

BOGGABRI COAL MINE

Independent Environmental Audit

Prepared for:

Boggabri Coal
386 Leard Forest Road
Boggabri NSW 2382

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SLR 

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BASIS OF REPORT

This report has been prepared by SLR Consulting Australia Pty Ltd (SLR) with all reasonable skill, care and diligence, and taking account of the timescale and resources allocated to it by agreement with Boggabri Coal (the Client). Information reported herein is based on the interpretation of data collected, which has been accepted in good faith as being accurate and valid.

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DOCUMENT CONTROL

Reference	Date	Prepared	Checked	Authorised
630.30072-R01-v1.0	15 December 2020	Renae Gifford / Nathan Archer	Nathan Archer	Nathan Archer

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1 Introduction

1.1 Background to Site

The Boggabri Coal Mine is an open cut coal mine located 15 kilometres (km) north-east of the township of Boggabri in north-western New South Wales (NSW). The Boggabri Coal Mine is managed by Boggabri Coal Operations Pty Ltd (BCOPL) which is majority owned by Idemitsu Australia Resources Group (IAR), a subsidiary of Japanese company Idemitsu Kosan Pty Ltd.

The current Project Approval (PA) 09_0182 Modification 7, limits mining until end of December 2033. The current Mining Operations Plan (MOP) covers a 5-year period from the 1 January 2020 to the 31 December 2024.

Truck and shovel operations are undertaken at Boggabri Coal Mine to produce a crushed and screened Run of Mine (ROM) coal product. Construction of a Coal Handling and Preparation Plant (CHPP) was completed in 2015. Following extraction and processing, product coal is stockpiled prior to being conveyed to the train load out facility, where it is dispatched to the Port of Newcastle and exported for overseas consumption. The rail spur has been operating since in early 2015, replacing road transport of product coal between the Mine Infrastructure Area (MIA) and Boggabri Coal Terminal (BCT).

BCOPL have approval to extract 8 Million tonnes per annum (Mtpa) of ROM coal per calendar year and may process up to 4.2 Mtpa of ROM coal at the CHPP. The Project includes the operation of ancillary equipment, CHPP, 17 km rail spur line and a rail loadout facility located at the mine. The final stage of the mining process involves the reshaping, topsoiling and seeding of the overburden emplacement to achieve the rehabilitation objectives of BCOPL.

BCOPL no longer engages contractors to undertake construction, mining, coal processing and transportation activities. BCOPL now directly employ staff to undertake these tasks, with the exception of the maintenance of fleet which is undertaken by a contractor.

1.2 Audit Requirements

The audit has been prepared in accordance with Schedule 5 Condition 10 and 11 of the PA 09_0182 which stipulates the following requirement to complete the Independent Environmental Audit (Audit):

AUDITING

Independent Environmental Audit

10. By the end of June 2014 and every 3 years thereafter, unless the Secretary directs otherwise, the Proponent shall commission and pay the full cost of an Independent Environmental Audit of the project. This audit must:

- a) be conducted by a suitably qualified, experienced and independent team of experts whose appointment has been endorsed by the Secretary;*
- b) include consultation with the relevant agencies;*
- c) assess the environmental performance of the project and assess whether it is complying with the requirements in this approval, and any other relevant approvals, relevant EPL/s and/or Mining Lease (including any assessment, plan or program required under these approvals);*
- d) assess whether the Proponent is implementing best noise, blasting and air quality management practice;*

- e) *investigate and report on the measures taken to minimise the noise impacts of the project during meteorological conditions when the noise limits in this approval do not apply, including:*
- *the effectiveness of these measures in maintaining noise impacts within the relevant noise criteria in this approval and/or the limits in the relevant EPL; and*
 - *any additional measures available to mitigate noise impacts under such meteorological conditions*
- f) *investigate and report on the measures taken to minimise the air quality impacts of the project during adverse meteorological conditions and extraordinary events (see condition 30(d) of Schedule 3), including:*
- *the effectiveness of these measures in maintaining air quality impacts within the criteria in Table 9, Table 10 and Table 11 of Schedule 3; and*
 - *any additional measures available to mitigate air quality impacts under such conditions;*
- g) *review the adequacy of any approved strategy, plan or program required under the abovementioned approvals; and*
- h) *recommend measures or actions to improve the environmental performance of the project and/or any strategy, plan or program required under these approvals.*

Note: This audit team must be led by a suitably qualified auditor, and include experts in noise, air quality, ecology, Aboriginal heritage and any other fields specified by the Secretary.

11. Within 3 months of commissioning this audit, or as otherwise agreed by the Secretary, the Proponent shall submit a copy of the audit report to the Secretary, together with its response to any recommendations contained in the audit report.

The audit has been completed in accordance with the *Independent Audit Guideline* (DPIE, 2015).

1.3 Audit Scope

The scope of the Audit is to assess compliance with the following key approvals and documentation:

- Project Approval – PA 09_0182 (including management plans and programs);
- Environment Protection Licence (EPL) – EPL 12407;
- Environmental Assessment (EA) Modification 7 (MOD 7) Consolidated Statement of Commitments (as per Appendix 5 of PA 09_0182);
- Mining Leases – CL 368 and ML 1755; and
- Water Access Licences – WAL 2571, WAL 2572, WAL 2595, WAL 2596, WAL 12691, WAL 12767, WAL 15037, WAL 24103, WAL 29473, WAL 29562, WAL 36547, WAL 37067, WAL 37519 and WAL 42234.

The physical boundaries of the audit are defined by the Project Approval area, which is outlined in **Figure 1**.

1.4 Audit Period

This audit covers the period from 3 August 2017 to 6 November 2020 (hereafter referred to as the “*Audit Period*”). This is the date of the previous audit site visit, until the final day of the 2020 audit site inspection.

1.5 Audit Submission

In accordance with Schedule 5 Condition 10 and 11 of the PA 09_0182, this audit report and response to submissions must be submitted to the Secretary within 3 months of commissioning this audit, or as otherwise agreed by the Secretary.

As per the audit team approval letter attached as **Appendix A**, the Secretary has approved BCOPL's request to extend the due date of the submission of the audit to 20 December 2020.

1.6 Selection and Endorsement of the Audit Team

The audit team presented in **Table 1** was endorsed by the Department of Planning, Infrastructure and Environment (DPIE) on 31 August 2020 as per the endorsement letters attached as **Appendix A**.

Table 1 Audit Team

Name	Company / Position	Audit Role
Nathan Archer BSc M Env Mgt Certified Exemplar Global Lead Auditor (#133601)	SLR - Principal Environmental Scientist Lead Environmental Auditor	Lead Auditor and Noise Specialist Present at site for 3 days
Renae Gifford B Env Sc M Bus Admin Grad Cert Marketing	SLR - Principal Environmental Scientist	Assistant Auditor Present at site for 3 days
Ali Naghizadeh BSc Microbiology MSc Environmental Management	SLR - Associate Consultant	Air Quality Specialist Desktop assistance and data review
Jodie Benton PhD Archaeology BA (Hons) Archaeology	OzArc Environment and Heritage - Director	Heritage Specialist Desktop assistance and data review

The audit team are independent of BCOPL as defined under Section 3.3 of the NSW Government's (2015) *Independent Audit Guideline*.

It is noted that a team of biodiversity specialists have been commissioned under a separate engagement to address the relevant biodiversity and offset aspects of the Project Approval and EPBC Act approval.

1.7 Key Site Contacts

The key contacts for the BCOPL involved in the audit are provided in **Table 2**

Table 2 Key Contacts

Name	Role	Contact
Hamish Russell	Environmental Superintendent	0438 003 915 Hamish.Russell@boggabricoal.com.au

Name	Role	Contact
Keren Halliday	Senior Environmental Advisor	02 6749 5013 Keren.holiday@boggabrickoal.com.au
Tim McDermott	Graduate Environmental Advisor	tim.mcdermott@boggabrickoal.com.au
Scotney Moore	Environmental Advisor	scotney.moore@boggabrickoal.com.au

1.8 Consultation Requirements

1.8.1 Summary of Consultation

In accordance with the Audit Guidelines, the following consultation was undertaken, prior to the site visit component of the audit. Consultation letters were sent to the key stakeholders identified in **Table 3** on 1 October 2020 requesting feedback and comment on any key issues to be addressed within the agreed scope of the audit. Responses, where received, are summarised in **Table 3** and detailed in **Section 1.8.2** and **Section 1.8.3**.

Table 3 Summary of Consultation

Stakeholder	Contact Details	Response
Department of Planning, Infrastructure and Environment (DPIE)	Heid Watters 02 6575 3401 Heidi.Watters@planning.nsw.gov.au James Epstein 02 6575 3419 james.epstein@planning.nsw.gov.au	Email received on 8 October 2020. DPIE requested the audit focus on: - Implementation of the Site Water Management Plan; and - Compliance with blasting criteria and limits. Refer Section 1.8.2 for audit response.
Department of Regional NSW – Resources Regulator	Mark Buchan 0427 327 718 Mark.buchan@planning.nsw.gov.au	No response received
Environmental Protection Authority (EPA)	Robert O’Hern (02) 6773 7000 Rober.Ohern@epa.nsw.gov.au	No response received
Natural Resource Access Regulator (NRAR)	water.referrals@dpi.nsw.gov.au	No response received
Narrabri Shire Council	council@narrabri.nsw.gov.au	No response received
Community Consultation Committee	David Ross David.ross@phoenixstrategic.com.au	A response was received from the CCC as attached in Appendix B . A number of items were raised which are summarised in Section 1.8.3 .

1.8.2 DPIE Consultation Responses

Table 4 outlines the key issues raised by DPIE for address in this audit along with the audit findings.

Table 4 DPIE Comments Relating to this Audit

DPIE Comment	Audit Comment
Implementation of the Site Water Management Plan	<p>The assessment of compliance is included in Appendix C with a summary of findings included in Section 7.</p> <p>Generally, the Site Water Management Plan was observed to be effectively implemented. Identified non-compliances and recommendations are included in Section 7.</p> <p>It is noted that updates to the Site Water Management Plan (and associated subplans) were completed and submitted to DPIE in July 2019; however, to date these plans have not been approved by DPIE.</p>
Compliance with blasting criteria and limits	<p>The assessment of compliance is included in Appendix B with a summary of findings included in Section 7.</p> <p>As reported in the 2019 Annual Review, a blast fired on 21 August 2019 recorded an airblast overpressure of 123 dBL exceeding the 120dBL criteria. This exceedance was attributed to a short-term fluctuation in the upper air wind conditions that could not have been reasonably foreseen.</p> <p>On 8 July 2020 the EPA issued a Formal Warning in Relation to Breaches of the EPL with regard to this incident.</p>

1.8.3 CCC Consultation Responses

Table 5 outlines the key issues raised by CCC for address in this audit along with the audit findings. The CCC response letter is attached as **Appendix B**.

Table 5 CCC Comments Relating to this Audit

CCC Comment	Comment
<p>Groundwater/Pit water</p> <p>Monitoring, assessment and reporting of groundwater inflows to the open cut mining operations. Many community members are concerned about the underground aquifers and the effects that all three mining operations in the Leard Forest mining precinct are having on the surrounding and immediate aquifers, ephemeral creeks such as Bollol & Back Creek and further afield.</p> <ul style="list-style-type: none"> • What are the new requirements by NRAR as a result of the Maules Creek investigations that would also apply to Boggabri Coal? • Where are these new requirements evidenced in the licences, leases or management plans? • How is the mine complying with any new requirements put out by NRAR as a result of the Maules Creek investigation? What compliance level is being achieved? 	<p>This audit has assessed compliance with the relevant conditions of BCOPL's current regulatory compliance requirements. Based on the documentation reviewed during the audit there is no evidence that any findings of NRAR investigations at Maules Creek have been applied to BCOPL. Consultation with NRAR was undertaken prior to the audit but no response was received.</p> <p>The assessment of compliance is included in Appendix C with a summary of findings included in Section 7.</p>

CCC Comment	Comment
<p>Has Boggabri Coal undertaken any improvements to their water monitoring regime as it relates to the exiting or now updated Boggabri Ground Water Model and the existing or now revised Regional Water Management Strategy?</p> <p>e.g.</p> <ul style="list-style-type: none"> • Is there any runoff that should be diverted that isn't? • Are there additional alluvium monitoring bores that need to be put in place as a result of the increase in Maules Creek and Boggabri Groundwater licences? • Where are these actual improvements/ additional or improved monitoring occurring on/around the mine site? • Where are the improvement plans/maps available/recorded? • Where is the data? • Is the mine compliant with its updated improvements? 	<p>Boggabri Coal has updated all water management plans for the site during the audit period. These were submitted these to the DPIE for approval in July 2019; however, no approval has yet been received.</p> <p>The Boggabri, Tarrawonga, Maules Creek Complex Numerical Model Update was prepared by AGE dated 17 August 2018.</p> <p>It is noted that the implementation of the currently approved surface water management plan is non-compliant as the clean water drain presented in Appendix A of the SWMP to the north of the disturbance area has been mined through and has not been reinstated. It is acknowledged that the update to the SWMP (Rev8) has been prepared depicting the absence of the clean water drain and that a report has been prepared by GHD to justify not reinstating this drain and to evidence that the site is not harvesting clean water outside of harvestable rights allowances.</p> <p>The update to the SWMP was submitted to the DPIE for approval in July 2019; however, given that it has yet to be approved the implementation of the approved SWMP is non-compliant. It is recommended to continue to liaise with DPIE with regard to the approval of the revised water management system and the removal of the clean water diversion.</p> <p>The revised management plans, including updated maps of monitoring locations and the water management system will be published on the BCOPL website on approval by the DPIE.</p> <p>Monitoring data is available on the BCOPL website and is summarised in the site's Annual Reviews.</p> <p>This audit has assessed compliance of the operation with its approved management plans and legislative requirements.</p>
<p>Transparency in the trading of water between the mines in the precinct and the licences that allow this trading of water and the monitoring/data and accounting of where the water is sourced from.</p>	<p>Refer Section 5.7.</p>
<p>In light of NRAR's investigations into Surface water issues in the Maules Creek Precinct, the community would like targeted auditing regarding all water issues and not just Surface Water Management Plans.</p>	<p>This audit has assessed water management at the site as it relates to the relevant development consents and the scope of this audit.</p> <p>The assessment of compliance is included in Appendix C with a summary of findings included in Section 7.</p>
<p>It is noted that there was a Non-Compliance in relation to Location of Monitoring/discharge points and areas, please ensure that all sampling has been carried out since the last audit and that the EPL Variance has been lodged and approved.</p>	<p>The audit has found that monitoring has generally been undertaken at the locations specified in the approved management plans. However, groundwater bores 2102 and 2103 were not monitored in 2018 and 2019 due to damage of the bore casing. Monitoring at bores 2104 and 2105 was not undertaken as they were not accessible and MW6 was not monitored as it was blocked.</p> <p>Additionally, noise and air quality monitoring locations in the approved management plans have been amended due to changes in ownership and operations and do not align with those in the current EPL.</p> <p>Recommendations have been made to ensure that monitoring points in EPL align with those utilised by the site.</p> <p>The discharge point is as per the EPL and has been sampled during discharge as required. Only one (1) discharge occurred during the audit period.</p>

CCC Comment	Comment
<p>Blast fumes/Air quality.</p> <p>Is the mine complying with any new requirements put out by the EPA?</p> <p>Over the past few months there have been ‘blast fume events’ that have impacted our local community members, this is of great concern. On multiple occasions, within minutes blast fumes-nitrous oxide is reaching Glencoe Road Maules Creek. How far from the blasting site is this?</p> <p>We feel there needs to be an extensive review of the blast monitoring, recording and reporting in relation to the unusual weather conditions that we sometimes experience in our local valley. Our community’s health must not be compromised for the sake of a blasting event that may need to be postponed or cancelled altogether until weather conditions are optimal. Cameras that can be accessed by EPA need to be installed and further monitoring equipment that can detect NOX fumes migrating off site. Just having mine personnel reporting that they did not ‘see’ any blast fumes migrating off site is simply not good enough for our community to have confidence that the mine would contact them in such an event. In these past fume events’ the community had to report their concerns to Boggabri Coal and the EPA.</p>	<p>BCOPL have evidenced an extensive blast management system and provided evidence of the implementation of the Blast Management Plan. Blast fume monitoring includes the recording of blast fume through use of drones. Annual reviews report on the blast results including fume.</p> <p>During the audit period there were two blast fume incidents in July 2020 which resulted in complaints from the community. BCOPL provided evidence of investigation of these complaints and liaison with the EPA. The EPA has requested information which has been supplied by BCOPL. At this stage no further action has been taken by the EPA. BCOPL also provided evidence of attempting to liaise with the complainant however no reply to follow up requests was received.</p> <p>Drone footage of the event was viewed during the site visit; however, the footage ceased before evidence of the dispersal of the fume or offsite transport could be confirmed.</p> <p>Based on the information presented by BCOPL, it is considered that the blast management system is extensive and represents good practice. However, the audit has recommended improvements to the blast monitoring system to provide verification of impacts of future blast fume events and to determine whether blast fume did remain and travel off site at a distance.</p>
<p>Environmental Audit.</p> <p>Clarity around the assessment, reporting and monitoring of the Biodiversity corridor boundary and biodiversity impacts due to clearing and mining. Auditing of the on-ground location/identification of the Biodiversity Corridor and its management is a priority for the community. The outcome of the most recent Boggabri Coal Project Approval, Modification 7, ensured that exploration drilling is expressly forbidden within the native vegetation corridor. The Independent Planning Commission Approval noted that portions of this native vegetation corridor overlap with the mine disturbance boundary and that this corridor is part of the <i>Environment Protection and Biodiversity Conservation Act 1999</i> (EPBC Act) approval (EPBC 2009/5256).</p> <p>Is the Corridor fenced and signage erected so contractors know where the boundary between Whitehaven Coal & Boggabri Coal is?</p> <p>Clearing must not occur in the corridor and clearing and drilling contractors must be supported by clearly understanding where the corridor is- so accidental drilling or clearing does not occur.</p> <p>How close has the exploration drilling been to the Biodiversity Corridor?</p> <p>Is Boggabri Compliant with its Approval?</p> <p>Are the locations of the drill sites transparent to the community?</p> <p>Are the drilling depths compliant with the Exploration Licence?</p>	<p>Biodiversity aspects are beyond the scope of this audit. This is being addressed by biodiversity specialists under a separate engagement.</p>

CCC Comment	Comment
<p>Assessment, reporting and monitoring of offsets</p> <p>Biodiversity protection- the ongoing failure to find offsets that should have been secured by December 2014. Boggabri Coal gained approval to modify the Project Approval to allow offsets to be secured using contemporary mechanisms under the Biodiversity Conservation Act 2016 (BC Act), and/or by transferring the offsets into the National Park Estate.</p> <p>Additionally, it was given permission to extend the date for which the security arrangement must be finalised to February 2020.</p> <p>Have all the Offsets and the Biodiversity Corridor been secured in perpetuity as per their extension?</p> <p>The community are concerned that while not reducing or removing the requirement, harm is increasing through by the delay of attaining offsets and therefore not fulfilling and acquiring /managed land to offset its vegetation destruction.</p> <p>.....</p>	<p>Biodiversity aspects are beyond the scope of this audit. This is being addressed by biodiversity specialists under a separate engagement.</p>

2 Audit Methodology

2.1 Audit Scope Development

The audit compliance tables presented in **Appendix C** were prepared to document all conditions to be assessed as part of this audit.

2.2 Audit Methodology

The audit was undertaken on site by Nathan Archer (Lead Auditor) and Renae Gifford (Assistant Auditor) of SLR, with the site component completed on 4, 5 and 6 November 2020. At the request of the DPIE, SLR also used Ali Naghizadeh (SLR Air Quality Specialist) and Jodie Benton (OzArk Heritage Specialist) to provide specialist input into the audit.

Information was provided by BCOPL prior to the audit, during the audit and following the audit. SLR also sourced a large amount of information from the BCOPL website.

The methodology for the audit consisted of the following key steps:

- Introductory and close out meetings;
- Reviewing key documents provided by BCOPL and sourced via the website prior to the audit;
- Consultation with relevant government agencies as per the audit requirements prior to the site component;
- Preparation of draft Audit Protocols and requests for information provided to BCOPL prior to the site audit;
- Site component of the audit from 4 to 6 November 2020 – including inspections and discussions with key BCOPL personnel;
- Review of additional relevant documentation obtained while on site during the inspection or provided by BCOPL after the site inspection; and
- Client review and comment on the draft audit report.

The audit has been completed as per the *Independent Audit Guidelines* (DPIE, 2015).

The audit team assessed the approvals and documentation outlined in **Section 5**.

2.2.1 Introductory and Close Out Meetings

An opening meeting was undertaken at the commencement of the site component of the audit. The opening meeting provided the opportunity to outline the audit process and review the schedule and introduce key personnel responsible for environmental management at the site. A further meeting was held at the end of the site visit to discuss initial observations, additional information requests and remaining audit requirements. The attendees of each meeting are listed in **Table 6**.

Table 6 Site Meeting Attendees

Personnel	Role	Comment
Hamish Russell	Environmental Superintendent	Present at both meetings
Russell Taylor	General Manager	Present at opening meeting

Personnel	Role	Comment
Stuart Dunlop	Deputy General Manager	Present at opening meeting
Peter Forbes	Health, Safety and Environment Manager	Present at opening meeting
Keren Halliday	Senior Environmental Advisor	Present at close out meeting
Tim McDermott	Graduate Environmental Advisor	Present at close out meeting
Nathan Archer	Lead Auditor	Present at both meetings
Renae Gifford	Assistant Auditor	Present at both meetings

2.2.2 Site Inspections and Interviews

The site component of the audit was undertaken between 4 November 2020 and 6 November 2020 including inspections and interviews with key BCOPL personnel. Site inspections were undertaken Nathan Archer (Lead Auditor) and Renae Gifford (Assistant Auditor).

The site inspections included inspections of the following areas:

- Active mining area including open cut pit and overburden dumps;
- Pre-mining clearance area;
- Key areas of the surface water management system including sediment dams and 2000 ML dam MW5;
- Topsoil stockpile area;
- CHPP;
- Mine infrastructure area (MIA) including laydown areas, workshop and stores;
- Victoria Park bore and mine owned agricultural properties; and
- Rehabilitation areas.

Information obtained during the interviews conducted, whilst on site at the facility, were directly recorded as evidence. The auditor also used the interviews as an opportunity to gain an appreciation of the extent to which the measures in place to manage environmental impacts from site operations were understood and implemented.

Photographs taken during the site inspections are included in **Appendix D**.

2.2.3 Document Review

Information was provided by BCOPL prior to the audit, during the audit and following the audit. SLR also sourced a large amount of information from the BCOPL website:

<https://www.idemitsu.com.au/mining/operations/boggabri-coal/approvals-plans-reports/>

A large amount of evidence was viewed and collected as part of the audit, including monitoring records, reports, and correspondence. While this key evidence has been referenced in **Section 3**, it has not been attached to this audit report.

3 Documents Reviewed and Referenced

Some of the key documentation reviewed as part of the audit includes:

- Project Approval – PA 09_0182
- Environment Protection Licence – EPL 12407;
- Water Access Licences (WALs);
- Mining Leases - CL 368, ML 1755;
- EA Statement of Commitments (Attached to the Project Approval);
- Previous Independent Environmental Audit – SLR Consulting (October 2017);
- Approved Environmental Management Plans, including:
 - Groundwater Management Plan (May 2017);
 - Water Management Plan (May 2017);
 - Noise Management Plan (April 2019);
 - Surface Water Management Plan (February 2017);
 - Site Water Balance (May 2017);
 - Blast Management Plan (November 2018);
 - Traffic Management Plan (June 2017);
 - Cultural Heritage Management Plan (CHMP) (November 2016);
 - Pollution Incident Response Management Plan (July 2020);
 - Social Impact Management Plan (November 2013);
 - Environmental Management Strategy (June 2020);
 - BTM Complex Blast Management Strategy (April 2020);
 - BTM Complex Air Quality Management Strategy (May 2017);
 - BTM Complex Noise Management Strategy (May 2017);
 - BTM Water Management Strategy (May 2019);
 - Air Quality Environmental Management Plan (July 2017)
- Mining Operations Plan (MOP) – 2020 – 2024 (March 2020);
- Annual Returns across the audit period;
- Annual Reviews across the audit period;
- Community Consultative Committee Meeting Minutes – across the audit period;
- Key consultation with government – including consultation and approval letters;
- Complaints Register;
- Pollution Reduction Program; and
- Environmental monitoring reports and data including air quality, blasting, noise, water.

4 Assessment of Compliance

In accordance with the Independent Audit Guidelines (DPIE, 2015), the terms used in the audit to describe the level of compliance of the site with the relevant approval documentation are outlined in **Table 7** and **Table 8**.

Table 7 Compliance Assessment Criteria

Assessment	Criteria
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.

Table 8 Risk Levels for Non-Compliance

Risk Level	Colour Coded	Description
High	Red	Non-compliance with potential for significant environmental consequences, regardless of the likelihood of occurrence.
Medium	Orange	Non-compliance with: <ul style="list-style-type: none">• potential for serious environmental consequences, but is unlikely to occur; or• potential for moderate environmental consequences, but is likely to occur.
Low	Yellow	Non-compliance with: <ul style="list-style-type: none">• potential for moderate environmental consequences, but is unlikely to occur; or• potential for low environmental consequences, but is likely to occur
Administrative Non-Compliance	Blue	Only to be applied where the non-compliance does not result in any risk of environmental harm (e.g. submitting a report to government later than required under approval conditions).

5 Approvals and Documentation Assessed

5.1 Previous Audit Recommendations

The previous audit was undertaken by SLR and dated 24 October 2017. The audit covered the period of 18 August 2014 to 3 August 2017.

Responses to recommendations and outstanding actions are reported in the Annual Reviews. Corrective recommendations with regard to non-compliances have generally been addressed and reported in the Annual Reviews. In some cases, BCOPL did not implement recommendations for improvement; where recommendations were not implemented, justifications were provided in the response to recommendations and reported in the Annual Reviews.

5.2 Project Approval 09_0182

Appendix C presents the assessment of compliance against the conditions of PA09_0182. The compliance status of each condition is documented, along with recommended actions in response to non-compliances. Non-compliances and recommendations are summarised in **Section 7** and **Section 8**.

BCOPL operates under Project Approval (PA) 09_0182 which was originally granted on 18 July 2012. PA 09_0182 has subsequently been modified on five (5) occasions as follows:

- Modification 3 (PA 09_0182 MOD3) dated 17 March 2014 covering access, stockpiling and in-pit fuel storage;
- Modification 4 (PA 09_0182 MOD4) dated 23 March 2015 covering boundary and infrastructure alterations;
- Modification 5 (PA 09_0182 MOD5) dated 30 August 2016 amendments to the project boundary to allow for the incorporation of additional ground water supply works;
- Modification 6 (PA 09_0182 MOD6) dated 7 July 2018 amendments to Schedule 2 condition 12 regarding tonnages of coal which could be transported by road and rail; and
- Modification 7 (PA 09_0182 MOD7) dated 27 May 2019 involving miscellaneous changes including updates to agency names and land ownership.

The Project Approval includes specific reference to each of the conditions within the following key areas of the consent:

Schedule 2: Administrative Conditions

Schedule 3: Environmental Performance Conditions

- Noise and vibration;
- Blasting;
- Air Quality and Greenhouse Gas;
- Meteorological Monitoring;
- Soil and Water;
- Heritage;
- Transport;

- Visual;
- Bushfire Management;
- Biodiversity;
- Rehabilitation;
- Ecology;
- Waste; and
- Social impacts.

Schedule 4: Additional Procedures

- Notification of Landowners/Tenants;
- Independent Review; and
- Land Acquisition.

Schedule 5: Environmental Management, Reporting and Auditing

- Environmental Management;
- Reporting;
- Independent Environmental Audit; and
- Access to Information.

Biodiversity conditions were not covered by this audit as these have been commissioned under a separate engagement.

5.3 Environmental Assessment – Statement of Commitments

Appendix C presents the assessment of compliance against the conditions of the EA Statement of Commitments as presented in Appendix 5 of PA 09_0182 (as modified).

The compliance status of each condition is documented, along with recommended actions in response to non-compliances. Non-compliances relating to the EA Statement of Commitments are outlined in **Section 7**.

Key aspects for the Statement of Commitments include:

- Mining Operations;
- Environmental Management and Monitoring;
- Air Quality;
- Noise and Blasting;
- Water Resources;
- Traffic;
- Visual;
- Aboriginal Archaeology and Cultural Heritage;

- Non-Aboriginal Heritage;
- Community;
- Housing;
- Ecology;
- Rehabilitation;
- Reporting; and
- Rail.

Biodiversity conditions were not covered by this audit as these have been commissioned under a separate engagement.

