/2017, when they received the PM10 results via e-mail from AECOM.</li> <li>Email from BMC to DPIE dated 15/3/2017 in regards to an exceedance at the Mount Arthur Coal Constable HVAS monitor on 11/2/2017, that BMC become aware of the exceedance on 14/3/2017 when they received the monitoring results via e-mail from AECOM.</li> <li>Email from BMC to DPIE dated 9/8/2017 in regards to an exceedance at the PM10-4 monitor on 11/7/2017 that BMC become aware of the exceedance just before 9/8/2017 (according to site communications). BMC were made aware of the exceedance also via email from AECOM dated 10/8/2017.</li> <li>Emails from BMC to DPIE (compliance@planning.nsw.gov.au) dated 9 October and 16 October 2019 in regards to air quality (dust) criteria exceedances at HVAS monitor PM10-4, recorded on 5 September 2019 and 11 September 2019. BMC was made aware of the exceedance on 9/10/2019 when AECOM sent through an email regarding the exceedances.</li> <li>Email from BMC to DPIE dated 20/10/2017 in regards to an exceedance at the PM10-4 monitor on 22/8/2017 and 27/9/2017. BMC was made aware of the exceedance on 13/9/2019 when AECOM emailed through environmental monitoring data for August 2017 data.</li> <li>Email from BMC to DPIE dated 4/12/2017 in regards to an exceedance at the PM10-4 monitor on 2/11/2017 that BMC become aware of on 4/12/2017, when they received an email from AECOM in regards to the November 2017 HVAS data.</li> <li>Email from BMC to DPIE dated 10/1/2018 in regards to an exceedance at the HV6 monitor on 26/12/2017 that BMC become aware of on 8/1/2018 when they received an email from AECOM noting the exceedance and providing December 2017 environmental monitoring data.</li> <li>Email from BMC to DPIE dated 10/1/2018 in regards to an exceedance at the PM10-4 monitor on 8/12/2017 that BMC become aware of on 8/1/2018 when they received an email from AECOM noting the exceedance and providing December 2017 environmental monitoring data.</li> </ul> </li> <li>Further dust exceedance notifications to DPIE during 2018 and 2019 provided by BMC.</li> <li>Incidents discussed in Section 11 of 2017 &amp; 2018 Annual Reviews</li> <li>According to communications from BMC, all reportable incidents have been reported within the audit period. BMC reported that the clearing that occurred inconsistent with the Ground Disturbance Permits on 25 June 2017 and 10 October 2017 and the Biodiversity Management Plan (BMP) was not notified to DPIE as no material harm threatened to occur or occurred. The areas cleared were approved for clearing under SSD-5170 and the environmental impact is offset by the purchase of the offset properties (noting the inconsistency with the Biodiversity Management Plan).</li> <li>BMC did not notify DPIE immediately after it became aware of a number of dust exceedances, as listed above, however correspondence from DPIE dated 10 August 2017 as provided by BMC states: <p>"In 2014 the Department requested all mines in the Hunter Valley to report air exceedances when their PM10 monitors exceeded the 24 hour period criteria, regardless if the result was contributed by their site. Given the recent change and support of EPA's proposal of upstream and downstream monitoring, the Department requires sites to only report when their own contribution exceeds the 24 hour criteria (50 ug/m3). However, each site must assess, in a timely manner, their contribution when their monitor/s exceed 50ug/m3 for a 24 hour period."</p> </li> <li>BMC reported that despite the above guidance from DPIE, BMC has continued reporting PM10 all sources readings above 50 micrograms when received to the Department. BMC provided a spreadsheet to Auditors noting dates of exceedances made known to them; and dates of reporting to DPIE. Based on the dates provided by BMC, assessment of the BMC contribution, and reporting of results to DPIE has generally been conducted in a "timely manner".</li> <li>Based on the above guidance from DPIE as provided by BMC, and from the dates of notification provided by BMC, BMC is considered to be compliant with this condition.</li> </ul>	
7A	<p>Within seven days of becoming aware of a non-compliance, the Applicant must notify the Department of the non-compliance. The notification must be in writing to compliance@planning.nsw.gov.au and identify the development (including the development application number and name), set out the condition of this consent that the development is non-compliant with, the way in which it does not comply and the reasons for the non-compliance (if known) and what actions have been, or will be, undertaken to address the non-compliance.</p> <p>Note: A non-compliance which has been notified as an incident does not need to also be notified as a non-compliance.</p>	Compliant	<ul style="list-style-type: none"> <li>Reviewed a sample of non-compliance notification emails to DPIE and they generally: <ul style="list-style-type: none"> <li>Identified the Development;</li> <li>Set out the condition of the consent that the development is non-compliant with;</li> <li>The way in which the non-compliance does not comply with the condition; and</li> <li>What actions have been, or will be, undertaken to address the non-compliance.</li> </ul> </li> </ul> <p>It is noted that not all notifications were assessed as part of compliance assessment for this condition.</p>	
7B	<p><b>Monitoring and Environmental Audits</b></p> <p>Any condition of this consent that requires the carrying out of monitoring or an environmental audit, whether directly or by way of a plan, strategy or program, is taken to be a condition requiring monitoring or an environmental audit under Division 9.4 of Part 9 of the EP&amp;A Act. This includes conditions in respect of incident notification, reporting and response, non-compliance notification, compliance report and independent audit.</p> <p>Note: For the purposes of this condition, as set out in the EP&amp;A Act, "monitoring" is monitoring of the development to provide data on compliance with the consent or on the environmental impact of the development, and an "environmental audit" is a periodic or particular documented evaluation of the development to provide information on compliance with the consent or the environmental management or impact of the development.</p>	Note	<ul style="list-style-type: none"> <li>Noted</li> <li>Refer to Management Plan conditions above for monitoring.</li> <li>Refer to condition 9 in regards to auditing.</li> </ul>	
8	<p><b>Regular Reporting</b></p> <p>The Applicant must provide regular reporting on the environmental performance of the development on its website, in accordance with the reporting arrangements in any plans or programs approved under the conditions of this consent.</p>	Compliant	<ul style="list-style-type: none"> <li>Annual Reviews prepared - 2017 &amp; 2018 Annual Review.</li> <li>Monthly Monitoring Data Summaries prepared and included on the BMC website.</li> </ul>	

9	<p><b>INDEPENDENT ENVIRONMENTAL AUDIT</b></p> <p>Within 1 year of the commencement of development under this consent, and every 3 years thereafter, unless the Secretary directs otherwise, the Applicant must commission and pay the full cost of an Independent Environmental Audit of the development. This audit must:</p> <p>(a) be conducted by a suitably qualified, experienced and independent team of experts whose appointment has been endorsed by the Secretary;</p> <p>(b) include consultation with the relevant agencies and CCC;</p> <p>(c) assess the environmental performance of the development and assess whether it is complying with the requirements in this consent and any relevant EPL or Mining Lease (including any assessment, plan or program required under these approvals);</p> <p>(d) review the adequacy of strategies, plans or programs required under the abovementioned approvals; and</p> <p>(e) recommend appropriate measures or actions to improve the environmental performance of the development, and/or any assessment, plan or program required under the abovementioned approvals.</p> <p><i>Note: This audit team must be led by a suitably qualified auditor and include experts in any field specified by the Secretary.</i></p>	Compliant	<p>(a) DPIE letter to BMC dated 3/10/2019 in regards to endorsement of the audit team.</p> <p>(b) Consultation with EPA, Council, RR, CCC and NRAR was undertaken on 20 November 2019, via phone calls and emails.</p> <p>(c) Refer to the SSD-5170, EPL 6538 and ML conditions assessed.</p> <p>(d) Refer to conditions above for applicable conditions relating to strategies and plans.</p> <p>(e) Refer to recommendations included in this Audit Table and Audit Report.</p>
10	<p>Within 6 weeks of the completion of this audit, unless the Secretary agrees otherwise, the Applicant must submit a copy of the audit report to the Secretary, together with its response to any recommendations contained in the audit report.</p>	Compliant	<p>Email from BMC to DPIE dated 14/9/2017 submitting the prior (2017) IEA report within the required period, prior to 15/9/2017.</p>
11	<p><b>ACCESS TO INFORMATION</b></p> <p>From the commencement of development under this consent, the Applicant must:</p> <p>(a) make copies of the following publicly available on its website:</p> <ul style="list-style-type: none"> <li>• the documents listed in condition 2(a) of Schedule 2;</li> <li>• current statutory approvals for the development;</li> <li>• approved strategies, plans and programs required under the conditions of this consent;</li> <li>• a comprehensive summary of the monitoring results of the development, reported in accordance with the specifications in any conditions of this consent, or any approved plans and programs;</li> <li>• a complaints register, which is to be updated monthly;</li> <li>• minutes of CCC meetings;</li> <li>• the annual reviews of the development (for the last 5 years, if applicable);</li> <li>• any independent environmental audit of the development, and the Applicant's response to the recommendations in any audit;</li> <li>• any other matter required by the Secretary; and</li> </ul> <p>(b) keep this information up-to-date, to the satisfaction of the Secretary.</p>	Compliant	<p>Auditors checked the Bengalla website on 20/1/2020 and make the following comments:</p> <p>(a) Compliant - The documents listed in condition 2(a) of Schedule 2:</p> <ul style="list-style-type: none"> <li>- EIS, SEE (Mod 1), SEE (Mod 2), SEE (Mod 3) and SEE (Mod 4);</li> <li>• Compliant - Consolidated consent.</li> <li>• Compliant - Approved strategies and plans required under the conditions of this consent.</li> <li>• Compliant - Monthly Monitoring Data Summaries.</li> <li>• 2017, 2018 and 2019 Complaints Registers.</li> <li>• Compliant - CCC meeting minutes.</li> <li>• Compliant - The annual reviews of the development for the last 5 years.</li> <li>• Compliant - 2013 &amp; 2016 IEA reports and BMC responses.</li> </ul> <p>(b) Based on the review on 21/1/2020, all information appeared to have been kept up to date.</p>
<b>Appendix 3</b>			
<b>Terms of the Voluntary Planning Agreement</b>			
	<p>Bengalla Coal Community Fund (\$400,000 per annum)</p>	Compliant	<p>* Remittance advice sighted dated 28/12/2017 for the sums of \$495,008.97 and \$18,562.93.</p> <p>* Remittance advice sighted dated 15/02/2019 for the sums of \$504,414.14, \$18,915.62 and \$157,783.99.</p>
	<p>Road maintenance requirements within the Muswellbrook LGA (\$125,000 per annum)</p>	Compliant	<p>A sample of receipts as listed below indicate payment of road maintenance requirements within the audit period.</p> <ul style="list-style-type: none"> <li>* Road maintenance order 408323/1 dated 28/3/2018 for \$140,765.45.</li> <li>* Remittance advice 2011 dated 28/3/2018 for \$160,422.13.</li> <li>* Road maintenance order 431289/1 dated 15/2/2019 for \$143,439.99.</li> </ul>
	<p>Council Environmental Officer position (\$20,000 per annum)</p>	Compliant	<p>Two receipts were provided that show evidence that the Council Environmental Officer position was paid during the audit period.</p> <ul style="list-style-type: none"> <li>* Order 401507/2 dated 1/12/2017 for \$16,875.39.</li> <li>* Order 431290/1 dated 25/1/2019 for \$17,196.02.</li> </ul> <p>According to communications from BMC the 2019 payment advice for the Council Environmental Officer position has not been received from Council.</p>
	<p>A commitment from the Applicant to seek to engage four apprentices per annum for the life of the mine sourced from residents within the local area (N/A)</p>	Not Triggered	<p>Not applicable</p>
	<p>General (\$0.065 cents per tonne of product coal produced in excess of 8.5 Mt of product coal from the mine in any one calendar year).</p>	Compliant	<p>Copies of remittance advice provide evidence that the \$0.065 cents per tonne of product coal produced in excess of 8.5 Mt of product coal from the mine in any one calendar year was paid for each year of the audit. The following remittances were provided by BMC:</p> <ul style="list-style-type: none"> <li>* Payment remittance advice dated 15/3/2019 for \$37,604.28, to pay tax invoice 46386 - from Council for tonnage over 8.5mTpa.</li> <li>* Payment remittance advice dated 18/3/2020 for \$49,492.73, to pay tax invoice 52409 - from Council for tonnage over 8.5mTpa.</li> </ul> <p>According to communications from BMC, payment advice for 2019 payment has not yet been received.</p>
<b>Appendix 5</b>			
<b>Noise Compliance Assessment</b>			
1	<p><b>Applicable Meteorological Conditions</b></p> <p>The noise criteria in Table 4 of schedule 3 are to apply under all meteorological conditions except the following:</p> <p>(a) wind speeds greater than 3 m/s measured at 10 m above ground level; or</p> <p>(b) temperature inversion conditions between 1.5°C and 3°C/100 m and wind speeds greater than 2 m/s at 10 m above ground level; or</p> <p>(c) temperature inversion conditions greater than 3°C/100 m.</p>	Compliant	<p>Attended noise monitoring reports show that assessment of mine operational noise is conducted in accordance with applicable meteorological conditions obtained from the Bengalla weather station and inversion tower.</p>
2	<p><b>Determination of Meteorological Conditions</b></p> <p>Except for wind speed at microphone height, the data to be used for determining meteorological conditions shall be that recorded by the meteorological station located on the site.</p>	Compliant	<p>Assessment of mine operational noise is conducted in accordance with applicable meteorological conditions obtained from the Bengalla weather station and inversion tower.</p>
3	<p><b>COMPLIANCE MONITORING</b></p> <p>Attended monitoring is to be used to evaluate compliance with the relevant conditions of this consent.</p>	Compliant	<p>Monthly operator attended night-time noise monitoring conducted throughout the audit period.</p>
4	<p>This monitoring must be carried out at least once a month (but at least two weeks apart) unless the Secretary directs otherwise.</p>	Compliant	<p>Operator attended noise monitoring was conducted on a monthly basis throughout the audit period. It was noted that a minimum of 16 days between monitoring rounds was recorded.</p>

<p>5</p>	<p>Unless otherwise agreed with the Secretary, this monitoring is to be carried out in accordance with the relevant requirements for reviewing performance set out in the NSW Industrial Noise Policy (as amended from time to time), in particular the requirements relating to:                  (a) monitoring locations for the collection of representative noise data;                  (b) meteorological conditions during which collection of noise data is not appropriate;                  (c) equipment used to collect noise data, and conformity with Australian Standards relevant to such equipment; and                  (d) modifications to noise data collected, including for the exclusion of extraneous noise and/or penalties for modifying factors apart from adjustments for duration.</p>	<p>Compliant</p>	<p>a) Monitoring is conducted at three representative locations and an assessment of mine only noise is conducted where audible/measurable.                  b) Assessment of mine operational noise is conducted in accordance with applicable meteorological conditions obtained from the Bengalla weather station and inversion tower.                  c) Calibration certificates supplied with monthly monitoring reports indicate that all sound level meters and calibrators comply with the appropriate standards.                  d) Extraneous noise is excluded where appropriate and only mine noise is reported against the criteria. It is noted that the use of LCeq(15minute) 60dB is used for the assessment of low frequency noise.</p>	<p>In the Implementation and transitional arrangements for the NSW Noise Policy for Industry it is noted that the assessment of modifying factors in accordance with the Industrial Noise Policy (INP) has been replaced by the NPI assessment methodology to reflect updated understanding of tonal and low frequency noise on the community. As such it is recommended that the NSW Noise Policy for Industry (NPI) assessment methodology for low frequency noise to be adopted.</p>
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Table Appendix A.1 Bengalla Continuation Project EIS SEE Commitments

Bengalla IEA\_EIS & SEE Commitments

Reference	Commitment	Requirement	Compliance Status	Evidence	Recommended Action
Continuation of Bengalla Mine, Environmental Impact Statement, September 2013					
The Continuation Project was aimed at accessing coal resources to the west of the existing project (that were identified in the original EIS) and extending mine life by a further 24 year					
Section 8 Impacts Management and Mitigation					
Air Quality					
	8.1.4	Maintain sufficient levels of moisture in trafficed surfaces	Compliant	During the site inspection noted watered roads using water carts.	
		Limit vehicle speeds in construction areas	Compliant	During the site inspection noted traffic speed limits throughout Bengalla.	
		Cessation of activities in periods of high dust	Compliant	During site inspection noted activities around and in the pit were modified or ceased in specific areas, during periods of high dust, with the aim of reducing dust. When wind speeds exceeded 10m/s at the wind speed monitoring location activities were observed to stop other than transport of Coal to the ROM loading bin.	
		Install TEOMs to largely replace HVAS	Not verified	According to site communications TEOMs will be installed once revised Air Quality Management Plan (AQMP) is approved by DPIE.	
		Best endeavours to establish AQ data sharing with neighbouring mines	Compliant	According to site communications: * Data sharing with Mt Arthur Coal (inversion data shared); * Meeting minutes provided by BMC; * HVAS data was shared from Mt Arthur. Mt Arthur stopped monitoring and BMC took over the monitoring; and * Meetings are held with Mt Arthur Coal and Mt Pleasant Mine.	
		Adjustment of the monitoring network as the site proceeds west.	Not verified	According to site communications monitoring network to be adjusted once revised AQMP is approved by DPIE.	
		Update of the existing dust and blast management systems with real time air quality management system combined with predictive meteorological forecasting	Compliant	During site inspection noted real time air quality management system combined with predictive meteorological forecasting was used to assist operations minimise air quality (dust and blast) impacts.	
	Revise the AQMP to include: 1. KPIs 2. Monitoring Methods. 3. Location frequency and duration of monitoring. 4. Monitoring, response and reporting procedures	Compliant	1. Section 4 AQMP; 2. Section 4 AQMP; 3. Section 4 AQMP; and 4. Section 4 & 7 AQMP.		
Greenhouse Gas	8.2.4	Monitor fuel efficiency of diesel equipment	Observation	* Section 5.2 of the AQMP states that fuel efficiency of diesel equipment will be monitored. * <u>Observation</u> : Fuel efficiency results were not provided during the audit period.	Monitor the fuel efficiency of diesel equipment.
		Optimising conditions of fleet operations	Compliant	According to site communications consideration of fuel efficiency during procurement; mine planning to optimise haul distances and maintaining equipment so fuel use is minimised.	
		Use of high efficiency Electric motors	Compliant	* Section 5.2 of the AQMP states that high efficiency electric motors will be used. * According to communications from BMC: 1. The site currently has over 200 electrical motors in fixed installations; 2. The site has always installed the highest efficiency that is practical at the time of installation; 3. Due to this BMC currently have different efficiency types across the site; and 4. When these motors are due for change out they will be replaced with the highest efficiency that is practical for the installation.	
		Energy efficient lighting systems	Compliant	* Section 5.2 of the AQMP states that energy efficient lighting systems will be used. * According to communications from BMC: 1. BMC have LED lighting fitted to >90% of HME. 2. All lighting plants have LED lights installed. 3. CHPP is converting to LED as the older lights fail. 4. All new installations for the previous 5 years have had LED fitted.	
Noise	8.3.4	The proposed relocated ROM hopper will include an equivalent level of noise control as the existing hopper, which was designed and constructed following best practice procedures	Compliant	Site inspection and review of aerial photography indicates that the ROM hopper has not been relocated during the audit period.	
		Best practice modifications will continue to be implemented at the CHPP building, which currently produces a sound power level of 115 dBA	Compliant	NMP as implemented details the continued use of best practice at the CHPP.	
		Conveyors will continue to be limited to a sound power level of no more than 76 dBA per metre for sections of conveyor that cannot be enclosed	Compliant	NMP as implemented details the continued use of best practice to minimise noise from the conveyor system. Conveyors were noted to be covered and were not observed to be a significant noise source.	
		The rail load out facility, stackers and reclaimers will continue to be managed and modified following best practice control measures.	Compliant	NMP as implemented details the continued use of best practice to minimise noise from coal transport systems. Stackers and reclaimers were not observed to be significant noise sources during the site inspections.	

Table Appendix A.1 Bengalla Continuation Project EIS SEE Commitments

		The NMP will be updated	Compliant	NMP is regularly reviewed and updated as necessary. Updated in March 2019 in response to MOD4 to the Development Consent.		
		Real time noise monitoring will be undertaken at representative receptors and the data will be used onsite in noise management to avoid exceedances	Compliant	NMP as implemented and as observed during the site inspection details the use of the real-time noise monitoring system to guide day to day operation of the site, minimise noise impacts and ensure compliance with the relevant noise criteria.		
Blasting	8.4.4	Maximum of 12 blast events per week during the hours of 7:00 am to 5:00 pm, Monday to Saturday;	Compliant	Blasting records indicate a maximum of 7 blasts were conducted in one week. All blasts occurred between the hours of 7:00 am and 5:00pm.		
		Commitment for a maximum of one blast event per day during the hours of 11:00 am to 3:00 pm on Sundays only for blasts scheduled within 500 m of the M A as defined on Figure 17 (or the approved but not yet constructed Mount Pleasant Project infrastructure area);	Compliant	No blasting occurred on a Sunday. (Not permitted in Development Consent)		
		MSC along with all privately owned residents located within the Project noise management receptor zone See Table 40 and Table 41) will be offered to be notified of a Sunday blast.	Compliant	No blasting occurred on a Sunday. (Not permitted in Development Consent)		
		Blast design procedures to be undertaken by appropriately qualified personnel to minimise the potential for overpressure, ground vibration and blast fume impacts to residential receptors, surrounding infrastructure and BMC employees;	Compliant	Comprehensive blast procedures in place and enacted by appropriate contractors and Bengalla personnel.		
		Ongoing review of real-time meteorological monitoring information (wind speed, direction, inversion) before the timing of any blast;	Compliant	Observed to be in practice during the site inspection and detailed in the BMP.		
		The existing blast monitoring system will be regularly reviewed and implemented to ensure it is representative of the nearest sensitive receptors in consultation with relevant regulators;	Compliant	The blast monitoring system is reviewed and implemented as per BMP.		
		Procedures for the notification of neighbours of upcoming blast events (timing and location) and maintenance of the BMC Blasting Hotline;	Compliant	Detailed in BMP and implemented. Blasting schedule hotline in place (02 6542 9591).		
		The Blast MP will include: Management measures to close public roads, rail infrastructure and evacuate M As within 500 m of a blast site during the blast event and until potentially impacted areas are clear of dust and fumes; and A summary of blast monitoring sites and procedures.	Compliant	Detailed in BMP and implemented.		
	Visual Impact	8.5.4 Onsite Treatments	The preparation of detailed landscape plans to achieve outcomes that emulate the grassland open woodland/scattered tree landscapes of surrounding hills as generally described in Section 8.21 to achieve a minimum of 10% tree cover with a higher density coverage on the eastern face of the overburden emplacement area (or as otherwise agreed with MSC);	Not Triggered	The MOP requires land to be rehabilitated to high Density Woody Vegetation (HDWV).	
			As part of above, complete landscape design for the realigned Dry Creek along with the OEAs, incorporating the ecological mitigation strategies for the Project to achieve a more natural riparian setting;	Not Triggered	* Dry Creek has not yet been reinstated. * MOP covers this requirement by stating that the entire mine site should have "final landforms designed to incorporate" "natural drainage lines, which, where reasonable and feasible, further avoid straight run drainage drop structures, to integrate with surrounding landforms.	
		Early, progressive establishment and rehabilitation of the outer faces of the Main OEA, particularly the southern slopes adjacent to the Main Northern Rail Line and CHPP. This will minimise the pre-rehabilitation areas to external sensitive view locations;	Compliant	During the site inspection noted revegetated visual bund adjacent to the CHPP and tree screen adjacent to the railway line.		
		Maintenance of existing tree planting areas and development of new areas (or equivalent mitigation measure) (as shown on Figure 14 to Figure 18) and the preparation of landscape design for planting areas to achieve the best visual outcome to critical eastern and southern views inclusive of planting patterns consistent with the limited, woodland and grassland Of the existing landscape (not subject to coal mining);	Compliant	During the site inspection noted revegetated visual bund adjacent to the CHPP, tree screen adjacent to the railway line and revegetated dump. See Project Approval conditions regarding rehabilitation.		
		Temporarily seeding the Western OEA to establish grass cover as soon as practical, commencing from the western and northern sides to reduce visibility;	Not Triggered	Western OEA not yet constructed.		
		Re-establishment of rehabilitated areas for agricultural use consistent with successful tree establishment upon completion of mining;	Not Triggered	Mining not yet completed.		
		Design drop down drainage structure alignments to vary with the topographic form of the Main OEA and avoid extensive straight line drop downs;	Compliant	During the site inspection noted BMC started incorporate fluvial geomorphology design influences (Geofluv) on the southern side of the dump.		
		Utilisation of tree areas to assist in breaking up views to drainage structures;	Compliant	BMC reported that they sought approval (SSD-5170 Modification 2) to construct visual relief at the top of the overburden emplacement area and establish High Density Woody Vegetation (HDWV) on the slopes facing Muswellbrook and Denman Road. A Visual Impact Assessment was undertaken. This Assessment supersedes EIS commitments regarding trees near the drop structures. Bengalla Mine is currently around Year 4. The Assessment Year 4 image shows sparse HDWV over the slopes facing Muswellbrook and Denman Road.		
		Finished new fixed infrastructure developments in forest tones such as olive green or grey as far as practical to reduce visual contrast with the surrounding landscape, consistent with regulatory and safety requirements; and	Complaint	The only new infrastructure is explosive magazine buildings. These are white and not in forest tones. Given the specifics of the condition below, the storage facility is required to be screened and cannot be seen off site, hence this condition is not seen as relevant to the explosives magazine. Based on this BMC are considered compliant with he condition.		
		Completion of topographic and tree planting design around the explosive storage facility and reload facility to reduce its visibility in the landscape.	Compliant	During the site inspection noted existing tree screen and bund around the explosives magazine prevents it from being seen from adjacent properties.		
Offsite Treatments	Tree screen planting (or equivalent mitigation measure) along Wybong Road will be extended to the western edge of the Project Boundary as generally shown on Figure 18;	Not Triggered	Mining has not yet advanced further enough west.			
	Landscape plans for screening the eastern side of Bengalla Link Road will be prepared and implemented. Planting (or equivalent mitigation measure) already established on Bengalla Link Road along the deviation and Roxburgh Road will be extended to the western end of the Project Boundary;	Compliant	Bengalla Link road has not yet been constructed.			

Table Appendix A.1 Bengalla Continuation Project EIS SEE Commitments

		Where appropriate, tree screen planting (or equivalent mitigation measure) will be implemented along Denman Road, Roxburgh Road, Wybong Road in consultation with local receptors and the RMS;	Observation	<ul style="list-style-type: none"> <li>* During the site inspection sighted the tree screen recently planting along Roxburgh Road.</li> <li><b>Observation:</b> Noted that there was some trees missing from the Roxburgh Road tree screen.</li> <li>* During site inspection noted the visual bund established along Wybong Road.</li> <li>* BMC have not been able to plant tree screening along Denman Road. Mt Arthur Coal Mine approached by BMC to plant trees on their land adjacent to Denman Road reserve, due to reserve constraints. Approval was not granted by Mt Arthur to plant the tree screen. BMC prepared a Visual Impact Review Report, dated 7/11/2019, for Denman Road and the report was provided to DPIE in a letter from BMC dated 8/11/2019. According to the 8/11/2019 email, BMC will await DPIE's review of the Report before taking further steps.</li> <li>* Section S138 notice to Muswellbrook Shire Council in regards to planting visual tree screens within the Denman Road reserve. The works are proposed to be undertaken during February/March 2020.</li> <li>* Roxburgh Road tree screen was planted in consultation with Council (meeting minutes dated 13/12/2017, indicate tree screen discussed with Council). According to site communications, Roxburgh Road is owned by Council therefore consultation with RMS was not required.</li> <li>* Local receptors were provided a copy of the Visual Impact Management Plan (VIMP) that provides visual impact mitigation measures, including tree planting.</li> </ul>	
		Compete a site inspection and where required, prepare landscape strategies for receptors that will experience prolonged high levels Of visual impact, where requested;	Compliant	Section 2.1.2 & 3.4.2 of the VIMP.	
		Ensure offsite landscape treatments at Edinglassie and Rous Lench create visual separation between these elements and active faces of the OEA in consultation with Mt Arthur Coal Mine; and	Compliant	Section 3.4.2 of the VIMP.	
		The reinforcement of plantings close to viewing locations will be undertaken where night lighting is visible.	Compliant	Section 3.4.2 of the VIMP.	
		Update the Landscape MP	Compliant	The Landscape Management Plan has been superseded the MOP. The MOP was updated on 9 April 2019.	
<b>Water</b>					
	8.6.4	Water Management plan			
Surface Water		The Water Management Plan will also include: <ul style="list-style-type: none"> <li>* Detailed baseline data on surface water flows and quality for water bodies that could potentially be impacted by the Project;</li> <li>* Surface water and stream health impact assessment criteria including trigger levels for investigating any potentially adverse surface water impacts; and</li> <li>* A program to monitor and assess: <ul style="list-style-type: none"> <li>— Surface water flows and quality;</li> <li>— Impacts on water uses;</li> <li>— Stream health; and</li> <li>— Channel Stability.</li> </ul> </li> </ul>	Compliant	Water Management Plan: <ul style="list-style-type: none"> <li>* Section 3.1 - Baseline data;</li> <li>* Section 3.8 - Trigger levels; and</li> <li>* Section 3.7 - Monitoring program.</li> </ul>	
		BMC will hold all relevant licences, share component and allocation required to comply with the WM Act and Water Act at all times water is taken, whether during or after the life of the Project (see Section 5.4.4),	Compliant	Two main Water Access Licence (WALs) (41547 and 1106) held for the site by BMC. WALs permit access to 6,017 units of water.	
Groundwater	8.7.4	The Water Management Plan will also include (at least): <ul style="list-style-type: none"> <li>Detailed baseline data on groundwater levels, yield and quality in the region;</li> <li>Groundwater impact assessment criteria, including trigger levels for investigating potentially adverse groundwater impacts;</li> <li>A program to monitor and assess: <ul style="list-style-type: none"> <li>Groundwater inflows to the mining operations;</li> <li>— Impacts on local (including alluvial) groundwater systems;</li> <li>— Impacts on the groundwater supply of potentially affected landowners; and</li> <li>— Impacts on any groundwater dependent ecosystems and riparian vegetation</li> </ul> </li> </ul>	Compliant	Water Management Plan: <ul style="list-style-type: none"> <li>* Section 6.2 - Baseline data;</li> <li>* Section 6.6 - Trigger levels;</li> <li>* Section 6.5 - Monitoring program; and</li> <li>* Section 5.0 - Water Balance.</li> </ul>	
		The Groundwater Management Plan will be revised for the Project and will address the following: <ul style="list-style-type: none"> <li>Increased zone of depressurisation in the Permian;</li> <li>Drawdown in the Hunter River alluvium;</li> <li>Groundwater seepages into the open cut mining area;</li> <li>Health of GDEs;</li> <li>Water licencing; and</li> <li>Groundwater quality in the final void and aquifers.</li> </ul>	Compliant	<ul style="list-style-type: none"> <li>* Section 6.3 - Depressurisation in the Permian;</li> <li>* Section 6.3.2 &amp; 6.3.3 - Drawdown in the Hunter River alluvium;</li> <li>* Section 1.3, Table 12 and 6.5.1 - Groundwater seepage;</li> <li>* Section 6.3.3 - Health of GDEs;</li> <li>* Section 5.2 and Table 11 - Water licencing;</li> <li>* Section 6.3.2 &amp; 6.4 - Groundwater quality in the final void &amp; aquifers;</li> </ul>	
Geochemical	Overburden	The ongoing management of overburden will consider the geochemistry of the material with respect to its potential risk to cause harm to the environment and its suitability for use in construction and revegetation. BMC will ensure: <ul style="list-style-type: none"> <li>The current management methods for PAF Archerfield Sandstone overburden will continue. This will occur in the Main OEA open mining area by covering Archerfield Sandstone material with acid neutralising and inert overburden to a depth of at least 5 m;</li> <li>That no Archerfield Sandstone materials will be placed in the Western OEA to avoid any potential connectivity with the adjacent Dry Creek; and</li> <li>The current practice of pre-stripping of topsoil from areas to be disturbed will continue as outlined in Section 3.4. The topsoil cover will then be utilised as part of the final rehabilitation to limit the risk of dispersion and erosion of potentially sodic overburden.</li> </ul>	Compliant	<ul style="list-style-type: none"> <li>* MOP includes "problematic materials" such as Potentially Acid Forming (PAF) material to be "encapsulated in the OEA under at least 5m of inert material".</li> <li>* During site inspection, inspected reject emplacements.</li> <li>* Western OEA not yet constructed.</li> <li>* Topsoil stripping included in MOP.</li> <li>* Topsoil placement noted on dump.</li> </ul>	
	Coal Reject	BMC will implement the following management measures: <ul style="list-style-type: none"> <li>No coarse reject materials will be emplaced in the Western OEA to avoid any potential connectivity with the adjacent Dry Creek;</li> <li>Consistent with current practice, coal reject materials will not be co-disposed with overburden materials within any part of the Main OEA that have been identified to overlie alluvial soils. There may be some scope for co-disposal of coal rejects in some areas that drain towards the open mining area, however only if existing groundwater/hydrogeological studies completed by BMC clearly demonstrate a low risk of seepage connectivity to alluvial soils; and</li> <li>Current management methods for coal reject materials (burial under NAF overburden) within the open mining area will continue. This practice has been determined through monitoring to be successful in minimising the risk of any significant impact to the environment.</li> </ul>	Compliant	<ul style="list-style-type: none"> <li>* Western OEA not yet constructed.</li> <li>* During site inspection, inspected reject emplacements.</li> </ul>	

Table Appendix A.1 Bengalla Continuation Project EIS SEE Commitments

Aboriginal Cultural Heritage	8.9.4	The revision Of the ACHMP will include: Detailed salvage methodologies to be carried out prior to the commencement of the Project, including: — Surface collection (salvage) of stone artefacts; and — Scarred tree assessment and removal. Identification of appropriate long term management options for recovered artefacts which will be developed in consultation with RAPs; Procedures for the protection and conservation of archaeological sites that are not impacted by the Project by means of fencing and other appropriate management measures; Protocols for the updating of BMCs existing Aboriginal site database, including its ongoing maintenance, throughout the life of Project; Provisions regarding the appropriate management action(s) for previously unrecorded Aboriginal sites identified within the Project Boundary; and A standard procedure to be detailed in the ACHMP in the event that skeletal remains are identified within the Project Boundary throughout the operational life of the Project.	Compliant	ACHMP: * Section 6 - Salvage methodologies; * Section 4.1.2 & 6.6 - Options for recovered artefacts; * Section 5 - Management of Non-Impacted Aboriginal Sites; * Section 5.1 - Site database; * Section 7 - Unrecorded Aboriginal Objects; and * Section 7.3 - Skeletal Remains.	
	Salvage	Within the Disturbance Boundary surface collection will be undertaken for all 259 artefact scatters and isolated finds to be directly impacted by the Project. This will occur prior to the commencement of ground disturbance works and with the involvement of RAP representatives.	Not Triggered	Salvage work undertaken prior to the audit period.	
	Scarred Trees	Prior to disturbances the three potential scarred trees to be impacted by the Project will be subject to an aborist inspection, with the participation of RAPs, in order to assess their status as Aboriginal scarred trees. If the scars on the trees are determined to be of Aboriginal origin, they will be removed under the supervision of a qualified aborist, archaeologist and RAP representatives prior to impact.	Compliant	According to site communications no scar trees were assessed or removed during the audit period. No mention of scar trees in the 2017 & 2018 Annual Reviews.	
	Management	Conservation and management will be undertaken for all archaeological sites (n 26) within the Project Boundary that will not be impacted by the Project. These sites listed in Table 61, will be identified on site plans to avoid their accidental destruction and details for the care of these sites will be included in the revised ACHMP. Aboriginal archaeological sites that will not be impacted by the Project but occur within 200 m of proposed impacts (i.e. mine activities (n 9)) are to be protected via permanent stock-proof fencing and appropriate associated signage.	Compliant	Section 5 & Figure 3 - ACHMP.	
Historical Heritage	8.10.4	The indirect impacts will continue to be managed through the existing European Heritage Management Plan that includes a Conservation Management Plan for both Bengalla and Overdene Homesteads, which will be revised for the Project. The European Heritage Management Plan will be updated for the Project in consultation with relevant regulators.	Compliant	Section 3 & 4 Heritage Management Plan.	
		A Stockyard is located within the proposed Disturbance Boundary, archival recording of the site will be undertaken to account for the significance Of the item and ensure that information pertaining to this item is retained into the future. The recording will comply with the Heritage Branch guidelines How to Prepare Archival Records of Heritage Items (1998) and Photographic Recordings of Heritage Items using Film or Digital Capture (2006).	Not Triggered	Archival recording undertaken prior to the audit period.	
Ecology	8.11.4	Mitigating impacts to ecology have been favoured through Project pre-clearance and clearance protocols, which will be contained in a Biodiversity Management Plan (BMP) to be prepared prior to the commencement of the Project, to the satisfaction of DP&I.	Not Triggered	BMP prepared prior to the audit period.	
		Proposed management measures to account for impacts to sensitive flora and fauna include: Continued use of an updated Land Disturbance Permit Process (described in Section 3.13) to ensure compliance with relevant licences and approvals and that appropriate environmental safeguards and mitigation measures are implemented prior to any disturbance; Limiting vegetation disturbance areas as far as practical so as to minimise the loss of habitat at any one time; Safe relocation of animals occupying trees to nearby woodlands in advance of disturbance by an appropriately qualified person; Removal (and relocation within the Project Boundary) of key habitat features such as tree hollows, large logs and boulders from within Disturbance Boundary; Provision of nesting boxes or tree hollows in nearby woodland proportionate to those removed; Progressive high quality rehabilitation and revegetation of disturbed areas, which will in the long-term, replace lost habitats for threatened fauna. Disturbed areas will be reinstated following mining to agricultural land with at least 10% open woodland corridors across the majority of the Disturbance Boundary and higher density coverage of the eastern face of the OEA to provide fauna habitat and movement;	Compliant	* During site inspection noted cleared tree hollows stored at the bottom of the Geofluv area. * MOP now requires land to be rehabilitated to High Density Woody Vegetation (HDVV).	
		Planting, relocation and/or propagation of species conforming to Box Gum Woodland and Derived Native Grassland in rehabilitated areas and/or other suitable sites within the Study Area to assist in the recovery of their populations; Planting of treed areas principally on either side of the Dry Creek frontage, along paddock fence lines and as copses in paddocks and also as large patches of treed vegetation, located on the eastern face of the OEA; Translocating and direct placement of topsoil for rehabilitation when practical to conserve the native seed bank and assist diversity; Implementation of dust and noise minimisation measures to reduce potential indirect impacts to vegetation condition and habitat quality in areas outside the Disturbance Boundary; Implementation of dam drainage protocols (safe relocation of animals, timing of works to non-breeding seasons for target species and disease transmission reduction initiatives) prior to any dam decommissioning; Erosion and sediment controls to maintain habitat integrity/ function and reduce the potential spread of weeds; Weed and pest management; and Visual and lighting management, to reduce potential indirect impacts to nocturnal fauna in areas nearby operations.	Compliant	* MOP now requires land to be rehabilitated to High Density Woody Vegetation (HDVV). * Dry Creek not yet reinstated. * During the site inspection noted that trees planted on the dump face and also along paddock fence lines. * During site inspection noted: - Water cart watering haul roads-sized correctly; and - During windy days at the site machinery in the pit were shut down. * Topsoil is either directly placed or stockpiled. * Noted during site inspection dams being drained progressively and erosion and sediment controls in place. * 2017 and 2018 Annual Reviews indicate weed and pest management work undertaken at the mine site. * During the site inspection noted the following at the site: - Visual bund adjacent to the CHPP; - Rehabilitation of the waste emplacement; and - Planting of tree screens around the site.	

Table Appendix A.1 Bengalla Continuation Project EIS SEE Commitments

		A regular ecological monitoring program will be developed as a component of the biodiversity management plan to monitor the ongoing status and health of flora and fauna communities that will be retained within the study area as well as previously- disturbed rehabilitated areas. BMC will provide a financial contribution to the Upper Hunter Offset Fund in accordance with the credits generated under the upper hunter strategic assessment (or alternative offset strategy as agreed with relevant regulators) to secure sufficient offsets to compensate for the direct removal of native vegetation.	Compliant	* Ecological monitoring program discussed in the 2017 & 2018 Annual Reviews. * Letter to DPIE from BMC, dated 17 August 2018, in regards to an extension of time for the Long Term Security of Offsets. * Letter from DPIE dated 29/9/2019 granted an extension of time to finalise and secure a Biobanking Agreement. The time extension was until 1 October 2018. * Letter from DPIE dated 25/9/2018 approved extension until 30/9/2019, to allow for BMC to look at an alternative to a Long Term Security for the offset areas. * Letter from DPIE dated 27/9/2019 approved further extension until 30/9/2020.	
		A Dry Creek Reinstatement Management Plan will be developed in conjunction with relevant regulators to ensure a relevant, natural and functioning ecological community. Native grasses, reeds and shrub species that are characteristic of the Hunter Floodplain Red Gum Woodland community will be planted in the reconstructed bed and riparian areas of the realigned Dry Creek.	Not Triggered	Dry Creek has not yet been reinstated.  The Dry Creek Reinstatement Management Plan has not been prepared. According to site communications, the future re-instatement of Dry Creek is not proposed until after Year 15 or around 2030, subject to annual production rates.	
		Mine-owned riparian areas of dry creek nearby the Hunter River and a retained area (adjacent to the CHPP within the project boundary that were not affected by the disturbance boundary will also be rehabilitated (including the planting of the regionally endangered population river red gum).	Not Triggered	Dry Creek has not yet been reinstated.	
<b>Traffic</b>	8.13.4	Bengalla Link Road BMC will continue to be responsible for the costs of the maintenance of the Bengalla Link Road to the Bengalla Mine Access Road for the life of the Project. BMC will also ensure that all road signs are maintained and provide at least 24 hrs of notice of road closure on Wybong Road and Bengalla Link Road.	Not triggered	Bengalla Link Road not yet constructed.	
<b>Social</b>	8.14.4	Construction Phase The following measures will be undertaken to assist MSC in its policy and planning to account for the potential cumulative social impacts of the construction phase of the Project in consideration of the status of other mining operations: Monitoring of the proportion of non-local operational workforce hires; Provide applicable construction workforce data to assist MSC in monitoring local housing demand and supply, housing prices and affordability and plan appropriately for land and housing provision; and Include contract specifications to include provisions for a high loading for the cost of temporary accommodation in order to encourage sustainable accommodation practices, where practical.	Not Triggered	Construction has been completed.	
		Operational Phase BMC will provide timely and appropriate operations workforce information to MSC, to assist Council to plan for future needs in relation to housing and accommodation, affordable housing and child care.	Compliant	*According to site communications a copy of the Annual Review containing workforce statistics is sent to the MSC on an annual basis.	
	VPA	A new VPA is to be established for the project	Not Triggered	VIMP prepared outside of the audit period.	
<b>Waste</b>	8.17.5	Regular inspections and monitoring will be conducted by qualified personnel to ensure adequate maintenance and operation of the waste facilities and to ensure management practices are sufficient to manage any waste products.	Compliant	* During the site inspection Auditors viewed the pulse system that is used to facilitate waste management on site. * Remondis is the principal subcontractor that removes waste on-site. Noted Remondis waste truck on-site during the site inspection. Monthly Waste Management Reports from Remondis provided.	
		BMC will ensure that each major waste stream is segregated in the appropriate receptacles for recycling, reuse and / or disposal.	Compliant	During the site inspection noted that waste is stored in an appropriate manner, with waste sorted out separately into different bins.	
<b>Soils and Land Capability</b>	8.19.4	BMC will update the Rehabilitation Management Plan for commitments below . The mitigation and management measures included within the Rehabilitation Management Plan that will be provided in the revised plan include Suitable topsoil from each of the soil types will be stripped prior to overburden emplacement. To ensure that the better quality topsoil is not mixed with the inferior subsoil, selective soil stripping practices will occur; Prior to any surface disturbance a relevant GDP will be completed to ensure that the limits of these works are pegged and delineated by a suitably qualified person; Topsoil will be maintained in a slightly moist condition during stripping; Stripped material will be placed onto reshaped overburden and spread immediately, if practical;	Compliant	Current MOP serves as the Rehabilitation Management Plan. Ground Disturbance Permit system evidenced on site. Not always possible to strip or maintain topsoil in a slightly moist condition. Drought for several years has reduced ability to strip topsoil with ideal moisture content. Topsoil is either directly placed or stockpiled.  The management recommendations and practices for soil and rehabilitation contained in the approved management plans covers all aspects identified in the audit.	Continue current practices regarding GDP and soil testing and management.  It must be emphasised that the management recommendations and practices for soil and rehabilitation contained in the approved management plans must continue to be implemented in accordance with the approved plans.
		Grading or pushing soil into windrows with graders or dozers for later collection for loading into rear dump trucks by front-end loaders; Soil transported by overburden trucks may be placed directly into storage; If long-term stockpiling is planned (i.e. greater than 12 months), these will be seeded and fertilised; As a general rule, a maximum stockpile height of 3 m will be maintained. Clayey soils will be stored in lower stockpiles for shorter periods Of time compared to coarser textured sandy soils; Prior to re-spreading stockpiled topsoil onto reshaped overburden, an assessment of weed, infestation on stockpiles will be undertaken to limit any potential distribution of weed species; and Topsoil should be spread to a minimum depth range of 0.1 m (steep slopes) to 0.2 m (flatter areas).	Compliant	Conditions undertaken on site, soil depths inspected in the field appear to meet the EIS requirements. Some areas where rill erosion has reduced cover may need repair or additional soil resources to meet conditions.	
<b>Agriculture</b>	8.20.4	BMC will implement a number of mitigation and management measures including: • Developing a final landform that s consistent with pre mining agricultural land use; • Continuing, where possible, with the existing licensee arrangements for BMC agricultural land; - Continuing with arrangements for sustainable farming practices, in collaboration With licensees and the Hunter-Central Rivers Catchment Management Authority. This will include the implementation and monitoring of annual farm plans, BMC financial support for programs and the effective management of land situated outside the Disturbance Boundary;	Compliant	The MOP dictates landforms, which are in line with EIS designs with changes being approved through project and MOP modifications. Buffer land is leased and managed through Farm Management Plans. The introduction and implementation of Geomorphic landform designs in current and future rehabilitation is encouraged by the Regulators and should proceed as designed.	

Table Appendix A.1 Bengalla Continuation Project EIS SEE Commitments

Rehabilitation and Mine Closure	8.21.9	Rehabilitation monitoring of the reinstated channel of Dry Creek will include regular inspections of rehabilitated areas to assess: Structural stability; The effectiveness of erosion and sediment control measures; The effectiveness of the realigned section of Dry Creek; Revegetation success of mine rehabilitation; and The effectiveness of weed and pest management measures.	Not Triggered	Not Triggered	
		Rehabilitation will be designed to permit the reintroduction of relevant agricultural activities into appropriate the rehabilitated landform as soon as practicable.	Compliant	Limited trials have been undertaken however it is predicted this will not occur for many years as the change in rehabilitation targets to high density woody vegetation will not facilitate grazing on a large portion of the available rehabilitation area.	The change of vegetation type in much of the rehabilitation to HDWV means trials on agricultural land rehabilitation will be pushed back several years. There are learning from current research trials which should be reviewed and adopted in pasture rehabilitation intended for future grazing.
		Final rehabilitation completion criteria for mine closure will be developed and agreed in consultation with the relevant government agencies and community and incorporated into the Final Void and Mine Closure Plan (developed as part of the Rehabilitation Management Plan).	Compliant	Covered in current MOP and to be implemented in Mine Closure Plan.	Continue monitoring rehabilitation to ensure it is tracking towards final completion criteria.
		Should BMC wish to cease operations at Year 24 a Mine Closure Plan will be developed within five years of the scheduled mine closure.	Note	Noted	

**BENGALLA MINE - DEVELOPMENT CONSENT MODIFICATION 1, August 2015, Statement of Environmental Effects**

This Modification was sought for the following:  
 -Alterations to various water management infrastructure components including:  
 o Utilisation of the Satellite Pit as a temporary dirty water catchment dam;  
 o Relocation of the Staged Discharge Dam Hunter River Salinity Trading Scheme staged discharge release point;  
 o Construction of clean water diversion levees in locations other than those already approved; and  
 o Revised locations for the proposed relocation of the Hunter River and Washery Dams.  
 - Additional locations for the siting of the Explosives Storage Facility; and  
 - The placement of fill from the excavation of Clean Water Dam 1 adjacent to it.

Statement of Commitments	7	All construction activities potentially audible at sensitive receivers will be conducted between the hours of 7 am to 6 pm, Monday to Friday and 8 am to 1 pm on Saturdays. No construction works will occur on Sundays or Public Holidays.	Compliant	No significant construction occurred during audit period. According to communications from BMC, the relocated Raw Water Dam, Relocated Washery Dam and the relocated Staged Discharge Dam (PHOTO 13) were constructed within permitted construction hours.	
		Disturbance associated with the construction of the Northern Clean Water Diversion Levees will be contained to the area as shown on Figure 7. Disturbance areas will be clearly demarcated and sign posted, where appropriate.	Not Triggered	Not constructed in the audit period.	
		Impacts to mature trees associated with the construction of the Northern Clean Water Diversion Levees will be avoided where possible which will be identified during the completion of pre-clearance and clearance surveys in accordance with the Biodiversity Management Plan or its latest version.	Not Triggered	Not constructed in the audit period.	
		Following completion of the Northern Clean Water Diversion Levees, the vegetation communities will be rehabilitated back to its previous condition using locally endemic groundcover species from the Box Gum Woodland and Derived Native Grassland community.	Not Triggered	According to site communications the Northern Clean Water will not be rehabilitated until the Dry Creek is reinstated.	
		To ensure dust emissions from the development of the CW1 Emplacement Area are minimised where possible, appropriate operational and physical dust mitigation measures will be implemented such as maintaining sufficient levels of moisture on the surface of trafficked surfaces and limiting vehicle speeds.	Not Triggered	These works were undertaken outside of the audit period.	
		Rehabilitation will commence as soon as practicable following completion of the CW1 Emplacement Area.	Not Triggered	Rehabilitation works were undertaken outside of the audit period.	
		AHIMS sites 37-2-1469, 37-2-2891, 37-2-2896, and 37-2-2897 will be temporarily fenced and signposted as appropriate during construction of the Northern Clean Water Diversion Levees.	Not Triggered	The Aboriginal sites were fenced and signposted outside of the audit period.	
		Impacts to previously recorded AHIMS site A7-A8 (#37-2-1468) and newly recorded Aboriginal sites BM-AS2715 and BM-IA24-15 will be salvaged in accordance with BMC's existing ACHMP following approval of the Modification.	Not Triggered	Salvage works undertaken outside of the audit period.	
		AHIMS site cards for Aboriginal sites BM-AS27-15 and BM-IA24-15 will be submitted to the AHIMS register.	Not Triggered	Salvage works undertaken outside of the audit period.	
	BMC will update (at least) the SSD-5170 required Water Management Plan and Aboriginal Archaeology and Cultural Heritage Management Plan following approval of the Modification.	Compliant	The WMP, ACHMP and HHMP were updated following approval of SSD 5170 Mod 1.		

**BENGALLA MINE - SSD 5170 CONSENT MODIFICATION 2 Environmental Assessment, April 2016**

This proposed Modification was sought for the following:  
 • Alterations to the approved height of the Main Overburden Emplacement Area to improve visual amenity from primary viewing locations in and surrounding the township of Muswellbrook and Denman Road, in two selected locations (Visual Relief Areas):  
 o The Northern Relief Area constructed to a maximum height of Reduced Level 300; and  
 o The Southern Relief Area constructed to a maximum height of Reduced Level 290.  
 • Establishment of a new gravel access road from Wybong Road to the Dry Creek Diversion Project Construction Site Office being a former homestead (Homestead Access).

Determined 1-07-2016

7.0 Impacts Mitigation and Management

Table Appendix A.1 Bengalla Continuation Project EIS SEE Commitments

Visual	7.1.2	Relevant to this Modification the following on site rehabilitation and visual screening treatments will continue to be maintained: <ul style="list-style-type: none"> <li>The implementation of dense woody vegetation across the eastern face of the Main OEA exposed to Muswellbrook and Denman Road;</li> <li>Progressive establishment and rehabilitation of the outer faces of the Main OEA, particularly the southern slopes adjacent to the Muswellbrook- Ulan Rail Line;</li> <li>Maintenance of existing tree planting areas; and</li> <li>Design drainage to vary with the topographic form of the Main OEA and avoid straight line drop downs where reasonable and feasible.</li> </ul>	Compliant	* BMC waiting for independent report to be prepared in regards to the best way forward to establish HDWV. * During site inspection noted: - Progressive revegetation being undertaken at the dump; - Tree screens in place; and - Appropriate drainage in Geofluv area (PHOTO 16).	
Water	7.4.2	The Visual Relief Areas will be designed, installed and maintained to encapsulate and prevent migration of tailings, acid forming and potentially acid forming materials, and saline and sodic material.	Compliant	* During site inspection, inspected reject emplacements.	
Rehabilitation and Landform	7.9.2	Once established, the Visual Relief Areas will be shaped to allow the progressive implementation of rehabilitation as soon as reasonable and feasible. Rehabilitation development will include a range of measures, including topsoil management and relocation, establishment of erosion and sediment controls, habitat reinstatement and revegetation works. SSD-5170 Schedule 3, Condition 45 notes that rehabilitation should be conducted progressively as soon as practicable following disturbance.	Observation	Rehabilitation of available areas was scheduled, undertaken and reported in the 2017 and 2018 Annual Reviews. The majority of the site has been progressively rehabilitated, especially the southern face and dump top within the audit period. This rehabilitation has been undertaken in accordance with the MOP.  Much of the rehabilitation has been progressively undertaken in previous years targeting a mix of grass/pasture land and woodland communities, in accordance with previously approved rehabilitation targets. Given that under the current approval the target has changed to HDWV for much of this area, the current progressive rehabilitation must now be viewed as temporary. With the understanding that a revised rehabilitation program will be undertaken over the next 10+ years to establish HDWV.  Approximately 400 ha of legacy grassland/pastureland rehabilitation on the eastern face of the overburden area is required to be rehabilitated with HDWV (PHOTO 17). A specialist has been engaged to recommend methods of rehabilitating to achieve high density woody vegetation (HDWV).  <u>Observation:</u> It was observed that a section of the northern face of the overburden emplacement has been classified as active 'overburden emplacement' in the MOP. This area was raised as a concern during the audit as it did not display evidence of recent active dumping, however it is understood that additional material is required for final shaping. No final shaping or rehabilitation efforts had been made on this section of the Overburden Emplacement during the Audit period. The area appears to have been dumped out without final shaping or rehabilitation since 2013 (PHOTO 8). BMC consider that the schedule for rehabilitation of the northern face is in accordance with the approved Mining Operations Plan 2017 – 2021 Amendment A. BMC explained that during the audit period, severe drought conditions made any efforts to temporarily or permanently rehabilitate this section of 'overburden emplacement' not 'reasonable and feasible', given the potential dust generated from these activities would be higher than if they operated in accordance with the MOP and maintain the area as overburden emplacement. The Rehabilitation Specialist also understands that the areas that are visible to Muswellbrook were of greater community concern and therefore prioritised in the approved MOP scheduling. Whilst this area is not as visible from Muswellbrook as the Eastern face, final dumping, reshaping and rehabilitation should be prioritised in any future amendments to any authority, such as a MOP amendment.	It is recommended that BMC consider a staged approach to be undertaken to achieve HDWV, with 'patches' of HDWV applied each year over the 10+ years. BMC should aim to establish approximately 40 ha of HDWV each year. This would provide for small manageable areas for maintenance purposes (weed control and watering), especially in the first critical few years of establishment of each patch. Noted this approach may require DPIE/Resources Regulator approval.  Trials should be established in the first years of rehabilitating to HDWV to assess the best establishment techniques including: supplemental tree planting, spraying out pasture, re-ripping and direct tree seeding, ripping directly into pasture and seeding. It is understood Bengalla have already engaged a suitably qualified expert to prepare these trials.  The area on the northern face yet to be shaped and rehabilitated should take priority over other legacy areas being modified to HDWV and be completed promptly. Recent rainfall has provided reasonable and feasible conditions for both temporary and permanent rehabilitation efforts. These conditions were not present during most of the audit period. If the area requires additional overburden material for permanent rehabilitation, then dump scheduling should prioritise the additional material needed in this area for final volumes and levels, so final shaping can commence and permanent rehabilitation established. If scheduling does not prioritise this area for additional material, then temporary rehabilitation must be undertaken immediately to provide some surface cover to reduce dust and stabilise the surface material, as required by this condition. Any future modifications to an Authority must prioritise this area for rehabilitation.
		Schedule 3 Condition 44 of SSD-5170 further requires the Main OEA exposed to Muswellbrook and Denman Road to be rehabilitated with dense woody vegetation as soon as reasonable and feasible following the completion of mining operations.	Not Triggered	Rehabilitation ongoing however the final requirement for the Resources Regulator to be satisfied is not yet triggered. See above for update on achieving HDWV objectives.	
		BMC has commenced the development of a strategy to assist in implementing Condition 44 of SSD-5170. The strategy will be prepared in consultation with DP&E and DRE. It is anticipated that the strategy, where appropriate, will apply to the eastern facing components of the Visual Relief Areas should this Modification be approved. The strategy will then be reflected in the Bengalla Rehabilitation Management Plan (as Modified) and the Bengalla MOP (as Modified).	Compliant	MOP includes the strategy detailed in the condition.	

**BENGALLA MINE - SSD 5170 CONSENT MODIFICATION 3 Environmental Assessment, September 2016**

This Modification was sought to facilitate minor changes to the approved location of an explosives facility, reload facility, Hunter River pipeline and topsoil stockpiles.

Determined December 2016

**6.0 Impacts, Management and Mitigation**

Hazards	6.1.2	Management procedures will continue to be implemented to minimise potential hazards and their likelihood of occurrence. These hazards are decreased by ensuring compliance with relevant legislation, regulations and guidelines.	Compliant	During the site inspection noted that the relocated explosives magazine was bunded, fenced and gated. Refer to other conditions regarding other environmental risks.	
		All storage facilities at BMC will continue to satisfy the following requirements: <ul style="list-style-type: none"> <li>Facilities will be designed, constructed, inspected and maintained in accordance with the requirements of the Dangerous Goods (Road and Rail Transport) Act 2008 and the relevant Australian Standards;</li> <li>Explosives will be transported and utilised in accordance with site procedures and the requirements of the Explosives AS, Explosives Act 2003, Explosives Regulation 2013, Coal Mines Health and Safety Act 2002, the Coal Mines Health and Safety Regulations 2006 and other relevant codes;</li> <li>All facilities will be secure;</li> <li>Designs will ensure easy access for firefighting should a fire occur; and</li> <li>All substances will be stored in the areas or facilities provided.</li> </ul>	Compliant	The new explosives compound was constructed at the beginning 2017. In accordance with site communications, this facility was built in accordance with another Australian Standard (AS); AS 2187:1998 Explosives - Storage, Transport and Use – Storage. The audit team did not check that the facility was build to the AS 2187:1998 standard.  BMC provided photographs of the compliance plates for each of the 4 magazines.	
Amenity	6.2	Potential amenity impacts including visual, air quality and noise will continue to be managed in accordance with the approved management plans and onsite procedures.	Note	Refer to review of visual, air quality and noise management plans and practices provided in relevant the SSD-5170 conditions.	

**BENGALLA MINE - SSD 5170 CONSENT MODIFICATION 4 Environmental Assessment, December 2017**

This Modification was sought for the following:

- Amendments to the approved water management system;
- To temporarily store earthen materials associated with dam construction and other identified suitable clay material required for the future Dry Creek reinstatement;
- Increase the capacity of (and an additional locations for) Run of Mine (ROM) coal stockpiles; and
- Additional storage locations for temporary emplacement of coal processing reject material.

Determined December 2018

Table Appendix A.1 Bengalla Continuation Project EIS SEE Commitments

6.0 Impacts, Management and Mitigation					
Surface Water	6.1.2	As a conservative measure to prevent potential interaction between mine water and alluvium, the excavated storage area will be lined with approximately 600 mm of compacted clay liner.	Not verified	* During the audit inspection noted that the Dry Creek East Dam installed, but did not inspect the liner of the dam as it was full of water.	
		Erosion and sediment control devices will be designed and constructed according to the guidelines Managing Urban Stormwater: Soils and Construction (Landcom, 2004), as well as recommendations from the Draft Guidelines for Establishing Stable Drainage Lines on Rehabilitated Mine sites (Department of Land and Water Conservation, 1999).	Note		
		BMC will hold or have applied for relevant licences, share component and allocation required to comply with the WM Act when water is taken.	Compliant	Two main Water Access Licence (WALs) (41547 and 1106) held for the site by BMC. WALs permit access to 6,017 units of water.	
Air Quality	6.2.2	Existing BMC dust management techniques consistent with 'Bengalla Air Quality Management Plan' (BMC, 2016b) will be applied to MOD 4.	Compliant	* During site inspection noted: - Water cart watering haul roads-sized correctly. Sizing based on the results of a Water Cart Fill Point Selection report, dated November 2017 ; - Air quality monitoring devices in the field (including deposition gauges); and - During windy days at the site machinery in the pit were shut down:	
Acoustics	6.3.2	Existing BMC noise management techniques consistent with 'Bengalla Noise Management Plan' (BMC, 2016d) will be applied to MOD 4.	Compliant	* During the site inspection it was noted that equipment was progressively shut down and/or relocated as weather conditions changed. This was done in response to real-time noise monitoring and observations from the control room. * Supplementary noise monitoring results sighted. * Complaints register reviewed and actions (where appropriate) noted.	
Visual	6.4.2	BMC will, where appropriate, establish tree screens and plantings to minimise visual impacts.	Observation	* Tree screens have been established around the site to minimise visual impacts. * <u>Observation</u> : Noted that there was some trees missing from the Roxburgh Road tree screen. * <u>Observation</u> : Tree screen along Wybong Road has a gap in it.	* Determine how many trees have been lost from the Roxburgh tree screen and replant missing trees. * Conduct in-fill tree planting along Wybong Road.
		Visual impacts to sensitive receivers will be considered during the future development of the Bengalla Link Road realignment proposed around Year 13. By Year 24 the proposed tree screens will likely be established along the realigned Bengalla Link Road.	Not Triggered	Bengalla Link road has not yet been constructed.	
Ecology	6.5	The existing Ground Disturbance Permit (GDP) process will continue to be implemented prior to clearing or disturbing vegetation and applies to all land owned or managed by BMC that have not previously been disturbed by mining or associated activities.	Compliant	No non compliance was observed relating the the GDP process during the period since the MOD Approval in December 2018 to the date of the audit site inspection.	
		BMC will continue to manage all ecological matters on-site in accordance with the <i>Bengalla Biodiversity Management Plan</i> (BMC, 2016c).	Non-Compliant (Low Risk)	<u>Non-Compliant</u> : Seed has not been harvested during the audit period, in accordance with Section Table 8 of the Biodiversity Management Plan. * Observation - <i>Galenia pubescens</i> outbreaks at the site. * 2017 and 2018 Annual Reviews indicate weed and pest management work undertaken at the mine site. * 2017, 2018 and 2019 Weed Action Plans indicates planned weed management and monitoring works. * Invoices for weed and pest management activities undertaken at mine areas, during 2017, 2018 and 2019. * According to site communications 2020 Weed Action Plan will focus on the site and adjacent dairy. * Salvaged material (tree limbs etc) near to the "dehab" site and also on top of the dump. * Clearance and Pre-Clearance Survey Reports dated 2017, 2018 & 2019 for various areas across the mine operations. * Selection of completed Ground Disturbance Permits provided for the audit report.  <u>Non-Compliance Summary</u> : BMC has not continued to manage all ecological matters on-site in accordance with the Bengalla Biodiversity Management Plan (BMC, 2016c), with the GDC process not implemented twice in 2017 and seed not harvested during the audit period.	* Undertake weed management work at the site to control outbreaks of <i>Galenia pubescens</i> . * Collect seed from site, to be used in future revegetation works.
Non-aboriginal Heritage	6.7	BMC will continue to manage items relating to historic cultural heritage in accordance with the approved Historic Heritage Management Plan (BMC, 2016f) (as modified).	Observation	* During the site inspection the Bengalla homestead, the Overdene homestead and the Keys Family Private Cemetery were viewed. * Photos of the Bengalla homestead, taken during the site inspection, (PHOTO 21 & 22) compared with photographs included in Appendix B of the HHMP, dated 2011, it is apparent that since 2011 significant restoration works have been undertaken by BMC at the homestead. * <u>Observation</u> : Historical items in the Bengalla homestead were not stored in an appropriate manner. * According to site communications during the audit period expensive work has been undertaken at the Bengalla homestead, and that there is budget allocated to continue restoration works in the years to come. * According to site communications a site inspection of the Keys Cemetery is undertaken every 3 months and maintenance works is undertaken. The cemetery appeared to be well maintained. * 2017 & 2018 Annual Reviews provide details of works undertaken at the Bengalla homestead and Overdene homestead during the audit period. * 2017, 2018 & 2019 Bengalla Homestead Dilapidation Reports by WSP indicate there appears to be no further major degradation since the 2016 inspection. * 2017, 2018 & 2019 Overdene Homestead Dilapidation Reports by WSP indicate there appears to be no further major degradation since the 2016 inspection.	* Investigate ways in which historic items in the Bengalla homestead could be better preserved or passed on to a local historic society.