5.4 Management Plans and Programs

The management plans and programs required by PA 09_0182, as listed in **Table 9**, were assessed as part of this audit. Assessment has considered both the preparation of the management plans in accordance with project approval requirements and the effective implementation of the documented management and mitigation strategies. The compliance assessment is presented in the audit tables in **Appendix C**. Identified non-compliances and recommendations are listed in **Section 7** and **Section 8**.

Table 9 presents a summary of the assessment of the adequacy of the preparation and implementation of the management plans.

The *Biodiversity Management Plan* was not assessed during this audit, with this covered under a separate engagement.

Table 9 Assessment of Management Plans

Management Plan	Condition	Comment
Noise Management Plan (April 2019)	S3 Condition 13	<p>The latest version of the <i>Noise Management Plan</i> (NMP) is dated November 2018 and was approved by DPIE on 21 February 2019. The preparation of the NMP meets the requirements of the relevant consent conditions.</p> <p>Based on the findings the audit including site inspections and interviews it is considered that the NMP is being appropriately implemented. No exceedances of the offsite noise criteria have been recorded during the audit period.</p> <p>It is noted that non-compliance with sound power levels of mobile plant and equipment were recorded during the audit period. BCOPL continue to undertake sound power level testing as required by PA 09_0182 and the NMP; however, the site will remain non-compliant with this condition unless all equipment meets required sound power levels (refer Section 6.2).</p>

Management Plan	Condition	Comment
Blast Management Plan (November 2018)	S3 Condition 22	<p>The latest version of the <i>Blast Management Plan</i> (BMP) is dated November 2018 and was approved by DPIE on 21 February 2019. The preparation of the BMP meets the requirements of the relevant consent conditions.</p> <p>The implementation of the BMP has been assessed to be non-compliant due to an exceedance of the blast overpressure limit (August 2018) during the audit period. It is not considered that the exceedances are due to inadequacies in the BMP. Improvements were implemented following the blast overpressure exceedance in 2018 and no further exceedances have been recorded.</p> <p>Recommendations for improvements to blast fume monitoring have been recommended to assist in the preparation of blast fume incident reports and the verification of fume impacts following complaints in July 2020.</p>
Air Quality and Greenhouse Gas Management Plan (July 2017)	S3 Condition 31	<p>The latest version of the <i>Air Quality and Greenhouse Gas Management Plan</i> (AQGHGMP) is dated July 2018 and was approved by DPIE on 6 September 2018. The preparation of the AQGHGMP meets the requirements of the relevant consent conditions.</p> <p>Non-compliances and recommendations regarding the implementation of the AQGHGMP have been detailed in Appendix C and are summarised in Section 7 and Section 8.</p>
Water Management Plan (May 2017)	S3 Condition 38	<p>The most recent approved <i>Water Management Plan</i> is dated May 2017 and was approved by DPIE on 24 May 2017. An update to the Water Management Plan has been completed and was submitted to the DPIE for approval in July 2019. No approval or response has been received from DPIE at this time.</p> <p>The WMP is the overarching framework document for the water management system at Boggabri. The preparation of the WMP meets the requirements of the relevant consent conditions with the Site Water Balance, Surface Water Management Plan and Groundwater Management Plan detailing requirements of specific conditions.</p>
Site Water Balance (May 2017)	S3 Condition 38 (a)	<p>The most recent approved <i>Site Water Balance</i> is dated May 2017 and was approved by DPIE on 24 May 2017. An update to the Site Water Balance has been completed and was submitted to the DPIE for approval in July 2019. No approval or response has been received from DPIE at this time.</p> <p>The preparation of the Site Water Balance meets the requirements of the relevant consent conditions.</p>

Management Plan	Condition	Comment
Surface Water Management Plan (February 2017)	S3 Condition 38 (b)	<p>The most recent approved <i>Surface Water Management Plan</i> is dated May 2017 and was approved by DPIE on 24 May 2017. An update to the SWMP has been completed and was submitted to the DPIE for approval in July 2019. No approval or response has been received from DPIE at this time.</p> <p>The preparation of the SWMP meets the requirements of the relevant consent conditions and water management is generally implemented in accordance with the plan. However, it is noted that the clean water drain presented in Appendix A of the approved SWMP to the north of the disturbance area has been mined through and has not been reinstated. It is acknowledged that the update to the SWMP (Rev8) has been prepared depicting the absence of the clean water drain. This plan was submitted to the DPIE for approval in July 2019; however, given that it has yet to be approved. As such the implementation of the approved SWMP is non-compliant. It is recommended to continue to liaise with DPIE with regard to the approval of the revised water management system.</p>
Groundwater Management Plan (February 2017)	S3 Condition 38 (c)	<p>The most recent approved <i>Groundwater Management Plan</i> (GWMP) is dated February 2017 and was approved by DPIE on 24 May 2017. An update to the GWMP has been completed and was submitted to the DPIE for approval in July 2019. No approval or response has been received from DPIE at this time.</p> <p>The preparation of the GWMP meets the requirements of the relevant consent conditions and water management is generally implemented in accordance with the plan.</p> <p>Administrative non-compliance was identified with regard to the implementation of the GWMP as groundwater monitoring was not undertaken at all the required bores.</p>
Cultural Heritage Management Plan (CHMP) (November 2016)	S3 Condition 56	<p>The latest version of the Cultural Heritage Management Plan is dated November 2016. Approved by DPIE on 13 February 2017. There have been no revisions to the plan since the 2017 audit. The preparation and implementation of the CHMP generally meets the requirements of the project approval.</p> <p>Observations and recommendations regarding the CHMP have been detailed in Section 6.3 and Appendix C and are summarised in Section 7 and Section 8.</p>
Traffic Management Plan (June 2017)	S3 Condition 60	<p>The latest version of the <i>Traffic Management Plan</i> (TMP) is dated July 2017. Approved by DPIE in 2015. The TMP was updated in 2017.</p> <p>The preparation of the TMP meets the requirements of the consent conditions. Based on site inspections and the Annual Reviews, it considered that the TMP is being appropriately implemented.</p>
Rehabilitation Management Plan / Mining Operations Plan (March 2020)	S3 Condition 71	<p>The <i>Rehabilitation Management Plan</i> (RMP) is incorporated into the Mining Operations Plan (MOP). The latest version of the RMP/MOP was approved by Resources Regulator on 8 April 2020.</p> <p>The current RMP/MOP covers the period of January 2020 to December 2024. The RMP/MOP details the post mining land use and rehabilitation strategy and was developed in accordance with the ESG3 MOP Guidelines 2013. The RMP/MOP has been assessed to have been prepared in accordance with relevant Project Approval and ML conditions.</p> <p>Observations and recommendations regarding the implementation of the RMP have been detailed in Appendix C and are summarised in Section 7 and Section 8.</p>

Management Plan	Condition	Comment
Social Impact Management Plan (October 2020)	S3 Condition 77	The latest version of the <i>Social Impact Management Plan</i> (SIMP) is dated October 2020. Approval by DPIE is pending. The latest approved version was approved by DPIE in April 2014 and was assessed in the previous audit. The below assessment of preparation is based on the revised 2020 version. The preparation of the SIMP meets the requirements of the relevant consent conditions. Based on site interviews and the Annual Reviews, it considered that the SIMP is being appropriately implemented.
Environmental Management Strategy (June 2020)	S5 Condition 1	The latest version of the <i>Environmental Management Strategy</i> (EMS) is dated June 2020. Approval by DPIE is pending. The latest approved version was approved by DPIE in 2013 and was assessed in the previous audit. This audit has assessed the preparation of the revised 2020 version. The preparation of the EMS meets the requirements of the relevant consent conditions. Evidence of the effective implementation of the EMS has been evidenced through complaints and incidents management, monitoring and inspections, and community liaison.

5.5 Environment Protection Licence

Appendix C lists the conditions imposed by EPL and indicates the compliance status of each condition, along with recommended actions in response to non-compliances. Non-compliances and recommendations relating to the EPL are outlined in **Section 7** and **Section 8**. The EPL includes specific reference to each of the following aspects:

- Administrative Conditions;
- Location of monitoring/discharge points and areas;
- Limit Conditions;
- Operating Conditions;
- Monitoring and Recording Conditions;
- Reporting Conditions;
- General Conditions;
- Pollution Studies and Reduction Programs; and
- Special Conditions.

5.6 Mining Leases

Two mining leases are held by BCOPL being:

- Coal Lease (CL) 368; and
- Mining Lease (ML) 1755.

Appendix C lists the conditions imposed by the mining leases and indicates the compliance status of each condition, along with recommended actions in response to non-compliances. Non-compliances and recommended actions are summarised in **Section 7** and **Section 8**.

5.7 Water Licences

BCOPL holds 14 Water Access Licences (WALs) as shown in **Table 10**.

Table 10 Water Access Licences

Water Access Licences	
WAL 2571	WAL 24103
WAL 2572	WAL 29473
WAL 2595	WAL 29562
WAL 2596	WAL 36547
WAL 12691	WAL 37067
WAL 12767	WAL 37519
WAL 15037	WAL 42264

SLR were presented summary spreadsheets tracking how the site has performed against the WAL's during the site component of the audit and discussions were undertaken with the Environmental Superintendent describing the water access system, trading and allocations. It is a complex system involving carry over from previous years and the potential to sell or hold licences. There is a dedicated resource at BCOPL to manage WAL's.

A summary of water take against the WAL allocations is presented in the annual reviews and has been summarised in **Table 11** for the audit period. As indicated in the **red text** in **Table 11**, it appears that BCOPL has exceeded the allocation for the WALs associated with the Lower Namoi Regulated River, Upper Namoi and Lower Namoi Regulated River Water Sharing Plan (WALs 2571, 2572, 2595 and 2596). However, based on site correspondence and as reported in the Annual Reviews, total water extracted can exceed the sum of allocation and temporary transfers due to water being available in the account at the start of the accounting period. Based on site correspondence, SLR has no reason to believe that the operation is non-compliant with allocation requirements.

Notwithstanding this, based on the consultation responses from the CCC detailed in **Section 1.8.3**, there are community concerns around the transparency of the trading of water between the mines in the precinct and the licences that allow this trading of water and the monitoring/data and accounting of where the water is sourced from. It is recommended that the Annual Review includes additional information to detail the amounts of water in the account at the start of the accounting period and to provide further justification, transparency and evidence that the total water extraction remains within the total allowed allocations.

Table 11 Water Take During the Audit Period

Water Access Licence No.	Water Source and Water Sharing Plan	2017					2018					2019						
		Allocation (ML)	Temporary Transfers (ML)	Passive Take / Inflows (ML)	Active Pumping (ML)	TOTAL (ML)	Allocation (ML)	Carryover from Previous Water Year	Temporary Transfers (ML)	Passive Take / Inflows (ML)	Active Pumping (ML)	TOTAL (ML)	Allocation (ML)	Carryover from Previous Water Year	Temporary Transfers (ML)	Passive Take / Inflows (ML)	Active Pumping (ML)	TOTAL (ML)
15037 12767 24103 12691 36547 37519	Upper Namoi Zone 4 Namoi Valley (Keepit Dam to Gin's Leap), Upper and Lower Namoi Groundwater Sources Water Sharing Plan 2003	1028	-540	0	300	300	1028	2056	-980	0	391	439	1028	1518	1310	0	2188.1	2188.1
29473 29562	Gunnedah Oxley Basin Murray Darling Basin Groundwater Source, NSW Murray Darling Basin Porous Rock Groundwater Sources Water Sharing Plan	1092	0	182.5	0	182.5	842	210.5	0	182.5	52	1076.5	842	210.5	0	182.5	16.62	199.12
2571 2572 2595 2596	Lower Namoi Regulated River, Upper Namoi and Lower Namoi Regulated River Water Sharing Plan	20.8	128	0	325	325*	53	265.6	524.9	0	465.6	1043.5	26.5	n/a	128	0	259.8	259.8
37067	Upper Namoi Regulated River, Upper Namoi and Lower Namoi Regulated River Water Sharing Plan	128	-128	0	0	0	128	0	128	0	0	256	128	0	-128	0	0	0
42234	Upper Namoi Zone 11 Maules Creek Groundwater source. Purchased 9/1/2019	-	-	-	-	-	-	-	-	-	-	-	0	60	0	0	0	0

5.8 Complaints

A review of complaints received during the audit period was undertaken. Complaints are summarised in the Annual Reviews and the complaint register which is available on the website. Follow up actions are detailed in the complaints log.

During the audit period there have been eight (8) complaints as follows:

- 2017 – one (1) complaint relevant to the audit period regarding dust;
- 2018 – four (4) complaints relating to traffic, groundwater, dust and blast;
- 2019 – nil complaints;
- 2020 – three (3) complaints regarding noise and blast fume.

5.9 Incident / Non-Compliance Management

Environmental incidents during the audit period are outlined within the Annual Reviews and Annual Returns.

Incident investigations and reporting were completed with evidence provided to the audit team.

It is noted that BCOPL was issued with a warning letter from DPIE on 18 October 2019 for not reporting the blast overpressure exceedance which occurred on 21 August 2019 until 28 August 2019. On 8 July 2020 the EPA issued a Formal Warning in Relation to Breaches of the EPL with regard to this incident.

6 Environmental Management - Specialist Assessments

As required by Schedule 5 Condition 10 of PA 09_0182 and as directed by the DPIE, the audit team included experts in the fields of noise, air quality and heritage. Biodiversity specialists have been commissioned under a separate engagement.

The specialists listed in **Table 1** were endorsed by the DPIE on 31 August 2020. The specialists provided inputs to the relevant aspects of the compliance tables in **Appendix C** with recommendations being made as required. A summary of the key findings of specialist assessments is provided as follows.

6.1 Air Quality Management

6.1.1 Background to Noise Management

The air quality management system for Boggabri Coal Mine is outlined within the Air Quality and Greenhouse Gas Management Plan (AQGHGMP). The most recent version of the AQGHGMP is dated July 2018 and was approved by DPIE on 6 September 2018.

Air quality monitoring at site includes depositional dust monitoring and monitoring of suspended particulate matter using High Volume Air Samplers (HVAS) and Tapered Element Oscillating Microbalances (TEOM). Being an open cut there are a series of dust sources, with these outlined within the AQGHGMP. Mitigation measures relating to air quality impacts are outlined within the AQGHGMP.

6.1.2 Key Findings – Air Quality

Key findings from the SLR audit include:

- The AQGHGMP has generally been prepared to meet Schedule 3 Condition 31 of the Project Approval;
- The field inspection noted evidence of water carts, use of mulch for dust suppression and the minimisation of the disturbance footprint;
- Minimal dust emissions were evident during the site inspection around the CHPP and Mine Infrastructure Area with sprays in evidence at key dust generating locations;
- Some dust was evident in the pit; however, the Environmental Superintendent actioned promptly by contacting the OC and additional water carts were deployed. It has been recommended to display the EPA Dust Handbook in briefing rooms and crib rooms and discuss in toolbox talks to empower all personnel to request changes to operations based on dust emissions;
- DPIE was not notified of recorded exceedances of the relevant air quality criteria. Whilst it is acknowledged that exceedances of the air quality criteria do not necessarily equate to a non-compliance, it is considered that all exceedances should be notified to DPIE, particularly given that note (a) to Schedule 3 Condition 27 states that criteria are “*Total impact (ie incremental increase in concentrations due to the project plus background concentrations due to all other sources)*”. If the exceedance is not attributable to BCOPL operations, evidence of the investigation or data that led to this conclusion should be provided with the notification;
- There was evidence of the implementation of triggers following real time air quality monitoring; and
- There are some further recommendations relating to air quality, with these outlined within Section 7 of this report.

6.2 Noise Management

6.2.1 Background to Noise Management

The noise management system for Boggabri Coal Mine is outlined within the approved *Noise Management Plan*. The adequacy of the NMP has been assessed in **Table 9**.

Noise monitoring for the mine includes attended monitoring, real time monitoring, cumulative noise monitoring and mobile equipment monitoring. The site also has a detailed meteorological monitoring system to assist with noise management. Key noise mitigation measures are outlined within the approved *Noise Management Plan*.

6.2.2 Key Findings - Noise

Key noise related findings and observations include:

- Attended noise monitoring is undertaken monthly at the following locations:
 - N2 - 'Sylvania' - Dripping Rock Road
 - N3 - 'Picton' - Dripping Rock Road
 - N4 - Barbers Lagoon Boggabri - Manilla Road
- There were no exceedances of noise limits during the audit period at privately owned residences or those where there is no private agreement relating to noise;
- The site received only one (1) noise complaint during the audit period;
- Two (2) real time noise monitors are located at private receivers;
- During the audit period, the real time noise monitoring system was updated to the Teledata system and a review of alarms was undertaken. Email and text messages sent are sent to relevant personnel if triggered and are recorded in the alarms register with actions and responses undertaken;
- Non-compliances and warnings from DPIE have occurred during the audit period due to exceedances of sound power levels identified in the Environmental Assessment (EA) for mobile equipment;
- A noise modelling review was undertaken by Global Acoustics (*Boggabri Coal Mine - Noise Modelling Assessment* dated April 2020) to assess whether compliance with approved noise limits is likely based on the current mining progression and existing sound powers for equipment, and, whether noise levels are likely to exceed those predicted in the Acoustic Impact Assessment (AIA) for prepared for the EA. The investigation found that that:
 - *The majority of the mining fleet at BCM currently operates at sound power levels higher than modelled for the BCM AIA;*
 - *despite the site operating equipment with higher sound powers than modelled for the BCM AIA, the predicted zone of impact is typically less than previously predicted;*
 - *it is Global Acoustics' opinion that operating a mining fleet with current sound power levels and quantities, which are higher than modelled for the BCM AIA, should not cause an increase to the zone of impact relative to that predicted for the BCM AIA.*

- Based on the conditions of the current PA, BCOPL will remain non-compliant with sound power level requirements unless all plant and equipment meet the modelled EA sound power levels. However, it is acknowledged that despite sound power levels of equipment being above those modelling in the EA, compliance with the offsite noise limits has been achieved during the audit period and only one (1) noise compliant has been received;
- It has been recommended to continue investigations and dialogue with DPIE regarding sound power level requirements; and
- BCOPL have been implementing a plant attenuation, monitoring and review program across the audit period which has involved the trial of three sound attenuation kits on six 930E Komatsu trucks. This trial is ongoing.

6.3 Heritage Management

As endorsed by the DPIE, OzArc were engaged by SLR to undertake the specialist heritage review. Key findings from the OzArk's review are provided below. The detailed assessment is included in **Appendix C** with recommendations being made as required.

6.3.1 Background to Heritage Management

Aboriginal and Cultural Heritage is managed under the *Cultural Heritage Management Plan* (CHMP) dated November 2016 which was approved by DPIE on 13 February 2017. The CHMP outlines known heritage sites, consultation requirements and a background to process to manage heritage sites. A second document has also been prepared called the *Aboriginal Heritage Conservation Strategy* (AHCS), which provides objectives regarding the conservation of Aboriginal and non-Aboriginal sites.

6.3.2 Key Findings – Heritage

Overall, the audit shows that BCOPL continue to exhibit a good level of regulatory compliance in terms of heritage and a demonstrated strong commitment to the ongoing best practice management of Aboriginal and historic cultural heritage.

6.3.2.1 Aboriginal Heritage Conservation Strategy (AHCS) (Condition 55)

Since the last audit, the Aboriginal Heritage Conservation Strategy: Maules Creek Coal Mine, Tarrawonga Coal Project, Boggabri Coal Mine, and Related Biodiversity Offset Areas has been completed. This is a comprehensive document that broadly complies with the subsections of Condition 55. This document has been approved by DPIE.

One of the outcomes of the AHCS is a video *The Kamilaroi* which was completed, and a screening staged in Gunnedah. Also completed from the AHCS was a detailed recording of the Rock Inn.

Both of these AHCS outcomes should be sent to OEH (now Heritage NSW) as per the AHSC and although they may have been, no evidence for this was sighted.

6.3.2.2 CHMP (Condition 56)

The 2017 audit identified some areas for improvement in relation to the CHMP. These improvements were intended to strengthen the existing practices and documentation, which are generally compliant with the project approval conditions and are in accordance with accepted Aboriginal cultural heritage management practices in NSW. As there has been no review / update to the CHMP since the 2017 audit, none of these minor issues have been rectified.

Verification of compliance with Condition 57(c) would be assisted by providing evidence showing that the CHMP requirement to monitor all sites annually (or more frequently for those located within 100m or proposed works) is occurring and evidence (e.g. program/schedule) showing that the actions identified during monitoring are being implemented. Compliance with Condition 57(c) would also be improved by outlining site assessment protocols in the CHMP.

6.3.2.3 Archaeological Salvage Program (Condition 57)

Boggabri Coal has been very active in the implementation of the salvage program. The evidence supplied (including summaries in the Annual Reports, a sample salvage report and a suite of Aboriginal Site Impact Record Forms) indicates that this work is being completed as per Conditions of Consent and to best practice standards.

Further, ongoing Aboriginal community consultation has been formalised into biannual meetings, the sample minutes of which indicate they are comprehensive and transparent forums.

7 Audit Findings

7.1 Summary of Assessment of Compliance

Appendix C presents the detailed Assessment of Compliance against the conditions of the key approvals and licences applicable to the Boggabri Mine.

Table 12 presents a summary of the findings of this audit.

Table 12 Summary Table of Compliance

Compliance Status	Number of conditions	Percentage of total conditions	Percentage of assessed conditions
Compliant	172	64%	87%
Not verified	5	2%	3%
Non-Compliant (Low Risk)	9	3%	5%
Non-Compliant (Medium Risk)	0	0%	0%
Non-Compliant (High Risk)	0	0%	0%
Administrative Non-Compliance	12	4%	6%
Not Triggered	46	17%	-
Observation	0	0%	0%
Note	23	9%	-
Total assessed conditions (excluding not triggered and notes)	198	74%	-
Total conditions	267	-	-

Overall, 267 conditions were identified, 46 (17%) were not triggered during the audit period, and 23 (9%) were a note for information. Of the 198 remaining audited conditions 172 (87%) were compliant, 9 (5%) were non-complaint (low risk) and 12 (6%) were administrative non-compliances. Five (5) conditions could not be verified based on available information. No high or medium risk non-compliances were identified. The non-compliances are listed in **Section 7.2**.

7.2 Summary of Non-Compliances

Table 13 outlines the summary of non-compliances relating to the statutory conditions for Boggabri Coal.

Table 13 Summary of Non-Compliances

Non-compliance Number	Schedule and Condition Number	Condition	Compliance Status	Evidence	Recommendation
PA 09_0182					
NC1	Schedule 3 Condition 9	The Proponent shall: (a) Ensure that: <ul style="list-style-type: none"> - All new trucks, dozers, drills and excavators purchased for use on the site after the date of this approval are commissioned as noise suppressed (or attenuated) units; - Ensure that all equipment and noise control measures deliver sound power levels that are equal to or better than the sound power levels identified in the EA and that correspond to best practice or the application of best available technology economically achievable. - Where reasonable and feasible, improvements are made to existing noise suppression equipment as technologies become available; and (b) Monitor and report on the implementation of these requirements annually on its website.	Non-Compliant Low Risk	(a) Annual testing of mobile plant and equipment is undertaken. Test results are compared with the Boggabri Coal Mine Environmental Assessment (Hanson Bailey 2010). Sound power screening levels greater than 3 dBA are considered significant and require further investigation. <u>Non compliances</u> of sound power levels for a number of mobile plant were reported in the 2017, 2018 and 2019 Annual Reviews. BCOPL have been implementing a plant attenuation, monitoring and review program across the audit period which has involved the trial of three sound attenuation kits on six 930E Komatsu trucks. This trial is ongoing. (b) As reported in the Boggabri Coal Mine - Noise Modelling Assessment (April 2020) the majority of the mining fleet currently operates at sound power levels higher than modelled for the EA. The noise modelling assessment was undertaken to evaluate if compliance with noise limits can be achieved with the current plant.	NC REC: continue investigations and dialogue with DPIE regarding sound power level requirements.

Non-compliance Number	Schedule and Condition Number	Condition	Compliance Status	Evidence	Recommendation															
NC2	Schedule 3 Condition 15	<p>The Proponent shall ensure that the blasting on the site does not cause exceedances of the criteria in Table 6.</p> <table border="1"> <thead> <tr> <th>Location</th> <th>Airblast overpressure (dB(Lin Peak))</th> <th>Ground vibration (mm/s)</th> <th>Allowable exceedance</th> </tr> </thead> <tbody> <tr> <td rowspan="2">Residence on privately owned land</td> <td>120</td> <td>10</td> <td>0%</td> </tr> <tr> <td>115</td> <td>5</td> <td>5% of the total number of blasts over a period of 12 months</td> </tr> <tr> <td>All public infrastructure</td> <td>-</td> <td>50 or alternatively a specific limit determined to the satisfaction of the Secretary by the structural design methodology in AS 2187.2-2006, or its latest version</td> <td>0%</td> </tr> </tbody> </table> <p>However, these criteria do not apply if the Proponent has a written agreement with the relevant owner or infrastructure provider/owner, and the Proponent has advised the Department in writing of the terms of this agreement.</p>	Location	Airblast overpressure (dB(Lin Peak))	Ground vibration (mm/s)	Allowable exceedance	Residence on privately owned land	120	10	0%	115	5	5% of the total number of blasts over a period of 12 months	All public infrastructure	-	50 or alternatively a specific limit determined to the satisfaction of the Secretary by the structural design methodology in AS 2187.2-2006, or its latest version	0%	Non-Compliant (Low Risk)	<p>As reported in the 2019 Annual Review, a blast fired on 21 August 2019 recorded an airblast overpressure of 123 dBL exceeding the 120dBL criteria. This exceedance was attributed to a short-term fluctuation in the upper air wind conditions that could not have been reasonably foreseen.</p> <p>An incident report was prepared which concluded that:</p> <p><i>Blast design investigations indicate that tie in and firing conditions of the blast would ordinarily result in basic blast emission of less than 115dBL and that 123dBL can only be explained by the effects of meteorology.</i></p> <p>It is noted that no exceedances have been recorded since this time. The real time blast monitoring and weather system has been sighted and is implemented.</p> <p>This exceedance was reported to DPIE on 28 August. BCOPL was issued with a warning letter from DPIE on 18 October 2019 for not reporting the blast overpressure exceedance within seven days of the incident. Notification of the exceedance was sent via text and email but was originally missed. This is attributable to the amount of trigger text messages which were received, particularly under the old system.</p>	<p>NC REC: Ensure blasts are undertaken under appropriate weather conditions. Delays to blasts should be implemented if required based on real time weather data review.</p> <p>NC REC: Implement changes to the TARP notifications system to distinguish "triggers" from "exceedances" so that reportable exceedances are not missed</p>
Location	Airblast overpressure (dB(Lin Peak))	Ground vibration (mm/s)	Allowable exceedance																	
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All public infrastructure	-	50 or alternatively a specific limit determined to the satisfaction of the Secretary by the structural design methodology in AS 2187.2-2006, or its latest version	0%																	

Non-compliance Number	Schedule and Condition Number	Condition	Compliance Status	Evidence	Recommendation
NC3	Schedule 3 Condition 22	<p>The proponent shall prepare and implement a Blast Management Plan for the project to the satisfaction of the Secretary. This plan must:</p> <ul style="list-style-type: none"> (a) Be submitted to the Secretary for approval within 6 months from the date of project work. (b) be prepared in consultation with the EPA, the CCC and interested members of the local community potentially affected by blasting operations; (c) propose any alternative ground vibration limits for public infrastructure in the vicinity of the site; (d) describe the measures that would be implemented to ensure: <ul style="list-style-type: none"> - best management practice is being employed; and - compliance with the relevant conditions of this approval; (e) include a road closure management plan for blasting within 500 metres of a public road, that has been prepared in consultation with Council; (f) include a specific blast fume management protocol to demonstrate how emissions will be minimised including risk management strategies if blast fumes are generated; (g) include a monitoring program for evaluating the performance of the project including: <ul style="list-style-type: none"> - compliance with the applicable criteria; and - minimising fume emissions from the site; and (h) include a Leard Forest Mining Precinct Blast Management Strategy that has been prepared in consultation with other mines within the Leard Forest Mining Precinct to minimise cumulative blasting impacts. <p><i>Note: The Leard Forest Mining Precinct Blast Management Strategy can be developed in stages and will need to be subject to ongoing review dependent upon the determination of and commencement of other mining projects in the area.</i></p>	Non-Compliant (Low Risk)	<p>Preparation</p> <p>The latest version of the Blast Management Plan is dated November 2018. Approved by DPIE on 21st February 2019.</p> <ul style="list-style-type: none"> i. The Blast Management Plan was originally prepared in January 2013, with this being within six months of the Project Approval. ii. the current Blast Management Plan November 2018 summarises consultation undertaken in Appendix D iii. Alternate ground vibration covered in Section 5.1 of plan iv. Section 6 of BLMP v. Section 6.3 of BLMP vi. Appendix C vii. Section 7 of BLMP iii. Appendix E of BLMP <p>Implementation</p> <p><u>Non-compliant</u> due to 120 dBL exceedance.</p>	<p>NC REC: Ensure blasts are undertaken under appropriate weather conditions. Delays to blasts should be implemented if required based on real time weather data review.</p>