# Appendix B

## Compliance Assessment:

### Environmental Protection Licence 6538

Table Appendix B-1: Environment Protection Licence No. 6538

Condition Number	Condition	Compliance Status	Evidence	Recommended Action																				
<b>1. Administrative Conditions</b>																								
A1	What the licence authorises and regulates																							
A1.1	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.	Note																						
	<table border="1"> <thead> <tr> <th>Scheduled Activity</th> <th>Fee Based Activity</th> <th>Scale</th> </tr> </thead> <tbody> <tr> <td>Coal works</td> <td>Coal works</td> <td>&gt; 5000000 T annual handling capacity</td> </tr> <tr> <td>Mining for coal</td> <td>Mining for coal</td> <td>&gt; 5000000 T annual production capacity</td> </tr> </tbody> </table>	Scheduled Activity	Fee Based Activity	Scale	Coal works	Coal works	> 5000000 T annual handling capacity	Mining for coal	Mining for coal	> 5000000 T annual production capacity	Compliant	* 2017 Annual Review reports 10.9 million tonnes of ROM coal extracted/processed. * 2018 Annual Review reports 11.3 million tonnes of ROM coal extracted/processed. * December 2019 Weekly Report dated 17/12/2019 indicates 11.8 million tonnes of ROM coal was extracted from 1/01/2019 to 15/12/2019.												
Scheduled Activity	Fee Based Activity	Scale																						
Coal works	Coal works	> 5000000 T annual handling capacity																						
Mining for coal	Mining for coal	> 5000000 T annual production capacity																						
	Note: In relation to this licence, the licensee must comply with:  a) the activity scale limits imposed by this licence; b) the activity scale limits which apply for the reporting period specified in this licence; and c) the activity scale limits imposed by other legal instruments, such as approvals currently in force under the <i>Environmental Planning and Assessment Act 1979</i> .	Note																						
A2	Premises or plant to which this licence applies																							
A2.1	The licence applies to the following premises:	Note																						
	<table border="1"> <thead> <tr> <th>Premises Details</th> </tr> </thead> <tbody> <tr> <td>BENGALLA MINE BENGALLA ROAD VIA MUSWELLBROOK NSW 2333</td> </tr> <tr> <td>PREMISES BOUNDARY DEFINED IN THE PLAN "BENGALLA MINE - BMC PREMISES BOUNDARY" DATED 19 JANUARY 2018 AND SHAPE FILES. EPA REFERENCE DOC18/52069</td> </tr> </tbody> </table>	Premises Details	BENGALLA MINE BENGALLA ROAD VIA MUSWELLBROOK NSW 2333	PREMISES BOUNDARY DEFINED IN THE PLAN "BENGALLA MINE - BMC PREMISES BOUNDARY" DATED 19 JANUARY 2018 AND SHAPE FILES. EPA REFERENCE DOC18/52069	Compliant	* "BMC Premises Boundary" falls within the SSD-5170 Mod 4 Project Approval boundary.																		
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BENGALLA MINE BENGALLA ROAD VIA MUSWELLBROOK NSW 2333																								
PREMISES BOUNDARY DEFINED IN THE PLAN "BENGALLA MINE - BMC PREMISES BOUNDARY" DATED 19 JANUARY 2018 AND SHAPE FILES. EPA REFERENCE DOC18/52069																								
A3	Other activities																							
A3.1	This licence applies to all other activities carried on at the premises, including:	Note																						
	<b>Ancillary Activity</b>  <table border="1"> <tbody> <tr> <td>Crushing, grinding or separating</td> </tr> <tr> <td>Sewage treatment</td> </tr> </tbody> </table>	Crushing, grinding or separating	Sewage treatment	Compliant	* Coal Handling Preparation Plant (CHPP) and Waste Water Treatment Plant (WWTP) inspected during site visit.																			
Crushing, grinding or separating																								
Sewage treatment																								
A4	Information supplied to the EPA																							
A4.1	Works and activities must be carried out in accordance with the proposal contained in the licence application, except as expressly provided by a condition of this licence.  In this condition the reference to "the licence application" includes a reference to: a) the applications for any licences (including former pollution control approvals) which this licence replaces under the Protection of the Environment Operations (Savings and Transitional) Regulation 1998; and b) the licence information form provided by the licensee to the EPA to assist the EPA in connection with the issuing of this licence.	Note																						
<b>2. Discharges to Air and Water and Applications to Land</b>																								
P1	Location of monitoring/discharge points and areas																							
P1.1	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.	Note																						
	<table border="1"> <thead> <tr> <th colspan="4">Air</th> </tr> <tr> <th>EPA identification no.</th> <th>Type of Monitoring Point</th> <th>Type of Discharge Point</th> <th>Location Description</th> </tr> </thead> <tbody> <tr> <td>22</td> <td>Particulate Matter Monitoring</td> <td></td> <td>Monitoring at coordinates 296414, 6425580 (Easting, Northing), shown as 'EPA22' on Figure 1.</td> </tr> <tr> <td>23</td> <td>Particulate Matter Monitoring</td> <td></td> <td>Monitoring at coordinates 294330, 6426888 (Easting, Northing), shown as 'EPA23' on Figure 1.</td> </tr> <tr> <td>24</td> <td>Particulate Matter Monitoring</td> <td></td> <td>Monitoring at coordinates 292552, 6429004 (Easting, Northing), shown as 'EPA24' on Figure 1.</td> </tr> </tbody> </table>	Air				EPA identification no.	Type of Monitoring Point	Type of Discharge Point	Location Description	22	Particulate Matter Monitoring		Monitoring at coordinates 296414, 6425580 (Easting, Northing), shown as 'EPA22' on Figure 1.	23	Particulate Matter Monitoring		Monitoring at coordinates 294330, 6426888 (Easting, Northing), shown as 'EPA23' on Figure 1.	24	Particulate Matter Monitoring		Monitoring at coordinates 292552, 6429004 (Easting, Northing), shown as 'EPA24' on Figure 1.	Compliant	"Air Quality Monitoring Network", dated 28/06/17, includes EPA sites 22, 23 and 24 and their respective GPS coordinates. "Monthly Monitoring Data Summary" Reports, Annual Returns and the Annual Reviews for the audit period include data from these sites.	
Air																								
EPA identification no.	Type of Monitoring Point	Type of Discharge Point	Location Description																					
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24	Particulate Matter Monitoring		Monitoring at coordinates 292552, 6429004 (Easting, Northing), shown as 'EPA24' on Figure 1.																					

P1.2	The following utilisation areas referred to in the table below are identified in this licence for the purposes of the monitoring and/or the setting of limits for any application of solids or liquids to the utilisation area.	Note																	
P1.3	The following points referred to in the table are identified in this licence for the purposes of the monitoring and/or the setting of limits for discharges of pollutants to water from the point.	Note																	
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			<p>* Update "EPL Monitoring Points -Water" figure such that it excludes EPA point 1 and includes EPA points 25 and 26.</p> <p>* Update Water Management Plan (WMP) Figure 4 figure such that it excludes EPA point 1 and includes EPA points 25 and 26.</p>																

P1.4	The following points referred to in the table below are identified in this licence for the purposes of weather and/or noise monitoring and/or setting limits for the emission of noise from the premises.	Note																												
	<p style="text-align: center;"><b>Noise/Weather</b></p> <table border="1"> <thead> <tr> <th>EPA identification no.</th> <th>Type of monitoring point</th> <th>Location description</th> </tr> </thead> <tbody> <tr> <td>6</td> <td>Meteorological Station</td> <td>Meteorological station at coordinates 298409, 6427246 (Easting, Northing), shown as 'W1' on Figure 4.</td> </tr> <tr> <td>7</td> <td>Noise monitoring</td> <td>Monitoring at coordinates 289836, 6428049 (Easting, Northing), shown as 'AN01 (EPA07)' on Figure 4.</td> </tr> <tr> <td>8</td> <td>Noise monitoring</td> <td>Monitoring at coordinates 290861, 6421509 (Easting, Northing), shown as 'AN03 (EPA08)' on Figure 4.</td> </tr> <tr> <td>9</td> <td>Noise monitoring</td> <td>Monitoring at coordinates 298808, 6426782 (Easting, Northing), shown as 'AN04 (EPA09)' on Figure 4.</td> </tr> <tr> <td>12</td> <td>Air blast overpressure &amp; ground vibration peak particle velocity monitoring</td> <td>Monitoring at coordinates 292469, 6428948 (Easting, Northing), shown as 'MRE (EPA12)' on Figure 4.</td> </tr> <tr> <td>19</td> <td>Air blast overpressure &amp; ground vibration peak particle velocity monitoring</td> <td>Monitoring at coordinates 300730, 6426731 (Easting, Northing), shown as 'SCH (EPA19)' on Figure 4.</td> </tr> <tr> <td>20</td> <td>Air blast overpressure &amp; ground vibration peak particle velocity monitoring</td> <td>Monitoring at coordinates 300098, 6429731 (Easting, Northing), shown as 'BLK (EPA20)' on Figure 4.</td> </tr> <tr> <td>21</td> <td>Meteorological Station – to determine meteorological conditions for noise monitoring</td> <td>Temperature inversion tower at coordinates 269298, 6425224 (Easting, Northing), shown as 'W2' on Figure 4.</td> </tr> </tbody> </table>	EPA identification no.	Type of monitoring point	Location description	6	Meteorological Station	Meteorological station at coordinates 298409, 6427246 (Easting, Northing), shown as 'W1' on Figure 4.	7	Noise monitoring	Monitoring at coordinates 289836, 6428049 (Easting, Northing), shown as 'AN01 (EPA07)' on Figure 4.	8	Noise monitoring	Monitoring at coordinates 290861, 6421509 (Easting, Northing), shown as 'AN03 (EPA08)' on Figure 4.	9	Noise monitoring	Monitoring at coordinates 298808, 6426782 (Easting, Northing), shown as 'AN04 (EPA09)' on Figure 4.	12	Air blast overpressure & ground vibration peak particle velocity monitoring	Monitoring at coordinates 292469, 6428948 (Easting, Northing), shown as 'MRE (EPA12)' on Figure 4.	19	Air blast overpressure & ground vibration peak particle velocity monitoring	Monitoring at coordinates 300730, 6426731 (Easting, Northing), shown as 'SCH (EPA19)' on Figure 4.	20	Air blast overpressure & ground vibration peak particle velocity monitoring	Monitoring at coordinates 300098, 6429731 (Easting, Northing), shown as 'BLK (EPA20)' on Figure 4.	21	Meteorological Station – to determine meteorological conditions for noise monitoring	Temperature inversion tower at coordinates 269298, 6425224 (Easting, Northing), shown as 'W2' on Figure 4.	Compliant	* "Bengalla Compliance Acoustic Monitoring Network - Figure 1", dated 09/09/2016 includes all the noise and blast monitoring points and both meteorological stations. * Noise monitoring points shown in Figure 4 of the NMP. * Blast monitoring points shown in Figure 3 of BMP.
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P1.5	For the purposes of condition P1.1, Figure 1 refers to the plan titled "Revised Air Quality Monitoring Network" (EPA reference DOC19/915914).	Note																												
P1.6	For the purposes of condition P1.2 and P1.3, Figure 2 refers to the plan titled "EPL Monitoring Points - Water" (EPA reference DOC19/915914).	Note																												
P1.7	For the purposes of condition P1.2 and P1.3, Figure 3 refers to the plan titled "Effluent Quality Monitoring Location" (EPA reference DOC19/915914).	Note																												
P1.8	For the purposes of condition P1.4, Figure 4 refers to the plan titled "Bengalla Compliance Acoustic Monitoring Network" (EPA reference DOC19/915914).	Note																												
P1.9	The datum for grid references in this Licence is the Geodetic Datum of Australia 1194 (GDA94), Zone 56.	Note																												
<b>3. Limit Conditions</b>																														
L1	Pollution of waters																													
L1.1	Except as may be expressly provided in any other condition of this licence, the licensee must comply with section 120 of the <i>Protection of the Environment Operations Act 1997</i> .	Not Triggered	Based on BMC statements and Annual Reviews during the period, no off-site water discharge was reported during the audit period.																											
L2	Concentration limits																													
L2.1	For each monitoring/discharge point or utilisation area specified in the table's below (by a point number), the concentration of a pollutant discharged at that point, or applied to that area, must not exceed the concentration limits specified for that pollutant in the table.	Note																												
L2.2	Where a pH quality limit is specified in the table, the specified percentage of samples must be within the specified ranges.	Note																												
L2.3	To avoid any doubt, this condition does not authorise the pollution of waters by any pollutant other than those specified in the table's.	Note																												
L2.4	Water and/or Land Concentration Limits																													
	<p>POINT 26</p> <table border="1"> <thead> <tr> <th>Pollutant</th> <th>Units of Measure</th> <th>100 percentile concentration limit</th> </tr> </thead> <tbody> <tr> <td>pH</td> <td>pH</td> <td>6.5-9.5</td> </tr> <tr> <td>Total suspended solids</td> <td>milligrams per litre</td> <td>120</td> </tr> </tbody> </table>	Pollutant	Units of Measure	100 percentile concentration limit	pH	pH	6.5-9.5	Total suspended solids	milligrams per litre	120	Not Triggered	* No off-site water discharge reported by BMC during the audit period.																		
Pollutant	Units of Measure	100 percentile concentration limit																												
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Total suspended solids	milligrams per litre	120																												
L3	Volume and mass limits																													
L3.1	For each discharge point or utilisation area specified below (by a point number), the volume/mass of: a) liquids discharged to water; or; b) solids or liquids applied to the area; must not exceed the volume/mass limit specified for that discharge point or area.	Note																												
	<table border="1"> <thead> <tr> <th>Point</th> <th>Unit of Measure</th> <th>Volume/Mass Limit</th> </tr> </thead> <tbody> <tr> <td>26</td> <td>megalitres per day</td> <td>200</td> </tr> </tbody> </table>	Point	Unit of Measure	Volume/Mass Limit	26	megalitres per day	200	Not Triggered	* No off-site water discharge reported by BMC during the audit period.																					
Point	Unit of Measure	Volume/Mass Limit																												
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L4	Noise Limits	Noted																												
L4.1	Noise generated at the premises that is measured at each noise monitoring point established under this licence must not exceed the noise levels specified in Column 4 of the table below for that point during the corresponding time periods specified in Column 1 when measured using the corresponding measurement parameters listed in Column 2.	Noted																												
	<p>POINT 7,9</p> <table border="1"> <thead> <tr> <th>Time period</th> <th>Measurement parameter</th> <th>Measurement frequency</th> <th>Noise level dB(A)</th> </tr> </thead> <tbody> <tr> <td>Night</td> <td>Night-LAeq (15 minute)</td> <td>Monthly</td> <td>35</td> </tr> </tbody> </table>	Time period	Measurement parameter	Measurement frequency	Noise level dB(A)	Night	Night-LAeq (15 minute)	Monthly	35	Compliant	Monitoring is conducted at these representative locations during the night-time period in accordance with the approved NMP. No exceedances of the applicable criteria was recorded during the audit period.																			
Time period	Measurement parameter	Measurement frequency	Noise level dB(A)																											
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	<p><b>POINT 8</b></p> <table border="1"> <thead> <tr> <th>Time period</th> <th>Measurement parameter</th> <th>Measurement frequency</th> <th>Noise level dB(A)</th> </tr> </thead> <tbody> <tr> <td>Night</td> <td>Night-LAeq (15 minute)</td> <td>Monthly</td> <td>40</td> </tr> </tbody> </table>	Time period	Measurement parameter	Measurement frequency	Noise level dB(A)	Night	Night-LAeq (15 minute)	Monthly	40	Compliant	Monitoring is conducted at this representative location during the night-time period in accordance with the approved NMP. No exceedances of the applicable criteria was recorded during the audit period.																																																					
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Location	Day LAeq(15min)	Evening LAeq(15min)	Night LAeq (15min)	Night LA1 (1min)																																																												
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	<p><i>Note:</i> The locations referred to in the table above are identified in the plan titled 'Bengalla Mine - Bengalla Compliance Acoustic Monitoring Network - Figure 1' version 09/09/2016, EPA reference DOC16/456893.</p> <p>The limits in the noise table above do not apply if the licensee has an approved written agreement with the relevant land owner(s) of these residences to generated high noise levels. The limits do not apply to residences owned by the proponent.</p>	Note																																																														
L4.3	<p>For the purpose of Conditions L4.1 and L4.2:</p> <p>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  c) Night is defined as the period from 10pm to 7am Monday to Saturday and 10pm to 8am Sundays and Public Holidays  d) LAeq(15minute) is defined as the equivalent continuous 'A' weighted sound pressure level- the energy average of the noise measured over a 15 minute period.  e) LA1 (1 minute) is defined as the sound pressure level exceeded for one percent of a 1 minute measurement period.</p>	Note																																																														
L4.4	<p>The noise emission limits identified in this licence apply under all meteorological conditions except for the following:</p> <p>a) Wind speeds greater than 3m/s at 10 metres above ground level; or  b) Temperature inversion conditions between 1.5 degrees celcius and 3 degrees celcius/100m and wind speeds greater than 2m/s at 10m above ground level; or  c) Temperature inversion conditions greater than 3 degrees celcius/100m.</p>	Note																																																														
L4.5	<p>For the purpose of condition L4.4:</p> <p>a) Data recorded from the meteorological station and inversion tower identified as EPA Licence Point 6 and 21 must be used to determine the meteorological conditions; and  b) Temperature inversion conditions (vertical temperature gradient in degrees celcius are to be determined by direct measurement over a minimum 50m height interval as referred to in Part E2 of Appendix E to the NSW Industrial Noise Policy.</p>	Compliant	Attended noise monitoring reports show that assessment of mine operational noise is conducted in accordance with applicable meteorological conditions obtained from the Bengalla weather station and inversion tower.																																																													
L4.6	For the purposes of the noise limits in this licence the 'night' period is defined as 10pm to 7am Monday to Saturday and 10pm to 8am Sundays and Public Holiday, however night time noise monitoring can be conducted from 9pm onwards but must be assessed against the night time criteria provided in this licence.	Noted	Night-time noise monitoring is conducted from 10pm in accordance with the approved NMP.																																																													
L5	Blasting																																																															
L5.1	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 12, 19 or 20 in Condition P1.4.	Compliant	- 2017: Of the 152 blasts all results were below 115dBpeak with the exception of blast 029-21-CI-WN where 116.4dB was recorded.(i.e 0.7% of blasts exceeded 115dBpeak). - 2018: Of the 169 blasts three exceedances above 115dBpeak were recorded at MRE (118.6,118.4 and 115.7) resulting in 1.8% exceedance. One blast was recorded above 115dB peak at BLK (115.1) resulting in a 0.6% exceedance. - 2019 (to 17 December): Of the 181 blasts to date no exceedances of 115dBpeak has been recorded.																																																													
L5.2	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 12, 19 or 20 in Condition P1.4.	Compliant	Blast results provided for the entire audit period. It was noted that at all times blast records indicate overpressure levels not exceeding 120dBpeak.																																																													

L5.3	The ground vibration peak particle velocity from blasting operations carried out in or on the premises must not exceed: 5 mm/second for more than 5% of the total number of blasts during each reporting period; at either monitoring point 12, 19 or 20 in Condition P1.4	Compliant	- 2017: No exceedance of 5mm/s. - 2018: Of the 169 blasts one blast exceeded 5mm/s (5.53mm/s) at the MRE blast location. (i.e 0.6% exceedance). - 2019 (to 17 December): Of the 181 blasts to date one exceedance of 5mm/s was recorded at MRE from blast S35-16-IB-WW4 resulting in vibration levels of 5.72mm/s (0.6% exceedance to date).	
L5.4	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 12, 19 or 20 in Condition P1.4.	Compliant	Blast results provided for the entire audit period. It was noted that at all times blast records indicate vibration levels did not exceed 10mm/s .	
L5.5	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>	Compliant	* Fume management is undertaken during blasting risk assessment. * Per 2017 & 2018 Annual Reviews and 2017, 2018 & 2019 Incident Registers localised fume incidents occurred on 18/4/2017 and 12/6/2018. - According to the 2017 Annual Review there was one level 1B fume event and six level 3 fume events during 2017. It was reported that there was no significant fume events. - According to the 2018 Annual Review there was a localised fume event. - None of these events emitted fume from the premises. * According to site communications no fume travelled beyond the premise boundary.	
<b>4. Operating Conditions</b>				
O1	Activities must be carried out in a competent manner			
O1.1	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.	Non-Compliant (Low Risk)	During site inspections the Auditors observed: * Sprinklers in use at coal stockpiles to reduce coal dust; * Water trucks watering down roads to minimise dust; and * Covered coal conveyors.  * BMC has procedures to ensure work is carried out in a competent manner: - PRO-0069 'Tipping and Dumping of Materials'; - PRO-0263 'Dragline Operation'; - PRO-0266 'Watercart Operation'; - PRO-0273 'Excavation Operation'; and - PRO-0576 'Loading of Reject in Haul Trucks'.  a) <u>Non-compliant</u> : During the site inspection noted a hydrocarbon spill at the re-fuelling area near to the workshop (PHOTO 26).  BMC has been found non-compliant with condition O1.1 a), with substance(s) (hydrocarbons) not stored in a competent manner, with a hydrocarbon spill at the re-fuelling area near to the workshop, noted during the site inspection.	Prevent hydrocarbon spills.
			b) Noted recycling bins throughout the site, including co-mingled recycling bins and scrap steel bin, during the site inspection. * Co-disposal of rejects, sited during the site inspection. * During the site inspection noted that waste is stored in an appropriate manner, with waste sorted out separately into different bins. * During the site inspection viewed the pulse system that is used to manage waste on site. * Remondis is the principal subcontractor that removes waste on-site. Noted Remondis waste truck on-site during the site inspection. Monthly Waste Management Reports from Remondis provided. * 2017 & 2018 Annual Reviews report on the effectiveness of waste minimisation and management measures.  It is noted that Auditors only reviewed a small sample of the available documents related to his condition. The compliance status is only based on the samples of documents provided by BMC.	
O2	Maintenance of plant and equipment			

O2.1	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.	Compliant	<p>(a) Maintenance schedule '52 Week Schedule 2019' for plant and equipment provided.</p> <p>* Records indicating maintenance and calibration work undertaken by Benchmark Monitoring at the BMC weather station, dated 24/11/2017, 29/11/2019, 5/3/2018, 23/5/2018, 6/9/2018, 7/2/2019, 7/6/2019, 31/7/2019, 2/12/2019, 13/12/2019 and 31/12/2019.</p> <p>(b) During the site inspection noted equipment appeared to be operated in a proper and efficient manner:</p> <p>* Noted trucks parked up nearby to pit operations, when operations had to cease during high wind conditions (on 2/12/2019) i.e. did not drive too far away.</p> <p>* Noted ROM pad located in relatively close proximity to where coal is being extracted, allowing for efficient operations.</p> <p>* In-pit re-fuelling station, allowing for efficient refuelling.</p> <p>* Procedures for proper and efficient operation of equipment provided:</p> <ul style="list-style-type: none"> <li>- PRO-0069 'Tipping and Dumping of Materials';</li> <li>- PRO-0263 'Dragline Operation';</li> <li>- PRO-0266 'Watercart Operation';</li> <li>- PRO-0273 'Excavation Operation'; and</li> <li>- PRO-0576 'Loading of Reject in Haul Trucks'.</li> </ul> <p>* Site personnel are trained to operate equipment in a proper and efficient manner. Induction training and training packages:</p> <ul style="list-style-type: none"> <li>- 'Bengalla Environmental Training - Site Environmental Management';</li> <li>- 'BMC Training Air Quality - Operators and Contractors';</li> <li>- 'Environmental Training - Air Quality Management – Coal Stockpiles';</li> <li>- 'February 2018 - Dust Awareness';</li> <li>- 'UDAY - Environmental Training - Dust';</li> <li>- 'UDAY - Environmental Training'; and</li> <li>- 'Bengalla Mining Company Environment Induction Slides.</li> </ul> <p>It is noted that Auditors only reviewed a small sample of the available documents related to his condition. The compliance status is only based on the samples of documents provided by BMC.</p>	
O2.2	The licensee is responsible for the correct operation of the sewage treatment system on their premises.	Compliant	Sewage Treatment System (STS) Reports by GHD attached to 2017-2018 Annual Return and 2018-2019 Annual Return.	
O2.3	Correct operation involves regular supervision and system maintenance. The licensee must be aware of the system management requirements and must ensure that the necessary service contracts are in place.	Compliant	STS Reports by GHD (attached to 2017-2018 Annual Return and 2018-2019 Annual Return) includes maintenance records.	
O2.4	The sewage treatment system must be serviced by a suitably qualified and experienced wastewater technician at least once in each quarterly period and a minimum of four times per year.	Compliant	2018 & 2019 STS Reports by GHD states that "STS maintenance and inspections are undertaken by suitably qualified and experienced plumbers, electricians and mechanics as required." Per STS Report, quarterly inspections/services undertaken.	
O2.5	The licensee must record each inspection and any actions required or recommended by the technician including date, time, all results of tests performed on the sewage treatment system by the technician.	Compliant	2018 & 2019 STS Reports by GHD provide weekly operational inspection results with date, time, results of tests performed on the sewage treatment system by the technician and also actions required.	
O3	Dust			
O3.1	The premises must be maintained in a condition which minimises or prevents the emission of dust from the premises.	Compliant	<p>During the site inspection noted that the following is being undertaken:</p> <ul style="list-style-type: none"> <li>- Conveyor belts were enclosed; and</li> <li>- Sprinklers that are used to control coal stockpile dust.</li> </ul> <p>Generally dust observed during site inspections was from vehicle movements and operations and is discussed below for Condition O3.2. Use of water carts is also covered as an activity in Section O3.2 below. Dust was not generally observed to be generated from static areas of the mine. Rehabilitation of the dumps has reduce the potential for dust generation in these areas. Discussion relating to dust management is provided in the Development Consent Compliance spreadsheet schedule 3, conditions 16, 18, 19 &amp; 20.</p> <p>An Independent Dust Review of the site will be undertaken in accordance with SSD-5170 (as modified), Schedule 4, Condition 4. The issue that this condition addresses (O3.1) will be assessed further during this Review.</p>	
O3.2	All operations and activities occurring at the premises must be carried out in a manner that will minimise the emission of dust from the premises.	Not Verified	<p>Dust Management is discussed in detail in Conditions 16, 19 and 20 (Schedule 3) of the Development Consent Compliance Checklist. Reference is made to that compliance checklist for discussions and relevant findings.</p> <p>Notwithstanding this, it is noted that in September 2018, BMC received an 'Invitation to Show Cause' letter (dated 26 September 2018) from the EPA regarding "excessive dust emissions being generated from an excavator loading material into haul trucks" on 19 September 2018. On 26 October 2018 BMC provided a response to EPA 'Invitation to Show Cause'.</p> <p>On 29 November 2018, the EPA issued BMC a penalty infringement notice (PIN) for allegedly failing to comply with condition O1.1 of EPL 6538, and therefore allegedly contravening Section 64(1) of the POEO Act. The EPA alleged that the photos and video show "excessive dust emissions being generated from an excavator loading material into haul trucks" at the Bengalla Mine (Bengalla) premises. On 24 December 2018 BMC submitted to the EPA an application for review of the PIN. Per BMC communications Bengalla sought legal action in regards to the PIN, with EPA deciding not pursue the PIN any further. Letter from EPA to BMC, dated, 4/10/2019 stated that "EPA has decided not to proceed with this matter".</p>	Recommendations relating to dust are provided in the Development Consent Compliance Checklist.
O3.3	All trafficable areas, coal storage areas and vehicle manoeuvring areas in or on the premises must be maintained, at all times, in a condition that will minimise the emission of wind-blown or traffic generated dust from the premises.	Not Verified	As above for Condition O3.2.	
O4	Effluent application to land			

O4.1	Waste water utilisation areas must effectively utilise the waste water applied to those areas. This includes the use for pasture or crop production, as well as ensuring the soil is able to absorb the nutrients, salts, hydraulic load and organic materials in the solids or liquids. Monitoring of land and receiving waters to determine the impact of waste water application may be required by the EPA.	Not Triggered	* Treated effluent not applied to land. It is reused in the CHPP which is seen as a positive initiative to minimise use of water from off site sources.																
<b>5. Monitoring and Recording Conditions</b>																			
M1	Monitoring records																		
M1.1	The results of any monitoring required to be conducted by this licence or a load calculation protocol must be recorded and retained as set out in this condition.	Note																	
M1.2	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.	Compliant	a) EPL Monthly Monitoring Data Summaries. b) EPL Monthly Monitoring Data Summaries going back to January 2015 provided on the Bengalla website. c) According to site communications, requests from the EPA have been mainly in relation to complaints received by EPA. - Includes an email request from EPA, dated 25/7/2018, requesting a monitoring data set (records) from 1/7/2018 to 25/7/2018. BMC provided requested data to EPA on 10/8/2018, and further data provided on 17/8/2018 and 20/8/2018. - Includes an email request from EPA, dated 5/12/2019, requesting records and information in relation to a blast on 3/12/2019. BMC provided requested information to EPA via email on 11/12/2019.																
M1.3	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.	Compliant	* Field sheets attached to 2017, 2018 & 2019 Environmental Monitoring Reports. * Field sheets include: a) The date on which samples were taken. b) The time at which samples were collected. c) The point at which the samples were taken. d) The name of the person who collected the samples.																
M2	Requirement to monitor concentration of pollutants discharged																		
M2.1	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:	Note																	
M2.2	Air Monitoring Requirements																		
	<p>POINT 22,23,24</p> <table border="1"> <thead> <tr> <th>Pollutant</th> <th>Units of measure</th> <th>Frequency</th> <th>Sampling Method</th> </tr> </thead> <tbody> <tr> <td>PM10</td> <td>micrograms per cubic metre</td> <td>Continuous</td> <td>Special Method 1</td> </tr> </tbody> </table>	Pollutant	Units of measure	Frequency	Sampling Method	PM10	micrograms per cubic metre	Continuous	Special Method 1	Compliant	Bengalla received an EPA Notice to Provide Information and/or Records (Notice Number 1574086), dated 9/1/2019. The information required was regarding EPL 6538 dust monitors EPA22, EPA23 and EPA24. Bengalla provided their response to the EPA Notice, including calibration records, monthly monitoring schedules, Purchase Orders and 2017, 2018 and 2019 AECOM environmental monitoring (including dust) proposals.								
Pollutant	Units of measure	Frequency	Sampling Method																
PM10	micrograms per cubic metre	Continuous	Special Method 1																
	<i>Note: Special Method 1 is defined in "Dustrak II Aerosol Monitor Model 8530/8531/8532/8530EP Operation and Service Manual Revision January 2017" (EPA Reference DOC17/428598).</i>	Note																	
M2.3	Water and/ or Land Monitoring Requirements																		
	<p>POINT 2</p> <table border="1"> <thead> <tr> <th>Pollutant</th> <th>Units of measure</th> <th>Frequency</th> <th>Sampling Method</th> </tr> </thead> <tbody> <tr> <td>Conductivity</td> <td>microsiemens per centimetre</td> <td>2 times daily during discharge</td> <td>A probe designed to measure the range 0 to 10,000 uS/cm</td> </tr> </tbody> </table>	Pollutant	Units of measure	Frequency	Sampling Method	Conductivity	microsiemens per centimetre	2 times daily during discharge	A probe designed to measure the range 0 to 10,000 uS/cm	Not Triggered	* No off-site water discharge reported by BMC during the audit period.								
Pollutant	Units of measure	Frequency	Sampling Method																
Conductivity	microsiemens per centimetre	2 times daily during discharge	A probe designed to measure the range 0 to 10,000 uS/cm																
	<p>POINT 25</p> <table border="1"> <thead> <tr> <th>Pollutant</th> <th>Units of measure</th> <th>Frequency</th> <th>Sampling Method</th> </tr> </thead> <tbody> <tr> <td>Faecal Coliforms</td> <td>colony forming units per 100 millilitres</td> <td>Quarterly</td> <td>Grab sample</td> </tr> <tr> <td>pH</td> <td>pH</td> <td>Quarterly</td> <td>Grab sample</td> </tr> </tbody> </table>	Pollutant	Units of measure	Frequency	Sampling Method	Faecal Coliforms	colony forming units per 100 millilitres	Quarterly	Grab sample	pH	pH	Quarterly	Grab sample	Not Triggered	* No off-site water discharge reported by BMC during the audit period.				
Pollutant	Units of measure	Frequency	Sampling Method																
Faecal Coliforms	colony forming units per 100 millilitres	Quarterly	Grab sample																
pH	pH	Quarterly	Grab sample																
	<p>POINT 26</p> <table border="1"> <thead> <tr> <th>Pollutant</th> <th>Units of measure</th> <th>Frequency</th> <th>Sampling Method</th> </tr> </thead> <tbody> <tr> <td>Conductivity</td> <td>microsiemens per centimetre</td> <td>Continuous during discharge</td> <td>A probe designed to measure the range 0 to 10,000 uS/cm</td> </tr> <tr> <td>pH</td> <td>pH</td> <td>Daily during any discharge</td> <td>Grab sample</td> </tr> <tr> <td>TSS</td> <td>milligrams per litre</td> <td>Daily during any discharge</td> <td>Grab sample</td> </tr> </tbody> </table>	Pollutant	Units of measure	Frequency	Sampling Method	Conductivity	microsiemens per centimetre	Continuous during discharge	A probe designed to measure the range 0 to 10,000 uS/cm	pH	pH	Daily during any discharge	Grab sample	TSS	milligrams per litre	Daily during any discharge	Grab sample	Not Triggered	* No off-site water discharge reported by BMC during the audit period.
Pollutant	Units of measure	Frequency	Sampling Method																
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pH	pH	Daily during any discharge	Grab sample																
TSS	milligrams per litre	Daily during any discharge	Grab sample																
M3	Testing methods - concentration limits																		
M3.1	Monitoring for the concentration of a pollutant emitted to the air required to be conducted by this licence must be done in accordance with: a) any methodology which is required by or under the Act to be used for the testing of the concentration of the pollutant; or b) if no such requirement is imposed by or under the Act, any methodology which a condition of this licence requires to be used for that testing; or c) if no such requirement is imposed by or under the Act or by a condition of this licence, any methodology approved in writing by the EPA for the purposes of that testing prior to the testing taking place.  <i>Note: The Protection of the Environment Operations (Clean Air) Regulation 2010 requires testing for certain purposes to be conducted in accordance with test methods contained in the publication "Approved Methods for the Sampling and Analysis of Air Pollutants in NSW".</i>	Compliant	AECOM "Monthly Environmental Monitoring Report", dated March 2018, confirms sampling is undertaken in accordance with the "Approved Methods for the Sampling and Analysis of Air Pollutants in NSW". Based on this, BMC are considered compliant with this condition. Auditors did not undertake a review of the monitoring against the requirements of this condition.																

M3.2	Subject to any express provision to the contrary in this licence, monitoring for the concentration of a pollutant discharged to waters or applied to a utilisation area must be done in accordance with the Approved Methods Publication unless another method has been approved by the EPA in writing before any tests are conducted.	Not Triggered	* No off-site water discharge reported by BMC during the audit period. * Treated effluent not applied to land. It is reused in the CHPP.																																			
M4	Weather monitoring																																					
M4.1	At Point 6 and/or Point 21, the licensee must monitor (by sampling and obtaining results by analysis) the parameters specified in Column 1 of the table below, using the corresponding sampling method, units of measure, averaging period and sampling frequency, specified opposite in the columns 2,3,4 and 5.	Note																																				
	<table border="1"> <thead> <tr> <th>Parameter</th> <th>Sampling Method</th> <th>Unit of Measure</th> <th>Averaging Period</th> <th>Frequency</th> </tr> </thead> <tbody> <tr> <td>Air Temperature</td> <td>AM-4</td> <td>degrees celcius</td> <td>1 hour</td> <td>Continuous</td> </tr> <tr> <td>Wind Direction</td> <td>AM-2 &amp; AM-4</td> <td>degrees</td> <td>15 minute</td> <td>Continuous</td> </tr> <tr> <td>Wind Speed</td> <td>AM-2 &amp; AM-4</td> <td>metres per second</td> <td>15 minute</td> <td>Continuous</td> </tr> <tr> <td>Temperature Lapse Rate</td> <td>Part E2 Appendix E of the NSW Industrial Noise Policy</td> <td>degrees</td> <td>15 minute</td> <td>Continuous</td> </tr> <tr> <td>Rainfall</td> <td>AM-4</td> <td>millimetres</td> <td>15 minute</td> <td>Continuous</td> </tr> <tr> <td>Relative Humidity</td> <td>AM-4</td> <td>percentage</td> <td>1 hour</td> <td>Continuous</td> </tr> </tbody> </table>	Parameter	Sampling Method	Unit of Measure	Averaging Period	Frequency	Air Temperature	AM-4	degrees celcius	1 hour	Continuous	Wind Direction	AM-2 & AM-4	degrees	15 minute	Continuous	Wind Speed	AM-2 & AM-4	metres per second	15 minute	Continuous	Temperature Lapse Rate	Part E2 Appendix E of the NSW Industrial Noise Policy	degrees	15 minute	Continuous	Rainfall	AM-4	millimetres	15 minute	Continuous	Relative Humidity	AM-4	percentage	1 hour	Continuous	Compliant	* Monitoring Monthly Report, dated December 2017, prepared by Benchmark. * The Benchmark report confirms that monitoring is undertaken in accordance with Australian Standard AS3580.14-2011 Methods for sampling and analysis of ambient air.
Parameter	Sampling Method	Unit of Measure	Averaging Period	Frequency																																		
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Relative Humidity	AM-4	percentage	1 hour	Continuous																																		
M5	Recording of pollution complaints																																					
M5.1	The licensee must keep a legible record of all complaints made to the licensee or any employee or agent of the licensee in relation to pollution arising from any activity to which this licence applies.	Compliant	2017, 2018 and 2019 Complaints Registers were sighted by the Auditors.																																			
M5.2	The record must include details of the following: a) the date and time of the complaint; b) the method by which the complaint was made; c) any personal details of the complainant which were provided by the complainant or, if no such details were provided, a note to that effect; d) the nature of the complaint; e) the action taken by the licensee in relation to the complaint, including any follow-up contact with the complainant; and f) if no action was taken by the licensee, the reasons why no action was taken.	Compliant	2017, 2018 and 2019 Complaints Registers contain all required details.																																			
M5.3	The record of a complaint must be kept for at least 4 years after the complaint was made.	Compliant	Complaints Registers dating back to 2015 provided on the Bengalla website.																																			
M5.4	The record must be produced to any authorised officer of the EPA who asks to see them.	Compliant	On 5/12/2019 EPA sent email request to BMC for information in regards to a blast complaint received by EPA on 3/12/2019. BMC emailed requested information to the EPA on 11/12/2019.																																			
M6	Telephone complaints line																																					
M6.1	The licensee must operate during its operating hours a telephone complaints line for the purpose of receiving any complaints from members of the public in relation to activities conducted at the premises or by the vehicle or mobile plant, unless otherwise specified in the licence.	Compliant	* 24 Hour Complaints hotline (1800 178 984) advertised on the Bengalla website. * Hunter Valley News with complaints hotline advertised. * According to site communications complaints hotline publicised in the local paper on a fortnightly basis (not sighted by Auditors).																																			
M6.2	The licensee must notify the public of the complaints line telephone number and the fact that it is a complaints line so that the impacted community knows how to make a complaint.	Compliant	* 24 Hour Complaints hotline (1800 178 984) advertised on the Bengalla website. * Hunter Valley News with complaints hotline advertised. * According to site communications complaints hotline publicised in the local paper on a fortnightly basis (not sighted by Auditors).																																			
M6.3	The preceding two conditions do not apply until 3 months after: the date of the issue of this licence.	Note																																				
M7	Requirement to monitor volume or mass																																					
M7.1	For each discharge point or utilisation area specified below, the licensee must monitor: a) the volume of liquids discharged to water or applied to the area; b) the mass of solids applied to the area; c) the mass of pollutants emitted to the air; at the frequency and using the method and units of measure, specified below.	Not Triggered	* No off-site water discharge reported by BMC during the audit period.																																			
	<table border="1"> <thead> <tr> <th>POINT 26</th> <th>Unit of Measure</th> <th>Sampling Method</th> </tr> </thead> <tbody> <tr> <td>Frequency</td> <td>megallitres per day</td> <td>Magnetic flow meter</td> </tr> <tr> <td>Continuous during discharge</td> <td></td> <td></td> </tr> </tbody> </table>	POINT 26	Unit of Measure	Sampling Method	Frequency	megallitres per day	Magnetic flow meter	Continuous during discharge			Not Triggered	* No off-site water discharge reported by BMC during the audit period.																										
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Frequency	megallitres per day	Magnetic flow meter																																				
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M8	Blasting																																					
M8.1	The licensee must monitor all blasts carried out in or on the premises at or near the nearest residence or noise sensitive location (such as a school or hospital) that is likely to be most affected by the blast and 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 relating to alternative blasting limits.	Compliant	Blasting monitored via blast monitoring network at representative locations with all blasts recorded.																																			
M8.2	To determine compliance with conditions L5.1, L5.2 and L5.3: a) Airblast overpressure and ground vibration levels must be measured and electronically recorded for monitoring points 12, 19 and 20 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.	Compliant	a) 2016-2017, 2017-2018 and 2018-2019 Annual Returns indicate airblast overpressure and ground vibration recorded for monitoring points 12, 19 and 20, using the correct parameters. b) Correct units of measure and sample frequency indicated in 2016-2017, 2017-2018 and 2018-2019 Annual Returns. Blast Management Plan includes correct sampling method per AS 2187.2:2006.																																			

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Parameter	Units of Measure	Frequency	Sampling Method												
Airblast Overpressure	Decibels (Linear Peak)	All blasts	Australian Standard AS 2187.2-2006												
Ground Vibration Peak Velocity	millimetres per second	All blasts	Australian Standard AS 2187.2-2006												
M9	Other monitoring and recording conditions HRSTS Monitoring														
M9.1	The licensee must continuously operate and maintain communication equipment which makes the conductivity and flow measurements, taken at Point 26 available to the "Service provider" within one hour of those measurements being taken and makes them available in the format specified in the "Hunter River Salinity Trading Scheme Discharge Point Telemetry specification - Rev V1.0 Released 4 October 2018" as published by WaterNSW."	Compliant	* No off-site water discharge reported by BMC during the audit period, therefore no continuous conductivity and flow measurements. * According to site communications telemetry communication checks are undertaken through <a href="https://hydrotel.watersw.com.au/hrsts.html">https://hydrotel.watersw.com.au/hrsts.html</a> * According to site communications, maintenance on communications equipment was not required during the audit period.												
M9.2	The licensee must ensure that the results of the measurements it takes at the tributary monitoring points are available to the regional water quality monitoring network operated by the service provider within 1 hour of its recording.	Not Triggered	* No off-site water discharge reported by BMC during the audit period.												
M9.3	The licensee must ensure that all monitoring data is within a margin of error of 5% for conductivity measurements and 10% for discharge flow measurement.	Not Triggered	* No off-site water discharge reported by BMC during the audit period.												
M9.4	The licensee must mark monitoring point(s) 2 & 26, with a sign which clearly indicates the name of the licensee, whether the monitoring point is up or down stream of the discharge point(s) and that it is a monitoring point for the Hunter River Salinity Trading Scheme.	Non-Compliant (Low Risk)	* <u>Non-compliant</u> : Previous version of the EPL required "mark monitoring point(s) 1 & 2". Revised version of the EPL requires marking "monitoring point(s) 2 & 26." <u>Non-Compliance Summary</u> : Monitoring point 26 is incorrectly marked as point 1.	Mark monitoring point 26 as required of the EPL.											
M9.5	<b>Requirement to Monitor Particulate Matter</b> The Licensee must record the average PM10 concentration at Monitoring Points 22, 23 and 24 at intervals of 10 minutes. This data must be made available upon request by any Authorised Officer of the EPA who asks to see them.	Compliant	Annual Returns, Monthly Monitoring Summaries and 2017 & 2018 Annual Reports indicate monitoring of PM10 at 10 minute intervals is undertaken at Monitoring Points 22, 23 and 24.												
M10	Noise monitoring														
M10.1	To assess compliance with the noise limits specified within this licence, the licensee must undertake operator attended noise monitoring at each specified noise monitoring point in accordance with the table below.	Compliant	Monthly noise monitoring is conducted at three representative locations during the night-time period in accordance with the approved NMP.												
	<b>POINT 7,8,9</b> <table border="1"> <thead> <tr> <th>Assessment period</th> <th>Minimum frequency in a reporting period</th> <th>Minimum duration within assessment period</th> <th>Minimum number of assessment period</th> </tr> </thead> <tbody> <tr> <td>Night</td> <td>Monthly</td> <td>15 minutes</td> <td>1 operation day</td> </tr> </tbody> </table>	Assessment period	Minimum frequency in a reporting period	Minimum duration within assessment period	Minimum number of assessment period	Night	Monthly	15 minutes	1 operation day	Note					
Assessment period	Minimum frequency in a reporting period	Minimum duration within assessment period	Minimum number of assessment period												
Night	Monthly	15 minutes	1 operation day												
<b>6. Reporting Conditions</b>															
R1	Annual return documents														
R1.1	The licensee must complete and supply to the EPA an Annual Return in the approved form comprising: 1. a Statement of Compliance, 2. a Monitoring and Complaints Summary, 3. a Statement of Compliance - Licence Conditions, 4. a Statement of Compliance - Load based Fee, 5. a Statement of Compliance - Requirement to Prepare Pollution Incident Response Management Plan, 6. a Statement of Compliance - Requirement to Publish Pollution Monitoring Data; and 7. a Statement of Compliance - Environmental Management Systems and Practices.  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.	Compliant	* 2016-2017, 2017-2018 and 2018-2019 Annual Returns.												
R1.2	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>	Note													
R1.3	Where this licence is transferred from the licensee to a new licensee: a) the transferring licensee must prepare an Annual Return for the period commencing on the first day of the reporting period and ending on the date the application for the transfer of the licence to the new licensee is granted; and b) the new licensee must prepare an Annual Return for the period commencing on the date the application for the transfer of the licence is granted and ending on the last day of the reporting period.  <i>Note: An application to transfer a licence must be made in the approved form for this purpose.</i>	Not Triggered													
R1.4	Where this licence is surrendered by the licensee or revoked by the EPA or Minister, the licensee must prepare an Annual Return in respect of the period commencing on the first day of the reporting period and ending on: a) in relation to the surrender of a licence - the date when notice in writing of approval of the surrender is given; or b) in relation to the revocation of the licence - the date from which notice revoking the licence operates.	Not Triggered													

R1.5	The Annual Return for the reporting period must be supplied to the EPA via <i>eConnect EPA</i> or 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').	Compliant	*Compliant - Screen shot confirming 2016-2017 Annual Return submission on 9/11/2017. *Compliant - "eConnect EPA: Annual Return" submission email from EPA, dated 9/11/2018, confirms receipt of 2017-2018 Annual Return. *Compliant - "eConnect EPA: Annual Return" submission email from EPA, dated 8/11/2019, confirms receipt of 2018-2019 Annual Return.
R1.6	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.	Compliant	* 2015-2016, 2016-2017, 2017-2018 and 2018-2019 Annual Returns were sighted by Auditors.
R1.7	Within the Annual Return, the Statements 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.	Compliant	* 2016-2017, 2017-2018 and 2018-2019 Annual Returns.
R2	Notification of environmental harm <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>	Not Triggered	*According to communications from BMC and review of site documentation, no incidents causing or threatening material harm to the environment occurred during the audit period.
R2.1	Notifications must be made by telephoning the Environment Line service on 131 555.	Not Triggered	*According to communications from BMC and review of site documentation, no incidents causing or threatening material harm to the environment occurred during the audit period.
R2.2	The licensee must provide written details of the notification to the EPA within 7 days of the date on which the incident occurred.	Not Triggered	*According to communications from BMC and review of site documentation, no incidents causing or threatening material harm to the environment occurred during the audit period.
R3	Written report		
R3.1	Where an authorised officer of the EPA suspects on reasonable grounds that: a) where this licence applies to premises, an event has occurred at the premises; or b) where this licence applies to vehicles or mobile plant, an event has occurred in connection with the carrying out of the activities authorised by this licence, and the event has caused, is causing or is likely to cause material harm to the environment (whether the harm occurs on or off premises to which the licence applies), the authorised officer may request a written report of the event.	Compliant	* In September 2018, BMC received an 'Invitation to Show Cause' letter (dated 26 September 2018) from the EPA regarding "excessive dust emissions being generated from an excavator loading material into haul trucks" on 19 September 2018. On 26 October 2018 BMC provided a response to EPA 'Invitation to Show Cause'. On 29 November 2018, the EPA issued BMC a penalty infringement notice (PIN) for allegedly failing to comply with condition O1.1 of EPL 6538, and therefore allegedly contravening Section 64(1) of the POEO Act. The EPA alleged that the photos and video show "excessive dust emissions being generated from an excavator loading material into haul trucks" at the Bengalla Mine (Bengalla) premises. On 24 December 2018 BMC submitted to the EPA an application for review of the PIN. Per BMC communications Bengalla sought legal action in regards to the PIN, with EPA deciding not pursue the PIN any further. BMC further noted that the PIN doesn't show up on the performance review and it is just a notice that has been issued. * Bengalla received an EPA Notice to Provide Information and/or Records (Notice Number 1574086), 9/1/2019. The information required was regarding EPL 6538 dust monitors EPA22, EPA23 and EPA24. Bengalla provided their response to the EPA Notice, including calibration records, monthly monitoring schedules, Purchase Orders and 2017, 2018 and 2019 AECOM environmental monitoring (including dust) proposals.
R3.2	The licensee must make all reasonable inquiries in relation to the event and supply the report to the EPA within such time as may be specified in the request.	Compliant	As above
R3.3	The request may require a report which includes any or all of the following information: a) the cause, time and duration of the event; b) the type, volume and concentration of every pollutant discharged as a result of the event; c) the name, address and business hours telephone number of employees or agents of the licensee, or a specified class of them, who witnessed the event; d) the name, address and business hours telephone number of every other person (of whom the licensee is aware) who witnessed the event, unless the licensee has been unable to obtain that information after making reasonable effort; e) action taken by the licensee in relation to the event, including any follow-up contact with any complainants; f) details of any measure taken or proposed to be taken to prevent or mitigate against a recurrence of such an event; and g) any other relevant matters.	Note	
R3.4	The EPA may make a written request for further details in relation to any of the above matters if it is not satisfied with the report provided by the licensee. The licensee must provide such further details to the EPA within the time specified in the request.	Note	
R4	Other notifications		
R4.1	The Licensee must notify the EPA by telephoning the Environment Line service on 131555 immediately after the Licensee becomes aware of any contravention or potential contravention of Condition L1 of the Licence.	Not Triggered	No off-site water discharge during the audit period.
R4.2	The Licensee must provide written details of the notification to the EPA Director Hunter at the <a href="mailto:hunter.region@epa.nsw.gov.au">hunter.region@epa.nsw.gov.au</a> within 7 days of the date of the notification.	Not Triggered	No off-site water discharge during the audit period.
R5	Other reporting conditions HRSTS Reporting		

R5.1	The licensee must compile a written report of the activities under the Scheme for each scheme year. The scheme year shall run from 1 July to 30 June each year. The written report must be submitted to the EPA's regional office within 60 days after the end of each scheme year and be in a form and manner approved by the EPA. The information will be used by the EPA to compile an annual scheme report.	Compliant	* 2016-2017 HRSTS Discharge Report. * Letters from BMC to EPA, dated 30/8/2018 and 2/7/2019, noting no discharges during 2017/18 and 2018/19 reporting period.
R5.2	Blast Monitoring Report a) A report containing the monitoring results of blast compliance monitoring specified in this licence must be submitted annually with the Annual Return as set out in Condition R1. b) The report must include an explanation of any exceedances of blasting limits and what management and mitigations measures were put in place to prevent further exceedances.	Compliant	a) 2016-2017, 2017-2018 and 2018-2019 Annual Returns provided the blasting information. b) No blast exceedances were reported during the audit period.
R5.3	Noise Monitoring Report a) A report containing the monitoring results of noise compliance monitoring specified in this licence must be submitted annually with the Annual Return as set out in Condition R1. b) The report must include an explanation of any exceedances of noise limits and what management and mitigation measures were put in place to prevent further exceedances.	Compliant	a) 2016-2017, 2017-2018 and 2018-2019 Annual Returns. b) No noise exceedances were reported during the audit period.
R5.4	Sewage Treatment System A report on the sewage treatment system maintenance program must be submitted annually to the EPA with the Annual Return and must include a) Certification from the system provider that the sewage treatment system is operating within its capacity; b) Date, time and results of all routine maintenance procedures undertaken to the sewage treatment system; and c) Written records of each quarterly inspection.	Compliant	Sewage Treatment System (STS) Reports by GHD attached to 2017-2018 Annual Return and 2018-2019 Annual Return.
R5.5	The licensee must retain a copy of each report required by Condition O2.5 for 3 years from the date each record is made.	Compliant	2018 & 2019 Sewage Treatment System (STS) Report by GHD. According to site communications, the STS was added to EPL 6538 on 5/3/2018, therefore there is no STS report for the period 2016-2017.
<b>7. General Conditions</b>			
G1	Copy of licence kept at the premises or plant	Compliant	According to site communications a copy of EPL 6538 is kept on-site.
G1.1	A copy of this licence must be kept at the premises to which the licence applies.	Compliant	According to site communications a copy of EPL 6538 is kept on-site.
G1.2	The licence must be produced to any authorised officer of the EPA who asks to see it.	Compliant	EPL 6538 Compliance Audit Report.
G1.3	The licence must be available for inspection by any employee or agent of the licensee working at the premises.	Compliant	According to site communications a copy of EPL 6538 is kept on-site.
<b>8. Special Conditions</b>			
E1	Hunter River Salinity Trading Scheme		
E1.1	This licence authorises the discharge of saline water into the Hunter River Catchment from an authorised discharge point (or points), in accordance with the <i>Protection of the Environment Operations (Hunter River Salinity Trading Scheme) Regulation 2009</i> .	Not Triggered	* No off-site water discharge was reported by BMC during the audit period.
E1.2	For the purposes of Clauses 23 and 29 of the Protection of the Environment Operations (Hunter River Salinity Trading Scheme) Regulation 2002 the licensee must apply the conversion factor of 0.6.	Not Triggered	* No off-site water discharge was reported by BMC during the audit period.
E1.3	The licensee must not exceed the hourly volume discharge limit calculated using the following formula, at all discharge point(s) on this licence titled "Discharge of saline water under the Hunter River Salinity Trading Scheme (HRSTS)": $H = V / RRT$ Where: H is the hourly volume discharge limit (in megalitres per hour); V is the licence holder's volume discharge limit for the block (in megalitres) calculated in accordance with clause 23 of the Protection of the Environment Operations (Hunter River Salinity Trading Scheme) Regulation (2002); and RRT is the difference between the discharge stop and start times shown on the river register for that block (in hours) Note 1: The intent of this condition is to prevent spikes of saline water in the Hunter River as a result of discharges of less than the duration permitted by the river register. Note 2: A river register is issued by the Service Co-ordinator and allows participants of the Hunter River Salinity Trading Scheme (HRSTS) to discharge saline to the Hunter River during a discharge period.	Not Triggered	* No off-site water discharge was reported by BMC during the audit period.
E2	Monitoring and Discharge Point 26		
E2.1	Prior to any discharge from EPA Point 26 the Licensee must: 1. Ensure telemetry, associated equipment and infrastructure are installed at EPA Point 26; and 2. Provide the EPA with written notification 24 hours prior to any intended discharge from EPA Point 26.	Compliant	1. Telemetry, associated equipment and infrastructure was reported by BMC to have been set-up at EPA Point 26. 2. No off-site discharges were reported by BMC to have occurred during the audit period.

# Appendix C

## Compliance Assessment:

### Mining Leases

1. Table C-1: Mining Lease 1397 (2018)
2. Table C-2: Mining Lease 1397 (1996)
3. Table C-3: Mining Lease 1450 (1999)
4. Table C-4: Mining Lease 1469 (2000)
5. Table C-5: Mining Lease 1728 (2016)
6. Table C-6: Mining Lease 1711 (2015)
7. Table C-7: Mining Lease 1729 (2016)

Condition	Requirement	Compliance Status	Evidence	Recommended Action
Mining Lease ML 1397				
1	<p>Notice to Landholders</p> <p>(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.</p> <p>(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.</p>	Compliant	Notices to five (5) landowners were provided by BMC, dated 6/9/2018.	
2	<p>Rehabilitation</p> <p>Any disturbance resulting from the activities carried out under this mining lease must be rehabilitated to the satisfaction of the Minister.</p>	Not Verified	<p>The discussion on progressive rehabilitation is in the BMC-SSD-5170 Mod 4, Condition 45. However the rehabilitation progress is reported on in 2017 and 2018 Annual Reviews, which is approved by DPIE. This potentially indicates a level of satisfaction of rehabilitation activities each year without being a formal acknowledgement of satisfaction.</p> <p>The status of rehabilitation is discussed in the Development Consent Compliance Checklist.</p> <p>On 29th August 2019, Environmental Inspectors from the Resources Regulator conducted an inspection of Bengalla Mine. From this inspection three separate notices under Section 240 of the Mining Act 1992, were issued, in relation to the management and rehabilitation of lands:</p> <ul style="list-style-type: none"> <li>* NTCE0003914 - In relation to soil resources, soil management practices and recommendations by a suitably qualified expert.</li> <li>* NTCE0003917 - In relation to undertaking a rehabilitation risk assessment.</li> <li>* NTCE0003919 - In relation to undertaking a critical review of the MOP and progressive rehabilitation practices.</li> </ul> <p>These three notices are being considered by Bengalla and in progress during the time of this audit. The final date for compliance with these notices was 3rd April 2020. It is understood Bengalla has engaged a suitably qualified expert to assist with the requirements of these notices.</p> <p>On the basis that the Notices have been issued and are responses have not been considered as part of this IEA, compliance with this condition (specifically the satisfaction of the Minister) could not be verified.</p>	
3	<p>Mining Operations Plan</p> <p>(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.</p> <p>(b) The MOP must identify the post mining land use and set out a detailed rehabilitation strategy which:</p> <ul style="list-style-type: none"> <li>(i) identifies areas that will be disturbed;</li> <li>(ii) details the staging of specific mining operations, mining purposes and prospecting;</li> <li>(iii) identifies how the mine will be managed and rehabilitated to achieve the post mining land use;</li> <li>(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</li> <li>(v) reflects the conditions of approval under: <ul style="list-style-type: none"> <li>- the <i>Environmental Planning and Assessment Act 1979</i>;</li> <li>- the <i>Protection of the Environment Operations Act 1997</i>; and</li> <li>- any other approvals relevant to the development including the conditions of this mining lease.</li> </ul> </li> </ul> <p>(c) The MOP must be prepared in accordance with the <i>ESG3: Mining Operations Plan (MOP) Guidelines September 2013</i> published on the Department's website at <a href="http://www.resourcesandenergy.nsw.gov.au/miners-and-explorers/rules-and-forms/pgf/environmental-guidelines">www.resourcesandenergy.nsw.gov.au/miners-and-explorers/rules-and-forms/pgf/environmental-guidelines</a></p> <p>(d) The lease holder may apply to the Minister to amend and approved MOP at any time.</p> <p>(e) It is not a breach of this condition if:</p> <ul style="list-style-type: none"> <li>(i) the operations which, but for this condition 3(e) would be a breach of condition 3(a), were necessary to comply with a lawful order or direction given under the <i>Environmental Planning and Assessment Act 1979</i>, the <i>Protection of the Environment Operations Act 1997</i>, the <i>Work Health and Safety (Mines and Petroleum Sites) Act 2013</i> and <i>Work Health and Safety (Mines and Petroleum Sites) Regulation 2014</i> or the <i>Work Health and Safety Act 2011</i>; and <i>Work Health and Safety Regulation 2011</i></li> <li>(ii) the Minister had been notified in writing of the terms of the order or direction prior to the operations constituting the breach being carried out.</li> </ul> <p>(f) The lease holder must prepare a Rehabilitation Report to the satisfaction of the Minister.</p> <p>The report must:</p> <ul style="list-style-type: none"> <li>(i) provide a detailed review of the progress of rehabilitation against the performance measures and criteria established in the approved MOP;</li> <li>(ii) be submitted annually on the grant anniversary date (or at such other times as agreed by the Minister); and</li> <li>(iii) be prepared in accordance with any relevant annual reporting guidelines published on the Department's website at <a href="http://www.resourcesandenergy.nsw.gov.au/miners-and-explorers/rules-and-forms/pgf/environmental-guidelines">www.resourcesandenergy.nsw.gov.au/miners-and-explorers/rules-and-forms/pgf/environmental-guidelines</a></li> </ul> <p>Note: <i>The Rehabilitation Report replaces the Annual Environmental Management Report.</i></p>	Compliant	<p><u>Preparation:</u></p> <p>Mining Operations Plan (MOP) Amendment A, dated February 2019.</p> <ul style="list-style-type: none"> <li>a) MOP in place and activities being undertaken in accordance with MOP.</li> <li>b) i) &amp; ii) Current MOP identifies the areas to be disturbed and staging of operations in Plan 3A to E and Plan 4.</li> <li>iii) MOP Section 7 Rehabilitation Implementation.</li> <li>iv) MOP Section 2 Proposed Mining Activities and MOP Section 10 Trigger Action Response Plans.</li> <li>v) MOP Section 1.2 Consents, Authorisations and Licences.</li> <li>c) MOP Section 1 - was prepared in accordance with <i>ESG3: Mining Operations Plan (MOP) Guidelines</i>, September 2013, located on DPIEs website.</li> <li>d) Current MOP is Amendment A.</li> <li>e) Not Triggered.</li> <li>f) 2017 and 2018 Annual Reviews report rehabilitation status.</li> </ul> <p><u>Implementation:</u></p> <p>The implementation of the MOP (Rehabilitation Management Plan) is occurring on site as mining progresses. The recent areas available for rehabilitation are designed using the geomorphic natural landform software 'GeoFluv'. This provides for a more natural surface water drainage system on the rehabilitated landform. The older areas of rehabilitation are being maintained and inspected regularly for surface water drainage and revegetation issues. Given the change in target vegetation structure on the 400ha of the Eastern face, the implementation of the MOP will require these areas to be revisited to establish high density woody vegetation (HDWV). This means implementation will include new areas made available as mining progresses, as well as revisiting existing areas previously considered in the ecosystem establishment phase.</p> <p>The rehabilitation on the Eastern face is now well behind that predicted given the change to target HDWV. The staged plan to rehabilitate to HDWV should be included in a future MOP Amendment.</p>	The staged plan to rehabilitate to HDWV should be included in a future MOP Amendment

4	<p>Non-Compliance Reporting</p> <p>(a) The lease holder must notify the Department upon becoming aware of any breaches of the conditions of this mining lease or breaches of the Mining Act or Regulations;</p> <p>(b) Notifications under condition 4(a) must be provided in the form specified on the Department's website within seven (7) days of the mining lease holder becoming aware of the breach.</p>	Not Triggered	<p>* According to site communications no known breaches have occurred or been reported.</p> <p>* 2017 &amp; 2018 Annual Reviews indicate no non-compliances against the conditions of the Mining Lease (ML).</p>	
5	<p>Environmental Incident Report</p> <p>The lease holder must provide environmental incident notifications and reports to the Secretary no later than seven (7) days after those environmental incident notifications and reports are provided to the relevant authorities under the <i>Protection of the Environment Operations Act 1997</i>.</p>	Compliant	<p>* No incidents occurred during the audit period that required reporting to the RR.</p>	
6	<p>(a) Extraction Plan in this condition:</p> <p>(i) approved Extraction Plan means a plan, being:</p> <p>A. an extraction plan or subsidence management plan approved in accordance with the conditions of a relevant development consent and provided to the Secretary; or</p> <p>B. a subsidence management plan relating to the mining operations subject to this lease:</p> <p>I. submitted to the Secretary on or before 31 December 2014; and</p> <p>II. approved by the Secretary.</p> <p>(ii) relevant development consent means a development consent or project approval issued under the <i>Environmental Planning &amp; Assessment Act 1979</i> relating to the mining operations subject to this lease.</p> <p>(b) The lease holder must not undertake any underground mining operations that may cause subsidence except in accordance with an approved Extraction Plan.</p> <p>(c) The lease holder must ensure that the approved Extraction Plan provides for the effective management of risks associated with any subsidence resulting from mining operations carried out under this lease.</p> <p>(d) The lease holder must notify the Secretary within 48 hours of any:</p> <p>(i) incident caused by subsidence which has a potential to expose any person to health and safety risks;</p> <p>(ii) significant deviation from the predicted nature, magnitude, distribution, timing and duration of subsidence effects, and of the potential impacts and consequences of those deviations on built features and the health and safety of any person; or</p> <p>(iii) significant failure or malfunction of a monitoring device or risk control measure set out in the approved Extraction Plan addressing:</p> <p>A. built features;</p> <p>B. public safety; or</p> <p>C. subsidence monitoring.</p>	Not Triggered	<p>* Bengalla is an open cut mine. As this condition relates to subsidence it is not considered relevant to Bengalla.</p>	
7	<p>Resource Recovery</p> <p>The lease holder must optimise recovery of the minerals that are the subject of this mining lease to the extent economically feasible.</p>	Compliant	<p>Recovery of minerals is in general accordance with the approved MOP, hence Bengalla are considered to be compliant with the condition.</p>	
8	<p>Group Security</p> <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 group security has been assessed by the Minister at \$80,560,000.</p> <p>The leases covered by the group security include:</p> <p>Mining Lease 1397, 1450, 1469, 1711, 1728 and 1729 (Act 1992)</p>	Compliant	<p>* The current security deposit lodged is in the order of \$108,159,000 (lodged in 2019).</p> <p>* Letter from the RR to BMC dated 24/6/2019 confirms receipt of security.</p> <p>Auditors did not undertake any review of adequacy of the bond security calculations.</p>	
9	<p>Cooperation Agreement</p> <p>The lease holder must make every reasonable attempt, and be able to demonstrate its attempts, to enter into a cooperation agreement with the holder(s) of any overlapping title(s). The cooperation agreement should address but not be limited to issues such as:</p> <ul style="list-style-type: none"> <li>- access arrangements</li> <li>- operational interaction procedures</li> <li>- dispute resolution</li> <li>- information exchange</li> <li>- well location</li> <li>- timing of drilling</li> <li>- potential resource extraction conflicts; and</li> <li>- rehabilitation issues.</li> </ul>	Not Triggered	<p>* No overlapping title exists.</p>	
10	<p>Petroleum (mining operations by-product only)</p> <p>a) For the purposes of this lease, petroleum is limited to coal bed methane that is captured or extracted as a by-product in the course of conducting mining activities.</p> <p>b) Prior to the carrying out of any drainage or capture of petroleum, or any related activity, the Department's Mine Safety Operations and Environmental Sustainability Units must be advised. The Department may impose any condition on the carrying out of such activity as may be appropriate to each site-specific case.</p>	Not Triggered	<p>* There is no capture of petroleum at the site.</p>	

11	<p>Prescribed Dam</p> <p>(a) Notwithstanding any Mining Operations Plan, the lease holder must not mine within any part of the lease area which is within the notification area of the Bengalla Stage Discharge Dam, Bengalla Clean Water 1 Dam, Mount Pleasant Mine Water Dam Notification Area, Mount Pleasant Environmental Dam Notification Area, Bengalla Stage Discharge Dam 1 Notification Area, Bengalla Dirty Water Dam Notification Area, Bengalla Clean Water Dam 1 Notification Area without the prior written approval of the Minister and subject to any conditions stipulated.</p> <p>(b) Where the lease holder desires to mine within the notification area he or she must:</p> <p>(i) at least twelve (12) months before mining is to commence or such lesser time as the Minister may permit, notify the Minister of the desire to do so. A plan of the mining system to be implemented must accompany the notice; and</p> <p>(ii) provide such information as the Minister may direct.</p> <p>(c) The Minister must not, except in the circumstances set out in sub-paragraph (ii), grant approval unless sub-paragraph (i) of this paragraph has been complied with.</p> <p>(i) This sub-paragraph is complied with if:</p> <p>(A) the Dams Safety Committee as constituted by Section 7 of the <i>Dams Safety Act 1978</i> and the owner of the dam have been notified in writing of the desire to mine referred to in paragraph (b);</p> <p>(B) the notifications referred to in clause (A) are accompanied by a description or plan of the area to be mined;</p> <p>(C) the Director-General has complied with any reasonable request made by the Dams Safety Committee or the owner of the dam for further information in connection with the mining proposal;</p> <p>(D) the Dams Safety Committee has made its recommendations concerning the mining proposal or has informed the Minister in writing that it does not propose to make any such recommendations; and</p> <p>(E) where the Dams Safety Committee has made recommendations the approval is in terms that are:</p> <p>- in accordance with those recommendations; or</p> <p>- where the Minister does not accept those recommendations or any of them - in accordance with a determination under sub-paragraph (ii) of this paragraph.</p> <p>(ii) Where the Minister does not accept the recommendations of the Dams Safety Committee or where the Dams Safety Committee has failed to make any recommendations and has not informed the Minister in writing that it does not propose to make any recommendations, the approval shall be in terms that are, in relation to matters dealing with the safety of the dam:</p> <p>(A) as determined by agreement between the Minister and the Minister administering the <i>Dams Safety Act 1978</i>; or</p> <p>(B) in the event of failure to reach such agreement - as determined by the Premier.</p> <p>(d) The Minister, on notice from the Dams Safety Committee, may at any time or times:</p> <p>(i) cancel any approval given where a notice pursuant to Section 18 of the <i>Dams Safety Act 1978</i> is given.</p> <p>(ii) suspend for a period of time, alter, omit from or add to any approval given or conditions imposed.</p>	Compliant	* Email from BMC to RR and Dam Safety Committee DSC dated 17/1/2018 sought approval to mine within the prescribed dam notification area of Mt Pleasant Mine Environment Dam 3. Plan of the area to be mined is attached to the email.
	<p>Exploration Reporting</p> <p><i>Note: Exploration Reports (Geological and Geophysical)</i></p> <p><i>The lease holder must lodge reports to the satisfaction of the Minister in accordance with section 163C of the Mining Act 1992 and in accordance with clause 59 of the Mining Regulation 2016.</i></p> <p><i>Reports must be prepared in accordance with Exploration Reporting: A guide for reporting on exploration and prospecting in New South Wales.</i></p>	Compliant	* Auditors sighted the 2016-2017 , 2017-2018 and 2018-2019 Annual Reports on Coal Exploration
	<p>SPECIAL CONDITIONS</p> <p><i>Note: The standard conditions apply to all mining leases. The Division of Resources and Geoscience (DRG) reserves the right to impose special conditions, based on individual circumstances, where appropriate.</i></p>	Note	
New Condition 18 March 2004	Subsidence Management	Not Triggered	* No underground mining.
New Condition 4 April 2007	Single security for ML1397, ML1450 and ML1469	Compliant	* The current security deposit lodged is in the order of \$108,159,000 2019. * Letter from RR to BMC dated 24/6/2019 confirms receipt of security.
Endorsement Schedule 26 February 2008	Any proposed activity from time to time in regards to methane drainage and capture should be advised to the Department's Mine Safety Operations and Environmental Units for consideration and possible imposition of conditions relative to each site specific case.	Not Triggered	* BMC stated that there is no methane drainage or capture at Bengalla.
Endorsement Schedule 28 January 2009	Change of security to \$30,224,000	Compliant	* The current security deposit lodged is in the order of \$108,159,000 2019. * Letter from RR to BMC dated 24/6/2019 confirms receipt of security.
Endorsement Schedule 11 January 2012	Change of security to \$49,100,000	Compliant	* The current security deposit lodged is in the order of \$108,159,000 2019. * Letter from RR to BMC dated 24/6/2019 confirms receipt of security.
Endorsement Schedule 14 November 2015	Change of security to \$73,300,300	Compliant	* The current security deposit lodged is in the order of \$108,159,000 2019. * Letter from RR to BMC dated 24/6/2019 confirms receipt of security.
Endorsement Schedule 19 January 2018	Change of security to \$80,560,300	Compliant	* The current security deposit lodged is in the order of \$108,159,000 2019. * Letter from RR to BMC dated 24/6/2019 confirms receipt of security.
Instrument of variation 21 June 2019	Change of security to \$108,159,000	Compliant	* The current security deposit lodged is in the order of \$108,159,000 2019. * Letter from RR to BMC dated 24/6/2019 confirms receipt of security.