<p>NC4</p>	<p>Schedule 3 Condition 27</p>	<p>Except for the air quality affected land in Table 7, the Proponent shall ensure that particulate matter emissions generated by the project do not exceed the criteria listed in Table 9, Table 10 and Table 11 at any residence on privately-owned land or on more than 25 percent of any privately-owned land.</p> <p>Table 9: Long-term criteria for particulate matter</p> <p><i>Table 9: Long-term criteria for particulate matter</i></p> <table border="1"> <thead> <tr> <th>Pollutant</th> <th>Averaging Period</th> <th>^d Criterion</th> </tr> </thead> <tbody> <tr> <td>Total suspended particulate (TSP) matter</td> <td>Annual</td> <td>^a 90 µg/m³</td> </tr> <tr> <td>Particulate matter < 10 µm (PM₁₀)</td> <td>Annual</td> <td>^a 30 µg/m³</td> </tr> </tbody> </table> <p>Table 10: Short-term criteria for particulate matter</p> <p><i>Table 10: Short-term criteria for particulate matter</i></p> <table border="1"> <thead> <tr> <th>Pollutant</th> <th>Averaging Period</th> <th>^d Criterion</th> </tr> </thead> <tbody> <tr> <td>Particulate matter < 10 µm (PM₁₀)</td> <td>24 hour</td> <td>^a 50 µg/m³</td> </tr> </tbody> </table> <p>Table 11: Long-term criteria for deposited dust</p> <p><i>Table 11: Long-term criteria for deposited dust</i></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>^c Deposited dust</td> <td>Annual</td> <td>^a 2 g/m²/month</td> <td>^a 4 g/m²/month</td> </tr> </tbody> </table> <p>Notes to Table 9, Table 10 and Table 11:</p> <p>^a a Total impact (ie incremental increase in concentrations due to the project plus background concentrations due to all other sources);</p> <p>^b b Incremental impact (ie incremental increase in concentrations due to the project on its own);</p> <p>^c 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.</p> <p>^d d Excludes extraordinary events such as bushfires, prescribed burning, dust storms, sea fog, fire incidents or any other activity agreed by the Secretary.</p>	Pollutant	Averaging Period	^d Criterion	Total suspended particulate (TSP) matter	Annual	^a 90 µg/m ³	Particulate matter < 10 µm (PM ₁₀)	Annual	^a 30 µg/m ³	Pollutant	Averaging Period	^d Criterion	Particulate matter < 10 µm (PM ₁₀)	24 hour	^a 50 µg/m ³	Pollutant	Averaging Period	Maximum increase in deposited dust level	Maximum total deposited dust level	^c Deposited dust	Annual	^a 2 g/m ² /month	^a 4 g/m ² /month	<p>Administrative Non- Compliance</p>	<p>Evidence of air quality monitoring in Annual Reviews. Evidence of assessing the potential contribution of the site towards air quality criteria provided as notes and not included in the Annual Reviews.</p> <p>1 Jan 2017 - 31 Dec 2017 - Table 4-3 of the Annual Review identifies the Roma and Merriown monitoring locations as locations to be used for compliance monitoring. However, Section 4.2.2.2 of the 2017 Annual Review outlines that the one exceedance of the short-term PM10 criterion recorded at the Merriown HVAS monitor and the two exceedances recorded at the Roma HVAS monitor "are not considered exceedances as the monitoring location is not used as a compliance measurement tool". Moreover, the exceedances described above do not match data presented in the charts. According to the chart, only a single exceedance of the 24-hour average PM10 criteria was recorded at Roma and no exceedances at Merriown.</p> <p>1 Jan 2018 - 31 Dec 2018 - Based on the information provided, the site was within criteria. There were some days of extraordinary events and some days when the site was upwind from the monitoring stations which recorded an exceedance.</p> <p>1 Jan 2019 - 31 Dec 2019 - Based on the information provided, the site's compliance could not be established. The Annual Review mentions that 53 exceedances of the short term PM10 criteria were recorded by the Wilberoi East TEOM and that these were either due to extraordinary events (41 occasions) or due to sources other than the site. No evidence of incident investigations for 2019 was provided.</p>	<p>NC REC: It is recommended that in line with the requirements of note (d) of Schedule 3 Condition 27 of the Boggabri Coal PA, confirmation be sought from the secretary on the status of days believed to be extraordinary events prior to classifying any day as an extraordinary event day and removing the day from the annual average.</p> <p>NC REC: all exceedances of the relevant air quality criteria be investigated in accordance with the requirements of the AQGHGMP to determine if they are attributable to BCOP operations</p> <p>NC REC: DPIE should be informed of any exceedance of the relevant air quality criteria, regardless of the exceedance being a non-compliance or not. If the exceedance is not attributable to BCOP operations, evidence of the investigation or data that led to this conclusion should be provided with the notification;</p> <p>NC REC: a standard methodology should be developed for the investigation and reporting of any exceedances recorded by the air quality monitors.</p> <p>Improvement REC: In the interest of transparency it is recommended that:</p>
Pollutant	Averaging Period	^d Criterion																										
Total suspended particulate (TSP) matter	Annual	^a 90 µg/m ³																										
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Non-compliance Number	Schedule and Condition Number	Condition	Compliance Status	Evidence	Recommendation
				<p>Based on the information presented, there is no evidence that the criteria in S3 C27 have been exceeded as a result of BCOPL emissions.</p> <p><u>Admin non-compliant</u> as status of extraordinary event days has not been agreed with the Secretary and DPIE was not notified of recorded exceedances of the relevant air quality criteria. Whilst it is acknowledged that exceedances of the air quality criteria do not necessarily equate to a non-compliance, it is considered that all exceedances should be notified to DPIE, particularly given that note (a) to Schedule 3 Condition 27 states that criteria are "Total impact (ie incremental increase in concentrations due to the project plus background concentrations due to all other sources)". If the exceedance is not attributable to BCOPL operations, evidence of the investigation or data that led to this conclusion should be provided with the notification.</p>	<p>1) a table of all days with exceedances of the 24-hour average criteria be included in the annual reports together with findings of any investigations and status of days as determined by DPIE (extraordinary day or not); and</p> <p>2) all valid data captured by the TEOM be reported and included in the chart. Extraordinary days may then be excluded from the annual average calculations.</p>

Non-compliance Number	Schedule and Condition Number	Condition	Compliance Status	Evidence	Recommendation
NC5	Schedule 3 Condition 31	<p>The Proponent shall prepare and implement an Air Quality and Greenhouse Gas Management Plan for the project to the satisfaction of the Secretary. This plan must:</p> <p>(a) be prepared in consultation with the EPA and the CCC, and be submitted to the Secretary for approval within 6 months from the date of project approval;</p> <p>(b) integrate the recommendations of a Site Specific Best Management Determination and Reactive Dust Management Strategy prepared to the satisfaction of the EPA;</p> <p>(c) describe the measures that would be implemented to ensure:</p> <p>...</p> <p>(d) describe the proposed air quality management system;</p> <p>(e) include a risk/response matrix to codify mine operational responses to varying levels of risk resulting from weather conditions and specific mining activities;</p> <p>(f) include commitments to provide summary reports and specific briefings at CCC meetings on issues arising from air quality monitoring;</p> <p>(g) include an air quality monitoring program that:</p> <p>....</p> <p>(h) includes a Leard Forest Mining Precinct Air Quality Management Strategy that has been prepared in consultation with other coal mines in the Precinct to minimise the cumulative air quality impacts of all mines within the Precinct, that includes:</p>	Administrative Non-Compliance	<p>There is evidence of the site not effectively implementing the AQGHGMP as follows:</p> <p>1) DPIE was not notified of recorded exceedances of the relevant air quality criteria. Whilst it is acknowledged that exceedances of the air quality criteria do not necessarily equate to a non-compliance, it is considered that all exceedances should be notified to DPIE, particularly given that note (a) to Schedule 3 Condition 27 states that criteria are "Total impact (ie incremental increase in concentrations due to the project plus background concentrations due to all other sources)". If the exceedance is not attributable to BCOPL operations, evidence of the investigation or data that led to this conclusion should be provided with the notification;</p> <p>2) while notes relating to exceedances of relevant air quality criteria were provided, these exceedances (even though not necessarily non-compliances) were not logged in the Incident Register and evidence of completion of BCOPL Incident Report Forms were not provided. It is also noted that a standard methodology was not adopted for the presentation of the investigation findings.</p>	<p>NC REC: all exceedances of the relevant air quality criteria be investigated in accordance with the requirements of the AQGHGMP to determine if they are attributable to BCOPL operations</p> <p>NC REC: DPIE should be informed of any exceedance of the relevant air quality criteria, regardless of the exceedance being a non-compliance or not. If the exceedance is not attributable to BCOPL operations, evidence of the investigation or data that led to this conclusion should be provided with the notification;</p> <p>NC REC: a standard methodology should be developed for the investigation and reporting of any exceedances recorded by the air quality monitors.</p>

Non-compliance Number	Schedule and Condition Number	Condition	Compliance Status	Evidence	Recommendation
NC6	Schedule 3 Condition 38b	<p>A Surface Water Management plan, which includes:</p> <ul style="list-style-type: none"> - Detailed baseline data on surface water flows and quality in the waterbodies that could potentially be affected by the project. - Detailed baseline data on soils within the irrigation management area; - Detailed baseline data on hydrology across the downstream drainage system of the Namoi River floodplain from the mine site to the Namoi River. - A detailed description of the water management system on site, including the; <ul style="list-style-type: none"> • Clean water diversion system • Erosion and sediment controls (dirty water system); • Mine water management systems irrigation areas • Discharge limits in accordance with EPL requirements • Water storages • Haul road and Boggabri Rail Spur Line and bridge flood and water diversions; - Detailed plans including design objectives and performance criteria for: <ul style="list-style-type: none"> • Design and management of final voids • Design and management for the emplacement of reject materials, sodic and dispersible soils and acid or sulphate generating materials. 	Non-Compliant (Low Risk)	<p>The implementation of the currently approved surface water management plan is non-compliant as the clean water drain presented in Appendix A of the SWMP to the north of the disturbance area has been mined through and has not been reinstated. It is acknowledged that the update to the SWMP (Rev8) has been prepared depicting the absence of the clean water drain and that a report has been prepared by GHD to justify not reinstating this drain and to evidence that the site is not harvesting clean water outside of harvestable rights allowances.</p> <p>The update to the SWMP was submitted to the DPIE for approval in July 2019; however, given that it has yet to be approved the implementation of the approved SWMP is non-compliant. It is recommended to continue to liaise with DPIE with regard to the approval of the revised water management system and the removal of the clean water diversion.</p>	<p>NC REC: continue to liaise with DPIE with regard to the approval of the revised water management system and the removal of the clean water diversion.</p>

<p>NC7</p>	<p>Schedule 3 Condition 38(c)</p>	<p>(c) a Groundwater Management Plan, which includes:</p> <ul style="list-style-type: none"> ☑ detailed baseline data of groundwater levels, yield and quality in the region, and privately-owned groundwater bores including a detailed survey/schedule of groundwater dependent ecosystems (including stygo-fauna), that could be affected by the project; ☑ the monitoring and testing requirements specified in the PAC recommendations for groundwater management as set out in Appendix 6; ☑ detailed plans, including design objectives and performance criteria, for the design and management of the proposed final void; ☑ groundwater assessment criteria including trigger levels for investigating any potentially adverse groundwater impacts; ☑ a program to monitor and assess: <ul style="list-style-type: none"> o groundwater inflows to the open cut mining operations; o the seepage/leachate from water storages, backfilled voids and the final void; o interconnectivity between the alluvial and bedrock aquifers; o background changes in groundwater yield/quality against mine-induced changes; o the impacts of the project on: <ul style="list-style-type: none"> - regional and local (including alluvial) aquifers; - groundwater supply of potentially affected landowners; - aquifers potentially affected by the mine irrigation area; - groundwater dependent ecosystems (including potential impacts on stygo-fauna) and riparian vegetation. ☑ a program to validate the groundwater model for the project, including an independent review of the model every 3 years, and comparison of monitoring results with modelled predictions; and ☑ a plan to respond to any exceedances of the performance criteria; and 	<p>Administrative Non- Compliance</p>	<p>"Preparation Approved Groundwater Management Plan (May 2017) reviewed.</p> <ul style="list-style-type: none"> * Baseline data provided in Section 3.3 * Monitoring and testing requirements in Section 4 * Trigger levels included in Section 5 * Section 7.3 states groundwater model will be reviewed very three years. * Procedures for managing exceedances is included <p>Implementation Groundwater monitoring is undertaken quarterly with a detailed analysis of results presented in the Annual Groundwater Monitoring Review undertaken by GHD. The review assesses BCM's groundwater monitoring data and provides analyses on groundwater levels and groundwater quality. Findings from the review are summarised in the Annual Reviews.</p> <p>Based on the results presented in the Annual Reviews, groundwater levels have remained within trigger levels during the audit period.</p> <p>Groundwater bores 2102 and 2103 were not monitored in 2018 and 2019 due to damage of the bore casing. Monitoring at bores 2104 and 2105 was not undertaken as they were not accessible and MW6 was not monitored as it was blocked.</p> <p>Boggabri, Tarrawonga, Maules Creek Complex Numerical Model Update prepared by AGE dated 17 August 2018. "</p>	<p>NC REC: Continue to liaise with EPA regarding EPL variation to ensure that monitoring points in EPL align with those utilised by the site.</p>
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Non-compliance Number	Schedule and Condition Number	Condition	Compliance Status	Evidence	Recommendation
NC8	Schedule 3 Condition 64	Within 12 months of the completion of the Gunnedah Traffic Study, the Proponent shall provide a report of the outcomes of this liaison and identify any proposals recommended by either the Proponent or the Gunnedah Shire Council towards implementing reasonable and feasible recommendations, to the satisfaction of the Secretary."	Administrative Non-Compliance	No evidence of a report could be provided however, the rail over pass in Gunnedah was constructed during the audit period and opened to traffic in November 2020. This condition can be closed out.	
NC9	Schedule 4 Condition 3	As soon as practicable after obtaining monitoring results showing: (a) An exceedance of the relevant criteria in schedule 3, the Proponent shall notify the affected landowner in writing of the exceedance, and provide regular monitoring results to each of these parties until the projects is complying with the relevant criteria again; and (b) An exceedance of the relevant air quality criteria in schedule 3, the Proponent shall send a copy of: - The NSW Health fact sheet entitled "mine Dust and You" (as may be updated from time to time); and The air quality monitoring data, in an appropriate format so that a medical practitioner can assist the resident in making an informed decision on the health risks associated with occupation of the property to the landowner/s and/or existing tenants of the land.	Non-Compliant (Low Risk)	(a) Non-compliant - A blast on the 21 August 2019 exceeded the limit of 120 dBL. A recording of 123dBL was recorded at Wilderoi East. Verbal notification was provided to landowners. However, this was not notified to EPA and residents until 28 August. The DPIE and EPA issued notices for the non-reporting. No reportable dust exceedances were recorded in the audit period.	NC REC: Implement changes to the TARP notifications system to distinguish "triggers" from "exceedances" so that reportable exceedances are not missed.

Non-compliance Number	Schedule and Condition Number	Condition	Compliance Status	Evidence	Recommendation
NC10	Schedule 5 Condition 4	<p>"By the end of March each year, the Proponent shall review the environmental performance of the project for the previous calendar year to the satisfaction of the Secretary. This review must:</p> <ul style="list-style-type: none"> (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; (b) include a comprehensive review of the monitoring results and complaints records of the project over the past year, which includes a comparison of these results against the: <ul style="list-style-type: none"> ☑ relevant statutory requirements, limits or performance measures/criteria; ☑ monitoring results of previous years; and ☑ relevant predictions in the EA; (c) identify any non-compliance over the last year, and describe what actions were (or are being) taken to ensure compliance; (d) identify any trends in the monitoring data over the life of the project; (e) identify any discrepancies between the predicted and actual impacts of the project, and analyse the potential cause of any significant discrepancies; and (f) describe what measures will be implemented over the next year to improve the environmental performance of the project." 	Administrative Non-Compliance	<p>"Annual reviews for 2017, 2018 and 2019 were provided. They are also available on the BCOPL website. Each were submitted to DPIE prior to the end of March.</p> <ul style="list-style-type: none"> A) Rehabilitation details are provided in Section 8 of the Annual Review b) Monitoring results and comparison with performance are included in Section. 4. Complaints are summarised in Section 7.3 c) non-compliances are summarised in Section 5 d) trends in monitoring are included in Section 4. As noted in the previous audit, while long term trends associated with groundwater are presented in the annual reviews, there is little information relating to longer terms trends for air quality, surface water and noise over the life of mine as required by this condition. e) discrepancies against predictions (as relevant) are covered in Section 4 f) next years activities and improvements are included in section 5 and 9" 	<p>Improvement REC: Include additional information in the annual reviews regarding longer term trends particularly in terms of surface water, noise and air quality</p>

Non-compliance Number	Schedule and Condition Number	Condition	Compliance Status	Evidence	Recommendation
NC11	Schedule 5 Condition 5	<p>"Within 3 months of the submission of:</p> <ul style="list-style-type: none"> (a) an annual review under condition 4 above; (b) an incident report under condition 8 below; (c) an audit under condition 10 below; and (d) any modification to the conditions of this approval, <p>the Proponent shall review the strategies, plans, and programs required under this approval.</p> <p>Where this review results in revisions to any such document, then within 4 weeks of the completion of the revision, unless the Secretary agrees otherwise, the revised document must be submitted to the Secretary for approval."</p>	Administrative Non-Compliance	<p>"It is acknowledged that BCOPL has been progressively working on updating management plans for several years with revised versions submitted to department.</p> <p>Management plans and strategies have been updated over the last three years with the exception of the CHMP which is dated November 2016. "</p>	Improvement REC: Prepare a document review register to evidence dates when documents are reviewed. Register should identify if any changes are identified as being required.
NC12	Schedule 5 Condition 8	<p>The Proponent shall notify, at the earliest opportunity, the Secretary and any other relevant agencies of any incident that has caused, or threatens to cause, material harm to the environment. For any other incident associated with the project, the Proponent shall notify the Secretary and any other relevant agencies as soon as practicable after the Proponent becomes aware of the incident. Within 7 days of the date of the incident, the Proponent shall provide the Secretary and any relevant agencies with a detailed report on the incident, and such further reports as may be requested.</p>	Non-Compliant (Low Risk)	<p>This exceedance was reported to DPIE on 28 August. BCOPL was issued with a warning letter from DPIE on 18 October 2019 for not reporting the blast overpressure exceedance within seven days of the incident. Notification of the exceedance was sent via text and email but was originally missed. This is attributable to the amount of trigger text messages which were received, particularly under the old system.</p>	NC REC: Implement changes to the TARP notifications system to distinguish "triggers" from "exceedances" so that reportable exceedances are not missed.

Non-compliance Number	Schedule and Condition Number	Condition	Compliance Status	Evidence	Recommendation
EA Statement of Commitments					
NC13	9	Boggabri Coal will manage its blasting practices such that the recommended DECCW guidelines, existing at the time of approval; will be met at all privately owned receivers.	Non-Compliant (Low Risk)	As reported in the 2019 Annual Review, a blast fired on 21 August 2019 recorded an airblast overpressure of 123 dBL exceeding the 120dBL criteria. This exceedance was attributed to a short-term fluctuation in the upper air wind conditions that could not have been reasonably foreseen.	<p>NC REC: Ensure blasts are undertaken under appropriate weather conditions. Delays to blasts should be implemented if required based on real time weather data review.</p> <p>NC REC: Implement changes to the TARP notifications system to distinguish "triggers" from "exceedances" so that reportable exceedances are not missed.</p>

Non-compliance Number	Schedule and Condition Number	Condition	Compliance Status	Evidence	Recommendation																																																				
EPL 12407																																																									
NC14	P1.3	<p>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.</p> <table border="1"> <thead> <tr> <th colspan="4">Water and land</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>1</td> <td>Wet weather discharge Discharge water quality monitoring</td> <td>Wet weather discharge Discharge water quality monitoring</td> <td>Sediment dam SD6, as shown on Plan No. 1 EPL Boundary and Environmental Monitoring locations dated 26-6-18. 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In February 2020 there was one discharge event. Sampling was undertaken at SW1, SW2 and SD6.</p> <p>Groundwater bores 2102 and 2103 were not monitored in 2018 and 2019 due to damage of the bore casing. Monitoring at 2104 and 2105 was not undertaken as they were not accessible and MW6 was not monitored as it was blocked.</p>	<p>NC REC: Continue to liaise with EPA regarding EPL variation to ensure that monitoring points in EPL align with those utilised by the site.</p>
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NC15	L4.1	The airblast overpressure level from blasting operations at the premises must not exceed 120dB (Lin Peak) at any time at any noise sensitive locations. Error margins associated with any monitoring equipment used to measure this are not to be taken into account in determining whether or not the limit has been exceeded.	Non-Compliant (Low Risk)	<p>'As reported in the 2019 Annual Review, a blast fired on 21 August 2019 recorded an airblast overpressure of 123 dBL exceeding the 120dBL criteria. This exceedance was attributed to a short-term fluctuation in the upper air wind conditions that could not have been reasonably foreseen.</p> <p>An incident report was prepared which concluded that:</p> <p>Blast design investigations indicate that tie in and firing conditions of the blast would ordinarily result in basic blast emission of less than 115dBL and that 123dBL can only be explained by the effects of meteorology.</p> <p>This exceedance was reported to DPIE on 28 August. BCOPL was issued with a warning letter from DPIE on 18 October 2019 for not reporting the blast overpressure exceedance within seven days of the incident. Notification of the exceedance was sent via text and email but was originally missed. This is attributable to the amount of trigger text messages which were received, particularly under the old system.</p>	<p>NC REC: Ensure blasts are undertaken under appropriate weather conditions. Delays to blasts should be implemented if required based on real time weather data review.</p> <p>NC REC: Implement changes to the TARP notifications system to distinguish "triggers" from "exceedances" so that reportable exceedances are not missed.</p>																
NC16	M2.2	<p>Air Monitoring Requirements</p> <p>POINT 24,25,26</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>Particulates - Deposited Matter</td> <td>grams per square metre per month</td> <td>Continuous</td> <td>AM-19</td> </tr> </tbody> </table> <p>POINT 45</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>Every 6 days</td> <td>AM-19</td> </tr> </tbody> </table>	Pollutant	Units of measure	Frequency	Sampling Method	Particulates - Deposited Matter	grams per square metre per month	Continuous	AM-19	Pollutant	Units of measure	Frequency	Sampling Method	PM10	micrograms per cubic metre	Every 6 days	AM-19	Administrative Non-Compliance	In the 2019 - 2020 annual return sampling at three of the HVAS was not undertaken as private residences requested urgent removal of the monitoring units.	NC REC: Continue to liaise with EPA regarding EPL variation to ensure that monitoring points in EPL align with those utilised by the site.
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NC19	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.	Administrative Non-Compliance	'As reported in the 2019 Annual Review, a blast fired on 21 August 2019 recorded an airblast overpressure of 123 dBL exceeding the 120dBL criteria. This exceedance was attributed to a short-term fluctuation in the upper air wind conditions that could not have been reasonably foreseen.	NC REC: Implement changes to the TARP notifications system to distinguish "triggers" from "exceedances" so that reportable exceedances are not missed.																																																																																												

Non-compliance Number	Schedule and Condition Number	Condition	Compliance Status	Evidence	Recommendation
CL 368					
NC20	4	(a) The lease holder must lodge Environmental Management Reports (EMR) with the Director-General annually or at dates otherwise directed by the Director-General. (b) The EMR must: <ul style="list-style-type: none"> (i) report against compliance with the MOP; (ii) report on progress in respect of rehabilitation completion criteria; (ii) report on the extent of compliance with regulatory requirements; and (iii) have regard to any relevant guidelines adopted by the Director-General. 	Administrative Non-Compliance	The site annual reviews are prepared to meet this condition. Annual reviews are prepared for the site for the period of 1 January to 31 December. All Annual Reviews for audit period are signed and dated prior to end of March. Also sighted submission confirmation of submission for each year. The annual reviews generally cover these requirements. However, progression towards rehabilitation completion criteria is only mentioned with regard to the species richness analogue benchmark. Rehabilitation areas should be tracked against the phases in the MOP with evidence provided to justify whether the rehabilitation has met the rehabilitation objectives of that phase and domains. It is noted that the Resources Regulator has recently released proposed amendments to the rehabilitation compliance and reporting requirements	<p>NC REC: Future Annual Reviews must report on progress in respect of rehabilitation completion criteria.</p> <p>NC REC: Review rehabilitation monitoring process in line with the Resources Regulator Annual Rehabilitation Report guidance (http://www.resourceregulators.nsw.gov.au/_data/assets/pdf_file/00171262330/Form-And-way-Annual-rehabilitation-report-and-forward-program-for-large-mines.pdf) to ensure that progress against completion criteria is completed as required.</p>

Non-compliance Number	Schedule and Condition Number	Condition	Compliance Status	Evidence	Recommendation
NC21	10	<p>(a) Ground Vibration The lease holder must ensure that the ground vibration peak particle velocity generated by any blasting within the lease area does not exceed 10 mm/second and does not exceed 5 mm/second in more than 5% of the total number of blasts over a period of 12 months at any dwelling or occupied premises as the case may be, unless determined otherwise by the Department of Environment, Climate Change and Water.</p> <p>(b) Blast Overpressure The lease holder must ensure that the blast overpressure noise level generated by any blasting within the lease area does not exceed 120 dB (linear) and does not exceed 115 dB (linear) in more than 5% of the total number of blasts over a period of 12 months, at any dwelling or occupied premises, as the case may be, unless determined otherwise by the Department of Environment, Climate Change and Water.</p>	Non-Compliant (Low Risk)	A blast on the 12 August 2019 exceeded the limit of 120 dBA. A recording of 123dBA was recorded at Wilderoi East. Landowners were verbally notified and notification was provided to DPIE as per PA 09_0182	NC REC: Ensure blasts are undertaken under appropriate weather conditions. Delays to blasts should be implemented if required based on real time weather data review.
ML 1775					
No identified non-compliances					

8 Recommendations and Opportunities for Improvement

Table 14 consolidates all the recommended actions of this audit as listed in **Table 13** and **Appendix C**. Where required, audit recommendations have been included to address identified non-compliances. In addition, some recommendations have been included as potential areas for systems and compliance improvement. Recommendations specifically to address non-compliances are identified as *NC RECs*; while opportunities for improvement are identified as *Improvement RECs*.

These recommendations may be used to prepare the response to recommendations and audit action plan.

Table 14 Audit Recommendations

Rec #.	Aspect	Recommendation
Non-compliance recommendations		
NC REC 1	Noise	Continue investigations and dialogue with DPIE regarding sound power level requirements.
NC REC 2	Blasting	Ensure blasts are undertaken under appropriate weather conditions. Delays to blasts should be implemented if required based on real time weather data review.
NC REC 3	Blasting / General	Implement changes to the TARP notifications system to distinguish "triggers" from "exceedances" so that reportable exceedances are not missed
NC REC 4	Air quality	It is recommended that in line with the requirements of note (d) of Schedule 3 Condition 27 of the Boggabri Coal PA, confirmation be sought from the secretary on the status of days believed to be extraordinary events prior to classifying any day as an extraordinary event day and removing the day from the annual average.
NC REC 5	Air quality	All exceedances of the relevant air quality criteria be investigated in accordance with the requirements of the AQGHGMP to determine if they are attributable to BCOPL operations
NC REC 6	Air quality	DPIE should be informed of any exceedance of the relevant air quality criteria, regardless of the exceedance being a non-compliance or not. If the exceedance is not attributable to BCOPL operations, evidence of the investigation or data that led to this conclusion should be provided with the notification;
NC REC 7	Air quality	A standard methodology should be developed for the investigation and reporting of any exceedances recorded by the air quality monitors
NC REC 8	Air quality	In the interest of transparency it is recommended that: 1) a table of all days with exceedances of the 24-hour average criteria be included in the annual reports together with findings of any investigations and status of days as determined by DPIE (extraordinary day or not); and 2) all valid data captured by the TEOM be reported and included in the chart. Extraordinary days may then be excluded from the annual average calculations.
NC REC 9	Surface Water Management	Continue to liaise with DPIE with regard to the approval of the revised water management system and the removal of the clean water diversion.
NC REC 10	Reporting / rehabilitation	Review rehabilitation monitoring process in line with the Resources Regulator Annual Rehabilitation Report guidance (http://www.resourceregulators.nsw.gov.au/_data/assets/pdf_file/00171262330/Form-And-way-Annual-rehabilitation-report-and-forward-program-for-large-mines.pdf) to ensure that progress against completion criteria is completed as required.
NC REC 11	Monitoring / EPL	Continue to liaise with EPA regarding EPL variation to ensure that monitoring points in EPL align with those utilised by the site.
Improvement Recommendations		
Improvement REC 1	Blasting	Recommend for drone footage to continue for longer so that future complaints may be verified to determine whether blast fume did remain and travel off site at a distance.

Rec #.	Aspect	Recommendation
Improvement REC 2	Noise Management Plan	Update the Noise Management Plan to reflect new TARPs developed since the transition to Teledata real time system.
Improvement REC 3	Dust	Regularly include discussion around dust impacts in morning briefings and make EPA Dust Handbook available to all operators. Empower operators to contact OC to request water cart or mitigation if dust generation is observed.
Improvement REC 4	Weed management	Undertake weed management on topsoil stockpiles to mitigate risk of weed infestation to rehabilitation areas.
Improvement REC 5	Surface water management	Undertake appropriate investigations to determine how requirements for 1 GL air capacity can be retained following mining through of MW5.
Improvement REC 6	EPL	Vary the EPL in consultation with EPA to align with the appropriate borehole locations and remove those that have been mined through.
Improvement REC 7	Heritage	Implement the outstanding recommendations from the 2017 Audit as reported in the 2019 Annual Review in the updated CHMP.
Improvement REC 8	Heritage	Incorporate the recommended improvements from the OEH into the revised CHMP.
Improvement REC 9	Rehabilitation	Undertake further investigations to confirm that the proposed "rice paddy" final landform meets this development consent condition of "constructed landforms drain to the natural environment" and the MOP rehabilitation objective of creating a stable free draining landform.
Improvement REC 10	Rehabilitation	Undertake additional weed management in rehabilitation areas and repairs to erosion / scouring as required.
Improvement REC 11	Rehabilitation	Consider cover crops and/or hydromulch to assist with stabilisation in tubestock areas until tubestock takes off and ground cover increases.
Improvement REC 12	Annual review	Include additional information in the annual reviews regarding longer term trends particularly in terms of surface water, noise and air quality
Improvement REC 13	Management plans	Prepare a document review register to evidence dates when documents are reviewed. Register should identify if any changes are identified as being required.
Improvement REC 14	Real time monitoring data	Include the daily operational response information in the real time summary report available on the website to evidence to the public that operational changes are made.
Improvement REC 15	WAL reporting	It is recommended that the Annual Review includes additional information to detail the amounts of water in the account at the start of the accounting period and to provide further justification, transparency and evidence that the total water extraction remains within the total allowed allocations.

9 Conclusion

This Independent Environmental Audit has been prepared for the Boggabri Coal Mine to meet the requirements of Schedule 5 Condition 10 and 11 of Project Approval PA 09_0182.

The audit has been completed in accordance with the *Independent Audit Guideline* (DPIE, 2015) and has assessed compliance with:

- Project Approval – PA 09_0182 (including management plans and programs);
- Environment Protection Licence (EPL) – EPL 12407;
- Environmental Assessment (EA) Modification 7 (MOD 7) Consolidated Statement of Commitments (as per Appendix 5 of PA 09_0182);
- Mining Leases – CL 368 and ML 1755; and
- Water Access Licences – WAL 2571, WAL 2572, WAL 2595, WAL 2596, WAL 12691, WAL 12767, WAL 15037, WAL 24103, WAL 29473, WAL 29562, WAL 36547, WAL 37067, WAL 37519 and WAL 42234.

The site component of the audit was undertaken between 4 and 6 November 2020, with SLR being supplied additional documentation and information as requested following the site inspection.

Overall, 267 conditions were identified, 46 (17%) were not triggered during the audit period, and 23 (9%) were a note for information. Of the 198 remaining audited conditions 172 (87%) were compliant, 9 (5%) were non-complaint (low risk) and 12 (6%) were administrative non-compliances. Five (5) conditions could not be verified based on available information. No high or medium risk non-compliances were identified. SLR has provided recommendations to address identified non-compliances and to improve environmental performance.

During the site inspection it was evident that the site was generally being managed with a commitment to minimise the impact on the environment and surrounding residents.

The following areas of good performance were noted during the audit:

- BCOPL staff were very well prepared for the audit and were readily available to assist prior to, during and post audit;
- BCOPL had excellent record keeping during the audit period;
- Knowledge of environmental issues and procedures was evident in all operational personnel interviewed during the audit;
- Generally good housekeeping and hydrocarbon management with hydrocarbons stored in appropriately bunded areas;
- Very little evidence of any hydrocarbon staining around the site;
- Excellent waste management, with best practice signage and waste appropriately segregated;
- Minimal dust emissions around the CHPP and Mine Infrastructure area with sprays in evidence at key dust generating locations;

-
- Some dust was evident in the pit; however, the Environmental Superintendent actioned promptly by contacting the OC and additional water carts were deployed. It has been recommended to display the EPA Dust Handbook in briefing rooms and crib rooms and discuss in toolbox talks to empower all personnel to request changes to operations based on dust emissions;
 - Minimal evidence of erosion or sedimentation around the site. Evidence of repairs to erosion where it had occurred in rehabilitation areas;
 - Dirty water pipelines are generally contained in drainage lines in the dirty water management system;
 - Older rehabilitation areas are well established with good vegetation cover;
 - Incident investigation and reporting has been completed with reporting outlined within the Annual Reviews and evidence of incident investigations provided;
 - Based on information provided the site generally has a good relationship with the community. Evidence through community notifications, complaints management and the Community Consultative Committee;
 - Heritage Management and the presentation of *The Kamilaroi* documentary which was presented at a screening staged in Gunnedah.

The following general areas of improvement were noted during the audit:

- Some weeds evident in topsoils stockpiles and mine owned agricultural properties which should be included in the weed control program;
- Some improvements to blast fume monitoring have been recommended;
- Updates to TARP notifications and alarms have been recommended so non-compliances are not missed;
- Approval of the updates to the SWMP is required to reflect the current water management system including the removal of the clean water drain to the north of the disturbance area;
- Variation to the EPL is required to align with current monitoring locations;
- Further investigations are required to confirm that the proposed "rice paddy" final landform meets this development consent condition of "constructed landforms drain to the natural environment" and the MOP rehabilitation objective of creating a stable free draining landform.

Recommended actions for improvements have been included in **Table 14**.

APPENDIX A

Auditor Endorsement Letters



Mr Hamish Russell
Environmental Superintendent
Idemitsu Boggabri Coal
386 Leard Forest Road
BOGGABRI NSW 2382

Via Email ONLY: hamish.russell@boggabricoal.com.au

29/05/2020

Dear Mr Russell,

**Agreement of Independent Auditor
Boggabri Coal Project (PA 09_0182)**

I refer to Idemitsu Boggabri Coal's (IBC) submission, dated 15 May 2020, seeking the agreement of the Secretary of the Department of Planning, Industry and Environment (the Department) of a suitably qualified, experienced and independent audit team to undertake an Independent Environmental Audit (IEA) of the Boggabri Coal Project.

In accordance with Schedule 5, Condition 10 of PA 09_0182 (the Approval, as modified) and the Department's *Post-approval requirements for State Significant Developments – Independent Audit Guideline (October 2015)*, the Secretary has agreed to the following audit team:

- Christopher Jones – Lead Environmental Auditor;
- Nathan Archer – Assistant Environmental Auditor and Noise Specialist;
- Ali Naghizadeh – Air Quality Specialist; and
- Jodie Benton – Heritage Specialist.

Please ensure this correspondence is appended to the Independent Audit Report. The Independent Audit must be prepared, undertaken and finalised in accordance with the Department's *Post-approval requirements for State Significant Developments – Independent Audit Guideline (October 2015)*. Failure to meet these requirements will require revision and resubmission.

The Department reserves the right to request an alternate auditor or audit team for future audits. Notwithstanding the agreement for the above listed audit team for this Project, each respective project approval or consent requires a request for the agreement to the auditor or audit team be submitted to the Department, for consideration of the Secretary. Each request is reviewed and depending on the complexity of future projects, the suitability of a proposed auditor or audit team will be considered.

Additionally, the Department has considered IBC's request to remove the biodiversity aspects audited separately and not considered as part of the 2020 IEA. The Department has determined in

this instance to require IBC to include the biodiversity aspects in Schedule 3, Conditions 39 – 54 of the Approval in the 2020 IEA.

The Department considers that enough time has passed since the previous independent biodiversity audit in 2018 and that the next is not due under Schedule 3, Condition 53 of the Approval until December 2022 to warrant its inclusion in the 2020 IEA.

If you have any questions, please contact James Epstein, Senior Compliance Officer, on (02) 6575 3419 or email to compliance@planning.nsw.gov.au

Yours sincerely,

A handwritten signature in black ink that reads "H Watters". The signature is written in a cursive, flowing style.

Heidi Watters
Team Leader Northern
Compliance

As nominee of the Secretary



Mr Hamish Russell
Environmental Superintendent
Idemitsu Boggabri Coal
386 Leard Forest Road
BOGGABRI NSW 2382

Via Email ONLY: hamish.russell@boggabriccoal.com.au

13/08/2020

Dear Mr Russell,

**Agreement of Independent Auditor
Boggabri Coal Project (PA 09_0182)**

I refer to Idemitsu Boggabri Coal's (IBC) submission, dated 15 May 2020, seeking the agreement of the Secretary of the Department of Planning, Industry and Environment (the Department) of a suitably qualified, experienced and independent audit team to undertake an Independent Environmental Audit (IEA) of the Boggabri Coal Project.

Reference is also made to IBC's additional submission, dated 12 August 2020, seeking the agreement of the Secretary of the Department of a suitably qualified, experienced and independent replacement auditors, following the resignation of the previously endorsed Lead Auditor.

In accordance with Schedule 5, Condition 10 of PA 09_0182 (the Approval, as modified) and the Department's *Post-approval requirements for State Significant Developments – Independent Audit Guideline (October 2015)*, the Secretary has agreed to the following audit team:

- Nathan Archer – Lead Environmental Auditor and Noise Specialist;
- Renae Gifford – Assistant Environmental Auditor;
- Ali Naghizadeh – Air Quality Specialist; and
- Jodie Benton – Heritage Specialist.

The Independent Audit must be prepared, undertaken and finalised in accordance with the Department's *Post-approval requirements for State Significant Developments – Independent Audit Guideline (October 2015)*. Failure to meet these requirements will require revision and resubmission.

The Department reserves the right to request an alternate auditor or audit team for future audits.

Notwithstanding the agreement for the above listed audit team for this Project, each respective project approval or consent requires a request for the agreement to the auditor or audit team be submitted to the Department, for consideration of the Secretary. Each request is reviewed and depending on the complexity of future projects, the suitability of a proposed auditor or audit team will be considered.

The Department notes that previous correspondence sent to IBC regarding the inclusion of the biodiversity offsets in the 2020 IEA remains valid. Please ensure that all previous Departmental

correspondence regarding the IEA, including the original endorsement of auditors letter, is attached as an appendix to the 2020 IEA report.

If you have any questions, please contact James Epstein, Senior Compliance Officer, on (02) 6575 3419 or email to compliance@planning.nsw.gov.au

Yours sincerely

A handwritten signature in black ink that reads "H Watters". The signature is written in a cursive, flowing style.

Heidi Watters
Team Leader Northern
Compliance

As nominee of the Planning Secretary



Mr Hamish Russell
Environmental Superintendent
Idemitsu Boggabri Coal
386 Leard Forest Road
BOGGABRI NSW 2382

Via Email ONLY: hamish.russell@boggabricoal.com.au

31/08/2020

Dear Mr Russell,

**Agreement of Independent Auditor
Boggabri Coal Project (PA 09_0182)**

I refer to Idemitsu Boggabri Coal's (IBC) submission, dated 15 May 2020, seeking the agreement of the Secretary of the Department of Planning, Industry and Environment (the Department) of a suitably qualified, experienced and independent audit team to undertake an Independent Environmental Audit (IEA) of the Boggabri Coal Project.

Reference is also made to IBC's additional submission, dated 12 August 2020, seeking the agreement of the Secretary of the Department of a suitably qualified, experienced and independent replacement auditors, following the resignation of the previously endorsed Lead Auditor.

Reference is further made to the IBC's additional submission, dated 25 August 2020, seeking the agreement of the Secretary of the Department of a suitably qualified, experienced and independent qualified ecology auditors, as required.

In accordance with Schedule 5, Condition 10 of PA 09_0182 (the Approval, as modified) and the Department's *Post-approval requirements for State Significant Developments – Independent Audit Guideline (October 2015)*, the Secretary has agreed to the following audit team:

- Nathan Archer – Lead Environmental Auditor and Noise Specialist;
- Renae Gifford – Assistant Environmental Auditor;
- Ali Naghizadeh – Air Quality Specialist;
- Jodie Benton – Heritage Specialist;
- Travis Peake – Biodiversity Expert Auditor;
- Belinda Howe – Assistant Biodiversity Auditor; and
- Kathy Down – Administrative Support.

The Independent Audit must be prepared, undertaken and finalised in accordance with the Department's *Post-approval requirements for State Significant Developments – Independent Audit Guideline (October 2015)*. Failure to meet these requirements will require revision and resubmission.

The Department reserves the right to request an alternate auditor or audit team for future audits.

Notwithstanding the agreement for the above listed audit team for this Project, each respective project approval or consent requires a request for the agreement to the auditor or audit team be submitted to the Department, for consideration of the Secretary. Each request is reviewed and depending on the complexity of future projects, the suitability of a proposed auditor or audit team will be considered.

The Department notes that previous correspondence sent to IBC regarding the inclusion of the biodiversity offsets in the 2020 IEA remains valid.

Further, the Department notes IBC's request to extend the due date of the submission of the IEA to 20 December 2020. The Department in this instance has determined to grant the requested extension of time.

Finally, please ensure that this letter and all previous Departmental correspondence regarding the IEA, including the original endorsement of auditors letter, is attached as an appendix to the 2020 IEA report.

If you have any questions, please contact James Epstein, Senior Compliance Officer, on (02) 6575 3419 or email to compliance@planning.nsw.gov.au

Yours sincerely

A handwritten signature in black ink that reads "H Watters". The signature is written in a cursive, flowing style.

Heidi Watters
Team Leader Northern
Compliance

As nominee of the Planning Secretary

APPENDIX B

CCC Consultation Response

SLR Audit Questions – 19th Oct. 2020

Key issues that I and my community feel the audit team's attention needs to be drawn to:

The last Independent Audit by SLR October 2017 indicated that:

Schedule 3 condition 38 b) relating to the Surface Water Management Plan - **Non-compliant**

Schedule 3 condition 38 c) Groundwater Management Plan – **Non-Compliant**

Groundwater/Pit water

Monitoring, assessment and reporting of groundwater inflows to the open cut mining operations. Many community members are concerned about the underground aquifers and the effects that all three mining operations in the Leard Forest mining precinct are having on the surrounding and immediate aquifers, ephemeral creeks such as Bollol & Back Creek and further afield.

- What are the new requirements by NRAR as a result of the Maules Creek investigations that would also apply to Boggabri Coal?
- Where are these new requirements evidenced in the licences, leases or management plans?
- How is the mine complying with any new requirements put out by NRAR as a result of the Maules Creek investigation? What compliance level is being achieved?

Has Boggabri Coal undertaken any improvements to their water monitoring regime as it relates to the exiting or now updated Boggabri Ground Water Model and the existing or now revised Regional Water Management Strategy?

e.g.

- Is there any runoff that should be diverted that isn't?
- Are there additional alluvium monitoring bores that need to be put in place as a result of the increase in Maules Creek and Boggabri Groundwater licences.
- Where are these actual improvements/ additional or improved monitoring occurring on/around the mine site?
- Where are the improvement plans/maps available/recorded?
- Where is the data?
- Is the mine compliant with its updated improvements?

Transparency in the trading of water between the mines in the precinct and the licences that allow this trading of water and the monitoring/data and accounting of where the water is sourced from.

In light of NRAR's investigations into Surface water issues in the Maules Creek Precinct, the community would like targeted auditing regarding all water issues and not just Surface Water Management Plans.

EPL – 12407

It is noted that there was a **Non-Compliance** in relation to Location of Monitoring/discharge points and areas, please ensure that all sampling has been carried out since the last audit and that the EPL Variance has been lodged and approved.

EA Statement of Commitments – Condition 3

'Boggabri Coal 's Environmental Monitoring Programs for air quality, water quality, noise and blasting will be reviewed and updated as required, in consultation with the relevant regulators for approval by DP&I as specified in conditions of Project Approval.'

Blast fumes/Air quality.

Is the mine complying with any new requirements put out by the EPA?

Over the past few months there have been 'blast fume events' that have impacted our local community members, this is of great concern. On multiple occasions, within minutes blast fumes-nitrous oxide is reaching Glencoe Road Maules Creek. How far from the blasting site is this?

We feel there needs to be an extensive review of the blast monitoring, recording and reporting in relation to the unusual weather conditions that we sometimes experience in our local valley. Our community's health must not be compromised for the sake of a blasting event that may need to be postponed or cancelled altogether until weather conditions are optimal. Cameras that can be accessed by EPA need to be installed and further monitoring equipment that can detect NOX fumes migrating off site. Just having mine personnel reporting that they did not 'see' any blast fumes migrating off site is simply not good enough for our community to have confidence that the mine would contact them in such an event. In these past fume events' the community had to report their concerns to Boggabri Coal and the EPA.

Environmental Audit.

Clarity around the assessment, reporting and monitoring of the Biodiversity corridor boundary and biodiversity impacts due to clearing and mining. Auditing of the on-ground location/identification of the Biodiversity Corridor and its management is a priority for the community. The outcome of the most recent Boggabri Coal Project Approval, Modification 7, ensured that exploration drilling is expressly forbidden within the native vegetation corridor. The Independent Planning Commission Approval noted that portions of this native vegetation corridor overlap with the mine disturbance boundary and that this corridor is part of the *Environment Protection and Biodiversity Conservation Act 1999 (EPBC Act)* approval (EPBC 2009/5256).

- Is the Corridor fenced and signage erected so contractors know where the boundary between Whitehaven Coal & Boggabri Coal is?

Clearing must not occur in the corridor and clearing and drilling contractors must be supported by clearly understanding where the corridor is- so accidental drilling or clearing does not occur.

- How close has the exploration drilling been to the Biodiversity Corridor?
- Is Boggabri Compliant with its Approval?
- Are the locations of the drill sites transparent to the community?
- Are the drilling depths compliant with the Exploration Licence?

Assessment, reporting and monitoring of offsets

Biodiversity protection- the ongoing failure to find offsets that should have been secured by December 2014. Boggabri Coal gained approval to modify the Project Approval to allow offsets to be secured

using contemporary mechanisms under the *Biodiversity Conservation Act 2016 (BC Act)*, and/or by transferring the offsets into the National Park Estate.

Additionally, it was given permission to extend the date for which the security arrangement must be finalised to February 2020.

Have all the Offsets and the Biodiversity Corridor been secured in perpetuity as per their extension?

The community are concerned that while not reducing or removing the requirement, harm is increasing through by the delay of attaining offsets and therefore not fulfilling and acquiring /managed land to offset its vegetation destruction.

The Mod 7 IPC Statement of Reasons noted:

“38: The Department of Planning told the Independent Planning Commission that “.. the proposed conditions would strengthen the protection of the approved biodiversity offsets for the Project.”

“44: ...the Commission notes that the extension of the timeframe for securing the biodiversity offsets to February 2020 would align the Project Approval with the EPBC Act approval (EPBC 2009/5256) requirement for registration for offset areas, as stated by the Applicant in paragraph 34, and is supported by OEH.”

The IPC Decision to Approve the Modification was made saying

“... the Commission does continue to have strong concerns about the delay with securing the offsets, and urges the Applicant, OEH and the Department to expedite matters to ensure offset arrangements are finalised by February 2020, as required by the amended Condition 47 of Schedule 3.” <https://www.ipcn.nsw.gov.au/resources/pac/media/files/pac/projects/2019/01/boggabri-coal-mine-mod-7/determination/190527-boggabri-mod-7-sor.pdf>

What are the new requirements from OEH and DPE to protect actual biodiversity in the Biodiversity Management Plan to account for the delay and assure protection due to the ongoing delay to Boggabri Coal’s biodiversity obligation – even despite commitments made during the Boggabri Mod 7 hearings?

	areas agreed in writing by the minister.
As varied on the date of this notice	8. The conservation covenant(s) required under condition 7 must provide protection in perpetuity for the offset area and be registered by 15 December 2022. Progress in achieving this must be reported annually as part of the annual reporting to the Department required under condition 28.
	Evidence of compliance with condition 8 must be provided to the Department within 30 days of registering a legally binding covenant.

(Above) VARIATION OF CONDITIONS ATTACHED TO APPROVAL Boggabri Coal Mine Extension, NSW (EPBC 2009/5256).

Wimlah	1041.2	30°34'40"S 150°14'25"E	258.9	374.2	368.5	374.2 to Box Gum Woodland	742.8
Additional residual offset commitment	1000		650	350	650	350 to Box Gum Woodland	1000
Total	11599.9		1537.4	1483.3	5866.1	1831.7	7697.8

Above 1000 Ha. is required - according to Attachment B “Additional Residual offset commitment (2103) <https://www.idemitsu.com.au/mining/wp-content/uploads/2016/02/2009-5256-20200226-signed-variation.pdf>

Management, assessment, reporting and monitoring of Transport of coal samples: particularly in relation to our concerns of the cumulative traffic impacts.

APPENDIX C

Compliance Spreadsheets

Project Approval 09_0182 MOD 7

		2020 Audit Findings		
Condition Number	Condition	Compliance Status	Evidence	Recommended Action
Schedule 2 Administrative Conditions				
OBLIGATION TO MINIMISE HARM TO THE ENVIRONMENT				
1	The Proponent shall implement all reasonable and feasible measures to prevent and/or minimise any material harm to the environment that may result from the construction, operation, or rehabilitation of the development.	Compliant	Based on the information provided by BCOPL and evidence during the site inspection, there has been no evidence of material harm during the audit period and reasonable and feasible mitigation and management measures are in place..	
TERMS OF APPROVAL				
2	The Proponent shall carry out the project: (a) generally in accordance with the EA; and (b) in accordance with the statement of commitments and the conditions of this approval. Notes: • The general layout of the project is shown in Appendix 1 and Appendix 2; and • The Statement of Commitments is reproduced in Appendix 5.	Compliant	The site is generally operated in accordance with the EA and the statement of commitments and within the general layout of Appendix 1 and 2.	
3	If there is any inconsistency between the above documents, the most recent document shall prevail to the extent of the inconsistency. However, the conditions of this approval shall prevail to the extent of any inconsistency.	Note		
4	The Proponent shall comply with any reasonable requirement/s of the Secretary arising from the Department's assessment of: (a) any reports, reviews or audits commissioned by the Department regarding compliance with this approval; and (b) the implementation of any actions or measures contained in these documents	Compliant	Based on documentation provided recommendations from the last audit have largely been closed out. Remaining actions relate to the updates of the ACHMP. These have been actioned and completed in September 2020. These will be documented in the 2020 Annual Review	
LIMITS ON APPROVAL				
Mining Operations				
5	The Proponent may carry out mining operations on the site until the end of December 2033. Note: Under this approval, the Proponent is required to rehabilitate the site and carry out additional undertakings to the satisfaction of both the Secretary and Resources Regulator. Consequently, this approval 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	Operations are within the approval period	
6	The Proponent may undertake mining operations 24 hours a day, 7 days a week.	Compliant	Operations are undertaken 24/7	
7	The Proponent shall not clear native vegetation from any land within 250 metres of the adjoining Maules Creek Coal Mine mining lease boundary, except with the approval of the Secretary, following endorsement of OEH. Notes: The purpose of this condition is to ensure that a 500 metre wide native vegetation corridor is maintained between the open cut pits of the project and the adjoining Maules Creek Project, if it is approved. However, alignment of this corridor directly along the lease boundaries may not be its most efficient location, from either an environmental or economic perspective. Consequently, with the endorsement of OEH, the Secretary may approve substitution of an alternative native vegetation corridor of at least 500 metres width and equivalent or better ecosystem value, within the general vicinity of the lease boundary. See also condition 51 of Schedule 3.	Compliant	Based on mapped disturbance areas presented in Plans 3A to 3E of the MOP and current disturbance presented in the Annual Review Plans the closest disturbance to the Maules Creek Boundary is >1km.	
Coal Extraction and Stockpiles				
8	The Proponent shall not extract more than 3.5 million tonnes of ROM coal from the site in any calendar year (on a pro rata monthly basis) while ever coal is being transported along the private haul road to the coal loader, unless a road safety audit at the intersections of Leard Forest Road and Therribri Road has been completed in consultation with Council and RMS, and any recommended actions implemented to the satisfaction of the Secretary.	Compliant	As reported in the 2017, 2018 and 2019 Annual Reviews, all coal was transported via the rail spur during the audit period. The site visit confirmed there has been no road transport of coal over the audit periods.	
9	The Proponent shall not extract more than 4.5 million tonnes of ROM coal from the site in any calendar year (on a pro rata monthly basis) or undertake mining operations outside the disturbance area approved under DA36/88 MOD 2, unless the Biodiversity Management Plan required under condition 49 of Schedule 3 has been approved by the Secretary.	Compliant	The most recent Biodiversity Management Plan is dated October 2018 and was approved on 2nd July 2019.	
10	The Proponent shall not extract more than 8.6 million tonnes of ROM coal from the site in any calendar year.	Compliant	As reported in the Annual Reviews: - 2017 - 8.0 Mt - 2018 - 7.9 Mt - 2019 - 7.4 Mt - 2020 forecast - 8.4 Mt	
Coal Processing				
11	The Proponent may process up to 4.2 million tonnes of ROM coal in the CHPP in any calendar year. Note: For the purpose of this condition, processing does not include bypass coal from either the Boggabri or Tarrawonga coal mines.	Compliant	As reported in the Annual Reviews coal processed at the CHPP was as follows: - 2017 - 4.0 Mt - 2018 - 4.1 Mt - 2019 - 3.7 Mt 2020 to date volumes provided during site visit as follows: Total Overburden: 46,088,784 T Total Coal mined: 5,990,110 T Total Coal Railed: 5,042,876 T	
11A	The Proponent shall not process any coal from the Tarrawonga coal mine unless it has demonstrated that adequate water license are held to account for the required water use associated with processing this coal, to the satisfaction of the Secretary.	Compliant	As reported in the 2017, 2018 and 2019 Annual Reviews, no coal was processed from Tarrawonga during the audit period.	
Coal Transport				