Condition	Requirement	Compliance Status	Evidence	Recommended Action
<b>Mining Lease ML 1397</b>				
1	Method of Operations The lease holder shall extract as large a percentage of the coal in the subject area as is practicable, consistent with the provisions of the <i>Coal Mines Regulation Act 1982</i> and the Regulations thereunder and shall comply with any direction given or which may be given in this regard by the Minister.	Compliant	Extraction of coal is in general accordance with the approved MOP.	
2	Method of Operations (a) The lease holder shall not commence or carry out any underground mining operations within the subject area, unless with the consent of the Minister first had and obtained and subject to such conditions as the Minister may impose. (b) Where the lease holder intends to carry out underground mining operations within the subject area, the lease holder shall furnish to the Minister a plan showing the proposed workings in the section of land to be so mined, together with such other details as the Minister may require.	Not Triggered	No underground mining is undertaken at Bengalla.	
3	Method of Operations (a) The lease holder shall not carry out any open cut or surface mining operations within the subject area, or the removal of overburden or highwall mining, within the subject area or associated colliery holdings, unless with consent of the Minister and subject to such conditions as the Minister may impose. (b) Where the lease holder intends to carry out open cut workings, surface mining operations, the removal of overburden of highwall mining within the subject area or associated colliery holding, the lease holder shall apply for approval to carry out such operations in accordance with Instructions for Open Cut Applications or Instructions for Highwall Mining Applications, provided by the Director - General.	Compliant	Extraction of coal is in general accordance with the approved MOP.	
4	Dumps The lease holder shall comply with any direction, given or which may be given by the Inspector regarding the dumping, depositing or removal of material extracted, as well as the stabilisation and revegetation of any dumps of coal, minerals, mine residues, tailings or overburden situated on the subject area or the associated colliery holding.	Not Triggered	According to site communications no such direction has been given.	
5	Management and Rehabilitation of Lands (General) The lease holder shall observe any instructions given or which may be given by the Minister with a view to minimising or preventing public inconvenience or damage to public or private property.	Not Triggered	According to site communications no such instruction has been given.	
6	Management and Rehabilitation of Lands (General) If required to do so by the Minister and within such times as may be stipulated by the Minister, the lease holder shall carry out to the satisfaction of the Minister surveys of structures, buildings and pipelines on adjacent landholdings to determine the effect of operations on any such structures, buildings and pipelines.	Not Triggered	According to site communications no such direction has been given.	
7	Management and Rehabilitation of Lands (General) (a) The lease holder shall each year once operations have commenced, submit for the Minister's approval an "Annual Environmental Management Report" relating to the operations of the lease holder on the subject area. (b) The date by which the Report must be submitted will be determined by the Minister after consulting with the lease holder. (c) The Report shall comprise: (i) a plan showing short, medium and long term mining plans; (ii) a rehabilitation report (in respect of open cut operations) and/or a surface environmental management report (in respect of underground operations) (iii) a review of performance in terms of Environmental Protection Authority and Department of Water Resources licence and approval conditions (related to the <i>Clean Air Act 1961</i> , the <i>Clean Waters Act 1970</i> , the <i>Noise Control Act 1975</i> , the <i>Environmentally Hazardous Chemical Act 1985</i> , the <i>Pollution Control Act 1970</i> and the <i>Water Act 1912</i> ) applicable to the subject area; (iv) a review of performance in terms of Development Consent conditions for the subject area; (v) a listing of any variations obtained to approvals applicable to the subject area during the previous year. (d) The Minister may, by notice in writing, direct the lease holder to undertake any operations or remedial actions in such a manner and within such period as may be specified in that notice, so as to ensure that operations on the subject area conform to the requirements of relevant statutory approvals or licences. (e) The lease holder shall conduct operations on the subject area in accordance with an "open cut application" approved by the Minister and any conditions contained in the Minister's approval of that application. Where the lease holder is of the opinion that the approved operations should be amended the lease holder shall submit an amendment for the Minister's approval.	Compliant	(a) 2017 & 2018 Annual Reviews. (b) Annual Reviews submitted by 31 March each year. - 2017 Annual Review submitted to RR via email on 30/3/2018. - 2018 Annual Review submitted to RR via email on 30/3/2019.  2017 & 2018 Annual Reviews: (c) (i) Section 8.2 - Reference to MOP. (ii) Section 8 - Rehabilitation. (iii) & (iv) Section 6 & 7. (v) Section 3 - Approvals.  (d) According to site communications no such direction has been given during the audit period. (e) Mining operations conducted according to the MOP.	
8	Management and Rehabilitation of Lands If so directed by the Minister, the lease holder shall rehabilitate to the satisfaction of the Minister any lands within the subject area which may have been disturbed by the lease holder.	Not Verified	The discussion on progressive rehabilitation is in the BMC-SSD-5170 Mod 4, Condition 45. However the rehabilitation progress is reported on in 2017 and 2018 Annual Reviews, which is approved by DPIE. This potentially indicates a level of satisfaction of rehabilitation activities each year without being a formal acknowledgement of satisfaction.  The status of rehabilitation is discussed in the Development Consent Compliance Checklist.  On 29th August 2019, Environmental Inspectors from the Resources Regulator conducted an inspection of Bengalla Mine. From this inspection three separate notices under Section 240 of the Mining Act 1992, were issued, in relation to the management and rehabilitation of lands: * NTCE0003914 - In relation to soil resources, soil management practices and recommendations by a suitably qualified expert. * NTCE0003917 - In relation to undertaking a rehabilitation risk assessment. * NTCE0003919 - In relation to undertaking a critical review of the MOP and progressive rehabilitation practices.  These three notices are being considered by Bengalla and in progress during the time of this audit. The final date for compliance with these notices was 3rd April 2020. It is understood Bengalla has engaged a suitably qualified expert to assist with the requirements of these notices.  On the basis that the Notices have been issued and are responses have not been considered as part of this IEA, compliance with this condition (specifically the satisfaction of the Minister) could not be verified.	
9	Management and Rehabilitation of Lands Upon completion of operations on the surface of the subject area or upon the expiry or sooner determinations of this authority or any renewal thereof, the lease holder shall remove from such surface such buildings, machinery, plant, equipment, constructions and works as may be directed by the Minister and such surface shall be rehabilitated and left in a clean, tidy and safe condition to the satisfaction of the Minister.	Not Triggered	Site not yet decommissioned.	

10	<p>Management and Rehabilitation of Lands</p> <p>If so directed by the Minister, the lease holder shall rehabilitate to the satisfaction of the Minister and within such time as may be allowed by the Minister any lands within the subject area which may have been disturbed by mining or prospecting operations whether such operations were or were not carried out by the lease holder.</p>	Compliant	<p>This is covered in the approved MOP as an obligation for rehabilitation. Progressive rehabilitation currently being undertaken.</p> <p>Refer to notices discussed in Condition 8 above. The current Notices are being considered by BMC and a response being prepared. There is a possibility that further directions may occur following the review of the response by the Resources Regulator.</p>	
11	<p>Management and Rehabilitation of Lands</p> <p>The lease holder shall take all reasonable precautions against causing outbreak of fire on the subject area.</p>	Compliant	<p>* BMC has the procedure PRO-0684 Bengalla Mine Bushfire Management.</p> <p>* BMC has fire fighting equipment at the site.</p> <p>Auditors are not fire experts and have not assessed this condition in full. Based on their having been no reported fires during the reporting period on the lease area BMC is considered compliant with the condition.</p>	
12	<p>Blasting</p> <p>The lease holder shall monitor noise and vibration and institute controls, generally in accordance with the recommendation of Australian Standard AS – 2187 – 1993 and ANZEC Guidelines.</p> <p>(a) <u>Ground Vibration</u></p> <p>The lease holder shall design all blasts on the basis that the ground vibration peak particle velocity generated by any blasting within the subject area, shall not exceed the levels in or conditions of the EPA Licence for the mine, at any dwelling or occupied premises not owned by the lease holder, the holder of an authority under the Mining Act, Pacific Power, or any property referred to in Condition 21A of the development consent, or not subject to a valid agreement with the lease holder, with respect to the effects of blasting.</p> <p>(b) <u>Blast Overpressure</u></p> <p>The lease holder shall design all blasts on the basis that the blast overpressure noise level generated by any blasting within the subject area, shall not exceed the levels in or conditions of the EPA Licence for the mine, at any dwelling or occupied premises not owned by lease holder, the holder of an authority under the Mining Act, Pacific Power, or any property referred to in Condition 21A of the development consent, or not subject to a valid agreement with the lease holder, with respect to the effects of blasting.</p>	Compliant	<p>Overpressure and ground vibration are measured using instruments that comply with the Australian Standard (see Table 2 of Ecotech Monthly Summary Reports). Blast effects are measured at three locations that are representative of private receivers.</p> <p>Blast results were provided for the entire audit period. It was noted that blast records indicate vibration levels did not exceed 10mm/s and overpressure levels did not exceed 120dBpeak.</p> <p>- 2017: Of the 152 blasts all results were below 5mm/s and 115dBpeak with the exception of blast 029-21-CI-WN where 116.4dB was recorded (i.e. 0.7% of blasts exceeded 115dBpeak)</p> <p>- 2018: Of the 169 blasts one blast exceeded 5mm/s (5.53mm/s) at the MRE blast location. (i.e. 0.6% exceedance). Three exceedances above 115dBpeak recorded at MRE (118.6, 118.4 and 115.7) resulting in 1.8% exceedance. One blast was recorded above 115dB peak at BLK (115.1) resulting in a 0.6% exceedance.</p> <p>- 2019 (to 17 December): Of the 181 blasts to date one exceedance of 5mm/s was recorded at MRE from blast S35-16-IB-WW4 resulting in vibration levels of 5.72mm/s (0.6% exceedance to date)</p> <p>All blasting remained below the reportable 5% limitations as per regulatory requirements.</p>	
13	<p>Trees Flora and Fauna and Arboreal Screens</p> <p>If so directed by the Minister, the lease holder shall ensure that operations are carried out in such manner so as to minimise disturbance to flora and fauna within the subject area.</p>	Non-Compliant (Low Risk)	<p>* Mine disturbance included in the MOP.</p> <p>* The Bengalla pre-clearing and clearing procedures are referred to in the MOP.</p> <p>* As reported in the 2017 Annual Review, an area of approximately 1.4 ha area was cleared in October 2017 without the approval of a Ground Disturbance Permit (GDP), and an area of 0.09 ha was also cleared in June 2017 without a GDP.</p>	
14	<p>Soil Erosion</p> <p>The lease holder shall conduct operations in such a manner as not to cause or aggravate soil erosion and the lease holder shall observe and perform any instructions given or which may be given by the Minister with a view to minimising or preventing soil erosion.</p>	Observation	<p>* Section 3.4 of the Water Management Plan includes measures to mitigate erosion.</p> <p>* During site inspection noted various erosion and sediment controls in place at the site.</p> <p>* <u>Observation</u>: Erosion noted on the south-eastern face of the waste dump.</p> <p>BMC did not report that there had been any instructions from the Minister in respect of erosion.</p>	Repair erosion on the south-eastern face of the waste dump.
15	<p>Roads</p> <p>The lease holder shall pay to Muswellbrook Shire Council, Department of Water Conservation, the Chief Executive, Roads and Traffic Authority the cost incurred by such Council or Department or Chief Executive, of making good any damage caused by operations carried on by or under the authority of the lease holder to any road adjoining or traversing the surface or the excepted surface, as the case may be of the subject area.</p> <p>PROVIDED HOWEVER that the amount to be paid by the lease holder as aforesaid shall be reduced by such sum of money if any as may be paid to the said Council the Department of Conservation and Land Management or the Chief Executive, Roads and Traffic Authority as the case may be from the Mine Subsidence Compensation Fund constituted under the <i>Mine Subsidence Compensation Act, 1961</i>, in settlement of a claim for compensation for the same damage.</p>	Compliant	<p>BMC paid Muswellbrook Shire Council for Wybong Road pavement works on 28/6/2017 (remittance advice 28/6/2017).</p> <p>According to site communications, BMC is responsible for the maintenance of Bengalla Link Road from the Denman Road intersection to the Bengalla Mine entrance road. As such any works are engaged, controlled and paid by BMC.</p>	
16	<p>Roads</p> <p>In the event of operations being conducted on the surface of any road, track or firetrail traversing the subject area or in the event of such operations causing damage to or interference with any such road, track or firetrail the lease holder, at his own expense, shall if directed to do so by the Minister provide to the satisfaction of the Minister an alternative road, track or firetrail in a position as required by the Minister and shall allow free and uninterrupted access along such alternate road, track or firetrail and, if required to do so by the Minister, the lease holder shall upon completion of operations rehabilitate the surface of the original road, track or firetrail to a condition satisfactory to the Minister.</p>	Not Triggered	<p>BMC did not have to construct an alternative road or track, due to damage or interference on an existing road or track by the mine.</p>	
17	<p>Trig Stations and Survey Marks</p> <p>(a) The marks in connection with any trigonometrical station, Permanent Mark or State Survey Mark (under the Survey Co-ordination Act 1949) erected on or near the subject area shall not be interfered with the unrestricted right of access no such station is reserved at all times</p> <p>(b) The lease holder shall take all necessary precautions to preserve the trigonometrical station, Permanent Mark or State Survey Mark (under the Survey Co-ordination Act, 1949) and the cairn, mast and vanes which might be erected upon the subject area.</p> <p>(c) No buildings or other structures shall be erected which would make observations to and from surrounding trigonometrical stations difficult to effect.</p> <p>(d) In the event of operations interfering with or damaging any trigonometrical station, Permanent Mark or State Survey Mark (under the Survey Co-ordination Act, 1949) erected on or near the subject area, or if required to do so by the Minister, the lease holder shall relocate any such trigonometrical station, Permanent Mark or State Survey Mark (under the Survey Co-ordination Act, 1949) to the satisfaction of, and in a position required by, the Department of Conservation and Land Management, the Land Information Centre, Bathurst and the Minister may impose, the lease holder, upon completion of operations shall relocate any such trigonometrical station, Permanent Mark or Survey Mark (under the Survey Co-ordination Act, 1949) to its original position.</p>	Compliant	<p>* According to site communications one state survey mark (SSM78795) is located within ML 1397 and that the survey mark has not been affected by BMC.</p> <p>* According to site communications there are no trigonometrical stations located within ML 1397.</p>	

18	<p>Transmission Lines Communication Lines and Pipelines</p> <p>The lease holder shall as far as is practicable, conduct operations so as not to interfere with or impair the stability or efficiency of any transmission line, communication line or pipeline traversing the subject area and shall comply with any direction given or which may be given by the Minister in this regard.</p>	Compliant	<p>* According to site communications no such direction made.</p> <p>* 2017 &amp; 2018 Annual reviews indicate operations did not interfere with any transmission, communication or pipelines.</p>	
19	<p>Labour Expenditure</p> <p>The lease holder shall during each year of the term of the authority:</p> <p>(a) ensure that at least 49 workers are efficiently employed on the subject area or</p> <p>(c) expend on operations carried out in the course of prospecting or mining the subject area, an amount of not less than \$857,500.00. The Minister may at any time after a period of two (2) years from the date on which this authority has effect or from the date on which the renewal of this authority has effect, increase or decrease the amount of expenditure of labour required.</p>	Compliant	<p>Email from BMC dated 13/11/2019 indicates that expenditure in 2017, 2018 and 2019 exceeded \$857,500 and the headcount for these years was over 49.</p>	
20	<p>Additional Information</p> <p>The lease holder shall if directed by the Minister and within such time as the Minister may stipulate furnish to the Minister:</p> <p>(a) information regarding the ownership of the land within the subject area;</p> <p>(b) information regarding the ownership of the coal within the subject area prior to 1 January 1982;</p> <p>(c) an indemnity in a form approved by the Minister indemnifying the Crown and the Minister against any wrong payment effected as a result of incorrect information furnished by the lease holder;</p> <p>(d) information regarding the financial viability of the lease holder and operations within and associated with the subject area; and</p> <p>(e) information regarding shareholdings in the lease holder.</p>	Not Triggered	<p>According to site communications, BMC has not been directed by RR to provide this information.</p>	
21	<p>Service of Notice</p> <p>Within a period of three months from the date of this authority or a period of three months from the date of service of the notice of renewal, or within such further time as the Director-General may allow, the lease holder shall serve on each owner and occupier of the private land on each occupier of the Crown land held under a pastoral lease within the subject area a notice in writing indicating that this authority has been granted or renewed and whether the authority includes the surface. The notice shall be accompanied by an adequate plan and description of the subject area.</p> <p>If there are ten or more owners or occupiers affected, the lease holder may serve the notice by publication in a newspaper circulating in the region where the subject area is situated. The notice shall indicate that this authority has been granted or renewed, state whether the authority includes the surface and shall contain an adequate plan and description of the subject area.</p>	Compliant	<p>Notices to five (5) landowners, dated 6/9/2018.</p>	
22	<p>Inspections</p> <p>(a) Where the inspector is of the opinion that any condition of this authority relating to operations within the subject area, or any provisions of the Mining Act, 1992, relating to operations within the subject area, are not being complied with by the lease holder, the Inspector may serve on the lease holder a notice stating that and give particulars of the reason why, and may in such notice direct the lease holder:</p> <p>(i) to cease operations within the subject area in contravention of that condition or Act; and</p> <p>(ii) to carry out within the specified time works necessary to rectify or remedy the situation.</p> <p>(b) The lease holder shall comply with the directions contained in any notice served pursuant to sub paragraph (a) of this condition. The Director-General may confirm, vary or revoke any such direction.</p> <p>(c) A notice referred to in this condition may be served on the Colliery Manager.</p>	Compliant	<p>On 29th August 2019, Environmental Inspectors from the RR conducted an inspection of Bengalla Mine. From this inspection three separate notices under Section 240 of the Mining Act 1992, were issued, in relation to the management and rehabilitation of lands:</p> <p>* NTCE0003914 - In relation to soil resources, soil management practices and recommendations by a suitably qualified expert.</p> <p>* NTCE0003917 - In relation to undertaking a rehabilitation risk assessment.</p> <p>* NTCE0003919 - In relation to undertaking a critical review of the MOP and progressive rehabilitation practices.</p> <p>These three notices are being considered by Bengalla and in progress during the time of this audit. The final date for compliance with these notices is 3rd April 2020. It is understood Bengalla has engaged a suitably qualified expert to assist with the requirements of these notices.</p> <p>BMC are considered compliant with this condition on the basis that inspections have been undertaken by the Resources Regulator, Notices issued, and the response time for Notices had yet to be triggered at the time of this audit.</p>	<p>Ensure responses to Notices are within the timeframes required by the Resources Regulator.</p>
23	<p>Indemnities</p> <p>The lease holder shall indemnify and keep indemnified the Crown from and against all actions suits and claims and demands of whatsoever nature and all costs charges and expense which may be brought against the lease holder or which the lease holder may incur respect of any accident or injury to any person or property which may arise out of the construction maintenance or working of any workings now existing or to be made by the lease holder within the boundaries of the subject area or in connection with any of the operations notwithstanding that all other conditions of this authority shall in respects have been observed by the lease holder or that any such accident or injury shall arise from any act or thing which the lease holder may be licenced or compelled to do hereunder.</p>	Note		
24	<p>Indemnities</p> <p>The lease holder shall save harmless the Crown from payment of compensation and from and against claims, actions, suits or demands whatsoever in the event of any damage resulting from mining operations under or near this subject area.</p>	Note		
25	<p>Prospecting General</p> <p>(a) Where the lease holder desires to commence prospecting operations in the subject area, the lease holder shall notify the Director-General in writing and shall comply with such additional conditions as the Minister may impose including any condition requiring the lodgement of an additional bond or other form of security for rehabilitation of the area affected by such operations.</p> <p>(b) Where the lease holder notifies the Director-General pursuant to sub paragraph (a) of this condition, the lease holder shall furnish with that notification details of the type of prospecting methods that would be adopted and the extent and location of the area that would be affected by them.</p>	Not Triggered	<p>The commencement of prospecting operations occurred prior to this audit period.</p>	

26	<p>Security Deposit</p> <p>(a) The lease holder shall, within two (2) months of being requested by the Director-General, lodge with the Minister the sum of \$50,000.00 in accordance with Instructions for Manner and Lodgement of Security Deposits as security for the fulfilment of the obligations of the lease holder under this authority. In the event that the lease holder fails to fulfil any of its obligations under this authority the said sum may be applied at the discretion of the Minister towards the costs of fulfilling such obligations. For the purpose of this clause a lease holder shall be deemed to have failed to fulfil its obligations under this authority, if it fails to comply with any condition or provision of this authority, any provision of the Act or regulations made thereunder or any condition or direction imposed or given pursuant to a condition or provision of this authority or of any provision of the Act or regulations made thereunder.</p> <p>(b) The Minister may at any time after the commencement of this authority or any renewal thereof, vary the amount of security required in accordance with this condition.</p> <p>(c) Where the amount of security has been increased pursuant to clause (b) thereof, the lease holder shall within two (2) months of being requested by the Minister, lodge a security for the amount of security required, in which case the Minister shall refund or release to the lease holder the security previously lodged.</p>	Compliant	<p>* The current security deposit lodged is in the order of \$108,159,000 2019.</p> <p>* Letter from RR to BMC dated 24/6/2019 confirms receipt of security.</p>	
27	<p>Royalty at Additional Rate</p> <p>The lease holder shall during the term of this authority pay to the Minister royalty at the additional rate as prescribed by the Regulations for coal recovered by open cut mining methods from the area.</p>	Compliant	<p>* Royalty payment spreadsheet indicates total payments made from July 2016 to November 2019.</p> <p>* History Invoice Listing run February 2017 indicates royalty payments paid.</p>	
28	<p>The lease holder shall be responsible for the costs associated with any repairs to, replacement of and removal of any assets owned by EnergyAustralia, within the lease area, should such assets be damaged as a result of activities by the lease holder within the subject area.</p>	Not Triggered	<p>According to site communications, BMC have not been required to pay costs associated with any repairs to, replacement of and removal of any assets owned by EnergyAustralia, within the lease area.</p>	
New Condition	<p>Prescribed Dam</p> <p>(a) Notwithstanding any Mining Operations Plan, the lease holder must not mine within any part of the lease area which is within the notification area of the Bengalla Stage Discharge Dam, Bengalla Clean Water 1 Dam, Mount Pleasant Mine Water Dam Notification Area, Mount Pleasant Environmental Dam 3 Notification Area, Bengalla Stage Discharge Dam 1 Notification Area, Bengalla Dirty Water Dam Notification Area, Bengalla Clean Water Dam 1 Notification Area without the prior written approval of the Minister and subject to any conditions stipulated.</p> <p>(b) Where the lease holder desires to mine within the notification area he or she must:</p> <p>(i) at least twelve (12) months before mining is to commence or such lesser time as the Minister may permit, notify the Minister of the desire to do so. A plan of the mining system to be implemented must accompany the notice; and</p> <p>(ii) provide such information as the Minister may direct.</p> <p>(c) The Minister must not, except in the circumstances set out in sub-paragraph (ii), grant approval unless sub-paragraph (i) of this paragraph has been complied with.</p> <p>(i) This sub-paragraph is complied with if:</p> <p>(A) the Dams Safety Committee as constituted by Section 7 of the Dams Safety Act 1978 and the owner of the dam have been notified in writing of the desire to mine referred to in paragraph (b);</p> <p>(B) the notifications referred to in clause (A) are accompanied by a description or plan of the area to be mined;</p> <p>(C) the Director-General has complied with any reasonable request made by the Dams Safety Committee or the owner of the dam for further information in connection with the mining proposal;</p> <p>(D) the Dams Safety Committee has made its recommendations concerning the mining proposal or has informed the Minister in writing that it does not propose to make any such recommendations; and</p> <p>(E) where the Dams Safety Committee has made recommendations the approval is in terms that are:</p> <p>- in accordance with those recommendations; or- where the Minister does not accept those recommendations or any of them</p> <p>- in accordance with a determination under sub-paragraph (ii) of this paragraph.</p> <p>(ii) Where the Minister does not accept the recommendations of the Dams Safety Committee or where the Dams Safety Committee has failed to make any recommendations and has not informed the Minister in writing that it does not propose to make any recommendations, the approval shall be in terms that are, in relation to matters dealing with the safety of the dam:</p> <p>(A) as determined by agreement between the Minister and the Minister administering the Dams Safety Act 1978; or</p> <p>(B) in the event of failure to reach such agreement - as determined by the Premier.</p> <p>(d) The Minister, on notice from the Dams Safety Committee, may at any time or times:</p> <p>(i) cancel any approval given where a notice pursuant to Section 18 of the Dams Safety Act 1978 is given.</p> <p>(ii) suspend for a period of time, alter, omit from or add to any approval given or conditions imposed.</p>	Compliant	<p>* Email from BMC to RR and Dam Safety Committee DSC dated 17/1/2018 sought approval to mine within the prescribed dam notification area of Mt Pleasant Mine Environment Dam 3. Plan of the area to be mined is attached to the email.</p>	

Condition	Requirement	Compliance Status	Evidence	Recommended Action
<b>Mining Lease 1450</b>				
1	<p>Method of Operations</p> <p>The lease holder shall extract as large a percentage of the coal in the subject area as is practicable, consistent with the provisions of the Coal Mines Regulation Act 1982 and the Regulations thereunder and shall comply with any direction given or which may be given in this regard by the Minister.</p>	Compliant	Extraction of coal is conducted in accordance with the approved MOP.	
2	<p>Mining Rehabilitation Environmental Management Process</p> <p>(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:</p> <p>(a) ongoing mining operations and environmental management; and</p> <p>(b) ongoing monitoring of the project.</p> <p>(2) The Plan must be prepared in accordance with the Director-General's guidelines current at the time of lodgement.</p> <p>(3) A Plan must be lodged with the Director-General:</p> <p>(a) prior to the commencement of operations;</p> <p>(b) subsequently as appropriate prior to the expiry of any current Plan; and</p> <p>(c) in accordance with any direction issued by the Director-General.</p> <p>(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:</p> <p>(a) area(s) proposed to be disturbed under the Plan;</p> <p>(b) mining and rehabilitation method(s) to be used and their sequence;</p> <p>(c) areas to be used for disposals of tailings/waste;</p> <p>(d) existing and proposed surface infrastructure;</p> <p>(e) progressive rehabilitation schedules;</p> <p>(f) areas of particular environmental sensitivity;</p> <p>(g) water management systems (including erosion and sediment controls);</p> <p>(h) proposed resource recovery; and</p> <p>(i) 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.</p> <p>(5) The Plan when lodged will be reviewed by the Department of Mineral Resources.</p> <p>(6) The Director-General may within two months of the lodgement of a Plan, require modification and relodgement.</p> <p>(7) If a requirement in accordance with clause (6) is not issued within two months of the lodgement of a Plan, lease holder may proceed with implementation of the Plan submitted subject to the lodgement of the required security deposit within the specified time.</p> <p>(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 (5)-(7) above.</p>	Compliant	<p>(1) Mining is being undertaken in general accordance with the current MOP. This covers a) ongoing mining operations and environmental management and (b) ongoing monitoring of the project.</p> <p>(2) MOP Section 1 - was prepared in accordance with ESG3: Mining Operations Plan (MOP) Guidelines.</p> <p>(3) MOP 2015-2021 was approved by the RR 03/07/15. The MOP 2015-2021 Amendment A was approved by RR on 12/04/16. MOP 2017-2021 approved by the RR on 8/11/17. MOP 2017-2021 Amendment A also approved in 11/04/2019.</p> <p>(4) MOP Plans.</p> <p>(5) As per (3).</p> <p>(6) Not Triggered.</p> <p>(7) Undertaken.</p> <p>(8) MOP 2017-2021 Amendment A approved in 11/04/2019.</p>	
3	<p>Annual Environmental Management Report</p> <p>(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.</p> <p>(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:</p> <p>(a) the accepted Mining Operations Plan;</p> <p>(b) development consent requirements and conditions;</p> <p>(c) Environment Protection Authority and Department of Land and Water Conservation licences and approvals;</p> <p>(d) any other statutory environmental requirements;</p> <p>(e) details of any variations to environmental approvals applicable to the lease area; and</p> <p>(f) where relevant, progress towards final rehabilitation objectives.</p> <p>(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.</p> <p>(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.</p>	Compliant	<p>(a) 2017 &amp; 2018 Annual Reviews.</p> <p>(b) Annual Reviews submitted by 31 March each year.</p> <p>- 2017 Annual Review submitted to RR via email on 30/3/2018.</p> <p>- 2018 Annual Review submitted to RR via email on 30/3/2019.</p> <p>2017 &amp; 2018 Annual Reviews:</p> <p>(a) Section 4.;</p> <p>(b), (c) &amp; (d) Section 1, Section 6 - 8, and 10;</p> <p>(e) Section 3; and</p> <p>(f) Section 8.1.</p> <p>(3) (4) According to site communications no such direction has been given during the audit period.</p>	
4	<p>Dumps</p> <p>The lease holder shall comply with any direction, given or which may be given by the Inspector regarding the dumping, depositing or removal of material extracted, as well as the stabilisation and revegetation of any dumps of coal, minerals, mine residues, tailings or overburden situated on the subject area or the associated colliery holding.</p>	Not Triggered	According to site communications no such direction has been given.	
5	<p>Management and Rehabilitation of Lands (General)</p> <p>The lease holder shall observe any instructions given or which may be given by the Minister with a view to minimising or preventing public inconvenience or damage to public or private property.</p>	Not Triggered	According to site communications no such instructions have been given.	
6	<p>Management and Rehabilitation of Lands (General)</p> <p>If required to do so by the Minister and within such times as may be stipulated by the Minister, the lease holder shall carry out to the satisfaction of the Minister surveys of structures, buildings and pipelines on adjacent landholdings to determine the effect of operations on any such structures, buildings and pipelines.</p>	Not Triggered	According to site communications no such direction has been given.	