Condition Number	Condition	Compliance Status	Evidence	Recommended Action
12	The Proponent may transport up to 10 million tonnes of product coal via the Boggabri Rail Spur Line in any calendar year, year, comprising:	Compliant	As reported in the Annual Reviews coal transported from Boggabri was as follows: - 2017 - 6.9 Mt - 2018 - 6.6 Mt - 2019 - 6.1 Mt - 2020 year to date provided by site 5.9 Mt	
	(a) up to 8.6 million tonnes of product coal from the Boggabri coal mine in any calendar year; and			
	(b) up to 3 million tonnes of product coal from the Tarrawonga coal mine in any calendar year.	Compliant	As reported in the 2017, 2018 and 2019 Annual Reviews, no coal from Tarrawonga was transported during the audit period. According to site communications no coal from Tarrawonga has been transported in 2020.	
12	The Proponent may transport up to 200 tonnes of coal per year from the site by road for marketing and testing purposes. All other coal must be transported from the site via the Boggabri Rail Spur Line, except in exceptional circumstances as agreed with RMS and Council and approved by the Secretary.	Compliant	As reported in the 2017, 2018 and 2019 Annual Reviews, all coal was transported via the rail spur during the audit period.	
SURRENDER OF EXISTING DEVELOPMENT CONSENT				
13	Within 12 months of the date of this approval, or as otherwise agreed by the Secretary, the Proponent shall surrender the existing development consent (DA36-88) for the Boggabri Coal Mine in accordance with Section 104A of the EP&A Act. Prior to the surrender of this development consent, the conditions of this approval shall prevail to the extent of any inconsistency with the conditions of the development consent.	Compliant	Outside the audit period. Assessed as compliant in 2017 audit.	
STRUCTURAL ADEQUACY				
14	The Proponent shall ensure that all new buildings and structures, and any alterations or additions to existing buildings and structures, are constructed in accordance with the relevant requirements of the BCA. Notes: <input type="checkbox"/> Under Part 4A of the EP&A Act, the Proponent is required to obtain construction and occupation certificates for the proposed building works; and <input type="checkbox"/> Part 8 of the EP&A Regulation sets out the requirements for the certification of the project.	Compliant	Construction is outlined in the annual review. Occupation certificate (with reference to the construction certificate) was sighted for the construction of "5 stage mine alterations that includes New Buildings, Relocation of Buildings, Covered Walkways, Car Parks and Removal of Buildings".	
15	The Proponent shall ensure that the Boggabri Rail Spur Line and ancillary infrastructure (including rail bridges) are designed and constructed in accordance with the relevant requirements of the current ARTC infrastructure standards, or as otherwise approved by the Secretary.	Compliant	Outside the audit period. Assessed as compliant in previous audit.	
16	The Proponent shall meet the requirements of the ARTC for any rail and associated infrastructure connections, such as signalling equipment, to the ARTC rail network.	Compliant	Outside the audit period. Assessed as compliant in previous audit.	
DEMOLITION				
17	The Proponent shall ensure that all demolition work on site is carried out in accordance with Australian Standard AS 2601-2001: The Demolition of Structures, or its latest version.	Not triggered	No demolition reported in annual reviews over the audit period. No demolition has been undertaken in 2020.	
PROTECTION OF PUBLIC INFRASTRUCTURE				
18	Unless the Proponent and the applicable authority agree otherwise, the Proponent shall: (a) repair, or pay the full costs associated with repairing, any public infrastructure that is damaged by the project; and (b) relocate, or pay the full costs associated with relocating, any public infrastructure that needs to be relocated as a result of the project.	Compliant	There has been no damage to public infrastructure during the audit period. Payment was made to extended Goonbri Road to replace the loss of Leards Forest Rd however this is out of the audit period. BCOPL have voluntary planning agreement with council for upkeep of roads. Sighted agreement attached to conditions of consent.	
OPERATION OF PLANT AND EQUIPMENT				
19	The Proponent shall ensure that all the plant and equipment used on site, or to transport coal from the site, is: (a) maintained in a proper and efficient condition; and (b) operated in a proper and efficient manner.	Compliant	Evidence provided for the testing of sound power measurement for mobile plant and equipment for the duration of the audit period. BCOPL schedule maintenance and repairs through their SAP system which generate job cards. Examples of these were provided and cited. Testing of the sound power levels during the audit period identified some exceedances of the levels adopted for the EA. BCOPL are currently undertaking trials of noise attenuation fittings and this will continue beyond the audit period.	
UPDATING & STAGING STRATEGIES, PLANS OR PROGRAMS				

Condition Number	Condition	Compliance Status	Evidence	Recommended Action
20	<p>With the approval of the Secretary, the Proponent may submit any strategies, plans or programs required by this approval on a progressive basis.</p> <p>To ensure the strategies, plans or programs under the conditions of this approval are updated on a regular basis, the Proponent may at any time submit revised strategies, plans or programs to the Secretary for approval.</p> <p>With the agreement of the Secretary, the Proponent may prepare any revised strategy, plan or program without undertaking consultation with all parties under the applicable condition of this approval.</p> <p>Notes:</p> <ul style="list-style-type: none"> • While any strategy, plan or program may be submitted on a progressive basis, the Proponent 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. 	Compliant	<p>All management plans approved under DA 36/88 have now been replaced by the equivalent plans required under this consent.</p> <p>Multiple management plans have been updated and revised during the audit period and resubmitted to the DPIE for approval. Refer to individual management plan conditions.</p>	
21	<p>Until they are replaced by an equivalent strategy, plan or program approved under this approval, the Proponent shall implement the existing strategies, plans or programs for the site that have been approved under DA 36/88.</p>	Compliant	<p>All management plans approved under DA 36/88 have now been replaced by the equivalent plans required under this consent.</p>	
COMMUNITY ENHANCEMENT				
22	<p>By the end of December 2012, unless otherwise agreed by the Secretary, the Proponent shall enter into a planning agreement with Council in accordance with:</p> <p>(a) Division 6 of Part 4 of the EP&A Act; and</p> <p>(b) the terms of the Proponent's offer provided in Appendix 3.</p>	Compliant	<p>Outside the audit period.</p> <p>Assessed as compliant in previous audit.</p>	
Schedule 3 - Environmental Performance Conditions				
CONSTRUCTION				
Construction Environment Management Plan - Boggabri Rail Spur Line				
1	<p>Prior to the commencement of construction of the Boggabri Rail Spur Line, or as otherwise agreed by the Secretary, the Proponent shall prepare and implement (following approval by the Secretary) a Construction Environmental Management Plan for the Boggabri Rail Spur Line. The Plan shall outline the environmental management practices and procedures that are to be followed during construction, and shall be prepared in consultation with the relevant government agencies and in accordance with the Guideline for the Preparation of Environmental Management Plans (Department of Infrastructure, Planning and Natural Resources, 2004). The Plan shall include, but not necessarily be limited to:</p> <p>(a) a description of activities to be undertaken during construction of the Boggabri Rail Spur Line (including staging and scheduling);</p> <p>(b) statutory and other obligations that the Proponent is required to fulfil during construction, including approvals, consultations and agreements required from authorities and other stakeholders under key legislation and policies;</p> <p>(c) identification of relevant guidelines, standards, codes of practice etc. to which the Proponent intends to comply;</p> <p>(d) a description of the roles and responsibilities for relevant employees involved in the construction of Boggabri Rail Spur Line, including relevant training and induction provisions for ensuring that employees, including contractors and sub-contractors are aware of their environmental and compliance obligations under these conditions of approval;</p> <p>(e) an environmental risk analysis to identify the key environmental performance issues associated with the construction phase; and</p> <p>(f) details of how environmental performance would be managed and monitored to meet acceptable outcomes, including what actions will be taken to address identified potential adverse environmental impacts (including any impacts arising from the staging of the construction of the Boggabri Rail Spur Line). In particular, the following environmental performance issues shall be addressed in the Plan:</p> <p>(i) noise and vibration;</p> <p>(ii) traffic and access;</p> <p>(iii) soil, water quality, flood and spoil management;</p> <p>(iv) air quality and dust management;</p> <p>(v) management of Aboriginal and non-Aboriginal heritage;</p> <p>(vi) soil contamination, hazardous material and waste management;</p> <p>(vii) management of ecological impacts; and</p> <p>(viii) hazard and risk management</p> <p>Notes:</p> <p><input type="checkbox"/> Construction work does not include surveys, acquisitions, fencing, investigative drilling or excavation, minor clearing, minor access roads, minor adjustments to services/utilities, works which allow isolation of the site so that access for construction can be provided (including service relocations) and establishing temporary facilities for construction (including for example an office and amenities compound, construction compound, materials storage compound, maintenance workshop, testing laboratory or material stockpile areas).</p> <p><input type="checkbox"/> Additional guidance on appropriate content for the Construction Environmental Management Plan can be found in the Department's standard conditions for linear infrastructure.</p> <p><input type="checkbox"/> Other construction activities undertaken on the site, such as construction of the CHPP, drag line, water management structures and ancillary equipment, are to be addressed as part of the operational management plans required under this approval.</p>	Not triggered	<p>Construction of the Boggabri Rail Spur line was completed prior to the audit period.</p> <p>Assessed as compliant in previous audit</p>	<p>Observation / Improvement REC: During next modification consider requesting the removal of completed and closed out construction related conditions from the consent.</p>
NOISE AND VIBRATION				
Construction Noise and Vibration Criteria				

Condition Number	Condition	Compliance Status	Evidence	Recommended Action								
2	<p>During the hours of: (a) 7:00 am to 6:00 pm Monday to Fridays, inclusive; (b) 8:00 am to 1:00 pm on Saturdays; and (c) at no time on Sundays or public holidays.</p> <p>Noise from activities associated with the construction and/or upgrade of the Boggabri Rail Spur Line, Kamilaroi Highway Access Roads, and Daisymede Laydown Compound shall meet the criteria in Table 1.</p> <p>Table 1: Construction Noise impact assessment criteria – maximum any stage of project life</p> <table border="1"> <thead> <tr> <th>Location Property/ID</th> <th>Construction Noise Impact Assessment Criteria Day dB(A) $L_{Aeq}(15\text{ min})$</th> </tr> </thead> <tbody> <tr> <td>27</td> <td>50</td> </tr> <tr> <td>23</td> <td>45</td> </tr> <tr> <td>All other privately-owned residences</td> <td>40</td> </tr> </tbody> </table> <p>Note: To interpret the locations referred to in Table 1, see the applicable figure in Appendix 4.</p> <p>Vibration from activities associated with the construction and/or upgrade of Boggabri Rail Spur Line, Kamilaroi Highway Access Roads, and Daisymede Laydown Compound shall meet the limits set by: (a) for structural damage, the vibration limits set out in the German Standard DIN 4150-3: Structural Vibration - effects of vibration on structures; and (b) for human exposure, the acceptable vibration values set out in the Environmental Noise Management Assessing Vibration: A Technical Guideline (Department of Environment and Conservation, 2006).</p> <p>Should the Proponent propose to undertake any construction works associated with the Boggabri Rail Spur Line, Kamilaroi Highway Access Roads, and Daisymede Laydown Compound outside of hours specified above then the Proponent must develop an Out of Hours Work (OOHW) protocol consistent with the requirements of the Interim Construction Noise Guideline (Department of Environment and Climate Change, 2009). The OOHW protocol must be developed to the satisfaction of the Secretary in consultation with the EPA and residents likely to be affected and demonstrate how the proposed scheduling would minimise impacts and how local residents' preferences would be accommodated.</p> <p>Note: For areas where construction noise from the Boggabri Rail Spur Line, Kamilaroi Highway Access Roads, and Daisymede Laydown Compound is predicted to be at or below 35dB(A) and/ or below operational noise criteria at sensitive receptors, this is likely to provide sufficient justification for the need to operate outside of recommended standard hours as specified in the ICNG.</p>	Location Property/ID	Construction Noise Impact Assessment Criteria Day dB(A) $L_{Aeq}(15\text{ min})$	27	50	23	45	All other privately-owned residences	40	Not triggered	As reported in the Annual Reviews, there was no construction in relation to any of these aspects during the audit period.	
Location Property/ID	Construction Noise Impact Assessment Criteria Day dB(A) $L_{Aeq}(15\text{ min})$											
27	50											
23	45											
All other privately-owned residences	40											
Operational Noise - Noise Affected Land												
3	<p>For privately-owned residences identified within the project's 35dB(A) noise impact contour (see Appendix 4A) the owner(s) can make a written request to the Proponent for one of the following: (a) mitigation (such as double glazing, insulation and air conditioning) at the residence in consultation with the owner(s). These measures must be reasonable and feasible and directed towards reducing the noise impacts of the project on the residence. If within 3 months of receiving this request from the owner(s), the Proponent and owner(s) 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; or (b) acquisition of the residence and land in accordance with the procedures in conditions 8-9 of Schedule 4.</p> <p>Upon receiving a written request from the owner(s), the Proponent must undertake whichever option has been requested by the owner(s). However, this condition does not apply if the Proponent has an agreement with the owner(s) of the relevant residence to generate higher noise levels, and the Proponent has advised the Department in writing of the terms of this agreement.</p> <p>Notes: 1. For the purposes of this condition a privately-owned residence is defined as a residence not owned by a mining company that: is regularly occupied; or is an existing residence that is not regularly occupied but for which a valid development consent exists; or is a proposed residence for which a development application has been lodged with the relevant authority prior to the date of this approval. 2. For the purposes of acquisition under this condition, parcels of land that are in close proximity and operated as a single agricultural enterprise should be considered as part of the land to be acquired. Where the Proponent and the owner(s) cannot agree on whether non-contiguous parcels of land should be included, either party may refer the matter to the Secretary for resolution. The Secretary's decision as to the lands to be included for acquisition under the procedures in conditions 8 and 9 of Schedule 4 shall be final.</p>	Compliant	A written request was received in 2013 for acquisition of the Heiler property with noise cited as one of the reasons for the request. Negotiations with the landowner continued throughout the audit period. The property was acquired by Whitehaven Coal in 2019.									
	<p>Where the owner(s) of a residence included in condition 3 of this schedule have opted for either an agreement to generate higher noise levels or mitigation under condition 3(a), and the owner(s) have reason to believe that the noise impacts at the residence are more than 3 dB(A) above the predicted noise levels for that residence (see Table 2), the owner(s) can request an independent noise impact assessment for the residence. The request shall be made in writing to the Secretary. If the Secretary considers that a noise impact assessment is warranted, then the Proponent shall commission the assessment.</p> <p>If the noise impact assessment determines that the noise generated by the project causes sustained exceedances, or is likely to cause sustained exceedances, of the predicted noise levels by more than 3 dB(A) the owner(s) may require the Proponent to acquire the residence and land in accordance with the procedures in conditions 8-9 of Schedule 4.</p>											

Condition Number	Condition	Compliance Status	Evidence	Recommended Action																																													
4	<p>Table 2: Maximum Predicted Noise Levels</p> <table border="1"> <thead> <tr> <th>Location Property/ID</th> <th>Day ($L_{Aeq}(15\text{ min})$)</th> <th>Evening ($L_{Aeq}(15\text{ min})$)</th> <th>Night ($L_{Aeq}(15\text{ min})$)</th> <th>Night ($L_{A1}(1\text{ min})$)</th> </tr> </thead> <tbody> <tr> <td>54</td> <td>35</td> <td>42</td> <td>42</td> <td>45</td> </tr> <tr> <td>52</td> <td>35</td> <td>41</td> <td>41</td> <td>45</td> </tr> <tr> <td>67, 68</td> <td>35</td> <td>40</td> <td>40</td> <td>45</td> </tr> <tr> <td>23</td> <td>35</td> <td>38</td> <td>38</td> <td>51</td> </tr> <tr> <td>27, 48</td> <td>36</td> <td>38</td> <td>38</td> <td>48</td> </tr> <tr> <td>86</td> <td>35</td> <td>38</td> <td>38</td> <td>45</td> </tr> <tr> <td>43, 44</td> <td>35</td> <td>37</td> <td>37</td> <td>45</td> </tr> <tr> <td>32, 33, 79, 90</td> <td>35</td> <td>36</td> <td>36</td> <td>45</td> </tr> </tbody> </table> <p>Notes: 1. To interpret the locations referred to in Table 2, see the applicable figure in Appendix 4. 2. The noise assessment must be undertaken by a suitably qualified, experienced and independent person, whose appointment has been approved by the Secretary and include either: o sufficient monitoring at the affected residence to allow for assessment of the impacts under a range of meteorological conditions (including adverse conditions) likely to be experienced at the residence; or o Sufficient monitoring to allow reliable prediction of the likely impacts under the range of meteorological conditions (including adverse conditions) likely to be experienced at the residence. 3. Monitoring should be conducted in accordance with the requirements of the NSW Industrial Noise Policy. 4. Where predictions of likely impacts is to be used, either in substitution for, or in conjunction with, direct measurement of noise impacts at the residence, it must be based on sufficient monitoring data to provide a reliable estimate of the impacts (including under adverse meteorological conditions) and be derived using standard noise modelling techniques accepted by the EPA. 5. The Proponent shall ensure that the requested noise impact assessment is submitted to the Secretary within 3 months of the Secretary's decision that the assessment was warranted. The Proponent shall also provide a copy of the assessment to the owner(s) of the residence at the same time it is submitted to the Secretary. 6. Note 2 to condition 3 of this Schedule applies to acquisition under this condition.</p>	Location Property/ID	Day ($L_{Aeq}(15\text{ min})$)	Evening ($L_{Aeq}(15\text{ min})$)	Night ($L_{Aeq}(15\text{ min})$)	Night ($L_{A1}(1\text{ min})$)	54	35	42	42	45	52	35	41	41	45	67, 68	35	40	40	45	23	35	38	38	51	27, 48	36	38	38	48	86	35	38	38	45	43, 44	35	37	37	45	32, 33, 79, 90	35	36	36	45	Not triggered	Based on site communications there have been no requests during the audit period.	
Location Property/ID	Day ($L_{Aeq}(15\text{ min})$)	Evening ($L_{Aeq}(15\text{ min})$)	Night ($L_{Aeq}(15\text{ min})$)	Night ($L_{A1}(1\text{ min})$)																																													
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5	<p>At any stage of the project, except for the noise-affected land identified in condition 3 as being within the project's 35 dB(A) contour, the Proponent shall ensure that operational noise generated by the project does not exceed the criteria in Table 3 at any residence on privately-owned land.</p> <table border="1"> <thead> <tr> <th>Location</th> <th>Day ($L_{Aeq}(\text{period})$)</th> <th>Evening ($L_{Aeq}(\text{period})$)</th> <th>Night ($L_{Aeq}(\text{period})$)</th> </tr> </thead> <tbody> <tr> <td>All privately-owned land</td> <td>40</td> <td>40</td> <td>40</td> </tr> </tbody> </table> <p>Notes: 1. Noise generated by the project is to be measured in accordance with the relevant requirements, and exemptions (including certain meteorological conditions), of the NSW Industrial Noise Policy 2. Operational noise generated by the project includes noise generated from use of the private haul road and proposed rail spur.</p> <p>However, these noise criteria do not apply if the Proponent has an agreement with the owner(s) of the relevant residence to generate higher noise levels, and the Proponent has advised the Department in writing of the terms of this agreement.</p>	Location	Day ($L_{Aeq}(\text{period})$)	Evening ($L_{Aeq}(\text{period})$)	Night ($L_{Aeq}(\text{period})$)	All privately-owned land	40	40	40	Compliant	<p>Monthly attended noise monitoring is undertaken during the night time period. Exceedances were reported in 2017 and 2018 Annual Reviews for the Goonbri property however this is owned by BCOPL.</p> <p>It is noted that Goonbri is no longer monitored and the NMP has been updated to exclude this location.</p>																																						
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All privately-owned land	40	40	40																																														
6	<p>If the owner(s) of a privately-owned residence, which is not within the project's 35 dB(A) noise impact contour (see condition 3 and Appendix 4A), have reason to believe that operational noise from the project is causing the criteria in Table 3 to be exceeded at the residence, the owner(s) can request an independent noise impact assessment for the residence. The request shall be made in writing to the Secretary. If the Secretary considers that a noise impact assessment is warranted, then the Proponent shall commission the assessment.</p> <p>If the noise impact assessment determines that the noise generated by the project causes sustained exceedances, or is likely to cause sustained exceedances, of the criteria in Table 3, the owner(s) can make a written request to the Proponent for one of the following:</p> <p>(a) mitigation (such as double glazing, insulation and air conditioning) at the residence in consultation with the owner(s). These measures must be reasonable and feasible and directed towards reducing the noise impacts of the project on the residence. If within 3 months of receiving this request from the owner(s), the Proponent and owner(s) 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; or</p> <p>(b) acquisition of the residence and land in accordance with the procedures in conditions 8-9 of Schedule 4.</p> <p>Upon receiving a written request from the owner(s), the Proponent must undertake whichever option has been requested by the owner(s).</p> <p>However, this condition does not apply if the Proponent has an agreement with the owner(s) of the relevant residence to generate higher noise levels, and the Proponent has advised the Department in writing of the terms of this agreement.</p>	Not triggered	Based on site communications there have been no requests received during the audit period for an independent noise impact assessment.																																														

Condition Number	Condition	Compliance Status	Evidence	Recommended Action								
	<p>Notes:</p> <p>1. For the purposes of this condition a privately-owned residence is defined as a residence not owned by a mining company that: is regularly occupied; or is an existing residence that is not regularly occupied but for which a valid development consent exists; or is a proposed residence for which a development application has been lodged with the relevant authority prior to the date of this approval.</p> <p>2. For the purposes of acquisition under this condition, parcels of land that are in close proximity and operated as a single agricultural enterprise should be considered as part of the land to be acquired. Where the Proponent and the owner(s) cannot agree on whether non-contiguous parcels of land should be included, either party may refer the matter to the Secretary for resolution. The Secretary's decision as to the lands to be included for acquisition under the procedures in conditions 8 and 9 of Schedule 4 shall be final.</p> <p>3. Notes 2, 3, 4 and 5 of condition 4 apply to this condition.</p>											
Cumulative Noise Criteria												
7	<p>Except for the noise affected land identified in condition 3 as being within the project's 35 dB(A) contour, the Proponent shall ensure that the operational noise generated by the project combined with the noise generated by other mines does not exceed the criteria in Table 4 at any residence on privately-owned land.</p> <p><i>Table 4: Cumulative noise criteria dB(A) L_{Aeq} (period)</i></p> <table border="1"> <thead> <tr> <th>Location</th> <th>Day (L_{Aeq} (period))</th> <th>Evening (L_{Aeq} (period))</th> <th>Night (L_{Aeq} (period))</th> </tr> </thead> <tbody> <tr> <td>All privately-owned land</td> <td>40</td> <td>40</td> <td>40</td> </tr> </tbody> </table> <p>Notes:</p> <ul style="list-style-type: none"> Cumulative noise is to be measured in accordance with the relevant requirements, and exemptions (including certain meteorological conditions), of the NSW Industrial Noise Policy. Operational noise includes noise from the mining operations and use of private haul roads and rail spurs 	Location	Day (L _{Aeq} (period))	Evening (L _{Aeq} (period))	Night (L _{Aeq} (period))	All privately-owned land	40	40	40	Compliant	There have been no exceedances reported as being generated by the project combined with other mines as reported in the 2017, 2018 and 2019 Annual Reviews as well as the monthly noise monitoring reports reviewed up October 2020.	
Location	Day (L _{Aeq} (period))	Evening (L _{Aeq} (period))	Night (L _{Aeq} (period))									
All privately-owned land	40	40	40									
Cumulative Noise Acquisition Criteria												
8	<p>If the owner(s) of a privately-owned residence, which is not within the project's 35 dB(A) noise impact contour (see condition 3 and Appendix 4A), reasonably believes that the noise limits in Table 4 are being exceeded at the residence and that the exceedance is caused by operational noise from the project and one or more other mines (including use of private haul roads or rail spurs), the owner(s) can request an independent noise impact assessment for the residence. The request shall be made in writing to the Secretary. If the Secretary considers that a noise impact assessment is warranted, then the Proponent shall commission the assessment.</p> <p>Where the noise impact assessment determines that the cumulative noise generated by the project combined with the noise from the other mine(s) causes, or is likely to cause, sustained exceedances of the criteria in Table 4, then the owner(s) can make a written request to the Proponent for one of the following:</p> <p>(a) mitigation (such as double glazing, insulation and air conditioning) at the residence in consultation with the owner(s). These measures must be reasonable and feasible and directed towards reducing the noise impacts of the project on the residence. If within 3 months of receiving this request from the owner(s), the Proponent and owner(s) 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; or</p> <p>(b) acquisition of the residence and land in accordance with the procedures in conditions 8-9 of Schedule 4.</p> <p>Upon receiving a written request from the owner(s), the Proponent must undertake whichever option has been requested by the owner(s).</p> <p>However, this condition does not apply if the Proponent has an agreement with the owner(s) of the relevant residence to generate higher noise levels, and the Proponent has advised the Department in writing of the terms of this agreement.</p> <p>The Proponent may seek to recover an equitable share of the costs incurred from the other mines contributing to the cumulative impact. Unless otherwise agreed between the mines, the proportional contributions should be based on expert analysis of the monitoring results to assess relative contribution to the impact. In the event of a dispute between the mines the Proponent, or one of the contributing mines, may submit the matter to the Secretary for resolution. The Secretary's decision shall be final.</p> <p>Notes:</p> <p>1. For the purposes of this condition a privately-owned residence is defined as a residence not owned by a mining company that: is regularly occupied; or is an existing residence that is not regularly occupied but for which a valid development consent exists; or is a proposed residence for which a development application has been lodged with the relevant authority prior to the date of this approval.</p> <p>2. For the purposes of acquisition under this condition, parcels of land that are in close proximity and operated as a single agricultural enterprise should be considered as part of the land to be acquired. Where the Proponent and the owner(s) cannot agree on whether non-contiguous parcels of land should be included, either party may refer the matter to the Secretary for resolution. The Secretary's decision as to the lands to be included for acquisition under the procedures in conditions 8 and 9 of Schedule 4 shall be final.</p> <p>3. Notes 2, 3, 4 and 5 of condition 4 apply to this condition.</p> <p>4. The noise impact assessment shall include assessment of the relative contribution of the mines to the impact at the residence.</p>	Not triggered	Based on site communications this has not been triggered during the audit period.									
	<p>The Proponent shall:</p> <p>(a) ensure that:</p> <p><input type="checkbox"/> all new trucks, dozers, drills and excavators purchased for use on the site after the date of this approval are commissioned as noise suppressed (or attenuated) units;</p> <p><input type="checkbox"/> ensure that all equipment and noise control measures deliver sound power levels that are equal to or better than the sound power levels identified in the EA and that correspond to best practice or the application of best available technology economically achievable;</p>		<p>a) Annual testing of mobile plant and equipment is undertaken. Test results are compared with the Boggabri Coal Mine Environmental Assessment (Hanson Bailey 2010). Sound power screening levels greater than 3 dBA are considered significant and require further investigation.</p> <p>Non compliances of sound power levels for a number of mobile plant were reported in the 2017, 2018 and 2019 Annual Reviews. BCOPL have been implementing a plant attenuation, monitoring and review program across the audit period which has involved the trial of three sound attenuation kits on six 930E Komatsu trucks. This trial is ongoing.</p>									

Condition Number	Condition	Compliance Status	Evidence	Recommended Action
9	<p><input type="checkbox"/> where reasonable and feasible, improvements are made to existing noise suppression equipment as technologies become available; and</p> <p>(b) monitor and report on the implementation of these requirements annually on its website.</p>	Non-Compliant (Low Risk)	<p>As reported in the Boggabri Coal Mine - Noise Modelling Assessment (April 2020) the majority of the mining fleet currently operates at sound power levels higher than modelled for the EA. The noise modelling assessment was undertaken to evaluate if compliance with noise limits can be achieved with the current plant.</p> <p>The site will remain non-compliant with this condition unless all equipment meets required SWL levels. However, it is noted that the evidence suggests that the mine is in compliance with offsite criteria at the nearest privately owned receivers.</p> <p>BCOPL also commissioned an independent acoustic consultant to undertake a validation of the of the noise model used in the Continuation of Boggabri Coal Mine Acoustic Impact Assessment (Bridges Acoustics, 2010). This involved comparing 2019 attended noise monitoring results with modelled noise impacts for the 2010 Acoustic Impact Assessment. During periods where meteorological conditions met the modelled conditions, measured levels from BCM were inaudible or not measurable.</p> <p>b) annual sound power level reports are prepared and reported on the website annually as well as summarised in the Annual Reviews.</p>	NC Recommendation: continue investigations and dialogue with DPIE regarding sound power level requirements.
10	<p>The Proponent shall:</p> <p>(a) conduct an annual testing program of the attenuated plant on site to ensure that the attenuation remains effective;</p> <p>(b) restore the effectiveness of any attenuation if it is found to be defective; and</p> <p>(c) report on the results of any testing and/or attenuation work within the Annual Review.</p>	Compliant	Annual testing was undertaken throughout the audit period and reported in the Annual Reviews and in the Annual Mobile Plant Sound Power Survey Reports available on the website.	
Boggabri Rail Spur Line and Bridge Design - Noise Impacts				
11	<p>The Proponent shall:</p> <p>(a) ensure all relevant Boggabri Rail Spur Line and rail bridge designs are assessed by suitably qualified and experienced person/s in acoustic engineering for the purpose of providing reasonable and feasible recommendations to minimise noise, including low frequency noise. This acoustic review should consider the EA's relevant recommendations and additional noise attenuation such as acoustic barriers to minimise noise at sensitive receptors;</p> <p>(b) implement reasonable and feasible recommendations made in the acoustic review;</p> <p>(c) undertake commissioning trials of the operation of the Spur Line to optimise train speed to minimise noise impacts; and</p> <p>(d) following completion and commissioning of the Spur Line, undertake targeted noise monitoring to determine the accuracy of predicted acoustic impacts and effectiveness of any noise reduction measures, including monitoring during adverse inversion conditions, to the satisfaction of the Secretary.</p>	Not triggered	Construction of the Boggabri Rail Spur line was completed prior to the audit period and commissioning tests undertaken and assessed as compliant in previous audit.	
Operating Conditions				
12	<p>The Proponent shall:</p> <p>(a) implement best management practice to minimise the operational, low frequency and road and rail traffic noise of the project;</p> <p>(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 approval;</p> <p>(c) maintain the effectiveness of noise suppression equipment on plant at all times and ensure defective plant is not used operationally until fully repaired;</p> <p>(d) ensure that noise attenuated plant is deployed preferentially in locations relevant to sensitive receivers;</p> <p>(e) minimise the noise impacts of the project during meteorological conditions when the noise limits in this approval do not apply;</p> <p>(f) ensure that the Boggabri Rail Spur Line is only accessed by locomotives that are approved to operate on the NSW rail network in accordance with the noise limits in ARTC's EPL (No. 3142);</p> <p>(g) use its best endeavours to ensure that rolling stock supplied by service providers on the Boggabri Rail Spur Line is designed and constructed to minimise noise;</p> <p>(h) ensure any new rail rolling stock manufactured specifically for the project is designed and constructed to minimise noise;</p> <p>(i) use its best endeavours to achieve the long term intrusive noise goals for the project in Table 5, where this is reasonable and feasible, and report on the progress towards achieving these goals in the annual review; and</p> <p>(j) co-ordinate the noise management on site with the noise management at other mines within the Leard Forest Mining Precinct to minimise the cumulative noise impacts of these mines.</p> <p>to the satisfaction of the Secretary.</p> <p>Notes:</p> <p><input type="checkbox"/> The comprehensive review can be undertaken as part of independent environmental audits required under condition 10 of Schedule 5.</p>	Compliant	<p>a) Monitoring and management. Minimal noise complaints. Based on noise monitoring results, operations have been compliant with noise conditions at the nearest privately owned receivers during the audit period.</p> <p>b) A new system was installed in late 2018 - 2019 (Teledata) replacing SentineX, which involved a review of alarm parameters. Two realtime monitors are located at private residences as well as five weather stations on site. Email and text messages sent if triggered. Site interviews presented the operation of the real time system. Alarms are recorded in alarms register (sighted) with actions and responses undertaken.</p> <p>c and d) Annual sound power level monitoring undertaken with any items of plant greater than 3dB above limits being modified or taken out of service.</p> <p>e) Noise monitoring completed. Use of real-time monitoring system in line with meteorological data.</p> <p>f) Based on site communications only approved locomotives are used.</p> <p>g and h) Design reports completed by engineers. Noise monitoring completed.</p> <p>i) Reporting on noise monitoring completed. Reports also found on website. Based on the annual reviews there have been no exceedances of the noise criteria in table 5 at privately owned receivers in the audit period.</p> <p>j) BTM Complex Noise MP developed and approved. BTM complex accepts and noise monitor (a</p>	

Condition Number	Condition	Compliance Status	Evidence	Recommended Action														
	<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_{Aeq} (15 min)</th> <th>L_{Aeq} (15 min)</th> <th>L_{Aeq} (15 min)</th> <th>L_{A1} (1 min)</th> </tr> </thead> <tbody> <tr> <td>All residences on privately owned land</td> <td>35</td> <td>35</td> <td>35</td> <td>45</td> </tr> </tbody> </table> <p>Notes: <input type="checkbox"/> To interpret the locations referred to Table 5, see the applicable figures in Appendix 4; and <input type="checkbox"/> Noise generated by the project is to be measured in accordance with condition 14 of this schedule.</p>	Location	Day	Evening	Night		L _{Aeq} (15 min)	L _{Aeq} (15 min)	L _{Aeq} (15 min)	L _{A1} (1 min)	All residences on privately owned land	35	35	35	45		<p>BTM Complex Noise IMP developed and approved. BTM complex operate one noise monitor (e-sampler).</p>	
Location	Day		Evening	Night														
	L _{Aeq} (15 min)	L _{Aeq} (15 min)	L _{Aeq} (15 min)	L _{A1} (1 min)														
All residences on privately owned land	35	35	35	45														
Noise Management Plan																		
13	<p>The Proponent shall prepare and implement a Noise Management Plan for the project to the satisfaction of the Secretary. This plan must:</p> <p>(a) be prepared in consultation with the EPA and the CCC, and submitted to the Secretary for approval within 6 months of the date of this approval;</p> <p>(b) describe the measures that would be implemented to ensure: <input type="checkbox"/> best management practice is being employed; <input type="checkbox"/> the noise impacts of the project are minimised during meteorological conditions when the noise limits in this approval do not apply; and</p> <p>(c) describe the proposed noise management system in detail;</p> <p>(d) include a risk/response matrix to codify mine operational responses to varying levels of risk resulting from weather conditions and specific mining activities;</p> <p>(e) include commitments to provide summary reports and specific briefings at CCC meetings on issues arising from noise monitoring;</p> <p>(f) include a monitoring program that: <input type="checkbox"/> uses a combination of real time and supplementary attended monitoring to evaluate the performance of the project; <input type="checkbox"/> adequately supports the proactive and reactive noise management system on site; <input type="checkbox"/> uses predictive meteorological forecasting to incorporate proactive mitigation measures to manage noise impacts; <input type="checkbox"/> includes monitoring of inversion strength at an appropriate sampling rate to determine compliance with noise limits; <input type="checkbox"/> evaluates and reports on the effectiveness of the noise management system on site; <input type="checkbox"/> provides for the annual validation of the noise model for the project; and</p> <p>(g) includes a Leard Forest Mining Precinct Noise Management Strategy that has been prepared in consultation with other coal mines in the Precinct to minimise the cumulative noise impacts of all mines within the Precinct, that includes: <input type="checkbox"/> systems and processes to ensure that all mines are managed to achieve their noise criteria; <input type="checkbox"/> a shared environmental monitoring network and data sharing protocol; and <input type="checkbox"/> procedures for identifying and apportioning the source/s and contribution/s to cumulative noise impacts for operating mines and other sources, using the noise and meteorological monitoring network and appropriate investigative tools.</p> <p>Note: The Leard Forest Mining Precinct Noise Management Strategy can be developed in stages and will need to be subject to ongoing review dependent upon the determination and commencement of other mining projects in the area.</p>	Compliant	<p>Latest version of the Noise Management Plan is dated April 2019. Approved by DPIE on 21 February 2019.</p> <p>a) Included as Appendix D b) Included in Section 5 c) Addressed throughout the NMP - particularly in sections 5-7 d) Section 5.3 e) Section 7.4 f) Sections 6 and 7</p> <p>g) BTM Noise Management Plan May 2017 satisfies this condition.</p> <p>During site interviews it was noted that updates to the real time noise monitoring TARPs have been made to align with the new telemetry system since the approval of the previous NMP.</p> <p><u>Implementation</u> Based on the findings of the previous conditions and the site inspection and interviews it is considered that the NMP is being appropriately implemented.</p>	Improvement REC: Update NMP to reflect the latest TARPs.														
Noise Measurement																		
14	<p>Where conditions in this approval refer to measurement of noise within the context of the NSW Industrial Noise Policy the inversion class to be applied to the project is Class G.</p> <p>However, the Proponent may undertake an investigation to determine whether a proposal for change in this classification could be considered for approval by the Secretary. Any such investigation must be conducted in consultation with the EPA and be conducted by a suitably qualified person whose appointment has been endorsed by the EPA and approved by the Secretary. The report and recommendation must be submitted to the EPA for endorsement prior to submission to the Secretary. If the Secretary is satisfied that the recommendation is reasonable, then the Secretary may amend the inversion class applying to the project under this approval.</p>	Compliant	<p>As reported in the monthly noise monitoring reports:</p> <p><i>As noise limits apply under the strongest inversion conditions (Stability Class G), no exemptions for inversion conditions are applicable for BCM. Based on the information above, noise limits have been assumed to apply under all meteorological conditions except during periods of rainfall or wind speeds greater than 3 m/s at 10 metres above ground level.</i></p> <p>There have been no investigations or requests for a change in classification.</p>															
BLASTING																		
Blasting Criteria																		
	The Proponent shall ensure that the blasting on the site does not cause exceedances of the criteria in Table 6.																	

Condition Number	Condition	Compliance Status	Evidence	Recommended Action																
15	<table border="1"> <thead> <tr> <th>Location</th> <th>Airblast overpressure (dB(Lin Peak))</th> <th>Ground vibration (mm/s)</th> <th>Allowable exceedance</th> </tr> </thead> <tbody> <tr> <td>Residence on privately owned land</td> <td>120</td> <td>10</td> <td>0%</td> </tr> <tr> <td></td> <td>115</td> <td>5</td> <td>5% of the total number of blasts over a period of 12 months</td> </tr> <tr> <td>All public infrastructure</td> <td>-</td> <td>50 or alternatively a specific limit determined to the satisfaction of the Secretary by the structural design methodology in AS 2187.2-2006, or its latest version</td> <td>0%</td> </tr> </tbody> </table> <p>However, these criteria do not apply if the Proponent has a written agreement with the relevant owner or infrastructure provider/owner, and the Proponent has advised the Department in writing of the terms of this agreement.</p>	Location	Airblast overpressure (dB(Lin Peak))	Ground vibration (mm/s)	Allowable exceedance	Residence on privately owned land	120	10	0%		115	5	5% of the total number of blasts over a period of 12 months	All public infrastructure	-	50 or alternatively a specific limit determined to the satisfaction of the Secretary by the structural design methodology in AS 2187.2-2006, or its latest version	0%	Non-Compliant (Low Risk)	<p>As reported in the 2019 Annual Review, a blast fired on 21 August 2019 recorded an airblast overpressure of 123 dB(Lin Peak) exceeding the 120dB(Lin Peak) criteria. This exceedance was attributed to a short term fluctuation in the upper air wind conditions that could not have been reasonably foreseen.</p> <p>An incident report was prepared which concluded that: <i>Blast design investigations indicate that tie in and firing conditions of the blast would ordinarily result in basic blast emission of less than 115dB(Lin Peak) and that 123dB(Lin Peak) can only be explained by the effects of meteorology.</i></p> <p>It is noted that no exceedances have been recorded since this time. The real time blast monitoring and weather system has been sighted and is implemented.</p> <p>This exceedance was reported to DPIE on 28 August. BCOPL was issued with a warning letter from DPIE on 18 October 2019 for not reporting the blast overpressure exceedance within seven days of the incident. Notification of the exceedance was sent via text and email but was originally missed. This is attributable to the amount of trigger text messages which were received, particularly under the old system.</p>	<p>NC REC: Ensure blasts are undertaken under appropriate weather conditions. Delays to blasts should be implemented if required based on real time weather data review.</p> <p>NC REC: Implement changes to the TARP notifications system to distinguish "triggers" from "exceedances" so that reportable exceedances are not missed.</p>
Location	Airblast overpressure (dB(Lin Peak))	Ground vibration (mm/s)	Allowable exceedance																	
Residence on privately owned land	120	10	0%																	
	115	5	5% of the total number of blasts over a period of 12 months																	
All public infrastructure	-	50 or alternatively a specific limit determined to the satisfaction of the Secretary by the structural design methodology in AS 2187.2-2006, or its latest version	0%																	
Blasting Hours																				
16	The Proponent shall only carry out blasting on the site between 9 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	<p>Annual reviews report that all blasts were conducted between the approved times of 9am to 5pm Monday to Saturday.</p> <p>A review of the blast log from 2017 to the 30th August was undertaken. It was identified that a blast was undertaken on 14 April 2019 which was a Sunday. Follow up correspondence with BCOPL stated that "The blast noted as occurring on 14 4 2019 occurred on the 15 4 2019. The date of the blast was erroneously recorded in the blast monitoring summary."</p> <p>SLR has no reason to believe this is not the case.</p>																	
Blasting Frequency																				
17	<p>The Proponent may carry out a maximum of:</p> <p>(a) 1 blast a day; unless an additional blast is required following a blast misfire; and</p> <p>(b) 4 blasts a week, averaged over a calendar year; for the project</p> <p>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, or to blasts required to ensure the safety of the mine or its workers.</p> <p>Note: 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.</p>	Compliant	<p>Annual reviews report that:</p> <p>a) blasting was not undertaken more than once per day during the 2017, 2018 or 2019 reporting periods.</p> <p>b) 2017 84 blasts = 1.6 per week 2018 - 94 blasts = 1.8 per week 2019 - 119 blasts = 2.3 per week 2020- 58 blasts = 1.65 per week (til 30th August)</p>																	
Property Inspections																				
18	<p>If the Proponent receives a written request from the owner of any privately-owned land within 2 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 report updated, then within 2 months of receiving this request the Proponent shall:</p> <p>(a) commission a suitably qualified, experienced and independent person, whose appointment is acceptable to both parties, to:</p> <p><input type="checkbox"/> establish the baseline condition of any buildings and/or structures on the land, or update the previous property inspection report; and</p> <p><input type="checkbox"/> identify any measures that should be implemented to minimise the potential blasting impacts of the project on these buildings and/or structures; and</p> <p>(b) give the landowner a copy of the new or updated property inspection report.</p> <p>If there is a dispute over the selection of the suitably qualified, experienced and independent person, or the Proponent or landowner disagrees with the findings of the independent property investigation, either party may refer the matter to the Secretary for resolution.</p> <p>If there is a dispute over the selection of the suitably qualified, experienced and independent person, or the Proponent or landowner disagrees with the findings of the independent property investigation, either party may refer the matter to the Secretary for resolution.</p>	Not triggered	Based on site communications there have been no requests.																	
Property Investigations																				
19	<p>If the owner of any privately-owned land claims that the buildings and/or structures on his/her land have been damaged as a result of blasting on site, then within 2 months of receiving this claim in writing from the landowner the Proponent shall:</p> <p>(a) commission a suitably qualified, experienced and independent person, whose appointment is acceptable to both parties, to investigate the claim; and</p> <p>(b) give the landowner a copy of the property investigation report.</p> <p>If this independent property investigation confirms the landowner's claim, and both parties agree with these findings, then the Proponent shall repair the damages to the satisfaction of the Secretary.</p> <p>If there is a dispute over the selection of the suitably qualified, experienced and independent person, or the Proponent or landowner disagrees with the findings of the independent property investigation, either party may refer the matter to the Secretary for resolution.</p> <p>The timeframe for completion of the inspection and provision of the report is subject to suitable access arrangements being granted by the landowner.</p>	Not triggered	Based on site communications, there have been no requests																	
Operating Conditions																				

Condition Number	Condition	Compliance Status	Evidence	Recommended Action
20	<p>During mining operations on site, the Proponent shall:</p> <p>(a) implement best management practice to:</p> <ul style="list-style-type: none"> <input type="checkbox"/> protect the safety of people and livestock in the surrounding area; <input type="checkbox"/> protect public or private infrastructure/property in the surrounding area from any damage; and <input type="checkbox"/> minimise the dust and fume emissions of any blasting; and <input type="checkbox"/> minimise blasting impacts on heritage items in the vicinity of the site; <p>(b) co-ordinate the timing of blasting on site with the timing of blasting at other mines within the Leard Forest Mining Precinct to minimise the cumulative blasting impacts of the mines; and</p> <p>(c) operate a suitable system to enable the public to get up-to-date information on the proposed blasting schedule on site, to the satisfaction of the Secretary.</p>	Compliant	<p>a) Discussion with blast co-ordinators regarding blasting process. Evidence of implementation of Blast Management Plan. Blasts, including fume, monitored through use of drones.</p> <p>On 24 July 2020 BCOPL received a complaint with regard to blast fume beyond the site boundary. Post complaint it was confirmed a blast did occur on the 24 July 2020 - EPA notified. Another complaint was made to the EPA with regard to blast fume on the 5 August 2020. EPA requested blast information which was supplied - Response from EPA pending. Drone footage of the event was viewed during the site visit, the footage ceased before evidence of the dispersal of the fume or offsite transport could be confirmed. Complaints log sighted detailing requests to follow up with the complainant. No reply was received.</p> <p>Extensive blast management system in place. Annual reviews report on the blast results including fume.</p> <p>Fume Management Plan attached to Blast Management Plan-sighted Blast Management Plan.</p> <p>Based on the information presented by BCOPL, it is considered that the blast management system is extensive and represents good practice. Whilst two complaints were received with regard to blast fume during the audit period, BCOPL has made efforts to undertake follow up investigations with the EPA and complainant, however there has been no response to date. There is no evidence that the complaint elicits a non-compliance at this stage. Notwithstanding this, recommendations have been made with regard to improvements to blast fume monitoring to allow for improved verification of blast fume impacts.</p> <p>b) BTM Blast Management Plan in place and approved (April 2020).</p> <p>c) Proposing blasting times are published on the BOCPL website,</p>	Improvement REC: Recommend for drone footage to continue for longer so that future complaints may be verified to determine whether blast fume did remain and travel off site at a distance.
21	<p>The Proponent shall not undertake blasting on-site within 500 metres of:</p> <p>(a) any public road without the approval of Council; or</p> <p>(b) any land outside the site not owned by the Proponent, unless:</p> <ul style="list-style-type: none"> <input type="checkbox"/> the Proponent has a written agreement with the relevant landowner to allow blasting to be carried out closer to the land, and the Proponent has advised the Department in writing of the terms of this agreement, or <input type="checkbox"/> the Proponent has: <ul style="list-style-type: none"> o demonstrated to the satisfaction of the Secretary that the blasting can be carried out closer to the land without compromising the safety of the people or livestock on the land, or damaging the buildings and/or structures on the land; 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 land. 	Compliant	<p>a) Leard Forest Rd was previously a public road but has been closed since 2015.</p> <p>b) Boggabri Coal and the Forestry Corporation of NSW maintain a 'compensation agreement' that allows for Boggabri Coal to undertake any 'Mining Operations and any Mining Purpose'. Compensation agreement sighted.</p> <p>No other non mine owned land within 500 metres.</p>	
Blast Management Plan				
22	<p>The Proponent shall prepare and implement a Blast Management Plan for the project to the satisfaction of the Secretary. This plan must:</p> <p>(a) be submitted to the Secretary for approval within 6 months from the date of project approval;</p> <p>(b) be prepared in consultation with the EPA, the CCC and interested members of the local community potentially affected by blasting operations;</p> <p>(c) propose any alternative ground vibration limits for public infrastructure in the vicinity of the site;</p> <p>(d) describe the measures that would be implemented to ensure:</p> <ul style="list-style-type: none"> <input type="checkbox"/> best management practice is being employed; and <input type="checkbox"/> compliance with the relevant conditions of this approval; <p>(e) include a road closure management plan for blasting within 500 metres of a public road, that has been prepared in consultation with Council;</p> <p>(f) include a specific blast fume management protocol to demonstrate how emissions will be minimised including risk management strategies if blast fumes are generated;</p> <p>(g) include a monitoring program for evaluating the performance of the project including:</p> <ul style="list-style-type: none"> o compliance with the applicable criteria; and o minimising fume emissions from the site; and <p>(h) include a Leard Forest Mining Precinct Blast Management Strategy that has been prepared in consultation with other mines within the Leard Forest Mining Precinct to minimise cumulative blasting impacts.</p> <p>Note: The Leard Forest Mining Precinct Blast Management Strategy can be developed in stages and will need to be subject to ongoing review dependent upon the determination of and commencement of other mining projects in the area.</p>	Non-Compliant (Low Risk)	<p><u>Preparation</u></p> <p>The latest version of the Blast Management Plan is dated November 2018. Approved by DPIE on 21st February 2019.</p> <p>a) The Blast Management Plan was originally prepared in January 2013, with this being within six months of the Project Approval.</p> <p>b) the current Blast Management Plan November 2018 summarises consultation undertaken in Appendix D</p> <p>c) Alternate ground vibration covered in Section 5.1 of plan</p> <p>d) Section 6 of BLMP</p> <p>e) Section 6.3 of BLMP</p> <p>f) Appendix C</p> <p>g) Section 7 of BLMP</p> <p>h) Appendix E of BLMP</p> <p><u>Implementation</u></p> <p>Non-compliant due to 120 dBL exceedance.</p>	NC REC: Ensure blasts are undertaken under appropriate weather conditions. Delays to blasts should be implemented if required based on real time weather data review
AIR QUALITY & GREENHOUSE GAS				
Odour				
23	<p>Unless otherwise authorised by an EPL, the Proponent shall ensure that no offensive odours are emitted from the site, as defined under the POEO Act.</p>	Not verified	<p>Two complaints were made in 24 and 31 July 2020 relating to blast fume and associated odour. BCOPL provided details of the complaints to DPIE, RR and EPA. BCOP provided the requested information to EPA. Drone footage of the event was viewed during the site visit, the footage ceased before evidence of the dispersal of the fume or offsite transport could be confirmed. Complaints log sighted detailing requests to follow up with the complainant. No reply was received.</p> <p>Whilst two complaints were received, BCOPL has made efforts to undertake follow up investigations with the EPA and complainant, however there has been no response to date. Based on the lack of evidence provided by the complainant, there is insufficient evidence for the auditor to assess whether or not the complaint elicits a non-compliance at this stage. Further, the EPA has been provided with details of the incident and has not made a judgement on the issue. For this reason this condition has not been verified. Notwithstanding this, recommendations have been made with regard to improvements to blast fume monitoring to allow for improved verification of blast fume impacts and confirmation of whether blast fumes are emitted from the site.</p>	Improvement REC: Recommend for drone footage to continue for longer so that future complaints may be verified to determine whether blast fume did remain and travel off site at a distance.
Greenhouse Gas Emissions				

Condition Number	Condition	Compliance Status	Evidence	Recommended Action				
24	The Proponent shall implement all reasonable and feasible measures to minimise the release of greenhouse gas emissions from the site to the satisfaction of the Secretary.	Compliant	BCOPL have an approved AQGHGMP (July 2018). GHG performance is included as part of the options analysis for new equipment. BCOPL continued to decrease fuel burning throughout the audit period. This included reviewing existing operating practices and engine configurations, and assessing the viability of alternate products through engaging specialist consultants.					
Acquisition on request due to Air Quality								
25	<p>Upon receiving a written request for acquisition from an owner of the land listed in Table 7, the Proponent shall acquire the land in accordance with the procedures in Conditions 8-9 of Schedule 4.</p> <table border="1"> <thead> <tr> <th>Acquisition Basis</th> <th>Land</th> </tr> </thead> <tbody> <tr> <td>Air impacts over land and at residence</td> <td>Residence and landholdings (ID 54,55 and 83)</td> </tr> </tbody> </table> <p>Notes: <input type="checkbox"/> To interpret the locations referred to in Table 7 see the applicable figure(s) in Appendix 4.</p>	Acquisition Basis	Land	Air impacts over land and at residence	Residence and landholdings (ID 54,55 and 83)	Not triggered	Properties owned by Whitehaven	
Acquisition Basis	Land							
Air impacts over land and at residence	Residence and landholdings (ID 54,55 and 83)							
Additional Air Quality Mitigation upon Request								
26	<p>Upon receiving a written request from the owner of any residence on the land listed in Table 7 or the land listed in Table 8, the Proponent shall implement additional air quality mitigation measures (such as air filters, a first flush roof water drainage system and/or air conditioning) at the residence in consultation with the owner. These measures must be reasonable and feasible and directed towards reducing the air quality impacts of the project on the residence.</p> <p>If within 3 months of receiving this request from the owner, the Proponent 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> <table border="1"> <thead> <tr> <th>Mitigation Basis</th> <th>Land</th> </tr> </thead> <tbody> <tr> <td>Air impacts at private residences</td> <td>52 and 86</td> </tr> </tbody> </table> <p>Note: To interpret the locations referred to in Table 8, see the applicable figure(s) in Appendix 4.</p>	Mitigation Basis	Land	Air impacts at private residences	52 and 86	Not triggered	There have been no requests.	
Mitigation Basis	Land							
Air impacts at private residences	52 and 86							
Air Quality Assessment Criteria								
27	<p>Except for the air quality affected land in Table 7, the Proponent shall ensure that particulate matter emissions generated by the project do not exceed the criteria listed in Table 9, Table 10 and Table 11 at any residence on privately-owned land or on more than 25 percent of any privately-owned land.</p> <p>Table 9: Long-term criteria for particulate matter</p> <p>Table 10: Short-term criteria for particulate matter</p> <p>Table 11: Long-term criteria for deposited dust</p> <p>Notes to Table 9, Table 10 and Table 11: <input type="checkbox"/> a Total impact (ie incremental increase in concentrations due to the project plus background concentrations due to all other sources); <input type="checkbox"/> b Incremental impact (ie incremental increase in concentrations due to the project on its own); <input type="checkbox"/> 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. <input type="checkbox"/> d Excludes extraordinary events such as bushfires, prescribed burning, dust storms, sea fog, fire incidents or any other activity agreed by the Secretary.</p>	Administrative non-compliance	<p>Evidence of air quality monitoring in Annual Reviews. Evidence of assessing the potential contribution of the site towards air quality criteria provided as notes and not included in the Annual Reviews.</p> <p>1 Jan 2017 - 31 Dec 2017 - Table 4-3 of the Annual Review identifies the Roma and Merriown monitoring locations as locations to be used for compliance monitoring. However, Section 4.2.2.2 of the 2017 Annual Review outlines that the one exceedance of the short-term PM10 criterion recorded at the Merriown HVAS monitor and the two exceedances recorded at the Roma HVAS monitor "are not considered exceedances as the monitoring location is not used as a compliance measurement tool". Moreover, the exceedances described above do not match data presented in the charts. According to the chart, only a single exceedance of the 24-hour average PM10 criteria was recorded at Roma and no exceedances at Merriown.</p> <p>1 Jan 2018 - 31 Dec 2018 - Based on the information provided, the site was within criteria. There were some days of extraordinary events and some days when the site was upwind from the monitoring stations which recorded an exceedance.</p> <p>1 Jan 2019 - 31 Dec 2019 - Based on the information provided, the site's compliance could not be established. The Annual Review mentions that 53 exceedances of the short term PM10 criteria were recorded by the Wilberoi East TEOM and that these were either due to extraordinary events (41 occasions) or due to sources other than the site. No evidence of incident investigations for 2019 was provided.</p> <p>Based on the information presented, there is no evidence that the criteria in S3 C27 have been exceeded as a result of BCOPL emissions.</p> <p>Admin non-compliant, as status of extraordinary event days has not been agreed with the Secretary and DPIE was not notified of recorded exceedances of the relevant air quality criteria. Whilst it is acknowledged that exceedances of the air quality criteria do not necessarily equate to a non-compliance, it is considered that all exceedances should be notified to DPIE, particularly given that note (a) to Schedule 3 Condition 27 states that criteria are "Total impact (ie incremental increase in concentrations due to the project plus background concentrations due to all other sources)". If the exceedance is not attributable to BCOPL operations, evidence of the investigation or data that led to this conclusion should be provided with the notification.</p>	<p>NC REC: It is recommended that in line with the requirements of note (d) of Schedule 3 Condition 27 of the Boggabri Coal PA, confirmation be sought from the secretary on the status of days believed to be extraordinary events prior to classifying any day as an extraordinary event day and removing the day from the annual average.</p> <p>NC REC: all exceedances of the relevant air quality criteria be investigated in accordance with the requirements of the AQGHGMP to determine if they are attributable to BCOPL operations</p> <p>NC REC: DPIE should be informed of any exceedance of the relevant air quality criteria, regardless of the exceedance being a non-compliance or not. If the exceedance is not attributable to BCOPL operations, evidence of the investigation or data that led to this conclusion should be provided with the notification;</p> <p>NC REC: a standard methodology should be developed for the investigation and reporting of any exceedances recorded by the air quality monitors.</p> <p>Improvement REC: In the interest of transparency it is recommended that: 1) a table of all days with exceedances of the 24-hour average criteria be included in the annual reports together with findings of any investigations and status of days as determined by DPIE (extraordinary day or not); and 2) all valid data captured by the TEOM be reported and included in the chart. Extraordinary days may then be excluded from the annual average calculations.</p>				
	The Proponent shall ensure that particulate matter emissions generated by the project do not exceed the criteria listed in Table 9, Table 10 and Table 11, at any occupied residence on any mine owned land (including land owned by adjacent mines) unless: (a) all reasonable and feasible avoidance and mitigation measures have been employed to prevent exceedance of the criteria;							