7	<p>Management and Rehabilitation of Lands (General)</p> <p>(a) The lease holder shall each year once operations have commenced, submit for the Minister's approval an "Annual Environmental Management Report" relating to the operations of the lease holder on the subject area.</p> <p>(b) The date by which the Report must be submitted will be determined by the Minister after consulting with the lease holder.</p> <p>(c) The Report shall comprise:</p> <p>(i) a plan showing short, medium and long term mining plans;</p> <p>(ii) a rehabilitation report (in respect of open cut operations) and/or a surface environmental management report (in respect of underground operations)</p> <p>(iii) a review of performance in terms of Environmental Protection Authority and Department of Water Resources licence and approval conditions (related to the Clean Air Act 1961, the Clean Waters Act 1970, the Noise Control Act 1975, the Environmentally Hazardous Chemical Act 1985, the Pollution Control Act 1970 and the Water Act 1912) applicable to the subject area;</p> <p>(iv) a review of performance in terms of Development Consent conditions for the subject area;</p> <p>(v) a listing of any variations obtained to approvals applicable to the subject area during the previous year.</p> <p>(d) The Minister may, by notice in writing, direct the lease holder to undertake any operations or remedial actions in such a manner and within such period as may be specified in that notice, so as to ensure that operations on the subject area conform to the requirements of relevant statutory approvals or licences.</p> <p>(e) The lease holder shall conduct operations on the subject area in accordance with an "open cut application" approved by the Minister and any conditions contained in the Minister's approval of that application. Where the lease holder is of the opinion that the approved operations should be amended the lease holder shall submit an amendment for the Minister's approval.</p>	Compliant	<p>(a) 2017 &amp; 2018 Annual Reviews.</p> <p>(b) Annual Reviews submitted by 31 March each year.</p> <p>- 2017 Annual Review submitted to RR on 30/3/2018.</p> <p>- 2018 Annual Review submitted to RR on 30/3/2019.</p> <p>2017 &amp; 2018 Annual Reviews:</p> <p>(c) (i) Section 8.2 - Reference to MOP.</p> <p>(ii) Section 8 - Rehabilitation.</p> <p>(iii) &amp; (iv) Section 6 &amp; 7.</p> <p>(v) Section 3 - Approvals.</p> <p>(d) According to site communications no such direction has been given during the audit period.</p> <p>(e) Mining operations conducted according to the MOP.</p>	
8	<p>Management and Rehabilitation of Lands (General)</p> <p>If so directed by the Minister, the lease holder shall rehabilitate to the satisfaction of the Minister any lands within the subject area which may have been disturbed by the lease holder.</p>	Not Verified	<p>The discussion on progressive rehabilitation is in the BMC-SSD-5170 Mod 4, Condition 45. However the rehabilitation progress is reported on in 2017 and 2018 Annual Reviews, which is approved by DPIE. This potentially indicates a level of satisfaction of rehabilitation activities each year without being a formal acknowledgement of satisfaction.</p> <p>The status of rehabilitation is discussed in the Development Consent Compliance Checklist.</p> <p>On 29th August 2019, Environmental Inspectors from the Resources Regulator conducted an inspection of Bengalla Mine. From this inspection three separate notices under Section 240 of the Mining Act 1992, were issued, in relation to the management and rehabilitation of lands:</p> <p>* NTCE0003914 - In relation to soil resources, soil management practices and recommendations by a suitably qualified expert.</p> <p>* NTCE0003917 - In relation to undertaking a rehabilitation risk assessment.</p> <p>* NTCE0003919 - In relation to undertaking a critical review of the MOP and progressive rehabilitation practices.</p> <p>These three notices are being considered by Bengalla and in progress during the time of this audit. The final date for compliance with these notices was 3rd April 2020. It is understood Bengalla has engaged a suitably qualified expert to assist with the requirements of these notices.</p> <p>On the basis that the Notices have been issued and are responses have not been considered as part of this IEA, compliance with this condition (specifically the satisfaction of the Minister) could not be verified.</p>	
9	<p>Management and Rehabilitation of Lands (General)</p> <p>Upon completion of operations on the surface of the subject area or upon the expiry or sooner determinations of this authority or any renewal thereof, the lease holder shall remove from such surface such buildings, machinery, plant, equipment, constructions and works as may be directed by the Minister and such surface shall be rehabilitated and left in a clean, tidy and safe condition to the satisfaction of the Minister.</p>	Not Triggered	Site not yet decommissioned.	
10	<p>Management and Rehabilitation of Lands (General)</p> <p>If so directed by the Minister, the lease holder shall rehabilitate to the satisfaction of the Minister and within such time as may be allowed by the Minister any lands within the subject area which may have been disturbed by mining or prospecting operations whether such operations were or were not carried out by the lease holder.</p>	Compliant	<p>Areas covered in the MOP.</p> <p>Refer to notices discussed in Condition 8 above. BMC are required to respond to Notices prior to April 3 2020.</p>	
11	<p>Management and Rehabilitation of Lands (General)</p> <p>The lease holder shall take all reasonable precautions against causing outbreak of fire on the subject area.</p>	Compliant	<p>* BMC has the procedure PRO-0684 Bengalla Mine Bushfire Management.</p> <p>* BMC has fire fighting equipment at the site.</p> <p>Auditors are not fire experts and have not assessed this condition in full. Based on their having been no reported fires during the reporting period BMC is considered compliant with the condition.</p>	

12	<p><b>Blasting</b> The lease holder shall monitor noise and vibration and institute controls, generally in accordance with the recommendation of Australian Standard AS – 2187 – 1993 and ANZEC Guidelines.</p> <p>(a) <b>Ground Vibration</b> The lease holder shall design all blasts on the basis that the ground vibration peak particle velocity generated by any blasting within the subject area, shall not exceed the levels in or conditions of the EPA Licence for the mine, at any dwelling or occupied premises not owned by the lease holder, the holder of an authority under the Mining Act, Pacific Power, or any property referred to in Condition 21A of the development consent, or not subject to a valid agreement with the lease holder, with respect to the effects of blasting.</p> <p>(b) <b>Blast Overpressure</b> The lease holder shall design all blasts on the basis that the blast overpressure noise level generated by any blasting within the subject area, shall not exceed the levels in or conditions of the EPA Licence for the mine, at any dwelling or occupied premises not owned by lease holder, the holder of an authority under the Mining Act, Pacific Power, or any property referred to in Condition 21A of the development consent, or not subject to a valid agreement with the lease holder, with respect to the effects of blasting.</p>	Compliant	<p>Overpressure and ground vibration are measured using instruments that comply with the Australian Standard (see Table 2 of Ecotech Monthly Summary Reports). Blast effects are measured at three locations that are representative of private receivers.</p> <p>Blast results provided for the entire audit period. It was noted that at all times blast records indicate vibration levels not exceeding 10mm/s and overpressure levels not exceeding 120dBpeak.</p> <p>- 2017: Of the 152 blasts all results were below 5mm/s and 115dBpeak with the exception of blast 029-21-CI-WN where 116.4dB was recorded, (i.e. 0.7% of blasts exceeded 115dBpeak)</p> <p>- 2018: Of the 169 blasts one blast exceeded 5mm/s (5.53mm/s) at the MRE blast location. (i.e. 0.6% exceedance). Three exceedances above 115dBpeak recorded at MRE (118.6, 118.4 and 115.7) resulting in 1.8% exceedance. One blast was recorded above 115dB peak at BLK (115.1) resulting in a 0.6% exceedance.</p> <p>- 2019 (to 17 December): Of the 181 blasts to date one exceedance of 5mm/s was recorded at MRE from blast S35-16-IB-WW4 resulting in vibration levels of 5.72mm/s (0.6% exceedance to date)</p> <p>All blasting remained below the reportable 5% limitations as per regulatory requirements.</p>
13	<p><b>Trees Flora and Fauna and Arboreal Screens</b> If so directed by the Minister, the lease holder shall ensure that operations are carried out in such manner so as to minimise disturbance to flora and fauna within the subject area.</p>	Compliant	<p>* Mine disturbance included in the MOP. * The Bengalla pre-clearing and clearing procedures are referred to in the MOP.</p>
14	<p><b>Soil Erosion</b> The lease holder shall conduct operations in such a manner as not to cause or aggravate soil erosion and the lease holder shall observe and perform any instructions given or which may be given by the Minister with a view to minimising or preventing soil erosion.</p>	Compliant	<p>* Section 3.4 of the Water Management Plan includes measures to mitigate erosion. * During site inspection noted various erosion and sediment controls in place at the site.</p>
15	<p><b>Roads</b> The lease holder shall pay to Muswellbrook Shire Council, Department of Water Conservation, the Chief Executive, Roads and Traffic Authority the cost incurred by such Council or Department or Chief Executive, of making good any damage caused by operations carried on by or under the authority of the lease holder to any road adjoining or traversing the surface or the excepted surface, as the case may be of the subject area.</p> <p>PROVIDED HOWEVER that the amount to be paid by the lease holder as aforesaid shall be reduced by such sum of money if any as may be paid to the said Council the Department of Conservation and Land Management or the Chief Executive, Roads and Traffic Authority as the case may be from the Mine Subsidence Compensation Fund constituted under the Mine Subsidence Compensation Act, 1961, in settlement of a claim for compensation for the same damage.</p>	Compliant	<p>BMC paid Muswellbrook Shire Council for Wybong Road pavement works on 28/6/2017 (remittance advice 28/6/2017).</p> <p>According to site communications, BMC is responsible for the maintenance of Bengalla Link Road from the Denman Road intersection to the Bengalla Mine entrance road, as such any works are engaged, controlled and paid by BMC.</p>
16	<p><b>Roads</b> In the event of operations being conducted on the surface of any road, track or firetrail traversing the subject area or in the event of such operations causing damage to or interference with any such road, track or firetrail the lease holder, at his own expense, shall if directed to do so by the Minister provide to the satisfaction of the Minister an alternative road, track or firetrail in a position as required by the Minister and shall allow free and uninterrupted access along such alternate road, track or firetrail and, if required to do so by the Minister, the lease holder shall upon completion of operations rehabilitate the surface of the original road, track or firetrail to a condition satisfactory to the Minister.</p>	Compliant	<p>BMC did not have to construct an alternative road or track, due to damage or interference on an existing road or track by the mine.</p>
18	<p><b>Transmission Lines Communication Lines Pipelines</b> The lease holder shall as far as is practicable, conduct operations so as not to interfere with or impair the stability or efficiency of any transmission line, communication line or pipeline traversing the subject area and shall comply with any direction given or which may be given by the Minister in this regard.</p>	Compliant	<p>* According to site communications no such direction made. * 2017 &amp; 2018 Annual reviews indicate operations did not interfere with any transmission, communication or pipelines.</p>
19	<p><b>Labour/Expenditure</b> The lease holder shall during each year of the term of the authority: (a) ensure that at least 7 workers are efficiently employed on the subject area or (b) expend on operations carried out in the course of prospecting or mining the subject area, an amount of not less than \$122,500.00. The Minister may at any time after a period of two (2) years from the date on which this authority has effect or from the date on which the renewal of this authority has effect, increase or decrease the amount of expenditure of labour required.</p>	Compliant	<p>Email from BMC dated 13/11/2019 indicates that expenditure in 2017, 2018 and 2019 exceeded \$857,500 and the headcount for these years was over 49.</p>
20	<p><b>Additional Information</b> The lease holder shall if directed by the Minister and within such time as the Minister may stipulate furnish to the Minister: (a) information regarding the ownership of the land within the subject area; (b) information regarding the ownership of the coal within the subject area prior to 1 January 1982; (c) an indemnity in a form approved by the Minister indemnifying the Crown and the Minister against any wrong payment effected as a result of incorrect information furnished by the lease holder; (d) information regarding the financial viability of the lease holder and operations within and associated with the subject area; and (e) information regarding shareholdings in the lease holder.</p>	Not Triggerred	<p>According to site communications, BMC has not been directed by RR to provide this information.</p>
21	<p><b>Service of Notices</b> Within a period of three months from the date of this authority or a period of three months from the date of service of the notice of renewal, or within such further time as the Director-General may allow, the lease holder shall serve on each owner and occupier of the private land on each occupier of the Crown land held under a pastoral lease within the subject area a notice in writing indicating that this authority has been granted or renewed and whether the authority includes the surface. The notice shall be accompanied by an adequate plan and description of the subject area.</p> <p>If there are ten or more owners or occupiers are affected, the lease holder may serve the notice by publication in a newspaper circulating in the region where the subject area is situated. The notice shall indicate that this authority has been granted or renewed, state whether the authority includes the surface and shall contain an adequate plan and description of the subject area.</p>	Not Triggerred	<p>Outside of audit period</p>

22	<p>Inspectors</p> <p>(a) Where the inspector is of the opinion that any condition of this authority relating to operations within the subject area, or any provisions of the Mining Act, 1992, relating to operations within the subject area, are not being complied with by the lease holder, the Inspector may serve on the lease holder a notice stating that and give particulars of the reason why, and may in such notice direct the lease holder:</p> <p>(i) to cease operations within the subject area in contravention of that condition or Act; and</p> <p>(ii) to carry out within the specified time works necessary to rectify or remedy the situation.</p> <p>(b) The lease holder shall comply with the directions contained in any notice served pursuant to sub paragraph (a) of this condition. The Director-General may confirm, vary or revoke any such direction.</p> <p>(c) A notice referred to in this condition may be served on the Colliery Manager.</p>	Compliant	<p>Refer to inspection and notices issued, as discussed in Condition 8 above.</p> <p>On 29th August 2019, Environmental Inspectors from the RR conducted an inspection of Bengalla Mine. From this inspection three separate notices under Section 240 of the Mining Act 1992, were issued, in relation to the management and rehabilitation of lands:</p> <p>* NTCE0003914 - In relation to soil resources, soil management practices and recommendations by a suitably qualified expert.</p> <p>* NTCE0003917 - In relation to undertaking a rehabilitation risk assessment.</p> <p>* NTCE0003919 - In relation to undertaking a critical review of the MOP and progressive rehabilitation practices.</p> <p>These three notices are being considered by Bengalla and in progress during the time of this audit. The final date for compliance with these notices is 3rd April 2020. It is understood Bengalla has engaged a suitably qualified expert to assist with the requirements of these notices.</p> <p>BMC are considered compliant with this condition on the basis that inspections have been undertaken by the Resources Regulator, Notices issued, and the response time for Notices had yet to be triggered at the time of this audit.</p>	Ensure responses to Notices are within the timeframes required by the Resources Regulator.
23	<p>Indemnities</p> <p>The lease holder shall indemnify and keep indemnified the Crown from and against all actions suits and claims and demands of whatsoever nature and all costs charges and expense which may be brought against the lease holder or which the lease holder may incur respect of any accident or injury to any person or property which may arise out of the construction maintenance or working of any workings now existing or to be made by the lease holder within the boundaries of the subject area or in connection with any of the operations notwithstanding that all other conditions of this authority shall in respects have been observed by the lease holder or that any such accident or injury shall arise from any act or thing which the lease holder may be licenced or compelled to do hereunder.</p>	Note		
24	<p>Indemnities</p> <p>The lease holder shall save harmless the Crown from payment of compensation and from and against claims, actions, suits or demands whatsoever in the event of any damage resulting from mining operations under or near this subject area.</p>	Note		
25	<p>Prospecting (General)</p> <p>(a) Where the lease holder desires to commence prospecting operations in the subject area, the lease holder shall notify the Director-General in writing and shall comply with such additional conditions as the Minister may impose including any condition requiring the lodgement of an additional bond or other form of security for rehabilitation of the area affected by such operations.</p> <p>(b) Where the lease holder notifies the Director-General pursuant to sub paragraph (a) of this condition, the lease holder shall furnish with that notification details of the type of prospecting methods that would be adopted and the extent and location of the area that would be affected by them.</p>	Compliant	* 2016-2017 , 2017-2018 and 2018-2019 Annual Report on Coal Exploration	
26	<p>Security Deposit</p> <p>(a) The lease holder shall, within two (2) months of being requested by the Director-General, lodge with the Minister the sum of (Ten Thousand Dollars) \$10,000.00 in accordance with Instructions for Manner and Lodgement of Security Deposits as security for the fulfilment of the obligations of the lease holder under this authority. In the event that the lease holder fails to fulfil any of its obligations under this authority the said sum may be applied at the discretion of the Minister towards the costs of fulfilling such obligations. For the purpose of this clause a lease holder shall be deemed to have failed to fulfil its obligations under this authority, if it fails to comply with any condition or provision of this authority, any provision of the Act or regulations made thereunder or any condition or direction imposed or given pursuant to a condition or provision of this authority or of any provision of the Act or regulations made thereunder.</p> <p>(b) The Minister may at any time after the commencement of this authority or any renewal thereof, vary the amount of security required in accordance with this condition.</p> <p>(c) Where the amount of security has been increased pursuant to clause (b) thereof, the lease holder shall within two (2) months of being requested by the Minister, lodge a security for the amount of security required, in which case the Minister shall refund or release to the lease holder the security previously lodged.</p>	Compliant	<p>* The current security deposit lodged is in the order of \$108,159,000 2019.</p> <p>* Letter from RR to BMC dated 24/6/2019 confirms receipt of security.</p>	
27	<p>Royalty at Additional Rate</p> <p>The lease holder shall during the term of this authority pay to the Minister royalty at the additional rate as prescribed by the Regulations for coal recovered by open cut mining methods from the area.</p>	Compliant	<p>* Royalty payment spreadsheet indicates total payments made from July 2016 to November 2019.</p> <p>* History Invoice Listing run February 2017 indicates royalty payments paid.</p>	
29	<p>Additional Conditions</p> <p>Where practicable the lease holder shall, upon completion of mining, revegetate the area with tree species and understorey vegetation native to the district and preferably to that site, with seed collected from local stock.</p>	Not Triggered	According to site inspection and site communications area not being rehabilitated during audit period.	
30	<p>Additional Conditions</p> <p>The lease holder shall pay Rail Access Corporation the cost of making good any damage caused by operations carried on, by, or under the authority of the lease holder to any rail infrastructure of the subject area.</p>	Not Triggered	<p>* According to site communications no notices received regarding damage during the audit period.</p> <p>* No damage noted during the site inspection.</p>	
31	<p>Additional Conditions</p> <p>The lease holder shall provide and maintain to the satisfaction of the Minister efficient means to prevent contamination, pollution, erosion or siltation of any river, stream, creek, tributary, lake, dam, reservoir, watercourse, groundwater or catchment area or any undue interference to fish or their environment and shall observe any instruction given or may be given by the Minister with a view to preventing or minimising the contamination, pollution, erosion or siltation of any river, stream, creek, tributary, lake, dam, reservoir, watercourse, groundwater or catchment area or any undue interference to fish or their environment.</p>	Compliant	<p>* Section 3.4 of the Water Management Plan includes measures to mitigate erosion.</p> <p>* During site inspection noted various erosion and sediment controls in place at the site.</p>	

58	Additional Conditions Prescribed Dam 58 (a) Notwithstanding any Mining Operations Plan, the lease holder must not mine within any part of the lease area which is within the notification area of the Bengalla Stage Discharge Dam without the prior written approval of the Minister and subject to any conditions he may stipulate. (b) Where the lease holder desires to mine within the notification area he or she must: (i) at least twelve (12) months before mining is to commence or such lesser time as the Minister may permit, notify the Minister of the desire to do so. A plan of the mining system to be implemented must accompany the notice; and (ii) provide such information as the Minister may direct. (c) The Minister must not, except in the circumstances set out in sub-paragraph (ii), grant approval unless sub-paragraph (i) of this paragraph has been complied with. (i) This sub-paragraph is complied with if: (a) the Dams Safety Committee as constituted by Section 7 of the Dams Safety Act 1978 and the owner of the dam have been notified in writing of the desire to mine referred to in paragraph (b); (b) the notifications referred to in clause (a) are accompanied by a description or plan of the area to be mined; (c) the Director-General has complied with any reasonable request made by the Dams Safety Committee or the owner of the dam for further information in connection with the mining proposal; (d) the Dams Safety Committee has made its recommendations concerning the mining proposal or has informed the Minister in writing that it does not propose to make any such recommendations; and (e) where the Dams Safety Committee has made recommendations the approval is in terms that are: (i) in accordance with those recommendations; or (ii) where the Minister does not accept those recommendations or any of them - in accordance with a determination under sub-paragraph (ii) of this paragraph. (ii) Where the Minister does not accept the recommendations of the Dams Safety Committee or where the Dams Safety Committee has failed to make any recommendations and has not informed the Minister in writing that it does not propose to make any recommendations, the approval shall be in terms that are, in relation to matters dealing with the safety of the dam: (a) as determined by agreement between the Minister and the Minister administering the Dams Safety Act 1978; or (b) in the event of failure to reach such agreement - as determined by the Premier. (d) The Minister, on notice from the Dams Safety Committee, may at any time or times: (i) cancel any approval given where a notice pursuant to Section 18 of the Dams Safety Act 1978 is given. (ii) suspend for a period of time, alter, omit from or add to any approval given or conditions imposed.	Not Triggerred	According to site communications, mining commenced within the prescribed notification area of Bengalla Stage Discharge Dam prior to this audit period.	
New Condition 18 March 2004	Subsidence Management	Not Triggerred	* No underground mining.	
New Condition 4 April 2007	Single security for ML1397, ML1450 and ML1469	Compliant	* The current security deposit lodged is in the order of \$108,159,000 2019. * Letter from RR to BMC dated 24/6/2019 confirms receipt of security.	
Endorsement Schedule 26 February 2008	Any proposed activity from time to time in regards to methane drainage and capture should be advised to the Department's Mine Safety Operations and Environmental Units for consideration and possible imposition of conditions relative to each site specific case.	Not Triggerred	* No methane drainage or capture.	
Endorsement Schedule 28 January 2009	Change of security to \$30,224,000	Compliant	* The current security deposit lodged is in the order of \$108,159,000 2019. * Letter from RR to BMC dated 24/6/2019 confirms receipt of security.	
Endorsement Schedule 11 January 2012	Change of security to \$49,100,000	Compliant	* The current security deposit lodged is in the order of \$108,159,000 2019. * Letter from RR to BMC dated 24/6/2019 confirms receipt of security.	
Instrument of amendment 18 March 2004	Extraction Plan Condition	Compliant	* The current security deposit lodged is in the order of \$108,159,000 2019. * Letter from RR to BMC dated 24/6/2019 confirms receipt of security.	
Endorsement Schedule 14 November 2015	Change of security to \$73,300,300	Compliant	* The current security deposit lodged is in the order of \$108,159,000 2019. * Letter from RR to BMC dated 24/6/2019 confirms receipt of security.	
Endorsement Schedule 19 January 2018	Change of security to \$80,560,300	Compliant	* The current security deposit lodged is in the order of \$108,159,000 2019. * Letter from RR to BMC dated 24/6/2019 confirms receipt of security.	
Instrument of variation 21 June 2019	Change of security to \$108,159,000	Compliant	* The current security deposit lodged is in the order of \$108,159,000 2019. * Letter from RR to BMC dated 24/6/2019 confirms receipt of security.	

Condition	Requirement	Compliance Status	Evidence	Recommended Action
<b>Mining Lease 1469</b>				
1	<p>Extraction of Coal</p> <p>The lease holder shall extract as large a percentage of the coal in the subject area as is practicable consistent with the provisions of the Coal Mines Regulations Act 1982 and the Regulations thereafter and shall comply with any direction given or which may be given in this regard by the Minister.</p>	Not Triggered	Extraction of coal was outside of the audit period.	
2	<p>Mining Operations Plan</p> <p>(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:</p> <p>(a) ongoing mining operations and environmental management; and</p> <p>(b) ongoing monitoring of the project.</p> <p>(2) The Plan must be prepared in accordance with the Director-General's guidelines current at the time of lodgement.</p> <p>(3) A Plan must be lodged with the Director-General:</p> <p>(a) prior to the commencement of operations;</p> <p>(b) subsequently as appropriate prior to the expiry of any current Plan; and</p> <p>(c) in accordance with any direction issued by the Director-General.</p> <p>(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:</p> <p>(a) area(s) proposed to be disturbed under the Plan;</p> <p>(b) mining and rehabilitation method(s) to be used and their sequence;</p> <p>(c) areas to be used for disposals of tailings/waste;</p> <p>(d) existing and proposed surface infrastructure;</p> <p>(e) progressive rehabilitation schedules;</p> <p>(f) areas of particular environmental sensitivity;</p> <p>(g) water management systems (including erosion and sediment controls);</p> <p>(h) proposed resource recovery; and</p> <p>(i) 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.</p> <p>(5) The Plan when lodged will be reviewed by the Department of Mineral Resources.</p> <p>(6) The Director-General may within two months of the lodgement of a Plan, require modification and re-lodgement.</p> <p>(7) If a requirement in accordance with clause (6) is not issued within two months of the lodgement of a Plan, lease holder may proceed with implementation of the Plan submitted subject to the lodgement of the required security deposit within the specified time.</p> <p>(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 (5)-(7) above.</p>	Compliant	<p><u>Preparation:</u></p> <p>Mining Operations Plan (MOP), dated February 2019.</p> <p>(1) Mining is being undertaken in general accordance with the current MOP. This covers</p> <p>a) ongoing mining operations and environmental management; and</p> <p>b) ongoing monitoring of the project.</p> <p>(2) MOP Section 1 - was prepared in accordance with ESG3: <i>Mining Operations Plan (MOP)</i> Guidelines.</p> <p>(3) MOP 2015-2021 was approved by the RR on 03/07/15. MOP 2015-2021 Amendment A was approved by the RR on 12/04/16. MOP 2017-2021 was approved by RR on 8/11/17. MOP 2017-2021 Amendment A was approved on 11/04/2019.</p> <p>(4) MOP Plans.</p> <p>(5) As per (3).</p> <p>(6) Not Triggered.</p> <p>(7) Undertaken.</p> <p>(8) MOP 2017-2021 Amendment A was approved on 11/04/2019.</p> <p><u>Implementation:</u></p> <p>The implementation of the MOP (Rehabilitation Management Plan) is occurring on site as mining progresses. The recent areas available for rehabilitation are designed using the geomorphic natural landform software 'GeoFluv'. This provides for a more natural surface water drainage system on the rehabilitated landform. The older areas of rehabilitation are being maintained and inspected regularly for surface water drainage and revegetation issues. Given the change in target vegetation structure on the 400ha of the Eastern face, the implementation of the MOP will require these areas to be revisited to establish high density woody vegetation (HDWV). This means implementation will include new areas made available as mining progresses, as well as revisiting existing areas previously considered in the ecosystem establishment phase. The rehabilitation on the Eastern face is now well behind that predicted given the change to target HDWV. The staged plan to rehabilitate to HDWV should be included in a future MOP Amendment.</p>	The staged plan to rehabilitate to HDWV should be included in a future MOP Amendment.
3	<p>Annual Environmental Management Report</p> <p>(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.</p> <p>(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:</p> <p>(a) the accepted Mining Operations Plan;</p> <p>(b) development consent requirements and conditions;</p> <p>(c) Environment Protection Authority and Department of Land and Water Conservation licences and approvals;</p> <p>(d) any other statutory environmental requirements;</p> <p>(e) details of any variations to environmental approvals applicable to the lease area; and</p> <p>(f) where relevant, progress towards final rehabilitation objectives.</p> <p>(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.</p> <p>(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.</p>	Compliant	<p>(a) 2017 &amp; 2018 Annual Reviews.</p> <p>(b) Annual Reviews submitted by 31 March each year.</p> <p>- 2017 Annual Review submitted to RR via email on 30/3/2018.</p> <p>- 2018 Annual Review submitted to RR via email on 30/3/2019.</p> <p>2017 &amp; 2018 Annual Reviews:</p> <p>(a) Section 4.;</p> <p>(b), (c) &amp; (d) Section 1, Section 6 - 8, and 10;</p> <p>(e) Section 3; and</p> <p>(f) Section 8.1.</p> <p>(3) (4) According to site communications no such direction has been given during the audit period.</p>	
14	Operations shall be conducted in such a manner as not to cause any danger to persons or stock and the lease holder shall provide and maintain adequate protection to the satisfaction of the Minister around each shaft or excavation opened up or used by the lease holder.	Compliant	<p>During site inspection noted:</p> <p>* No shafts at the site;</p> <p>* Site fenced and gated to prevent danger to the general public and stock.</p>	
15	<p>Dumps</p> <p>The lease holder shall comply with any direction, given or which may be given by the Inspector regarding the dumping, depositing or removal of material extracted as well as the stabilisation and vegetation of any dumps of coal, minerals, mine residues, tailings or overburden situated on the subject area or the associated colliery holding.</p>	Not Triggered	Refer to response for Condition 19.	
16	<p>Dumps</p> <p>The lease holder shall comply with any direction, given or which may be given by the Minister regarding the spraying of coal dumps on the subject area.</p>	Not Triggered	According to site communications no such direction has been given.	
17	<p>Dust</p> <p>The lease holder shall take such precautions as are necessary to abate any dust nuisance.</p>	Compliant	<p>During site inspection noted:</p> <p>- Watering of haul roads by water truck; and</p> <p>- When the wind speed reached 5m/sec any operations in the pit, causing dust, are shut-down and wind over 10m/sec then all activity in the pit is stopped.</p>	
18	<p>Management and Rehabilitation of Lands</p> <p>The lease holder shall not interfere in any way with any fences on or adjacent to the subject area unless with the prior written approval of the owner thereof or the Minister and subject to such conditions as the Minister may stipulate.</p>	Not Triggered	<p>* No reported damage to fences in the 2017 &amp; 2018 Annual Reviews.</p> <p>* According to site communications, there wasn't any interference with fences during the reporting period.</p>	

19	Management and Rehabilitation of Lands The lease holder shall observe any instruction given or which may be given by the Minister with a view to minimising or preventing public inconvenience or damage to public or private property.	Not Verified	<p>The discussion on progressive rehabilitation is in the BMC-SSD-5170 Mod 4, Condition 45. However the rehabilitation progress is reported on in 2017 and 2018 Annual Reviews, which is approved by DPIE. This potentially indicates a level of satisfaction of rehabilitation activities each year without being a formal acknowledgement of satisfaction.</p> <p>The status of rehabilitation is discussed in the Development Consent Compliance Checklist.</p> <p>On 29th August 2019, Environmental Inspectors from the Resources Regulator conducted an inspection of Bengalla Mine. From this inspection three separate notices under Section 240 of the Mining Act 1992, were issued, in relation to the management and rehabilitation of lands:  * NTCE0003914 - In relation to soil resources, soil management practices and recommendations by a suitably qualified expert.  * NTCE0003917 - In relation to undertaking a rehabilitation risk assessment.  * NTCE0003919 - In relation to undertaking a critical review of the MOP and progressive rehabilitation practices.</p> <p>These three notices are being considered by Bengalla and in progress during the time of this audit. The final date for compliance with these notices was 3rd April 2020. It is understood Bengalla has engaged a suitably qualified expert to assist with the requirements of these notices.</p> <p>On the basis that the Notices have been issued and are responses have not been considered as part of this IEA, compliance with this condition (specifically the satisfaction of the Minister) could not be verified.</p>	
20	Management and Rehabilitation of Lands If required to do so by the Minister and within such times as may be stipulated by the Minister, the lease holder shall carry out to the satisfaction of the Minister surveys of structures, buildings and pipelines on adjacent landholdings to determine the effect of operations on any such structures, buildings and pipelines.	Not Triggered	According to site communications no such direction has been given.	
21	Management and Rehabilitation of Lands If so directed by the Minister, the lease holder shall rehabilitate to the satisfaction of the Minister any lands within the subject area which may have been disturbed by the lease holder.	Compliant	Areas covered in the MOP. According to site communications no additional direction given. Refer to notices and discussion in Condition 19 above.	
22	Management and Rehabilitation of Lands Upon completion of operations on the surface of the subject area or upon the expiry or sooner determinations of this authority or any renewal thereof, the lease holder shall remove from such surface such buildings, machinery, plant, equipment, constructions and works as may be directed by the Minister and such surface shall be rehabilitated and left in a clean, tidy and safe condition to the satisfaction of the Minister.	Not Triggered	Site not yet decommissioned.	
23	Management and Rehabilitation of Lands If so directed by the Minister, the lease holder shall rehabilitate to the satisfaction of the Minister and within such time as may be allowed by the Minister any lands within the subject area which may have been disturbed by mining or prospecting operations whether such operations were or were not carried out by the lease holder.	Compliant	Areas covered in the MOP. According to site communications no additional direction given. Refer to notices and discussion in Condition 19 above.	
24	Management and Rehabilitation of Lands The lease holder shall take all reasonable precautions against causing outbreak of fire on the subject area.	Compliant	* BMC has the procedure PRO-0684 Bengalla Mine Bushfire Management. * BMC has fire fighting equipment at the site. Auditors are not fire experts and have not assessed this condition in full. Based on their having been no reported fires during the reporting period BMC is considered compliant with the condition.	
25	Management and Rehabilitation of Lands The lease holder shall provide and maintain to the satisfaction of the Minister efficient means to prevent contamination, pollution, erosion or siltation of any river, stream, creek, tributary, lake, dam, reservoir, watercourse, groundwater or catchment area or any undue interference to fish or their environment and shall observe any instruction given or may be given by the Minister with a view to preventing or minimising the contamination, pollution, erosion or siltation of any river, stream, creek, tributary, lake, dam, reservoir, watercourse, groundwater or catchment area or any undue interference to fish or their environment.	Compliant	* Section 3.4 of the Water Management Plan includes measures to mitigate erosion. * During site inspection noted various erosion and sediment controls in place at the site.	
26	Blasting The lease holder shall monitor noise and vibration and institute controls, generally in accordance with the recommendation of Australian Standard AS – 2187 – 1993 and ANZEC Guidelines. (a) <u>Ground Vibration</u> The lease holder shall design all blasts on the basis that the ground vibration peak particle velocity generated by any blasting within the subject area, shall not exceed the levels in or conditions of the EPA Licence for the mine, at any dwelling or occupied premises not owned by the lease holder, the holder of an authority under the Mining Act, Pacific Power, or any property referred to in Condition 21A of the development consent, or not subject to a valid agreement with the lease holder, with respect to the effects of blasting. (b) <u>Blast Overpressure</u> The lease holder shall design all blasts on the basis that the blast overpressure noise level generated by any blasting within the subject area, shall not exceed the levels in or conditions of the EPA Licence for the mine, at any dwelling or occupied premises not owned by lease holder, the holder of an authority under the Mining Act, Pacific Power, or any property referred to in Condition 21A of the development consent, or not subject to a valid agreement with the lease holder, with respect to the effects of blasting.	Not Triggered	No blasting occurred in ML 1469 during the audit period.	
27	Trees (Planting and Protection of) Flora and Fauna and Arboreal Screens If so directed by the Minister, the lease holder shall ensure that operations are carried out in such manner so as to minimise disturbance to flora and fauna within the subject area.	Compliant	* Mine disturbance included in the MOP. * The Bengalla pre-clearing and clearing procedures are referred to in the MOP.	
29	Trees (Planting and Protection of) Flora and Fauna and Arboreal Screens The lease holder shall maintain an arboreal screen to the satisfaction of the Minister within such parts of the subject area as may be specified by the Minister and shall plant such trees or shrubs as may be required by the Minister to preserve the arboreal screen in a condition satisfactory to the Minister.	Observation	* During the site inspection noted a tree screen along Wybong Road. * <u>Observation</u> : Tree screen along Wybong Road has a gap in it.	Conduct in-fill tree planting along Wybong Road.
30	Soil Erosion The lease holder shall conduct operations in such a manner as not to cause or aggravate soil erosion and the lease holder shall observe and perform any instructions given or which may be given by the Minister with a view to minimising or preventing soil erosion.	Compliant	* Section 3.4 of the Water Management Plan includes measures to mitigate erosion. * During site inspection noted various erosion and sediment controls in place at the site.	