Condition Number	Condition	Compliance Status	Evidence	Recommended Action																										
28	<p>(b) the tenant, and landowner (where owned by a mine other than the Proponent), has been notified of health risks in accordance with the notification requirements under Schedule 4 of this approval;</p> <p>(c) the tenant on project owned land can terminate their tenancy agreement without penalty, subject to giving reasonable notice, and the Proponent uses its best endeavours to provide assistance with relocation and sourcing of alternative accommodation;</p> <p>(d) air mitigation measures such as air filters, a first flush roof water drainage system and/or air conditioning) are installed at the residence, if requested by the tenant and landowner (where owned by a mine other than the Proponent); and</p> <p>(e) particulate matter air quality monitoring is undertaken to inform the tenant and landowner (where owned by a mine other than the Proponent) of potential health risks; and</p> <p>(f) the monitoring data are provided to the tenant in an appropriate format, for a medical practitioner to assist the tenant in making an informed decision on the health risks associated with occupying the property,</p> <p>to the satisfaction of the Secretary.</p>	Compliant	<p>No PM10 exceedances at Merriown HVAS except for days which were identified to have been impacted by extraordinary air quality events.</p> <p>Evidence of mitigation measures and monitoring through AEMR's, AQGHGMP and the site visit.</p>																											
Air Quality Acquisition Criteria																														
29	<p>If particulate matter emissions generated by the project exceed, or contribute to an exceedance of the relevant cumulative criteria, in Table 12, Table 13 or Table 14 at any residence on privately-owned land or on more than 25 percent of any privately-owned land, then upon receiving a written request for acquisition from the landowner the Proponent shall acquire the land in accordance with the procedures in conditions 8-9 of schedule 4.</p> <p><i>Table 12: Long term land acquisition criteria for particulate matter</i></p> <table border="1"> <thead> <tr> <th>Pollutant</th> <th>Averaging period</th> <th>^d Criterion</th> </tr> </thead> <tbody> <tr> <td>Total suspended particulate (TSP) matter</td> <td>Annual</td> <td>^a 90 µg/m³</td> </tr> <tr> <td>Particulate matter < 10 µm (PM₁₀)</td> <td>Annual</td> <td>^a 30 µg/m³</td> </tr> </tbody> </table> <p><i>Table 13: Short term land acquisition criteria for particulate matter</i></p> <table border="1"> <thead> <tr> <th>Pollutant</th> <th>Averaging period</th> <th>^d Criterion</th> </tr> </thead> <tbody> <tr> <td>Particulate matter < 10 µm (PM₁₀)</td> <td>24 hour</td> <td>^a 150 µg/m³</td> </tr> <tr> <td>Particulate matter < 10 µm (PM₁₀)</td> <td>24 hour</td> <td>^b 50 µg/m³</td> </tr> </tbody> </table> <p><i>Table 14: Long term land acquisition criteria for deposited dust</i></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>^c Deposited dust</td> <td>Annual</td> <td>^b 2 g/m²/month</td> <td>^a 4 g/m²/month</td> </tr> </tbody> </table> <p>Notes to Table 12, Table 13 and Table 14: a Total impact (ie incremental increase in concentrations due to the project plus background concentrations due to all other sources); b Incremental impact (ie incremental increase in concentrations due to the project 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; d Excludes extraordinary events such as bushfires, prescribed burning, dust storms, sea fog, fire incidents, or any other activity agreed by the Secretary.</p>	Pollutant	Averaging period	^d Criterion	Total suspended particulate (TSP) matter	Annual	^a 90 µg/m ³	Particulate matter < 10 µm (PM ₁₀)	Annual	^a 30 µg/m ³	Pollutant	Averaging period	^d Criterion	Particulate matter < 10 µm (PM ₁₀)	24 hour	^a 150 µg/m ³	Particulate matter < 10 µm (PM ₁₀)	24 hour	^b 50 µg/m ³	Pollutant	Averaging period	Maximum increase in deposited dust level	Maximum total deposited dust level	^c Deposited dust	Annual	^b 2 g/m ² /month	^a 4 g/m ² /month	Not triggered	No written request for acquisition was received during the audit period.	
Pollutant	Averaging period	^d Criterion																												
Total suspended particulate (TSP) matter	Annual	^a 90 µg/m ³																												
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^c Deposited dust	Annual	^b 2 g/m ² /month	^a 4 g/m ² /month																											
Operating Conditions																														
30	<p>The Proponent shall:</p> <p>(a) implement best management practice to minimise the odour, fume and dust emissions of the project, including best practice coal loading and profiling and other measures to minimise dust emissions from coal transportation by rail;</p> <p>(b) operate a comprehensive air quality management system on site that uses a combination of predictive meteorological forecasting, predictive and real time 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 approval;</p> <p>(c) manage PM2.5 levels in accordance with any requirements of an EPL;</p> <p>(d) minimise the air quality impacts of the project during adverse meteorological conditions and extraordinary events (see note d under Table 14 above);</p> <p>(e) minimise any visible air pollution;</p> <p>(f) minimise the surface disturbance of the site generated by the project; and</p> <p>(g) co-ordinate the air quality management on site with the air quality management at other mines within the Leard Forest Mining Precinct to minimise the cumulative air quality impacts of the mines,</p> <p>to the satisfaction of the Secretary.</p>	Compliant	<p>During the site inspection it was noted that dust management at the pit top was good with CHPP, loadout and stockpile sprays in evidence. In the pit some dust generation was observed however, water carts were sighted. Environmental superintendent contacted OC to request additional water carts in the pit as conditions were getting warmer.</p> <p>Clearly demarcated areas for clearance were viewed during the site inspection to minimise clearance areas prior to mining.</p>	Improvement REC: Regularly include discussion around dust impacts in morning briefings and make EPA Dust Handbook available to all operators. Empower operators to contact OC to request water cart or mitigation if dust generation is observed.																										
Air Quality and Greenhouse Gas Management Plan																														
	<p>The Proponent shall prepare and implement an Air Quality and Greenhouse Gas Management Plan for the project to the satisfaction of the</p> <p>(a) be prepared in consultation with the EPA and the CCC, and be submitted to the Secretary for approval within 6 months from the date of project approval;</p> <p>(b) integrate the recommendations of a Site Specific Best Management Determination and Reactive Dust Management Strategy prepared to the satisfaction of the EPA;</p> <p>(c) describe the measures that would be implemented to ensure:</p>		<p>The latest version of the Air Quality and Greenhouse Gas Management Plan is dated July 2018. Approved by DPIE on 6 September 2018.</p> <p>a) Consultation with identified stakeholders included as Appendix F b) Section 5.2 and 5.3 c) best management practices - sections 5.2 and 5.3</p>																											

Condition Number	Condition	Compliance Status	Evidence	Recommended Action
31	<p><input type="checkbox"/> best management practice is being employed, consistent with the development of the site specific best management determination and reactive dust management strategy;</p> <p><input type="checkbox"/> the air quality impacts of the project are minimised during adverse meteorological conditions and extraordinary events; and</p> <p><input type="checkbox"/> compliance with the relevant conditions of this consent.</p> <p>(d) describe the proposed air quality management system;</p> <p>(e) include a risk/response matrix to codify mine operational responses to varying levels of risk resulting from weather conditions and specific mining activities;</p> <p>(f) include commitments to provide summary reports and specific briefings at CCC meetings on issues arising from air quality monitoring;</p> <p>(g) include an air quality monitoring program that:</p> <p><input type="checkbox"/> uses a combination of real-time monitors and supplementary monitors to evaluate the performance of the project;</p> <p><input type="checkbox"/> adequately supports the proactive and reactive air quality management system;</p> <p><input type="checkbox"/> includes PM2.5 monitoring;</p> <p><input type="checkbox"/> includes monitoring of occupied project-related residences and residences on air-affected land listed in Table 7 and Table 8, subject to the agreement of the tenant and/or landowner;</p> <p><input type="checkbox"/> evaluates and reports on the effectiveness of the air quality management system;</p> <p><input type="checkbox"/> includes a protocol for determining any exceedances of the relevant conditions in this approval; and</p> <p>(h) includes a Leard Forest Mining Precinct Air Quality Management Strategy that has been prepared in consultation with other coal mines in the Precinct to minimise the cumulative air quality impacts of all mines within the Precinct, that includes:</p> <p><input type="checkbox"/> systems and processes to ensure that all mines are managed to achieve their air quality criteria;</p> <p><input type="checkbox"/> a shared environmental monitoring network and data sharing protocol;</p> <p><input type="checkbox"/> control monitoring site(s) to provide real time data on background air quality levels (ie not influenced by mining from the Leard Forest Mining Precinct and representative of regional air quality);</p> <p><input type="checkbox"/> a shared predictive and real time air dispersion model covering the Leard Forest Mining Precinct to be used for assessment of cumulative impacts, optimising location of the shared real time monitoring network, validation of air predictions and optimising mitigation measures; and</p> <p><input type="checkbox"/> procedures for identifying and apportioning the source/s and contribution/s to cumulative air impacts for both mines and other sources, using the air quality and meteorological monitoring network and appropriate investigative tools such as modelling of post incident plume dispersion, dual synchronised monitors and chemical methods of source apportionment.</p> <p>Notes:</p> <p><input type="checkbox"/> The requirement for regionally based control sites can be further reviewed if a regional air monitoring network is implemented and operated by the EPA as recommended in the draft Strategic Regional Land Use Plan for New England North West.</p> <p><input type="checkbox"/> The Leard Forest Mining Precinct Air Quality Management Strategy can be developed in stages and will need to be subject to ongoing review dependent upon the determination of and commencement of other mining projects in the area.</p>	Administrative non-compliance	<p>minimisation of air impacts - sections 5.5 and 5.6</p> <p>d) whole document</p> <p>e) section 5.4 and appendix E</p> <p>f) Section 7.3</p> <p>g) Section 6, 7.1 and 8</p> <p>h) BTM Air Quality Management Strategy - May 2017 addresses these requirements</p> <p><u>Implementation</u></p> <p>- Field evidence - The site inspection during the IEA noted effective dust management at the time of the site inspection.</p> <p>- Evidence of air quality monitoring - results and Annual Reviews;</p> <p>- Evidence of predictive system;</p> <p><u>Admin Non-compliant</u> However there is evidence of the site not effectively implementing the AQGHGMP as follows:</p> <p>1) DPIE was not notified of recorded exceedances of the relevant air quality criteria. Whilst it is acknowledged that exceedances of the air quality criteria do not necessarily equate to a non-compliance, it is considered that all exceedances should be notified to DPIE, particularly given that note (a) to Schedule 3 Condition 27 states that criteria are "Total impact (ie incremental increase in concentrations due to the project plus background concentrations due to all other sources)". If the exceedance is not attributable to BCOPL operations, evidence of the investigation or data that led to this conclusion should be provided with the notification;</p> <p>2) while notes relating to exceedances of relevant air quality criteria were provided, these exceedances (even though not necessarily non-compliances) were not logged in the Incident Register and evidence of completion of BCOPL Incident Report Forms were not provided. It is also noted that a standard methodology was not adopted for the presentation of the investigation findings.</p> <p><u>Observation</u></p> <p>The Dust TARP does not include any triggers based on temperature. The website trigger response was checked on 29 November 2020 with temperatures of 42 degrees and forecast strong winds (33 kph). Based on the website operational response "no action required - monitoring compliant and conditions favourable". It would be considered that these conditions are unfavourable and should instigate operational response.</p>	<p>NC REC: all exceedances of the relevant air quality criteria be investigated in accordance with the requirements of the AQGHGMP to determine if they are attributable to BCOPL operations</p> <p>NC REC: DPIE should be informed of any exceedance of the relevant air quality criteria, regardless of the exceedance being a non-compliance or not. If the exceedance is not attributable to BCOPL operations, evidence of the investigation or data that led to this conclusion should be provided with the notification;</p> <p>NC REC: a standard methodology should be developed for the investigation and reporting of any exceedances recorded by the air quality monitors.</p>
METEOROLOGICAL MONITORING				
32	<p>For the life of the project, the Proponent shall ensure that there is a meteorological station 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</p> <p>(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>	Compliant	There are five meteorological stations located on site. The weather stations are operated via telemetry and is calibrated annually.	
SOIL AND WATER				
Water Licences				
	<p>Note: Under the Water Act 1912 and/or the Water Management Act 2000, the Proponent is required to obtain the necessary water licences for the project.</p>	Compliant	<p>Current water access licences (WALs) are listed in the relevant approvals tables in the MOP and Annual Reviews.</p> <p>Most recent WAL table in the MOP dated March 2020 lists 15 WALs.</p> <p>Summary of WALs and water usage is reported in Section 4.5.2.4 of the Annual Reviews for the audit period.</p>	
Water Supply				
33	The Proponent shall ensure that it has sufficient water for all stages of the project, and if necessary, adjust the scale of mining operations on site, to match its available water supply to the satisfaction of the Secretary.	Compliant	<p>BCOPL has a network of production bores which provide sufficient water to the site for mining operations. BCOPL hold water licenses to draw water from the Namoi River however this has not been required throughout the audit period.</p> <p>Site water balance and presentation of water storages to CCC.</p>	
Compensatory Water Supply				
34	<p>The Proponent shall provide a compensatory water supply to any landowner of privately-owned land whose water supply is adversely and directly impacted (other than an impact that is negligible) as a result of the project, in consultation with DoI Lands & Water, and to the satisfaction of the Secretary.</p> <p>The compensatory water supply measures must provide an alternative long-term supply of water that is equivalent to the loss attributed to the project. Equivalent water supply should be provided (at least on an interim basis) within 24 hours of the loss being identified.</p> <p>If the Proponent and the landowner 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>If the Proponent is unable to provide an alternative long-term supply of water, then the Proponent shall provide alternative compensation to the satisfaction of the Secretary.</p>	Compliant	<p>Following request from J Heiler potable water was provided into their tanks.</p> <p>Landholder drawdown assessment report used to access veracity of claims.</p> <p>Report finalised in 2019. It is noted that this properties was acquired by Whitehaven in 2019.</p>	
Surface Water Discharges				
35	The Proponent shall ensure that all surface water discharges from the site comply with the discharge limits (both volume and quality) set for the project in any EPL.	Compliant	There was only one discharge event during the audit period (February 2020). Evidence of the sampling results provided. Communication with site confirmed reporting of the discharge event was not required due to rainfall exceeding 38.4 mm over a consecutive 5 day period.	
Operating conditions				
	The Proponent shall:			

Condition Number	Condition	Compliance Status	Evidence	Recommended Action
36	<p>(a) develop a detailed soil management protocol that identifies procedures for</p> <ul style="list-style-type: none"> <input type="checkbox"/> comprehensive soil surveys prior to soil stripping; <input type="checkbox"/> assessment of top-soil and sub-soil suitability for mine rehabilitation; and <input type="checkbox"/> annual soil balances to manage soil handling including direct respreading and stockpiling; <p>(b) maximise the salvage of suitable top-soils and sub-soils and biodiversity habitat components such as bush rocks, tree hollows and fallen timber for rehabilitation of disturbed areas within the site and for enhancement of biodiversity offset areas;</p> <p>(c) ensure that coal reject or any potentially acid forming interburden materials must not be emplaced at elevations within the Boggabri pit shell where they may promote acid or sulphate species generation and migration beyond the pit shell</p> <p>(d) ensure that any coal barrier between the final void and any future surrounding mining operations must remain intact in order to impede exchange of any contained groundwaters in the Boggabri pit shell.</p>	Compliant	<p>(a) Soil Management Protocol has been developed to meet the requirement of condition a). Included in the Remediation Management Plan dated April 2020.</p> <p>(b) Evidence of topsoil and subsoils management including stockpiling and salvaging materials was noted in the field inspection. Tree clearance areas and delineation of limit of clearing also observed. Some evidence of weeds observed in topsoil stockpiles.</p> <p>(c) Co-disposal of course rejects with overburden was observed during the site inspection into the operational pit.</p> <p>(d) Conceptual final landform study dated December 2012 attached to the current MOP.</p>	Improvement REC: Undertake weed management on topsoil stockpiles to mitigate risk of weed infestation to rehabilitation areas.
Flood impacts Boggabri Rail Spur Line and Haul Road				
37	<p>The rail spur line, rail spur bridges and any upgrade to the haul road must be designed and constructed to minimise impacts on flooding. Prior to construction of the rail spur line or any upgrades to the haul road, the Proponent shall undertake a flood assessment of the detailed design to confirm there would be minimal impacts as predicted in the EA.</p> <p>This shall include assessment of impacts of the rail spur line embankment and proposed design of stormwater culverts along the rail spur line to the Namoi River to assess changes to localised flood impacts within the Nagero creek catchment and adjoining Bollol Creek catchment. The assessment must be undertaken in consultation with DoL Lands & Water, North West LLS, Council and OEH, to the satisfaction of the Secretary.</p>	Not triggered	Construction of the rail spur line completed prior to the audit period.	
Water Management Plan				
	<p>The Proponent shall prepare and implement a Water Management Plan for the project to the satisfaction of the Secretary. This plan must be prepared in consultation with OEH, DoL Lands & Water, North West LLS and the CCC, by suitably qualified and experienced person/s whose appointment has been approved by the Secretary, and be submitted to the Secretary for approval within 6 months of the date of this approval.</p> <p>In addition to the standard requirements for management plans (see condition 3 of Schedule 5), this plan must include:</p> <p>(a) a Site Water Balance, that:</p> <ul style="list-style-type: none"> <input type="checkbox"/> includes details of: <ul style="list-style-type: none"> o sources and security of water supply, including contingency for future reporting periods; o prioritisation strategy for water sources o water use on site; o water management on site; o any off-site water discharges; o reporting procedures, including the preparation of a site water balance for each calendar year; o a program to validate the surface water model, including monitoring discharge volumes from the site and comparison of monitoring results with modelled predictions; and o methodologies used in the preparation of the site water balance, including provision of data sources, measurement type (direct sample / mass balance / engineering calculations / factors) and formulas used for all inflows, processes and outflows. <ul style="list-style-type: none"> <input type="checkbox"/> is supported by an annual improvement program to identify and address deficiencies and improvements within monitoring, measurement and calculation methods; <input type="checkbox"/> includes an action plan and schedule to implement annual water efficiency initiatives, and the recommendations in the Advisian peer review report titled "Peer Review of Site Water Use Aspects of Boggabri Coal MOD 5 Project, 22 July 2016", as set out in Appendix 6A; and <input type="checkbox"/> describes the measures that would be implemented to minimise clean water use on site. <input type="checkbox"/> is supported by an annual improvement program to identify and address deficiencies and improvements within monitoring, measurement and calculation methods <p><input type="checkbox"/> includes an action plan and schedule to implement annual water efficiency initiatives</p> <p><input type="checkbox"/> describes the measures that would be implemented to minimise clean water use on site.</p>	Compliant	<p><u>Preparation</u></p> <p>The latest version of the Water Management Plan and the Site Water Balance is dated May 2017. Approved by DPIE on 24 May 2017. Evidence of consultation is provided in Appendix A of the WMP. An update to the Water Management Plan has been completed and was submitted to the DPIE for approval in July 2019. No approval or response has been received from DPIE at this time.</p> <p>a) The SWB includes the details of this sub-condition.</p> <p><u>Implementation</u></p> <p>Section 4.5.2.4 of the Annual Reviews report the water demand, usage and storages on the site for the reporting period. Improvements and initiatives are reported in the annual reviews.</p> <p>As discussed during the site inspections, investigations and design considerations will be required over the coming years to determine requirements for when the MW5 dam is mined through to ensure that EPL requirements for 1 GL air capacity to be maintained within the water management system.</p>	Improvement REC: Undertake appropriate investigations to determine how requirements for 1 GL air capacity can be retained following mining through of MW5.
	<p>(b) a Surface Water Management Plan, which includes:</p> <ul style="list-style-type: none"> <input type="checkbox"/> detailed baseline data on surface water flows and quality in the water-bodies that could potentially be affected by the project; <input type="checkbox"/> detailed baseline data on soils within the irrigation management area; <input type="checkbox"/> detailed baseline data on hydrology across the downstream drainage system of the Namoi River floodplain from the mine site to the Namoi River; <input type="checkbox"/> a detailed description of the water management system on site, including the: <ul style="list-style-type: none"> o clean water diversion systems; o erosion and sediment controls (dirty water system); o mine water management systems including irrigation areas; o discharge limits in accordance with EPL requirements; o water storages; o haul road and Boggabri Rail Spur Line and bridge flood and water diversions; <input type="checkbox"/> detailed plans, including design objectives and performance criteria for: <ul style="list-style-type: none"> o design and management of final voids; 		<p><u>Preparation</u></p> <p>The most recent approved Surface Water Management Plan is dated May 2017 and was approved by DPIE on 24 May 2017. An update to the SWMP has been completed and was submitted to the DPIE for approval in July 2019. No approval or response has been received from DPIE at this time.</p> <ul style="list-style-type: none"> * SWMP includes details on water flows and quality in surrounding water bodies * Local catchment soils in section 3.4 * baseline data of downstream hydrology provided in section 2.3 * Details of water management system in Section 4 and 5 * Trigger levels for performance criteria in section 7 * Monitoring program in Section 6 and Appendix E * Performance criteria and contingency response in Table 7-1. <p>Riparian vegetation and health monitoring undertaken annually and reported in the 2019 annual review.</p> <p>Water quality monitoring provided in Annual Reviews.</p>	

Condition Number	Condition	Compliance Status	Evidence	Recommended Action
38	<p>o design and management for the emplacement of reject materials, sodic and dispersible soils and acid or sulphate generating materials;</p> <p>o design and management for construction and operation of the Boggabri Rail Spur Line and bridge across the Namoi River floodplain and upstream adjoining Nagero/Bollol creek catchments;</p> <p>o reinstatement of drainage lines on the rehabilitated areas of the site; and</p> <p>o control of any potential water pollution from the rehabilitated areas of the site;</p> <p><input type="checkbox"/> performance criteria for the following, including trigger levels for investigating any potentially adverse impacts associated with the project:</p> <p>o the water management system;</p> <p>o soils within the irrigation area;</p> <p>o downstream surface water quality;</p> <p>o downstream flooding impacts, including flood impacts due to the construction and operation of the Boggabri Rail Spur Line and rail bridge; and</p> <p>o stream and riparian vegetation health, including the Namoi River;</p> <p><input type="checkbox"/> a program to monitor:</p> <p>o the effectiveness of the water management system;</p> <p>o soils within the irrigation area; and</p> <p>o surface water flows and quality in the watercourses that could be affected by the project;</p> <p>o downstream flooding impacts; and</p> <p><input type="checkbox"/> reporting procedures for the results of the monitoring program;</p> <p><input type="checkbox"/> a plan to respond to any exceedances of the performance criteria, and mitigate and/or offset any adverse surface water impacts of the project; and</p>	Non-Compliant (Low Risk)	<p><u>Implementation</u></p> <p>* the water management structures were all in good condition with minimal evidence of erosion.</p> <p>* mine water pipelines around the site were generally observed to be placed within the dirty water system and within drain lines</p> <p>* Evidence of correct management of 'contaminated water' around the workshop area including wash down and oily water separators;</p> <p>* Mulch material used at site to assist with erosion and sediment control including along road to MW5 and the area around MW5;</p> <p>* Results of water monitoring outlined in Annual Reviews;</p> <p>* One discharge was reported in the audit period during a greater than specification rainfall event. The discharge was due to discharge from the Tarrawonga site via the Tarrawonga discharge drain.</p> <p>* Annual stream and riparian vegetation health monitoring is undertaken and reported in section 4.7.2.7 of the annual reviews.</p> <p><u>Non-compliant</u></p> <p>The implementation of the currently approved surface water management plan is non-compliant as the clean water drain presented in Appendix A of the SWMP to the north of the disturbance area has been mined through and has not been reinstated. It is acknowledged that the update to the SWMP (Rev8) has been prepared depicting the absence of the clean water drain and that a report has been prepared by GHD to justify not reinstating this drain and to evidence that the site is not harvesting clean water outside of harvestable rights allowances.</p> <p>The update to the SWMP was submitted to the DPIE for approval in July 2019; however, given that it has yet to be approved the implementation of the approved SWMP is non-compliant. It is recommended to continue to liaise with DPIE with regard to the approval of the revised water management system and the removal of the clean water diversion.</p>	NC REC: continue to liaise with DPIE with regard to the approval of the revised water management system and the removal of the clean water diversion.
	<p>(c) a Groundwater Management Plan, which includes:</p> <p><input type="checkbox"/> detailed baseline data of groundwater levels, yield and quality in the region, and privately-owned groundwater bores including a detailed survey/schedule of groundwater dependent ecosystems (including stygo-fauna), that could be affected by the project;</p> <p><input type="checkbox"/> the monitoring and testing requirements specified in the PAC recommendations for groundwater management as set out in Appendix 6;</p> <p><input type="checkbox"/> detailed plans, including design objectives and performance criteria, for the design and management of the proposed final void;</p> <p><input type="checkbox"/> groundwater assessment criteria including trigger levels for investigating any potentially adverse groundwater impacts;</p> <p><input type="checkbox"/> a program to monitor and assess:</p> <p>o groundwater inflows to the open cut mining operations;</p> <p>o the seepage/leachate from water storages, backfilled voids and the final void;</p> <p>o interconnectivity between the alluvial and bedrock aquifers;</p> <p>o background changes in groundwater yield/quality against mine-induced changes;</p> <p>o the impacts of the project on:</p> <p>- regional and local (including alluvial) aquifers;</p> <p>- groundwater supply of potentially affected landowners;</p> <p>- aquifers potentially affected by the mine irrigation area;</p> <p>- groundwater dependent ecosystems (including potential impacts on stygo-fauna) and riparian vegetation.</p> <p><input type="checkbox"/> a program to validate the groundwater model for the project, including an independent review of the model every 3 years, and comparison of monitoring results with modelled predictions; and</p> <p><input type="checkbox"/> a plan to respond to any exceedances of the performance criteria; and</p>	Administrative non-compliance	<p><u>Preparation</u></p> <p>The most recent approved Groundwater Management Plan (GWMP) is dated February 2017 and was approved by DPIE on 24 May 2017. An update to the GWMP has been completed and was submitted to the DPIE for approval in July 2019. No approval or response has been received from DPIE at this time.</p> <p>* Baseline data provided in Section 3.3</p> <p>* Monitoring and testing requirements in Section 4</p> <p>* Trigger levels included in Section 5</p> <p>* Section 7.3 states groundwater model will be reviewed very three years.</p> <p>* Procedures for managing exceedances is included</p> <p><u>Implementation</u></p> <p>Groundwater monitoring is undertaken quarterly with a detailed analysis of results presented in the Annual Groundwater Monitoring Review undertaken by GHD. The review assesses BCM's groundwater monitoring data and provides analyses on groundwater levels and groundwater quality. Findings from the review are summarised in the Annual Reviews.</p> <p>Based on the results presented in the Annual Reviews, groundwater levels have remained within trigger levels during the audit period.</p> <p>Groundwater bores 2102 and 2103 were not monitored in 2018 and 2019 due to damage of the bore casing. Monitoring at bores 2104 and 2105 was not undertaken as they were not accessible and MW6 was not monitored as it was blocked.</p> <p>Boggabri, Tarrawonga, Maules Creek Complex Numerical Model Update prepared by AGE dated 17 August 2018.</p>	Improvement REC: Vary the EPL in consultation with EPA to align with the appropriate borehole locations and remove those that have been mined through.
	<p>(d) a Leard Forest Mining Precinct Water Management Strategy that has been prepared in consultation with other mines within the Precinct to:</p> <p><input type="checkbox"/> minimise the cumulative water quality impacts of the mines;</p> <p><input type="checkbox"/> review opportunities for water sharing/water transfers between mines;</p> <p><input type="checkbox"/> co-ordinate water quality monitoring programs as far as practicable;</p> <p><input type="checkbox"/> undertake joint investigations/studies in relation to complaints/exceedances of trigger levels where cumulative impacts are considered likely; and</p> <p><input type="checkbox"/> co-ordinate modelling programs for validation, re-calibration and re-running of the groundwater and surface water models using approved mine operation plans.</p> <p>Note: The Leard Forest Mining Precinct Water Management Strategy can be developed in stages and will need to be subject to ongoing review dependent upon the determination of and commencement of other mining projects in the area.</p>	Compliant	<p>Evidence of the BTM Water Management Strategy provided dated May 2019. Plan developed in consultation with other mines. Regular meetings undertaken to discuss water management and determine the requirements for any coordinated monitoring or modelling.</p> <p>Minutes of BTM meetings sighted detailing consultation on the complex strategies.</p>	
Biodiversity				
HERITAGE				
Aboriginal Heritage Conservation Strategy				
	<p>The Proponent shall prepare and implement an Aboriginal Heritage Conservation Strategy for the project and the Biodiversity Offset Strategy areas to the satisfaction of the Secretary. This Strategy must enhance and conserve the Aboriginal cultural heritage values (both cultural and archaeological) and provide for their long-term protection and management. The Strategy must:</p> <p>(a) be prepared by suitably qualified and experienced person/s whose appointment has been endorsed by the Secretary;</p>		<p>A letter from DP&E dated 10 November 2017 confirms the approval of the AHCS.</p> <p>The approval letter requests that the AHCS be put on the Boggabri Coal Website ASAP.</p> <p>The approval letter requests that reports committed to in the AHCS be furnished to OEH.</p>	
			Authorship was covered in the 2017 audit. Compliant.	