31	<p>Roads</p> <p>The lease holder shall pay to Muswellbrook Shire Council, Department of Water Conservation, the Chief Executive, Roads and Traffic Authority the cost incurred by such Council or Department or Chief Executive, of making good any damage caused by operations carried on by or under the authority of the lease holder to any road adjoining or traversing the surface or the expected surface, as the case may be of the subject area.</p> <p>PROVIDED HOWEVER that the amount to be paid by the lease holder as aforesaid shall be reduced by such sum of money if any as may be paid to the said Council the Department of Conservation and Land Management or the Chief Executive, Roads and Traffic Authority as the case may be from the Mine Subsidence Compensation Fund constituted under the Mine Subsidence Compensation Act, 1961, in settlement of a claim for compensation for the same damage.</p>	Compliant	<p>BMC paid Muswellbrook Shire Council for Wybong Road pavement works on 28/6/2017 (remittance advice 28/6/2017).</p> <p>According to site communications, BMC is responsible for the maintenance of Bengalla Link Road from the Denman Road intersection to the Bengalla Mine entrance road, as such any works are engaged, controlled and paid by BMC.</p>	
32	<p>Roads</p> <p>In the event of operations being conducted on the surface of any road, track or firetrail traversing the subject area or in the event of such operations causing damage to or interference with any such road, track or firetrail the lease holder, at his own expense, shall if directed to do so by the Minister provide to the satisfaction of the Minister an alternative road, track or firetrail in a position as required by the Minister and shall allow free and uninterrupted access along such alternate road, track or firetrail and, if required to do so by the Minister, the lease holder shall upon completion of operations rehabilitate the surface of the original road, track or firetrail to a condition satisfactory to the Minister.</p>	Compliant	<p>BMC did not have to construct an alternative road or track, due to damage or interference on an existing road or track by the mine.</p>	
33	<p>Catchment Areas</p> <p>(a) Operations shall be carried out in such a way as not to cause any pollution of the Hunter River Catchment Area.  (b) If the lease holder is using or about to use any process which in the opinion of the Minister is likely to cause contamination of the waters of the said Catchment Area the lease holder shall refrain from using or cease using as the case may require such process within twenty four (24) hours of the receipt by the lease holder of a notice in writing under the hand of the Minister requiring the lease holder to do so.  (c) the lease holder shall comply with any regulations now in force or hereafter to be in force for the protection of the said Catchment Area.</p>	Not Triggered	<p>No discharges from the site during the audit period.</p>	
41	<p>Transmission Lines, Communication Lines and Pipelines</p> <p>The lease holder shall as far as is practicable, conduct operations so as not to interfere with or impair the stability or efficiency of any transmission line, communication line or pipeline traversing the subject area and shall comply with any direction given or which may be given by the Minister in this regard.</p>	Compliant	<p>* According to site communications no such direction made.  * 2017 &amp; 2018 Annual reviews indicate operations did not interfere with any transmission, communication or pipelines.</p>	
43	<p>Aboriginal Place or Relic</p> <p>The lease holder shall not knowingly destroy, deface or damage any aboriginal place or relic within the subject area except in accordance with an authority issued under the National Parks and Wildlife Act, 1974, and shall take every precaution in drilling, excavating or disturbing the land against any such destruction, defacement or damage.</p>	Not Triggered	<p>* According to site communications no artefacts were salvaged during the audit period.  * 2017 &amp; 2018 Annual Reviews indicate no new material salvaged during the reporting periods.</p>	
44	<p>Labour/Expenditure</p> <p>The lease holder shall during each year of the term of the authority:  (a) ensure that at least 1 worker are efficiently employed on the subject area or  (b) expend on operations carried out in the course of prospecting or mining the subject area, an amount of not less than Seventeen Thousand Five Hundred Dollars (\$17,500.00). The Minister may at any time after a period of two (2) years from the date on which this authority has effect or from the date on which the renewal of this authority has effect, increase or decrease the amount of expenditure of labour required.</p>	Compliant	<p>Email from BMC dated 13/11/2019 indicates that expenditure in 2017, 2018 and 2019 exceeded \$857,500 and the headcount for these years was over 49.</p>	
45	<p>Additional Information</p> <p>The lease holder shall if directed by the Minister and within such time as the Minister may stipulate furnish to the Minister:  (a) information regarding the ownership of the land within the subject area;  (b) information regarding the ownership of the coal within the subject area prior to 1 January 1982;  (c) an indemnity in a form approved by the Minister indemnifying the Crown and the Minister against any wrong payment effected as a result of incorrect information furnished by the lease holder;  (d) information regarding the financial viability of the lease holder and operations within and associated with the subject area; and  (e) information regarding shareholdings in the lease holder.</p>	Not Triggered	<p>According to site communications, BMC has not been directed by RR to provide this information.</p>	
46	<p>Service of Notices</p> <p>Within a period of three months from the date of this authority or a period of three months from the date of service of the notice of renewal, or within such further time as the Director-General may allow, the lease holder shall serve on each owner and occupier of the private land on each occupier of the Crown land held under a pastoral leaser within the subject area a notice in writing indicating that this authority has been granted or renewed and whether the authority includes the surface. The notice shall be accompanied by an adequate plan and description of the subject area.</p> <p>If there are ten or more owners or occupiers are affected, the lease holder may serve the notice by publication in a newspaper circulating in the region where the subject area is situated. The notice shall indicate that this authority has been granted or renewed, state whether the authority includes the surface and shall contain an adequate plan and description of the subject area.</p>	Not Triggered	<p>Outside of audit period</p>	
47	<p>Inspectors</p> <p>(a) Where an Inspector under the Mining Act 1992 is of the opinion that any condition of the authority relating to operations within the subject area, or any provision of the Mining Act, 1992, relating to operations within the subject area, are not being complied with by the lease holder, the Inspector may serve on the lease holder a notice stating that and give particulars of the reason why, and may in such notice direct the lease holder:  (i) to cease operations within the subject area in contravention of that condition or Act; and  (ii) to carry out within the specified time works necessary to rectify or remedy the situation.  (b) The lease holder shall comply with the directions contained in any notice served pursuant to sub paragraph (a) of this condition. The Director General may confirm, vary or revoke any such direction.  (c) A notice referred to in his condition may be served on the Colliery Manager.</p>	Compliant	<p>Refer to inspection and notices issued, as discussed in Condition 8 above.  On 29th August 2019, Environmental Inspectors from the RR conducted an inspection of Bengalla Mine. From this inspection three separate notices under Section 240 of the Mining Act 1992, were issued, in relation to the management and rehabilitation of lands:  * NTCE0003914 - In relation to soil resources, soil management practices and recommendations by a suitably qualified expert.  * NTCE0003917 - In relation to undertaking a rehabilitation risk assessment.  * NTCE0003919 - In relation to undertaking a critical review of the MOP and progressive rehabilitation practices.  These three notices are being considered by Bengalla and in progress during the time of this audit. The final date for compliance with these notices is 3rd April 2020. It is understood Bengalla has engaged a suitably qualified expert to assist with the requirements of these notices.</p> <p>BMC are considered compliant with this condition on the basis that inspections have been undertaken by the Resources Regulator, Notices issued, and the response time for Notices had yet to be triggered at the time of this audit.</p>	<p>Ensure responses to Notices are within the timeframes required by the Resources Regulator.</p>

48	Indemnities The lease holder shall indemnify and keep indemnified the Crown from and against all actions suits and claims and demands of whatsoever nature and all costs charges and expense which may be brought against the lease holder or which the lease holder may incur respect of any accident or injury to any person or property which may arise out of the construction maintenance or working of any workings now existing or to be made by the lease holder within the boundaries of the subject area or in connection with any of the operations notwithstanding that all other conditions of this authority shall in respects have been observed by the lease holder or that any such accident or injury shall arise from any act or thing which the lease holder may be licenced or compelled to do hereunder.	Note		
49	Indemnities The lease holder shall save harmless the Crown from payment of compensation and from and against claims, actions, suits or demands whatsoever in the event of any damage resulting from mining operations under or near this subject area.	Note		
50	Prospecting (General) (a) Where the lease holder desires to commence prospecting operations in the subject area, the lease holder shall notify the Director-General in writing and shall comply with such additional conditions as the Minister may impose including any condition requiring the lodgement of an additional bond or other form of security for rehabilitation of the area affected by such operations. (b) Where the lease holder notifies the Director-General pursuant to sub paragraph (a) of this condition, the lease holder shall furnish with that notification details of the type of prospecting methods that would be adopted and the extent and location of the area that would be affected by them.	Not Triggered		The commencement of prospecting operations occurred prior to this audit period.
51	Security Deposit (a) The lease holder shall, within two (2) months of being requested by the Director-General, lodge with the Minister the sum of (Ten Thousand Dollars) \$10,000.00 in accordance with Instructions for Manner and Lodgement of Security Deposits as security for the fulfilment of the obligations of the lease holder under this authority. In the event that the lease holder fails to fulfil any of its obligations under this authority the said sum may be applied at the discretion of the Minister towards the costs of fulfilling such obligations. For the purpose of this clause a lease holder shall be deemed to have failed to fulfil its obligations under this authority, if it fails to comply with any condition or provision of this authority, any provision of the Act or regulations made thereunder or any condition or direction imposed or given pursuant to a condition or provision of this authority or of any provision of the Act or regulations made thereunder. (b) The Minister may at any time after the commencement of this authority or any renewal thereof, vary the amount of security required in accordance with this condition. (c) Where the amount of security has been increased pursuant to clause (b) thereof, the lease holder shall within two (2) months of being requested by the Minister, lodge a security for the amount of security required, in which case the Minister shall refund or release to the lease holder the security previously lodged.	Compliant		* The current security deposit lodged is in the order of \$108,159,000 2019. * Letter from RR to BMC dated 24/6/2019 confirms receipt of security.
54	Royalty at Additional Rate The lease holder shall during the term of this authority pay to the Minister royalty at the additional rate as prescribed by the Regulations for coal recovered by open cut mining methods from the area.	Not Triggered		* Royalty payment spreadsheet indicates total payments made from July 2016 to November 2019. * History Invoice Listing run February 2017 indicates royalty payments paid.
New Condition 18 March 2004	Subsidence Management	Not Triggered		No underground mining occurring at the site.
New Condition 26 February 2008	Any proposed activity from time to time in regard to methane drainage and capture should be advised to the Department's Mine Safety Operations and Environment Units for consideration and possible imposition of conditions relative to each site specific.	Not Triggered		No methane drainage or capture.
New Condition 18 March 2004	Extraction Plan	Not Triggered		No underground mining occurring at the site.
New Condition 58 22 June 2011	Prescribed Dam	Not Triggered		According to site communications no mining occurred within the prescribed area of the Staged Discharge Dam.
New Condition 4 April 2007	Single security for ML1397, ML1450 and ML1469	Compliant		* The current security deposit lodged is in the order of \$108,159,000 2019. * Letter from RR to BMC dated 24/6/2019 confirms receipt of security.
Endorsement Schedule 26 February 2008	Any proposed activity from time to time in regards to methane drainage and capture should be advised to the Department's Mine Safety Operations and Environmental Units for consideration and possible imposition of conditions relative to each site specific case.	Not Triggered		* No methane drainage or capture.
Endorsement Schedule 28 January 2009	Change of security to \$30,224,000	Compliant		* The current security deposit lodged is in the order of \$108,159,000 2019. * Letter from RR to BMC dated 24/6/2019 confirms receipt of security.
Endorsement Schedule 11 January 2012	Change of security to \$49,100,000	Compliant		* The current security deposit lodged is in the order of \$108,159,000 2019. * Letter from RR to BMC dated 24/6/2019 confirms receipt of security.
Endorsement Schedule 14 November 2015	Change of security to \$73,300,300	Compliant		* The current security deposit lodged is in the order of \$108,159,000 2019. * Letter from RR to BMC dated 24/6/2019 confirms receipt of security.
Endorsement Schedule 19 January 2018	Change of security to \$80,560,300	Compliant		* The current security deposit lodged is in the order of \$108,159,000 2019. * Letter from RR to BMC dated 24/6/2019 confirms receipt of security.
Instrument of variation 21 June 2019	Change of security to \$108,159,000	Compliant		* The current security deposit lodged is in the order of \$108,159,000 2019. * Letter from RR to BMC dated 24/6/2019 confirms receipt of security.

Condition	Requirement	Compliance Status	Evidence	Recommended Action
<b>Mining Lease 1728</b>				
1	<p>Notice to Landholders</p> <p>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.</p> <p>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.</p>	Not Triggered	Outside of audit period.	
2	<p>Rehabilitation</p> <p>Any disturbance resulting from the activities carried out under this mining lease must be rehabilitated to the satisfaction of the Minister.</p>	Not Triggered	<p>Disturbance being the construction of the:</p> <ul style="list-style-type: none"> <li>- Western Diversion Levee and Clean Water Dam 1 diversion associated infrastructure e.g. pipeline; and</li> <li>- New stage discharge dam precinct (being commissioned).</li> </ul> <p>These areas will be rehabilitated after decommissioning.</p> <p>Notices issued by the Resources Regulator as described for other MLs include ML1728. Refer to discussion in the other MLs regarding these Notices.</p>	
3	<p>Mining Operations Plan and Annual Rehabilitation Report</p> <p>(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 disturbing activities, including mining operations, mining purposes and prospecting.</p> <p>(b) The MOP must identify the post mining land use and set out a detailed rehabilitation strategy which:</p> <ul style="list-style-type: none"> <li>(i) identifies areas that will be disturbed;</li> <li>(ii) details the staging of specific mining operations, mining purposes and prospecting;</li> <li>(iii) identifies how the mine will be managed and rehabilitated to achieve the post mining land use;</li> <li>(iv) identifies how mining operations, mining purposes and prospecting will be carried out in order to prevent and or mining harm to the environment; and</li> <li>(v) reflects the conditions of approval under: <ul style="list-style-type: none"> <li>- the Environmental Planning and Assessment Act 1979;</li> <li>- the Protection of the Environment Operations Act 1997; and</li> <li>- any other approvals relevant to the development including the conditions of this mining lease.</li> </ul> </li> </ul> <p>(c) The MOP must be prepared in accordance with the ESG3: Mining Operations Plan (MOP) Guidelines September 2013 published on the Department's website at <a href="http://www.resources.nsw.gov.au/environment">www.resources.nsw.gov.au/environment</a></p> <p>(d) The lease holder may apply to the Minister to amend an approved MOP at any time.</p> <p>(e) It is not a breach of this condition if:</p> <ul style="list-style-type: none"> <li>(i) the operations which, but for this condition 3(e) would be a breach of condition 3(a), were necessary to comply with a lawful order or direction given under the Environmental Planning and Assessment Act 1979, the Protection of the Environment Operations Act 1997, the Mine Health and Safety Act 2004 / Coal Mine Health and Safety Act 2002 and Mine Health and Safety Regulation 2007 / Coal Mine Health and Safety Regulation 2006 or the Work Health and Safety Act 2011; and</li> <li>(ii) the Minister had been notified in writing of the terms of the order or direction prior to the operations constituting the breach being carried out.</li> </ul> <p>(f) The lease holder must prepare a Rehabilitation Report to the satisfaction of the Minister. The report must:</p> <ul style="list-style-type: none"> <li>(i) provide a detailed review of the progress of rehabilitation against the performance measures and criteria established in the approved MOP;</li> <li>(ii) be submitted annually on the grant anniversary date (or at such other times as agreed by the Minister); and</li> <li>(iii) be prepared in accordance with any relevant annual reporting guidelines published on the Department's website at <a href="http://www.resources.nsw.gov.au/environment">www.resources.nsw.gov.au/environment</a>.</li> </ul> <p>Note: The rehabilitation report replaces the Annual Environmental Management Report.</p>	Compliant	<p><u>Preparation:</u></p> <p>Mining Operations Plan (MOP), dated February 2019.</p> <ul style="list-style-type: none"> <li>(a) Current MOP in place and activities being undertaken in accordance with MOP.</li> <li>(b) (i) &amp; (ii) Current MOP identifies the areas to be disturbed and staging of operations in Plan 3A to E and Plan 4.</li> <li>(iii) MOP Section 7 Rehabilitation Implementation.</li> <li>(iv) MOP Section 2 Proposed Mining Activities and MOP Section 10 Trigger Action Response Plans</li> <li>(v) MOP section 1.2 Consents, Authorisations and Licences.</li> <li>(c) MOP Section 1 - was prepared in accordance with ESG3: Mining Operations Plan (MOP) Guidelines, September 2013, located on RR website.</li> <li>(d) Current MOP is Amendment A.</li> <li>(e) Not Triggered</li> <li>(f) 2017 and 2018 Annual Reviews report on rehabilitation status.</li> </ul> <p><u>Implementation:</u></p> <p>The implementation of the MOP (Rehabilitation Management Plan) is occurring on site as mining progresses. The recent areas available for rehabilitation are designed using the geomorphic natural landform software 'GeoFluv'. This provides for a more natural surface water drainage system on the rehabilitated landform. The older areas of rehabilitation are being maintained and inspected regularly for surface water drainage and revegetation issues. Given the change in target vegetation structure on the 400ha of the Eastern face, the implementation of the MOP will require these areas to be revisited to establish high density woody vegetation (HDWV). This means implementation will include new areas made available as mining progresses, as well as revisiting existing areas previously considered in the ecosystem establishment phase.</p> <p>The rehabilitation on the Eastern face is now well behind that predicted given the change to target HDWV. The staged plan to rehabilitate to HDWV should be included in a future MOP Amendment</p>	The staged plan to rehabilitate to HDWV should be included in a future MOP Amendment.
4	<p>Non-Compliance Report</p> <p>(a) The lease holder must notify the Department upon becoming aware of any breaches of the conditions of the mining lease or breaches of the Mining Act or Regulations.</p> <p>(b) Notifications under condition 4(a) must be provided in the form specified on the Department's website within seven (7) days of the mining lease holder becoming aware of the breach.</p>	Not Triggered	<p>* According to site communications no known breaches.</p> <p>* 2017 &amp; 2018 Annual Reviews indicate no non-compliances against the conditions of the Mining Lease (ML).</p>	
5	<p>Environment Incident Report</p> <p>The lease holder must provide environmental incident notifications and reports to the Secretary no later than seven (7) days after those environmental incident notifications and reports are provided to the relevant authorities under the Protection of the Environment Operations Act 1997.</p>	Not Triggered	<p>* According to site communications no incidents required reporting to the Resources Regulator (RR).</p>	
8	<p>Security</p> <p>The lease holder is required to provide an maintain a security deposit to secure funding for the fulfillment 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 group security has been assessed by the Minister at \$73,300,300.</p> <p>The leases covered by the group security include:</p> <p>Mining Lease 1397, 1450, 1469 and Mining 1592 (Act 1992).</p> <p>This group security is extended to apply to this lease.</p>	Compliant	<p>* The current security deposit lodged is in the order of \$108,159,000 (Lodged in 2019).</p> <p>* Letter from RR to BMC dated 24/6/2019 confirms receipt of security.</p>	
9	<p>Cooperation Agreement</p> <p>The lease holder must make every reasonable attempt, and be able to demonstrate its attempts, to enter into a cooperation agreement with the holders(s) of any overlapping title(s). The cooperation agreement should address but not be limited to issue such as:</p> <ul style="list-style-type: none"> <li>- access arrangements</li> <li>- operations interaction procedures</li> <li>- dispute resolution</li> <li>- information exchange</li> <li>- well location</li> <li>- timing of drilling</li> <li>- potential resource extraction conflicts; and</li> <li>- rehabilitation issues.</li> </ul>	Not Triggered	<p>* No overlapping title.</p>	
	<p>Evaluation Reporting</p>			

	<p><i>Exploration Reporting</i>  <i>Note: Exploration reports (Geological and Geophysical) The Lease holder must lodge reports to the satisfaction of the Minister in accordance with section 163C of the Mining Act 1992 and in accordance with clause 57 of the Mining Regulation 2010. Reports must be prepared in accordance with Exploration Reporting: A guide for reporting on exploration and prospecting in New South Wales (Department of Trade and Investment; Regional Infrastructure Services 2010).</i></p>	Not Triggered	No exploration occurred during the audit period.	
New Condition	<p>Additional Condition  Prescribed Dam  (a) Notwithstanding any Mining Operations Plan, the lease holder must not mine within any part of the lease area which is within the notification area of the Bengalla Dirty Water Dam 1 and Bengalla Dirty Water Dam 1 Notification Area without the prior written approval of the Minister and subject to any conditions stipulated.  (b) Where the lease holder desires to mine within the notification area he or she must:  (i) at least twelve (12) months before mining is to commence or such lesser time as the Minister may permit, notify the Minister of the desire to do so. A plan of the mining system to be implemented must accompany the notice; and  (ii) provide such information as the Minister may direct.  (c) The Minister must not, except in the circumstances set out in sub-paragraph (ii), grant approval unless sub-paragraph (i) of this paragraph has been complied with.  (i) This sub-paragraph is complied with if:  (A) the Dams Safety Committee as constituted by Section 7 of the Dams Safety Act 1978 and the owner of the dam have been notified in writing of the desire to mine referred to in paragraph (b);  (B) the notifications referred to in clause (A) are accompanied by a description or plan of the area to be mined;  (C) the Director-General has complied with any reasonable request made by the Dams Safety Committee or the owner of the dam for further information in connection with the mining proposal;  (D) the Dams Safety Committee has made its recommendations concerning the mining proposal or has informed the Minister in writing that it does not propose to make any such recommendations; and  (E) where the Dams Safety Committee has made recommendations the approval is in terms that are:  - in accordance with those recommendations; or  - where the Minister does not accept those recommendations or any of them - in accordance with a determination under sub-paragraph (ii) of this paragraph.  (ii) Where the Minister does not accept the recommendations of the Dams Safety Committee or where the Dams Safety Committee has failed to make any recommendations and has not informed the Minister in writing that it does not propose to make any recommendations, the approval shall be in terms that are, in relation to matters dealing with the safety of the dam:  (A) as determined by agreement between the Minister and the Minister administering the Dams Safety Act 1978; or  (B) in the event of failure to reach such agreement - as determined by the Premier.  (d) The Minister, on notice from the Dams Safety Committee, may at any time or times:  (i) cancel any approval given where a notice pursuant to Section 18 of the Dams Safety Act 1978 is given.  (ii) suspend for a period of time, alter, omit from or add to any approval given or conditions imposed.</p>	Compliant	<p>* Email from BMC to RR and Dam Safety Committee DSC dated 17/1/2018 sought approval to mine within the prescribed dam notification area of Mt Pleasant Mine Environment Dam 3 (ED3). Plan of the area to be mined is attached to the email.  * According to site communications, Bengalla Mine was within the Mt Pleasant Mine ED3 Prescribed Dam Area 12 months prior to ED3 construction commencing due to the late commencement to the construction of Mt Pleasant Mine. It was not possible for BMC to have in place the 12 months notification due to the positions of Bengalla Mine and Mt Pleasant Mine.</p>	
Endorsement Schedule 19 January 2018	Change of security to \$80,560,300	Compliant	<p>* The current security deposit lodged is in the order of \$108,159,000 2019.  * Letter from RR to BMC dated 24/6/2019 confirms receipt of security.</p>	
Instrument of variation 21 June 2019	Change of security to \$108,159,000	Compliant	<p>* The current security deposit lodged is in the order of \$108,159,000 2019.  * Letter from RR to BMC dated 24/6/2019 confirms receipt of security.</p>	

Condition	Requirement	Compliance Status	Evidence	Recommended Action
<b>Mining Lease 1711</b>				
1	<p>Notice to Landholders</p> <p>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.</p> <p>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.</p>	Not Triggered	Outside of audit period.	
2	<p>Rehabilitation</p> <p>Any disturbance resulting from the activities carried out under this mining lease must be rehabilitated to the satisfaction of the Minister.</p>	Not Triggered	<p>Not Triggered - The disturbance undertaken within ML 1711 was for the construction of Clean Water Dam 1 and associated infrastructure. This area will be rehabilitated when Clean Water Dam 1 is decommissioned.</p> <p>Notices issued by the Resources Regulator as described for other MLs include ML1728. Refer to discussion in the other MLs regarding these Notices.</p>	
3	<p>Mining Operations Plan and Rehabilitation Report</p> <p>(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 disturbing activities, including mining operations, mining purposes and prospecting.</p> <p>(b) The MOP must identify the post mining land use and set out a detailed rehabilitation strategy which:</p> <p>(i) identifies areas that will be disturbed;</p> <p>(ii) details the staging of specific mining operations, mining purposes and prospecting;</p> <p>(iii) identifies how the mine will be managed and rehabilitated to achieve the post mining land use;</p> <p>(iv) identifies how mining operations, mining purposes and prospecting will be carried out in order to prevent and or mining harm to the environment; and</p> <p>(v) reflects the conditions of approval under:</p> <ul style="list-style-type: none"> <li>- the Environmental Planning and Assessment Act 1979;</li> <li>- the Protection of the Environmental Operations Act 1997; and</li> <li>- any other approvals relevant to the development including the conditions of this mining lease.</li> </ul> <p>(c) The MOP must be prepared in accordance with the ESG3: Mining Operations Plan (MOP) Guidelines September 2013 published on the Department's website at <a href="http://www.resources.nsw.gov.au/environment">www.resources.nsw.gov.au/environment</a></p> <p>(d) The lease holder may apply to the Minister to amend an approved MOP at any time.</p> <p>(e) It is not a breach of this condition if:</p> <p>(i) the operations which, but for this condition 3(e) would be a breach of condition 3(a), were necessary to comply with a lawful order or direction given under the Environmental Planning and Assessment Act 1979, the Protection of the Environment Operations Act 1997, the Mine Health and Safety Act 2004 / Coal Mine Health and Safety Act 2002 and Mine Health and Safety Regulation 2007 / Coal Mine Health and Safety Regulation 2006 or the Work Health and Safety Act 2011; and</p> <p>(ii) the Minister had been notified in writing of the terms of the order or direction prior to the operations constituting the breach being carried out.</p> <p>(f) The lease holder must prepare a Rehabilitation Report to the satisfaction of the Minister. The report must:</p> <p>(i) provide a detailed review of the progress of rehabilitation against the performance measures and criteria established in the approved MOP;</p> <p>(ii) be submitted annually on the grant anniversary date (or at such other times as agreed by the Minister); and</p> <p>(iii) be prepared in accordance with any relevant annual reporting guidelines published on the Department's website at <a href="http://www.resources.nsw.gov.au/environment">www.resources.nsw.gov.au/environment</a>.</p> <p>Note: The rehabilitation report replaces the Annual Environmental Management Report.</p>	Compliant	<p><u>Preparation:</u></p> <p>Mining Operations Plan (MOP), dated February 2019.</p> <p>(a) Current MOP in place and activities being undertaken in accordance with MOP.</p> <p>b) i) &amp; ii) Current MOP identifies the areas to be disturbed and staging of operations in Plan 3A to E and Plan 4.</p> <p>iii) MOP Section 7 Rehabilitation Implementation</p> <p>iv) MOP Section 2 Proposed Mining Activities and MOP Section 10 Trigger Action Response Plans.</p> <p>v) MOP section 1.2 Consents, Authorisations and Licences.</p> <p>c) MOP Section 1 - was prepared in accordance with ESG3: <i>Mining Operations Plan (MOP) Guidelines</i>, September 2013, located on RR website.</p> <p>d) Current MOP is Amendment A.</p> <p>e) Not Triggered.</p> <p>f) 2017 and 2018 Annual Reviews report on rehabilitation status.</p> <p><u>Implementation:</u></p> <p>The implementation of the MOP (Rehabilitation Management Plan) is occurring on site as mining progresses. The recent areas available for rehabilitation are designed using the geomorphic natural landform software 'GeoFluv'. This provides for a more natural surface water drainage system on the rehabilitated landform. The older areas of rehabilitation are being maintained and inspected regularly for surface water drainage and revegetation issues. Given the change in target vegetation structure on the 400ha of the Eastern face, the implementation of the MOP will require these areas to be revisited to establish high density woody vegetation (HDWV). This means implementation will include new areas made available as mining progresses, as well as revisiting existing areas previously considered in the ecosystem establishment phase.</p> <p>The rehabilitation on the Eastern face is now well behind that predicted given the change to target HDWV. The staged plan to rehabilitate to HDWV should be included in a future MOP Amendment</p>	The staged plan to rehabilitate to HDWV should be included in a future MOP Amendment.
4	<p>Non-Compliance Report</p> <p>(a) The lease holder must notify the Department upon becoming aware of any breaches of the conditions of the mining lease or breaches of the Mining Act or Regulations.</p> <p>(b) Notifications under condition 4(a) must be provided in the form specified on the Department's website within seven (7) days of the mining lease holder becoming aware of the breach.</p>	Not Triggered	<p>* According to site communications no known breaches.</p> <p>* 2017 &amp; 2018 Annual Reviews indicate no non-compliances against the conditions of the Mining Lease (ML).</p>	
5	<p>Environment Incident Report</p> <p>The lease holder must provide environmental incident notifications and reports to the Secretary no later than seven (7) days after those environmental incident notifications and reports are provided to the relevant authorities under the <i>Protection of the Environment Operations Act 1997</i>.</p>	Not Triggered	<p>* According to site communications no incidents required reporting to the Resources Regulator (RR).</p>	

6	<p>Extraction Plan</p> <p>(a) In this condition:</p> <p>(i) approved Extraction Plan means a plan, being:</p> <p>A. an extraction plan or subsidence management plan approved in accordance with the conditions of a relevant development consent and provided to the Secretary; or</p> <p>B. a subsidence management plan relating to the mining operations subject to this lease:</p> <p>I. submitted to the Secretary on or before 31 December 2014; and</p> <p>II. approved by the Secretary.</p> <p>(ii) relevant development consent means a development consent or project approval issued under the Environmental Planning &amp; Assessment Act 1979 relating to the mining operations subject to this lease.</p> <p>(b) The lease holder must not undertake any underground mining operations that may cause subsidence except in accordance with an approved Extraction Plan.</p> <p>(c) The lease holder must ensure that the approved Extraction Plan provides for the effective management of risks associated with any subsidence resulting from mining operations carried out under this lease.</p> <p>(d) The lease holder must notify the Secretary within 48 hours of any:</p> <p>(i) incident caused by subsidence which has a potential to expose any person to health and safety risks;</p> <p>(ii) significant deviation from the predicted nature, magnitude, distribution, timing and duration of subsidence effects, and of the potential impacts and consequences of those deviations on built features and the health and safety of any person; or</p> <p>(iii) significant failure or malfunction of a monitoring device or risk control measure set out in the approved Extraction Plan addressing:</p> <p>A. built features;</p> <p>B. public safety; or</p> <p>C. subsidence monitoring.</p>	Not Triggered	* Open cut mine.
7	<p>Resource Recovery</p> <p>The lease holder must optimise the recovery of the minerals that are the subject of this mining lease to the extent economically feasible.</p>	Not Triggered	No resource approved to be recovered within the ML.
8	<p>Group Security</p> <p>The lease holder is required to provide and maintain a security deposit to secure funding for the fulfillment 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 group security has been assessed by the Minister at \$49,100,000. The leases covered by the group security include:</p> <p>Mining Lease 1397 (Act 1992), Mining Lease 1450 (Act 1992), Mining Lease 1469 (Act 1992) and Mining Lease 1592 (Act 1992).</p> <p>This group security is extended to apply to this lease.</p>	Compliant	<p>* The current security deposit lodged is in the order of \$108,159,000 (lodged in 2019).</p> <p>* Letter from RR to BMC dated 24/6/2019 confirms receipt of security.</p>
9	<p>Cooperation Agreement</p> <p>The lease holder must make every reasonable attempt, and be able to demonstrate its attempts, to enter into a cooperation agreement with the holders(s) of any overlapping title(s). The cooperation agreement should address but not be limited to issue such as:</p> <ul style="list-style-type: none"> <li>- access arrangements</li> <li>- operations interaction procedures</li> <li>- dispute resolution</li> <li>- information exchange</li> <li>- well location</li> <li>- timing of drilling</li> <li>- potential resource extraction conflicts; and</li> <li>- rehabilitation issues.</li> </ul>	Compliant	<p>Bengalla Mine ML 1711 covers surface to 40m, and Mt Pleasant Mine ML 1645 covers 40m to 900m.</p> <p>The Bengalla Joint Venture (the owner of Bengalla Mine)/Bengalla Mining Company Pty Ltd (the operator of Bengalla Mine)/MACH Energy Australia Pty Limited and JCD Australia Pty Ltd (the owners of Mt Pleasant Mine) and MACH Energy Australia Pty Ltd (the operator of Mt Pleasant Mine) have agreements.</p> <p>The agreements are the Master Cooperation Agreement, Settlement and Amendment Deed and the Deed of Variation.</p> <p>Auditors sighted the agreement but did not audit the agreement as it is commercially sensitive. Based on the agreement existing, BMC are considered compliant with this condition.</p>
	<p>Exploration Reporting</p> <p>Note: <i>Exploration reports (Geological and Geophysical)</i></p> <p>The Lease holder must lodge reports to the satisfaction of the Minister in accordance with section 163C of the Mining Act 1992 and in accordance with clause 57 of the Mining Regulation 2010.</p> <p>Reports must be prepared in accordance with <i>Exploration Reporting: A guide for reporting on exploration and prospecting in New South Wales (Department of Trade and Investment; Regional Infrastructure Services 2010)</i>.</p>	Not Triggered	* No exploration occurred within the ML.
Endorsement Schedule 19 January 2018	Change of security to \$80,560,300	Compliant	<p>* The current security deposit lodged is in the order of \$108,159,000 2019.</p> <p>* Letter from RR to BMC dated 24/6/2019 confirms receipt of security.</p>
Instrument of variation 21 June 2019	Change of security to \$108,159,000	Compliant	<p>* The current security deposit lodged is in the order of \$108,159,000 2019.</p> <p>* Letter from RR to BMC dated 24/6/2019 confirms receipt of security.</p>

Condition	Requirement	Compliance Status	Evidence	Recommended Action
<b>Mining Lease 1729</b>				
1	<p>Notice to Landholders</p> <p>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.</p> <p>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.</p>	Not Triggered	Outside of audit period.	
2	<p>Rehabilitation</p> <p>Any disturbance resulting from the activities carried out under this mining lease must be rehabilitated to the satisfaction of the Minister.</p>	Not Triggered	Disturbance being the construction of the Western Diversion Levee and Clean Water Dam 1 associated infrastructure e.g. pipeline. These areas will be rehabilitated after the drain and pipeline have been decommissioned.	
3	<p>Mining Operations Plan and Annual Rehabilitation Report</p> <p>(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 disturbing activities, including mining operations, mining purposes and prospecting.</p> <p>(b) The MOP must identify the post mining land use and set out a detailed rehabilitation strategy which:</p> <p>(i) identifies areas that will be disturbed;</p> <p>(ii) details the staging of specific mining operations, mining purposes and prospecting;</p> <p>(iii) identifies how the mine will be managed and rehabilitated to achieve the post mining land use;</p> <p>(iv) identifies how mining operations, mining purposes and prospecting will be carried out in order to prevent and or mining harm to the environment; and</p> <p>(v) reflects the conditions of approval under:</p> <p>- the Environmental Planning and Assessment Act 1979;</p> <p>- the Protection of the Environmental Operations Act 1997; and</p> <p>- any other approvals relevant to the development including the conditions of this mining lease.</p> <p>(c) The MOP must be prepared in accordance with the ESG3: Mining Operations Plan (MOP) Guidelines September 2013 published on the Department's website at <a href="http://www.resources.nsw.gov.au/environment">www.resources.nsw.gov.au/environment</a>.</p> <p>(d) The lease holder may apply to the Minister to amend an approved MOP at any time.</p> <p>(e) It is not a breach of this condition if:</p> <p>(i) the operations which, but for this condition 3(e) would be a breach of condition 3(a), were necessary to comply with a lawful order or direction given under the Environmental Planning and Assessment Act 1979, the Protection of the Environment Operations Act 1997, the Mine Health and Safety Act 2004 / Coal Mine Health and Safety Act 2002 and Mine Health and Safety Regulation 2007 / Coal Mine Health and Safety Regulation 2006 or the Work Health and Safety Act 2011; and</p> <p>(ii) the Minister had been notified in writing of the terms of the order or direction prior to the operations constituting the breach being carried out.</p> <p>(f) The lease holder must prepare a Rehabilitation Report to the satisfaction of the Minister. The report must:</p> <p>(i) provide a detailed review of the progress of rehabilitation against the performance measures and criteria established in the approved MOP;</p> <p>(ii) be submitted annually on the grant anniversary date (or at such other times as agreed by the Minister); and</p> <p>(iii) be prepared in accordance with any relevant annual reporting guidelines published on the Department's website at <a href="http://www.resources.nsw.gov.au/environment">www.resources.nsw.gov.au/environment</a>.</p> <p>Note: The rehabilitation report replaces the Annual Environmental Management Report.</p>	Compliant	<p><u>Preparation:</u></p> <p>Mining Operations Plan (MOP), dated February 2019.</p> <p>a) Current MOP in place and activities being undertaken in accordance with MOP.</p> <p>b) i) &amp; ii) Current MOP identifies the areas to be disturbed and staging of operations in Plan 3A to E and Plan 4.</p> <p>iii) MOP Section 7 Rehabilitation Implementation.</p> <p>iv) MOP Section 2 Proposed Mining Activities and MOP Section 10 Trigger Action Response Plans.</p> <p>v) MOP section 1.2 Consents, Authorisations and Licences.</p> <p>c) MOP Section 1 - was prepared in accordance with ESG3: Mining Operations Plan (MOP) Guidelines, September 2013, located on RR website.</p> <p>d) Current MOP is Amendment A.</p> <p>e) Not Triggered.</p> <p>f) 2017 and 2018 Annual Reviews report on rehabilitation status.</p> <p><u>Implementation:</u></p> <p>The implementation of the MOP (Rehabilitation Management Plan) is occurring on site as mining progresses. The recent areas available for rehabilitation are designed using the geomorphic natural landform software 'GeoFluv'. This provides for a more natural surface water drainage system on the rehabilitated landform. The older areas of rehabilitation are being maintained and inspected regularly for surface water drainage and revegetation issues. Given the change in target vegetation structure on the 400ha of the Eastern face, the implementation of the MOP will require these areas to be revisited to establish high density woody vegetation (HDWV). This means implementation will include new areas made available as mining progresses, as well as revisiting existing areas previously considered in the ecosystem establishment phase.</p> <p>The rehabilitation on the Eastern face is now well behind that predicted given the change to target HDWV. The staged plan to rehabilitate to HDWV should be included in a future MOP Amendment</p>	The staged plan to rehabilitate to HDWV should be included in a future MOP Amendment.
4	<p>Non-Compliance Report</p> <p>(a) The lease holder must notify the Department upon becoming aware of any breaches of the conditions of the mining lease or breaches of the Mining Act or Regulations.</p> <p>(b) Notifications under condition 4(a) must be provided in the form specified on the Department's website within seven (7) days of the mining lease holder becoming aware of the breach.</p>	Not Triggered	* According to site communications no known breaches. * 2017 & 2018 Annual Reviews indicate no non-compliances against the conditions of the Mining Lease (ML).	
5	<p>Environment Incident Report</p> <p>The lease holder must provide environmental incident notifications and reports to the Secretary no later than seven (7) days after those environmental incident notifications and reports are provided to the relevant authorities under the Protection of the Environment Operations Act 1997.</p>	Not Triggered	* According to site communications no incidents required reporting to the Resources Regulator (RR).	
6	<p>Extraction Plan</p> <p>(a) In this condition:</p> <p>(i) approved Extraction Plan means a plan, being:</p> <p>A. an extraction plan or subsidence management plan approved in accordance with the conditions of a relevant development consent and provided to the Secretary; or</p> <p>B. a subsidence management plan relating to the mining operations subject to this lease:</p> <p>I. submitted to the Secretary on or before 31 December 2014; and</p> <p>II. approved by the Secretary.</p> <p>(ii) relevant development consent means a development consent or project approval issued under the Environmental Planning &amp; Assessment Act 1979 relating to the mining operations subject to this lease.</p> <p>(b) The lease holder must not undertake any underground mining operations that may cause subsidence except in accordance with an approved Extraction Plan.</p> <p>(c) The lease holder must ensure that the approved Extraction Plan provides for the effective management of risks associated with any subsidence resulting from mining operations carried out under this lease.</p> <p>(d) The lease holder must notify the Secretary within 48 hours of any:</p> <p>(i) incident caused by subsidence which has a potential to expose any person to health and safety risks;</p> <p>(ii) significant deviation from the predicted nature, magnitude, distribution, timing and duration of subsidence effects, and of the potential impacts and consequences of those deviations on built features and the health and safety of any person; or</p> <p>(iii) significant failure or malfunction of a monitoring device or risk control measure set out in the approved Extraction Plan addressing:</p> <p>A. built features;</p> <p>B. public safety; or</p> <p>C. subsidence monitoring.</p>	Not Triggered	* Open cut mine.	
7	<p>Resource Recovery</p> <p>The lease holder must optimise recovery of the minerals that are subject of this mining lease to the extent economically feasible.</p>	Not Triggered	No mining has occurred in the ML during the audit period.	

8	<p>Group Security The lease holder is required to provide and maintain a security deposit to secure funding for the fulfillment 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. The amount of the security deposit to be provided as a group security has been assessed by the Minister at \$73,300,300. The leases covered by the group security include: Mining Lease 1397, 1450, 1469 and Mining 1592 (Act 1992). This group security is extended to apply to this lease.</p>	Compliant	<p>* The current security deposit lodged is in the order of \$108,159,000 2019. * Letter from RR to BMC dated 24/6/2019 confirms receipt of security.</p>
9	<p>Cooperation Agreement The lease holder must make every reasonable attempt, and be able to demonstrate its attempts, to enter into a cooperation agreement with the holders(s) of any overlapping title(s). The cooperation agreement should address but not be limited to issue such as: - access arrangements - operations interaction procedures - dispute resolution - information exchange - well location - timing of drilling - potential resource extraction conflicts; and - rehabilitation issues.</p>	Compliant	<p>Bengalla Mine ML 1729 with Mt Pleasant Mine ML 1645 surface to 40m (over part of ML 1729). The Bengalla Joint Venture (the owner of Bengalla Mine)/Bengalla Mining Company Pty Ltd (the operator of Bengalla Mine)/MACH Energy Australia Pty Limited and JCD Australia Pty Ltd (the owners of Mt Pleasant Mine) and MACH Energy Australia Pty Ltd (the operator of Mt Pleasant Mine) have agreements.  The agreements are the Master Cooperation Agreement, Settlement and Amendment Deed and the Deed of Variation.  29 November 2019 variation to agreement was signed.  Sited agreement but did not audit the agreement as it is commercially sensitive.</p>
New Condition	<p>Additional Condition Prescribed Dam (a) Notwithstanding any Mining Operations Plan, the lease holder must not mine within any part of the lease area which is within the Notification Area of the Bengalla Stage Discharge Dam, Mount Pleasant Mine Water Dam Notification Area, Mount Pleasant Environmental Dam 3 Notification Area, Bengalla Stage Discharge Dam Notification Area and the Bengalla Clean Water Dam 1 Notification Area without the prior approval of the Minister and subject to any conditions stipulated. (b) Where the lease holder desires to mine within the notification area he or she must: (i) at least twelve (12) months before mining is to commence or such lesser time as the Minister may permit, notify the Minister of the desire to do so. A plan of the mining system to be implemented must accompany the notice; and (ii) provide such information as the Minister may direct. (c) The Minister must not, except in the circumstances set out in sub-paragraph (ii), grant approval unless sub-paragraph (i) of this paragraph has been complied with. This sub-paragraph is complied with if: (i) the Dams Safety Committee as constituted by Section 7 of the Dams Safety Act 1978 and the owner of the dam have been notified in writing of the desire to mine referred to in paragraph (b). (ii) the notifications referred to in clause (a) are accompanied by a description or plan of the area to be mined. (iii) the Director-General has complied with any reasonable request made by the Dams Safety Committee or the owner of the dam for further information in connection with the mining proposal. (iv) the Dams Safety Committee has made its recommendations concerning the mining proposal or has informed the Minister in writing that it does not propose to make any such recommendations; and (v) where the Dams Safety Committee has made recommendations the approval is in terms that are: - in accordance with those recommendations; or - where the Minister does not accept those recommendations or any of them - in accordance with a determination under sub-paragraph (ii) of this paragraph. (vi) Where the Minister does not accept the recommendations of the Dams Safety Committee or where the Dams Safety Committee has failed to make any recommendations and has not informed the Minister in writing that it does not propose to make any recommendations, the approval shall be in terms that are, in relation to matters dealing with the safety of the dam: - as determined by agreement between the Minister and the Minister administering the Dams Safety Act 1978; or - in the event of failure to reach such agreement - as determined by the Premier. (d) The Minister, on notice from the Dams Safety Committee, may at any time or times: (i) cancel any approval given where a notice pursuant to Section 18 of the Dams Safety Act 1978 is given. (ii) suspend for a period of time, alter, omit from or add to any approval given or conditions imposed</p>	Compliant	<p>* Email from BMC to RR and Dam Safety Committee DSC dated 17/1/2018 sought approval to mine within the prescribed dam notification area of Mt Pleasant Mine Environment Dam 3. Plan of the area to be mined is attached to the email. * According to site communications, Bengalla Mine was within the Mt Pleasant Mine ED3 Prescribed Dam Area 12 months prior to ED3 construction commencing due to the late commencement to the construction of Mt Pleasant Mine. It was not possible for BMC to have in place the 12 months notification due to the positions of Bengalla Mine and Mt Pleasant Mine.</p>
	<p>Exploration Reporting <i>Note: Exploration reports (Geological and Geophysical) The Lease holder must lodge reports to the satisfaction of the Minister in accordance with section 163C of the Mining Act 1992 and in accordance with clause 57 of the Mining Regulation 2010. Reports must be prepared in accordance with Exploration Reporting: A guide for reporting on exploration and prospecting in New South Wales (Department of Trade and Investment; Regional Infrastructure Services 2010).</i></p>	Compliant	<p>* 2016-2017 , 2017-2018 and 2018-2019 Annual Report on Coal Exploration</p>
Endorsement Schedule 19 January 2018	Change of security to \$80,560,300	Compliant	<p>* The current security deposit lodged is in the order of \$108,159,000 (lodged in 2019). * Letter from RR to BMC dated 24/6/2019 confirms receipt of security.</p>
Instrument of variation 21 June 2019	Change of security to \$108,159,000	Compliant	<p>* The current security deposit lodged is in the order of \$108,159,000 (lodged in 2019). * Letter from RR to BMC dated 24/6/2019 confirms receipt of security.</p>

## **Appendix D Status of Non-Compliance Recommendations in Previous IEA (2017)**

Table D-1: Status of Non-compliances and recommendations from 2017 IEA

Bengalla Mine 2017 Independent Environmental Audit Action Plan				Updates Since Audit (from Annual Review 2017 & Site Communications)	MCW Environmental Comment IEA 2019
Consent / Cond. No	Compliance Status / Finding	Recommendation	Corrective Action Responses		
SSD 5170 Sch. 2 C 14 (b) EPL O2.1 (b)	Not Compliant Medium Risk  Air Quality data lost due to incorrect programming of HVAS air quality monitors	-	BMC engages AECOM Australia Pty Limited (AECOM), a National Association of Testing Authorities (NATA) accredited company, to undertake the operation, calibration and maintenance of the High Volume Air Samplers (HVAS) utilised at Bengalla. The HVAS are calibrated on a bimonthly basis in accordance with the relevant Australian Standards. In the event that data is lost due to incorrect programming, power outage or other unforeseen circumstances a make-up run is undertaken as soon as possible.	<b>Completed:</b>  Consistent with the relevant Australian Standards, in the event that data is lost due to incorrect programming, power outage or other unforeseen circumstances, make-up runs are undertaken as soon as practicable.	<b>Closed:</b>  BMC is following Australian standards in terms of lost data.
SSD 5170 Sch. 3 C 4 EPL L 4.1 EPL L 4.2 Noise MP 4.1	Not Compliant Medium Risk  October 2016; Noise exceedance at AN04 which impacted private properties on Racecourse Rd, Muswellbrook.	-	Following each compliance attended measurement on the night of 17-18 October 2016, BMC's consultant, Global Acoustics Pty Ltd (Global), communicated the results to the appropriate BMC personnel in accordance with the procedure specified in the Noise Management Plan (NMP). The Open Cut Examiner (OCE) on duty immediately responded to the monitoring results by modifying the operations in the relevant area through relocating or ceasing use of equipment, before progressively restarting operations. This approach is consistent with the NMP.  An additional compliance attended monitoring test was scheduled for one week after the event in accordance with the NMP. Global carried out the measurement at AN04 at 22:10Hrs on 23/10/16 and the results were compliant with the noise criteria in SSD-5170.  BMC notified the NSW Department of Planning and Environment (DPE) of the exceedance, via email, on 19 October 2016. BMC has submitted a report to the DPE regarding the monitoring results at AN04 on 17-18 October 2016 as required by Condition 7 of Schedule 5 of SSD-5170.  BMC did not receive any landholder complaints regarding noise or otherwise on the night of 17-18 October 2016. The nearest affected residents of privately owned land in the vicinity of AN04 were advised of the monitoring results in accordance with Condition 3 of Schedule 4 of SSD-5170.  BMC has since developed and rolled out an environmental training package on-site.	<b>Completed:</b>  BMC notified the DPE of the exceedance within 24 hours of receiving the result. BMC advised the nearest affected residents of privately owned land in the vicinity of AN04 of the monitoring results in accordance with SSD-5170 S4 C3.  BMC has since developed and rolled out an onsite environmental training package which includes information on noise management and monitoring.	<b>Closed:</b>  As reported by BMC, the exceedance has been reported to affected residents.  U-Day Environmental training and BMC Induction contains information in regards to management of noise.
SSD 5170 Sch. 3 C 19 (a) AQMP 3.4.2	Not Compliant Medium Risk  The drop height of the coal conveyor at the coal stockpile was too great on the day it was inspected.	-	BMC will undertake air quality training with the relevant CHPP personnel prior to 31 December 2017.	<b>Completed:</b>  BMC provided air quality training to the relevant CHPP personnel in December 2017.	<b>Closed:</b>  As reported in the 2017 Annual Review, BMC trained relevant CHPP personnel in December 2017. The issue was not observed during the 2019 IEA site inspections.
SSD 5170 Sch. 3 C 23 SSD 5170 Sch. 3 C 24 EPL L 1.1	Not Compliant Medium Risk  15-16 January 2016, the Windmill Dam and ROM North Dam over	-	The incident was notified to the Environmental Protection Authority (EPA) enviroline on 18 January 2016.  The EPA was concerned that the incident was contrary to sections 64, 120(1) and 148 of the POEO Act and have investigated the incident. BMC acknowledged the EPA's concerns about the incident and BMC has given and the EPA	<b>Completed:</b>  BMC have implemented a range of actions and procedures to prevent reoccurrence of an overflow event, to the satisfaction of the EPA.	<b>Closed:</b>  During the site inspection viewed the new water management system that will be used to prevent reoccurrence of an overflow event.

Bengalla Mine 2017 Independent Environmental Audit Action Plan				Updates Since Audit (from Annual Review 2017 & Site Communications)	MCW Environmental Comment IEA 2019
Consent / Cond. No	Compliance Status / Finding	Recommendation	Corrective Action Responses		
Water MP Table 1	topped releasing sediment laden water.		<p>has accepted a number of undertakings. In the undertakings made in clauses 3.3 to 3.11 BMC proposed to take action to prevent any similar incidents in future. These actions included:</p> <ul style="list-style-type: none"> <li>• Instillation of sediment fences in appropriate locations.</li> <li>• Connection of the East Windmill, West Windmill and North ROM dam catchments to other water storage facilities.</li> <li>• Development and rollout of an environmental training package.</li> <li>• Instillation of depth markers in the two sediment dams that are not connected to the Mine Water System.</li> <li>• Update of the induction presentation.</li> </ul>		
SSD 5170 Sch. 3 C 24 Water MP Table 1	<p>Not Compliant Administrative</p> <p>There were no measures in the Water Management Plan for the assessment of baseline channel stability.</p>	-	BMC will clarify the application of baseline streambed stability monitoring and identify measures for the assessment of baseline channel stability in an updated Water Management Plan (WMP) prior to 31 December 2017.	<p><b>Completed:</b></p> <p>BMC developed a draft WMP prior to 31 December 2017.</p> <p>The Draft WMP clarifies the application of baseline streambed stability monitoring and identifies measures for the assessment of baseline channel stability. BMC will lodge the Draft WMP with relevant regulatory agencies for comment upon the approval of Modification 4.</p>	<p><b>Closed:</b></p> <p>In Section 3.7.4 of the most recent version of the WMP (February 2019) Stream and Riparian Vegetation Health Monitoring is included.</p> <p>The 2017 and 2018 Bank Stability Riparian Assessment Reports were provided by BMC, indicating this form of assessment is being undertaken by site.</p>
MOP 7.2.3	<p>Not Compliant</p> <p>Medium Risk</p> <p>Some slopes around sediment dams at the base of the eastern face of the were greater than 18°.</p>	-	BMC acknowledges that the rehabilitated slopes around the sediment dams at the base of the eastern face of the Overburden Emplacement Area (OEA) are greater than 18°. This is a legacy issue and has been identified on plan 4 of the approved 2015-2021 Mine Operations Plan (MOP) Amendment A. Furthermore, rehabilitation monitoring undertaken by AECOM in December 2016 has identified that, despite some low level erosion, all slopes across the rehabilitation areas are generally stable.	<p><b>Ongoing:</b></p> <p>BMC acknowledges this as a legacy issue. This was originally presented on Plan 4 of the Approved 2015-2021 MOP Amendment A. BMC will continue to monitor these locations during annual rehabilitation monitoring. 2016 and 2017 rehabilitation monitoring conducted by AECOM identified that all slopes across the rehabilitation areas are generally stable.</p>	<p><b>Ongoing:</b></p> <p>BMC confirm that this is a legacy issue that must be actively managed by site.</p> <p>2018 Annual Review indicates that additional rehabilitation monitoring points established on steep slopes to monitor rehabilitation success and slope stability.</p>
Noise MP 4.3.2	<p>Not Compliant Administrative</p> <p>Use of wheeled dozers instead of tracked dozers was not occurring.</p>	-	<p>This condition in the NMP has come from the 'Continuation of the Bengalla Mine Environmental Impact Statement' (Bengalla EIS) (Hansen Bailey, 2013). Appendix H of the Bengalla EIS is an acoustic impact assessment that was completed by Bridges Acoustics (Bridges). In Appendix H the condition is as follows "use wheel dozers rather than track dozers on acoustically exposed sections of the OEA, particularly during the sensitive night period".</p> <p>Advice was sought from Bridges in regards to the use of tracked dozers on exposed areas. Bridges has advised that a tracked dozer at a slow speed (to minimise track noise), and a wheel dozer, make a similar sound power level</p>	<p><b>Completed:</b></p> <p>An updated NMP was approved by DPE in August 2017.</p>	<p><b>Closed:</b></p> <p>NMP (approved by DPI on 27 May 2019) includes the statement "Dozers operating in elevated areas to use low gear only".</p>

Bengalla Mine 2017 Independent Environmental Audit Action Plan				Updates Since Audit (from Annual Review 2017 & Site Communications)	MCW Environmental Comment IEA 2019
Consent / Cond. No	Compliance Status / Finding	Recommendation	Corrective Action Responses		
			so appear similar in the EIS modelling. Therefore this condition has been removed from the NMP and has been replaced with the following condition "Dozers operating in elevated areas to use low gear only". Additionally, under the NMP, operations on elevated and exposed sections of the OEA are generally avoided during the sensitive night period. The updated NMP was approved in August 2017.		
Noise MP 4.3.3	Not Compliant  No training aimed at managing road noise in travel to and from the site was conducted in the audit period.	-	The road noise section has been removed from the NMP as approved by DPE in August 17.	<b>Completed:</b> An updated NMP was approved by DPE in August 2017.	U-Day Environmental training and BMC Induction contains information in regards to management of noise.
Water MP 3.9.4	Not Compliant Medium Risk  A stockpile or laydown area next to the western clean water diversion did not have sediment controls in place.	-	Temporary stabilisation of this stockpile was undertaken on 8-10 March 2017. Robson Civil topsoiled, hand seeded (pasture mix) and harrowed the stockpile on behalf of BMC.	<b>Completed:</b> Temporary stabilisation of this stockpile was undertaken on 8-10 March 2017.	<b>Not Verified:</b> Temporary stabilisation of this stockpile was reported in the 2017 Annual Review.  This stockpile was not viewed by the Audit Team during the site inspection.
EMS S.1 and others	Not Compliant Administrative  Environmental Management Strategy refers extensively to Coal & Allied management documents and management regime which no longer apply to the site.	-	Since the IEA was undertaken in February 2017 the Environmental Management Strategy (EMS) has been reviewed and updated. In the new version of the EMS the references to Coal & Allied management documents have been removed. These references have been replaced with references to BMC's management documents and management regimes.	<b>Completed:</b> EMS was reviewed and updated in September 2017.	<b>Closed:</b> The updated EMS was approved by DPIE 5 September 2017. This version of the EMS does refer to Coal & Allied.  No other management plans include Coal & Allied.
MOP	Recommendation	Revise the MOP to include the details of SSD 5170 MOD 2, specifically the change in landform.	In August 2017 BMC submitted the MOP (2017 - 2021) to continue mining in accordance with MOD1-3 of SSD-5170 and to incorporate the requirements of SSD-5170 Condition 46 for a RMP into this MOP as requested by DRE.	<b>Completed:</b> In August 2-17, BMC submitted MOP 2017-2021, to continue mining in accordance with MOD 1-3 of SSD-5170 and to incorporate the requirements of SSD-5170 S3 C46.	<b>Closed:</b> Amendment A of the current MOP includes details of MOD 1-4.
NMP	Recommendation	Remove the nominated mitigating action "Use of wheeled dozers instead of tracked dozers from exposed areas" from Section 4 of the NMP.	This condition in the NMP has come from the 'Continuation of the Bengalla Mine Environmental Impact Statement' (Bengalla EIS) (Hansen Bailey, 2013). Appendix H of the Bengalla EIS is an acoustic impact assessment that was completed by Bridges Acoustics (Bridges). In Appendix H the condition is as follows "use wheel dozers rather than track dozers on acoustically exposed sections of the OEA, particularly during the sensitive night period".  Advice was sought from Bridges in regards to the use of tracked dozers on exposed areas. Bridges has advised that a tracked dozer at a slow speed (to minimise track noise), and a	<b>Completed:</b> An updated NMP was approved by DPE in August 2017.	<b>Closed:</b> NMP (approved by DPI on 27 May 2019) includes the statement "Dozers operating in elevated areas to use low gear only".

Bengalla Mine 2017 Independent Environmental Audit Action Plan				Updates Since Audit (from Annual Review 2017 & Site Communications)	MCW Environmental Comment IEA 2019
Consent / Cond. No	Compliance Status / Finding	Recommendation	Corrective Action Responses		
			wheel dozer, make a similar sound power level so appear similar in the EIS modelling.  Therefore this condition has been removed from the NMP and has been replaced with the following condition "Dozers operating in elevated areas to use low gear only". Additionally, under the NMP, operations on elevated and exposed sections of the OEA are generally avoided during the sensitive night period. The updated NMP was approved in August 2017.		
PIRMP	Recommendation	Revise the PIRMP and review against the EPA Guideline – Preparation of Pollution Incident Response Management Plans, 2012.	BMC conducted a Pollution Incident Response Management Plan (PIRMP) test exercise on 15th December 2016. The scenario was that significant heating of the clean coal stockpile had resulted in a stockpile fire with the prevailing winds carrying large volumes of smoke towards the town of Muswellbrook. The test was attended by the Technical Services Manager, Environment & Approvals Specialist and the two Environmental Advisors. The testing identified a requirement to update the PIRMP.  In March 2017 the PIRMP was reviewed and updated based on the EPA Guideline and the results of the testing undertaken in December 2016.	<b>Completed:</b> The PIRMP was reviewed and updated based on the EPA Guidelines.	<b>Closed:</b> The PIRMP has been prepared generally in accordance with the EPA guideline.
MOP	Recommendation	MOP Plan 4 should show linkages to surrounding vegetation.	Domain M on MOP Plan 4 identifies the tree corridors and tree restoration areas. These areas include: <ul style="list-style-type: none"><li>• A 1km section of Dry Creek, to the south of the Project Boundary.</li><li>• A tree corridor from the Hunter River to the areas west of the final void; and</li><li>• Rehabilitation of riparian areas on BMC owned land, that are located in Dry Creek nearby the Hunter River, and retained riparian areas within the Project Boundary.</li></ul> However, these tree corridors and tree restoration areas are not planned to be completed within the current MOP period and as such are not specifically detailed in the MOP.  Domain D on MOP Plan 4 identifies the pasture areas. The MOP states that these areas will be reconstructed from species appropriate to farms and mines in the Upper Hunter Valley. As such the pasture areas will link in with the surrounding agricultural land uses. As identified on MOP plan 4 native vegetation will be included in the pasture areas to create biodiversity connectivity and windbreaks and wood lots for stock shelter.	<b>Completed:</b> MOP (2017-2021) Plan 4 identifies these linkages.	<b>Closed:</b> Plan 4 of the MOP (Amendment A) shows linkages to surrounding vegetation.
-	Recommendation	Attention needs to be paid to drop height maintenance when loading the coal stockpiles. It is	BMC will undertake air quality training with the relevant CHPP personnel prior to 31 December 2017.	<b>Completed:</b>	<b>Closed:</b> As reported in the 2017 Annual Review, BMC trained relevant

Bengalla Mine 2017 Independent Environmental Audit Action Plan				Updates Since Audit (from Annual Review 2017 & Site Communications)	MCW Environmental Comment IEA 2019
Consent / Cond. No	Compliance Status / Finding	Recommendation	Corrective Action Responses		
		noted that drop height minimisation is within the current procedures.		BMC provided air quality training to the relevant CHPP personnel in December 2017.	CHPP personnel in December 2017.
Blast Fume Management plan	Recommendation	Update Blast Fume Generation Mitigation and Management Plan to include details on rating system used, recording requirements for fume event ratings and reporting requirements for regulatory purposes.	BMC will update the Blast Fume Generation Mitigation and Management Plan as per the recommendation.  BMC propose to update the plan prior to 31 December 2017.	<b>Completed:</b>  In December 2017, BMC updated the Blast Fume Generation Mitigation and Management Plan as per the auditor's recommendation.	<b>Closed:</b>  The most up-to-date version of the Blast Fume Management Plans includes details on rating system used, recording requirements for fume event ratings and reporting requirements for regulatory purposes
MOP	Recommendation	BMC should ensure the planned rehabilitation for 2017 occurs as planned to avoid falling out of step with MOP predictions.	BMC is targeting eight hectares of rehabilitation in 2017. As at July 2017 approximately 6ha had been shaped and is planned to be finalised (i.e. topsoiled, seeded etc.) in September 2017. The remaining 2ha is expected to be available for rehabilitation in early October 2017.	<b>Completed:</b>  22ha of rehabilitation was completed in 2017 compared to 24 ha forecast in the MOP. The remaining 2ha of rehabilitation planned to be completed on the RL 240 in 2017 was not rehabilitated as access through this area required the relocation of topsoil from the RL 270. The 2ha area will be rehabilitated in 2018.	<b>Closed:</b>  2017 Annual Review reported that 22ha of rehabilitation was completed in 2017.
-	Recommendation	The auditors observed early signs of scouring of steep batter gradients on upstream embankment face of CW1. The design of the dam crest with the vehicle windrows resulted in concentrated flows down batter with no erosion protection measures in place. Measures should be developed and implemented to remove the concentrated flows where possible. Where this is not possible, the concentrated flows should be managed to remove the potential for erosion	CW1 dam using 2 tonnes of crusher dust. This work was undertaken in early September 2017.	<b>Completed:</b>  BMC engaged Daracon Group to refurbish the eroded areas on the upstream embankment in September 2017.	<b>Not Verified:</b>  2017 Annual Review reported that the eroded areas on the upstream embankment were repaired in September 2017.  The upstream of this embankment was not inspected during the site inspection.

## Appendix E Audit Team Approval



Craig White  
Environment and Approvals Specialist  
Bengalla Mine  
P.O. Box 4  
SINGLETON NSW 2330

Contact: Joel Curran  
Phone: 02 4904 2702  
Email: [joel.curran@planning.nsw.gov.au](mailto:joel.curran@planning.nsw.gov.au)  
[compliance@planning.nsw.gov.au](mailto:compliance@planning.nsw.gov.au)  
Our ref: SSD5170, as modified

Cc: [mcwenvironmental@bigpond.com](mailto:mcwenvironmental@bigpond.com)

**Bengalla Mine**  
**2019 Independent Environmental Audit Scope and Team Endorsement**

Dear Mr White,

Thank you for providing a copy of MCW Environmental, Independent Environmental Audit (IEA) proposal for Bengalla Mine, for endorsement of the audit scope and team in accordance with SSD 5170, as modified.

The Department has reviewed the information provided and endorses the scope of the IEA and proposed audit team with the following personnel:

- Michael Woolley (MCW) – Lead Auditor;
- Tracey Ball (SLR) – Auditor;
- Christopher Jones (SLR) – Backup Auditor;
- Martin Davenport (SLR) – Blasting Noise and Vibration Specialist; and
- Clayton Richards (Minesoils) – Rehabilitation Specialist.

The Department had previously requested the audit scope include a focus on Rehabilitation and Blasting Impacts and notes the inclusion of Clayton Richards and Martin Davenport as detailed above. Their audit findings should be incorporated into the IEA report.

The Department expects that the audit will be conducted in accordance with the Independent Audit Guideline, October 2015. A copy of this guideline is available at:


<http://www.planning.nsw.gov.au/~media/Files/DPE/Guidelines/independent-audit-guideline-2015-10-23.ashx>

Please ensure that your audit team consults with relevant agencies and the Community Consultative Committee prior to the audit site inspection. Evidence of consultation and clear referencing to audit findings in relation to any request is to be provided in the audit report.

Please note that the timeframe for delivery of the audit report and response to audit recommendations (RAR) is 6 weeks from audit completion (last site inspection), unless otherwise agreed. Please ensure that the RAR includes responses to all non-compliances and auditor recommendations with clear timeframes (dd-mm-yyyy) for implementation of the proposed corrective action.

Please contact Joel if you require any further clarification as per the details above.

Yours sincerely,

 3/10/19

Leah Cook  
**Team Leader - Compliance**  
*As Nominee of the Secretary*