Condition Number	Condition	Compliance Status	Evidence	Recommended Action
55	(b) be prepared in consultation with OEH, the local Aboriginal community and other mines within the Leard Forest Mining Precinct, and submitted to the Secretary for approval within 18 months from the date of project approval;	Compliant	Consultation with OEH: Section 1.6 documents correspondence with OEH. Consultation with Local Aboriginal community: AHCS Section 6 describes the consultation undertaken in the development of the AHCS. It was comprehensive and involved 5 separate opportunities for input / collaboration. One of the outcomes of the ACHS is a video The Kamilaroi which was completed and a screening staged in Gunnedah. Detailed recording of the Rock Inn was also completed.	
	(c) identify the Aboriginal cultural heritage values of the Biodiversity Offset Strategy areas;		Presented in Section 7 of the ACHS	
	(d) identify areas of high Aboriginal cultural heritage significance within both the site and the Leard Forest Mining Precinct;		Page 46 of the AHCS records that no specific areas were identified by RAPS as having higher significant than others. Areas with native vegetation and potential for bush foods were identified as having high cultural value	
	(e) identify a range of options for enhancing and conserving Aboriginal cultural heritage values, with specific consideration of the potential for the long-term protection and management of significant sites within either the site, the Biodiversity Offset Strategy areas or other lands within the Leard Forest Mining Precinct identified as having high cultural heritage significance to the Aboriginal community; and		Section 8 of the ACHS outlines nine possible options for conservation.	
	(f) consider cumulative impacts and potential for developing joint initiatives with other mines within the Leard Forest Mining Precinct for enhancing and conserving Aboriginal cultural heritage values.		Cumulative impacts are considered under the heading of inter-generational equity. Both Whitehaven (Maules Creek and Tarrawonga Mines) and Idemitsu (Boggabri Coal) were involved in the development of the ACHS.	
	Notes: Known Aboriginal sites are shown on the plans in Appendix 8.		Note	
Heritage Management Plan				
56	The Proponent shall prepare and implement a Heritage Management Plan for the project to the satisfaction of the Secretary. This plan must:	Compliant	The latest version of the Cultural Heritage Management Plan is dated November 2016. Approved by DPIE on 13 February 2017. There have been no revisions to the plan since the 2017 audit. Comments from the 2017 audit remain valid as none of the recommended actions from the 2017 audit have been incorporated.	Improvement REC: Implement the outstanding recommendations from the 2017 Audit as reported in the 2019 Annual Review in the updated CHMP.
	(a) be prepared by suitably qualified and experienced person/s whose appointment has been endorsed by the Secretary;		The letter of appointment is included as appendix I of the CHMP.	
	(b) be prepared in consultation with the OEH and the local Aboriginal stakeholders (in relation to the management of Aboriginal heritage values);		Authorship was covered in the 2017 audit. Compliant. As noted in 2017, the CHMP was developed in consultation with RAPS and OEH (CHMP Section 2 and Appendix G); however, there is no clear outline of the feedback provided by RAPS and OEH, when/how feedback was provided, and how this feedback was incorporated into the CHMP. A letter from OEH dated 7 February 2017 provides several recommendations for strengthening the CHMP (Boggabri ACHMP OEH Comments 20170207.pdf; additional audit documents). The CHMP was not updated to address these recommendations prior to approval by DP&E on 13 February 2017.	
	(c) be submitted to the Secretary for approval prior to any development that may impact heritage items, unless the Secretary agrees otherwise;		A letter from DP&E dated 13 February 2017 states that the CHMP Version 7 dated 9 February 2017 modified for MOD5 has been approved (Boggabri Coal Mine - Approval CHMP_2017.pdf; additional audit documents).	
	(d) include the following for the management of Aboriginal heritage: <input type="checkbox"/> a detailed plan for the implementation of the approved Aboriginal Heritage Conservation Strategy; <input type="checkbox"/> a description of the measures that would be implemented for: <input type="checkbox"/> protecting, monitoring and managing Aboriginal sites on the site which are outside of the approved disturbance area; <input type="checkbox"/> maintaining and managing reasonable access for Aboriginal stakeholders to heritage items on the site and within the Biodiversity Offset Strategy areas; <input type="checkbox"/> managing the discovery of any human remains or previously unidentified Aboriginal objects on site, including (in the case of human remains) stop work provisions and notification protocols; <input type="checkbox"/> ongoing consultation of the local Aboriginal stakeholders in the conservation and management of Aboriginal cultural heritage both on-site and within any Aboriginal heritage conservation areas; <input type="checkbox"/> ensuring any workers on site receive suitable heritage inductions prior to carrying out any activities which may disturb Aboriginal sites, and that suitable records are kept of these inductions; <input type="checkbox"/> a strategy for the storage and management of any heritage items salvaged on site, both during the project and long term;		It is noteworthy that, as was recorded in the 2017 audit, Section 7.1.1 of the CHMP does not appear to have been adhered to. This requires annual monitoring of Aboriginal sites, potentially more frequently with sites near impacts. If this has been occurring, no evidence for this was supplied. It may be that the active salvage operations means that there is much heritage management on site thus negating the need for specific monitoring trips.	
(e) include the following for the management of historic heritage: <input type="checkbox"/> a detailed plan for the implementation of mitigation and management measures for historic heritage items identified to be impacted by the project, in particular proposed consultation, archival recording, research and archaeological investigations to be undertaken for the locally significant Heathcliffe residence prior to and during any disturbance; <input type="checkbox"/> a detailed plan for management measures for maintaining or enhancing the heritage values of heritage items on project-related land which are outside of the approved disturbance area; <input type="checkbox"/> a description of the measures that would be implemented for: <input type="checkbox"/> managing the discovery of human remains or previously unidentified heritage items on site; and <input type="checkbox"/> ensuring workers on site receive suitable heritage inductions prior to carrying out any development on site, and that suitable records are kept of these inductions.	A letter from OEH dated 7 February 2017 provides several recommendations for strengthening the CHMP (Boggabri ACHMP OEH Comments 20170207.pdf; additional audit documents). The CHMP was not updated to address these recommendations prior to approval by DP&E on 13 February 2017 and has not been incorporated since	Improvement REC: Incorporate the recommended improvements from the OEH into the revised CHMP.		
Notes:				

Condition Number	Condition	Compliance Status	Evidence	Recommended Action
	<input type="checkbox"/> The Department acknowledges that the initial Heritage Management Plan may not include a detailed plan for the implementation of the Aboriginal Heritage Conservation Strategy. If this occurs, the Proponent will be required to update the plan as soon as practicable following the Secretary's approval of the Aboriginal Heritage Conservation Strategy.	Note		
Archaeological Salvage Program				
57	The Proponent shall prepare and implement an Archaeological Salvage Program for the project to the satisfaction of the Secretary. This Program must: (a) be prepared by suitably qualified and experienced person/s whose appointment has been endorsed by the Secretary;	Compliant	No change since previous audit It is noted that the CHMP Appendix I contains a letter approving Angela Besant (and Chris Carter) to prepare the CHMP, which includes undertaking the salvage program.	
	(b) be prepared in consultation with the OEH and the local Aboriginal stakeholders;	Compliant	Yes. No change since 2017 Meetings held with RAPs through the ASCFs. Minutes of the November 2016 and the November 2017 meetings provided. Not for the other four ASCF meetings held, although these are referred to in the 2017, 2018 and 2019 Annual Review documentation, including the dates upon which each meeting was held: 2017: May & November 2018: June & December 2019: February & July	
	(c) incorporate methodology including: <input type="checkbox"/> sub-surface testing; <input type="checkbox"/> staged salvage, based on anticipated mine planning; <input type="checkbox"/> pre-disturbance monitoring; <input type="checkbox"/> site assessment and reporting protocols; <input type="checkbox"/> research objectives to inform knowledge of Aboriginal occupation; <input type="checkbox"/> protection, storage and management of salvaged Aboriginal objects; <input type="checkbox"/> addressing relevant statutory requirements under the National Parks and Wildlife Act 1974; and <input type="checkbox"/> proposed long term plan for protection of salvaged Aboriginal objects.	Compliant	Methodologies were further discussed at ASCF meetings. Salvage including surface collection and test pitting occurred in two of the three reporting years as follows: - <u>2017 Annual Review notes</u> : Notes that 45.7 ha was cleared and inspected by RAPS. 12 artefacts salvaged. One an axe and RAPs asked for a couple of test pits which were dug. Nothing found in them. - Revised pre-clearing strategy said to be better with 12 artefacts found this year as opposed to 1 artefact found in previous year - <u>2018 Annual Review notes</u> : Notes that no salvage undertaken that year. - <u>2019 Annual Review notes</u> : - 11 previously unrecorded artefacts were salvaged and one Scarred Tree found. Collection was also made from 3 previously recorded sites: NV 15, NV16, NV10. - NV 82, an area of potential archaeological deposit (PAD) was inspected and 14 surface artefacts collected over 8 ha. Test pits were undertaken in four locations yielding 30 artefacts over 34 m2. - Salvage works were also undertaken at BC 34 recovering 69 surface artefacts - Eight artefacts were collected in the latter part of 2019 in the course of access track and borehole inspections. Drill sites over A355 and CL368 were inspected and any artefacts that would be impacted were collected. One Salvage report was supplied as evidence for meeting the reporting requirements of the salvage activities. This is by Insite 2018 and refers to the salvage activities undertaken in 2017 as described above. This report documents that ASIRFs were completed for the salvaged sites and that AHIMS site cards for completed for newly recorded sites. A selection of 12 ASIRFs were also supplied: for sites 20-1-0158 and 20-4-0906 to 0916 inclusive. Although not all ASIRFs have been sighted, the selection provided demonstrates that this requirement is being met. Proposed long term plan for salvaged objects continued to be discussed at ASCF meetings. Salvage is being undertaken when needed and in accordance with the CHMP, with transparent reporting in Annual Reports and to community forums. One salvage report and a selection of ASIRFs were supplied to evidence that these regulatory requirements are being met.	
TRANSPORT				
Road Upgrade and Maintenance				
58	Notes: <input type="checkbox"/> Under the Roads Act 1993, the Proponent will require separate approvals from RMS, NSW Forests and/or Council as the appropriate roads authorities prior to construction of, closure of or conducting mining operations within public roads. The Proponent shall construct, operate and maintain the bridges over the Kamilaroi Highway for the Boggabri Rail Spur Line and the haul road bridge to the satisfaction of RMS, and shall bear all costs associated with the construction and maintenance of these bridges.	Not triggered	Not triggered during audit period.	
58A	The Proponent shall design and construct the intersections with the Kamilaroi Highway for access to the haul road to the satisfaction of RMS.	Not triggered	Not triggered during audit period.	
59	The Proponent shall meet the requirements of the RMS in respect of road access from the Kamilaroi highway for temporary construction traffic, road intersection upgrades and maintenance of RMS roads used in respect of the project.	Not triggered	Not triggered during audit period.	
Traffic Management Plan				
	The Proponent shall prepare and implement a Traffic Management Plan for the project to the satisfaction of the Secretary. This plan must:		Preparation The latest version of the Traffic Management Plan is dated July 2017. Approved by DPIE in 2015. Traffic management plan was updated in 2017.	

Condition Number	Condition	Compliance Status	Evidence	Recommended Action
60	(a) be prepared in consultation with the RMS, Council and Gunnedah Council; (b) be submitted to the Secretary for approval within 6 months of the date of this approval; (c) propose an appropriate program and schedule of works for any intersection upgrades to be undertaken or contributed to by the Proponent arising from conditions 58 and 59 of Schedule 3; (d) include: (i) a code of conduct for drivers of heavy vehicles; (ii) nominated heavy vehicle access routes for construction and operational stages, including details on volumes and nature of heavy/over size and over/mass vehicles; (iii) measures to minimise traffic impacts at school bus pick up and drop off times; (iv) consideration of measures to minimise dust from unsealed roads that may be used for access to the mine site; and (v) a monitoring program to audit vehicle movements against predictions in the EA.	Compliant	Appendix A provides a record on consultation undertaken to date for the TMP. The TMP includes the required content as per the conditions. Implementation No traffic related issues were observed or communicated during the audit inspection. Traffic incidents are recorded and reported in the annual reviews.	
Leard Forest Road Closure				
61	The Proponent shall prepare and submit a Leard Forest Road Closure Strategy for approval by the Secretary in consultation with Council, Forests NSW, MCCC, CCC and the local community affected by the road closure. The strategy must: (a) provide a similar level of road access from Maules Creek to Manilla Road during flood events compared to the existing Leard Forest Road, following the closure of Leard Forest Road; (b) investigate options for a road realignment to join onto Goonbri Road to the east of Leard State Forest; (c) be funded by the Proponent for the capital cost of any upgrades or road realignment and identify allocation of ongoing maintenance costs; (d) include ongoing review of the effectiveness of the road closure strategy and provision of additional mitigation measures as necessary to maintain a similar level of access during flood events; and (e) be implemented prior to the closure of Leard Forest Road.	Not triggered	Complete prior to the audit period.	
Monitoring of Coal Transport				
62	The Proponent shall: (a) keep records of the: <input type="checkbox"/> amount of coal transported from the site (on a monthly basis); and <input type="checkbox"/> date and time of each train movement generated by the project; and (b) make these records available on its website at the end of each calendar year.	Compliant	Required records available on the website for the audit period to end of 2019. As reported in the Annual Reviews coal transported from Boggabri was as follows: - 2017 - 6.9 Mt - 2018 - 6.6 Mt - 2019 - 6.1 Mt - 2020 year to date provided by site 5.9 Mt	
Rail Transport				
63	The Proponent shall liaise with Gunnedah Shire Council regarding the recommendations made in the Gunnedah Traffic Study for mitigating impacts of coal rail transportation on road safety and congestion in the Gunnedah LGA due to closures of rail level crossings.	Compliant	BCO unable to provide evidence of liaison with GSC on this matter, also raised in previous audit GSC responded by suggesting new rail overpass evidences response to study concerns. The rail over pass in Gunnedah was constructed during the audit period and opened to traffic in November 2020.	
64	Within 12 months of the completion of the Gunnedah Traffic Study, the Proponent shall provide a report of the outcomes of this liaison and identify any proposals recommended by either the Proponent or the Gunnedah Shire Council towards implementing reasonable and feasible recommendations, to the satisfaction of the Secretary. Note: Any contribution by the Proponent should be on an equitable basis with other coal project rail users.	Administrative non-compliance	No evidence of a report could be provided however, the rail over pass in Gunnedah was constructed during the audit period and opened to traffic in November 2020. No further recommendations.	
VISUAL				
Operating Conditions				
65	The Proponent shall: (a) implement all reasonable and feasible measures to minimise the visual and off-site lighting impacts of the project; (b) ensure no outdoor lights shine above the horizontal; (c) wherever possible, ensure that mobile equipment is appropriately designed and/or retrofitted to prevent light being directed above the horizontal; (d) ensure that all external lighting associated with the project complies with Australian Standard AS4282 (INT) 1997 – Control of Obtrusive Effects of Outdoor Lighting or its latest version; (e) provide for the establishment of trees and shrubs and/or the construction of mounding or bunding: <input type="checkbox"/> along the access road to the mine site; <input type="checkbox"/> along the private haul road; <input type="checkbox"/> along the Boggabri Rail Spur Line; <input type="checkbox"/> around the water storage dams; and <input type="checkbox"/> at other areas identified as necessary for the maintenance of satisfactory visual amenity; (f) ensure that the visual appearance of all buildings, structures (including the rail spur bridge over the Namoi river floodplain and Kamilaroi highway), facilities or works (including paint colours and specifications) is aimed at blending as far as possible with the surrounding landscape. to the satisfaction of the Secretary.	Compliant	a) There have been no complaints with regard to visual or lighting during the audit period. B - d) Site inspection did not identify any non-compliance with this requirement e) The site is difficult to see from many public view points. Plantings have been undertaken near the security gate entrance. Native vegetation remains in place around water storage areas and rail spur where feasible. f) Buildings have been constructed using materials which are unobtrusive (charcoal and green).	
Additional Visual Impact Mitigation				

Condition Number	Condition	Compliance Status	Evidence	Recommended Action										
66	<p>Upon receiving a written request from the owner of any residence on privately-owned land which has, or would have, significant direct views of the mining operations and infrastructure on site during the project, the Proponent shall implement additional visual impact mitigation measures (such as landscaping treatments or vegetation screens) to reduce the visibility of these mining operations and infrastructure from the residences on their properties.</p> <p>These mitigation measures must be reasonable and feasible, and must be implemented within a reasonable timeframe.</p> <p>If the Proponent 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>Notes:</p> <ul style="list-style-type: none"> <input type="checkbox"/> The additional visual impact mitigation measures must be aimed at reducing the visibility of the mining operations on site from significantly affected residences, and do not require measures to reduce the visibility of the mining operations from other locations on the affected properties; <input type="checkbox"/> The additional visual impact mitigation measures do not necessarily have to include the implementation of measures on the affected property itself (i.e. the additional measures could involve the implementation of measures outside the affected property boundary that provide an effective reduction in visual impacts); and <input type="checkbox"/> Except in exceptional circumstances, the Secretary will not require additional visual impact mitigation to be undertaken for residences that are more than 7.5 kilometres from the mining operations. 	Not triggered	No requests have been received and no residences have direct view of the mine.											
BUSHFIRE MANAGEMENT														
67	<p>The Proponent shall:</p> <p>(a) ensure that the project is suitably equipped to respond to any fires on site; and</p> <p>(b) assist the Rural Fire Service, NSW Forests, emergency services and National Parks and Wildlife Services as much as possible if there is a fire in the surrounding area.</p>	Compliant	The biodiversity corridor plan contained within the Biodiversity Management Plan includes bushfire management procedures. The site has a number of dams which can be utilised for bushfire fighting if required.											
WASTE														
68	<p>The Proponent shall:</p> <p>(a) implement all reasonable and feasible measures to minimise the waste (including coal reject) generated by the project;</p> <p>(b) ensure that the waste generated by the project is appropriately stored, handled and disposed of;</p> <p>(c) monitor and report on the effectiveness of the waste minimisation and management measures in the Annual Review.</p>	Compliant	<p>a) waste segregation waste noted to encourage the recycling of materials where appropriate. Where possible the reuse of material is encouraged. Staff and contractors are to follow the waste hierarchy.</p> <p>b) site inspection confirmed that waste was correctly segregated and stored on site. Licensed contractors remove waste on a regular basis to ensure bins are not overloaded. Waste receptacles noted at numerous parts around the site. Signage of waste type on the sides of the bins and above the storage near the workshop. There has been some increase in waste generated in the 2019 Annual Review - this was attributable to additional waste streams, better tracking and reporting.</p> <p>c) Waste management and volumes are appropriately reported in the Annual Reviews.</p>											
REHABILITATION														
Rehabilitation Objectives														
69	<p>The Proponent shall rehabilitate the site to the satisfaction of Resources Regulator. This rehabilitation must be generally consistent with the proposed Rehabilitation Strategy described in the EA (and depicted conceptually in Appendix 9) and comply with the objectives in Table 16.</p> <p>Table 16: Rehabilitation Objectives</p> <table border="1"> <thead> <tr> <th>Feature</th> <th>Objective</th> </tr> </thead> <tbody> <tr> <td>Mine site (as a whole), including the final void.</td> <td>Safe, stable and non-polluting Minimise the size and depth of the final void as far as is reasonable and feasible and ensure that the void contains no retained surface water (ie no pit lake).</td> </tr> <tr> <td>Surface infrastructure</td> <td>Constructed landforms drain to the natural environment. To be decommissioned and removed, unless the DRE agrees otherwise.</td> </tr> <tr> <td>Other land</td> <td>Restore ecosystem function, including maintaining or establishing self-sustaining ecosystems comprised of: • local native plant species (unless DRE agrees otherwise); and • a landform consistent with the surrounding environment.</td> </tr> <tr> <td>Community</td> <td>Ensure public safety Minimise the adverse socio-economic effects associated with mine closure</td> </tr> </tbody> </table>	Feature	Objective	Mine site (as a whole), including the final void.	Safe, stable and non-polluting Minimise the size and depth of the final void as far as is reasonable and feasible and ensure that the void contains no retained surface water (ie no pit lake).	Surface infrastructure	Constructed landforms drain to the natural environment. To be decommissioned and removed, unless the DRE agrees otherwise.	Other land	Restore ecosystem function, including maintaining or establishing self-sustaining ecosystems comprised of: • local native plant species (unless DRE agrees otherwise); and • a landform consistent with the surrounding environment.	Community	Ensure public safety Minimise the adverse socio-economic effects associated with mine closure	Compliant	<p>These are final landform objectives, with rehabilitation ongoing.</p> <p>The MOP lists these final landuse and rehabilitation objectives</p> <p>Based on site communications and interviews, it is noted that the rehabilitated landform has been designed and constructed as a "rice paddy" design with ponding on the top surface. This was discussed during the site visit. There are concerns that a rice paddy design will not meet free draining requirements and ponding at the surface of dumps may result in tunnel erosion and compromise the landform.</p>	Improvement REC: Undertake further investigations to confirm that the proposed "rice paddy" final landform meets this development consent condition of "constructed landforms drain to the natural environment" and the MOP rehabilitation objective of creating a stable free draining landform.
Feature	Objective													
Mine site (as a whole), including the final void.	Safe, stable and non-polluting Minimise the size and depth of the final void as far as is reasonable and feasible and ensure that the void contains no retained surface water (ie no pit lake).													
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Community	Ensure public safety Minimise the adverse socio-economic effects associated with mine closure													
Progressive Rehabilitation														
	The Proponent shall rehabilitate the site progressively, that is, as soon as reasonably practicable following disturbance. All reasonable and feasible measures must be taken to minimise the total area exposed for dust generation at any time. Interim rehabilitation strategies shall be employed when areas prone to dust generation cannot yet be permanently rehabilitated.		BCOPL undertake progressive rehabilitation in accordance with the approved MOP and is reported in the Annual Review. In 2020 there is 6.8 ha of rehabilitation planned.											

Condition Number	Condition	Compliance Status	Evidence	Recommended Action
70	Note: It is accepted that some parts of the site that are progressively rehabilitated may be subject to further disturbance at some later stage of the development.	Compliant	Site inspection was undertaken of both newly established and advanced rehabilitation. General the rehabilitation was good. Evidence of erosion repair due to high rainfall events was observed. Established rehabilitation was quite dense and stable. Mulch and seedlings were observed in newer rehabilitation. Areas prepared for planting was also observed, with planting to commence in the coming weeks. Some areas of weeds were noted during the site inspection to be managed and some areas of scouring in new rehab areas following recent rainfall events. Improvement recommendations have been made with regards to rehabilitation.	Improvement REC: Undertake additional weed management in rehabilitation areas and repairs to erosion / scouring as required. Improvement REC: Consider cover crops and/or hydromulch to assist with stabilisation in tubestock areas until tubestock takes off and ground cover increases.
Rehabilitation Management Plan				
71	The Proponent shall prepare and implement a Rehabilitation Management Plan to the satisfaction of Resources Regulator. This plan must: (a) be prepared in consultation with the Department, Forests NSW, NOW, OEH, North West LLS, Council and the CCC; (b) be submitted Resources Regulator within 6 months from the date of this approval; (c) be prepared in accordance with any relevant Resources Regulator guideline; (d) describe how the rehabilitation of the site would be integrated with the implementation of the biodiversity management plan; (e) include detailed performance and completion criteria for evaluating the performance of the rehabilitation of the site, and triggering remedial action (if necessary); (f) describe the measures that would be implemented to ensure compliance with the relevant conditions of this approval, and address all aspects of rehabilitation including mine closure, final landform, and final land use; (g) include interim rehabilitation where necessary to minimise the area exposed for dust generation; (h) 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 (i) build to the maximum extent practicable on the other management plans required under this approval. Note: In particular the Biodiversity Management Plan and Rehabilitation Management Plan need to be substantially integrated for achieving biodiversity objectives for the rehabilitated mine-site.	Compliant	<u>Preparation</u> The Rehabilitation Management Plan is incorporated into the Mining Operations Plan (MOP) Latest version approved by RR on 8 April 2020. a) details of consultation provided in Section 2.5 b - c) Latest version approved by RR on 8 April 2020 d) Addressed in Section 1.1 e) Section 8.2 f) Detailed in Appendix A g) included as Section 7.13 h) Section 9 and Appendix A i) Relates to the BMP and AGHGMP (dust) <u>Implementation</u> Notes regarding implementation and efficacy of the RMP detailed in line items above. It is noted that site discussions indicated that the MOP rehab targets will not be achieved for 2020 due to MOD 8 . Will need to consult with RR regarding MOP Amendment to reflect the revised schedule.	
Final Void Design and Closure				
72	The Proponent shall prepare and implement an updated Final Void and Mine Closure Plan (as a component of the overall Rehabilitation Management Plan required under condition 71 of Schedule 3) to the satisfaction of Resources Regulator. This plan must: (a) be submitted to Resources Regulator by the end of December 2025; (b) address future stability of the proposed landforms, long term groundwater recovery and void groundwater quality characteristics; (c) include a detailed assessment of the hydrochemistry, hydrogeology and hydrology components of the final void and landform design that has been subject to independent review and verification by suitably qualified, experienced and independent person/s whose appointment has been approved by the Secretary. (d) demonstrate that: (i) the long term landform will not generate a pit lake; (ii) emplaced spoil has the capacity to drain to the natural environment; and (iii) drained waters do not adversely affect the downstream environment (e) identify opportunities for integrated mine planning with adjoining mines to minimise environmental impacts of the final landform.	Not triggered	Not within audit period	
SOCIAL IMPACTS				
Agricultural Production on Project-Owned Land				
73	The Proponent shall use its best endeavours to ensure that the agricultural productivity of land that is project related (including remaining agricultural land on properties forming the biodiversity offset area) is maintained or enhanced. Note: This does not include land where disturbance is permitted under the conditions of this approval, or land that forms part of the biodiversity offset area. However, the corridor enhancement zone that forms part of the Biodiversity Offset Area will need to be further assessed for agricultural suitability and management may include both agricultural and conservation outcomes identified as part of an approved biodiversity management plan.	Compliant	Annual Reviews summarise the management of agricultural land at BCOPL. Biodiversity management is outside the scope of this audit. Management of agricultural properties is reported in the annual reviews.	
Agricultural Production on land acquired due to impacts on residential receivers				
74	The Proponent shall ensure that any properties primarily used for agricultural production that are acquired by the Proponent due to impacts on residential receivers continue to be operated and maintained for sustainable agricultural production, unless they have been incorporated into an approved biodiversity offset area. This condition ceases to have effect if the Proponent disposes of the property.	Compliant	As reported in the annual reviews, agricultural lands owned by BCOPL continue to be managed for agricultural purposes under private lease agreements with local landholders.	
Housing Strategy				
75	The Proponent shall implement the Boggabri Coal Housing Commitment identified in the EA, in consultation with Council, to provide for: (a) construction of a minimum of 10 dwellings in Boggabri, within a timeframe agreed by Council; (b) construction of a minimum of 20 dwellings in Narrabri, within a timeframe agreed by Council; and (c) implementation of remaining commitments within the terms of the approved Social Impact Management Plan (see condition 77 of Schedule 3). If there is any dispute between Council and the Proponent regarding the timing of construction, then either party may refer the matter to the Secretary for resolution, whose decision shall be final.	Compliant	BCOPL have commenced construction of an early learning centre in Boggabri which will be completed in the next audit period. A-b) houses have not yet been constructed and there is no time limit on this condition. The SIMP outlines the procedure to monitor whether BCOPL operations are having a negative impact on the affordability of housing in the Gunnedah and Narrabri LGAs. Further action on this would be undertaken in consultation with each council if monitoring of housing price data indicated a drop in affordability. c) Table 5-22 of the SIMP outlines monitoring requirements in terms of social impact. This has been assessed as compliant as there is no completion date and based on site discussions, additional housing may not be the best outcome for the community. BCOPL have evidenced construction of an early learning centre in Boggabri which will be completed in the next audit period. Continue liaison with the DPIE and Council relating to this condition. Agreement on the best outcome for the area based on the housing strategy.	
Construction Workforce Accommodation				
	Prior to construction activities commencing, the Proponent shall prepare and implement a Construction Workforce Accommodation Plan, in consultation with Council, and to the satisfaction of the Secretary. The plan must:			

Condition Number	Condition	Compliance Status	Evidence	Recommended Action
76	(a) provide details of the construction workforce numbers throughout all stages of construction including local vs. non-local hiring; and (b) for off-site accommodation options, demonstrate that the construction workforce can be suitably housed in approved accommodation facilities.	Not triggered	Construction completed prior to the audit period	
Social Impact Management Plan				
77	The Proponent shall prepare and implement a Social Impact Management Plan for the project to the satisfaction of the Secretary to manage the potential impacts of the project. This plan must: (a) be prepared by suitably qualified and experienced person/s whose appointment has been endorsed by the Secretary; (b) be prepared in consultation with Council, Gunnedah Shire Council, the CCC, Aboriginal stakeholders and other relevant Government agencies and service providers, other mine operators in the Leard Forest Mining Precinct and submitted to the Secretary for approval within 12 months of project approval; (c) take into consideration relevant actions related to social impacts identified in the Strategic Regional Land Use Plan for New England North West; (d) identify the social impacts resulting from the various stages of the project (including construction, operational and decommissioning stages) in both the local and regional context, including but not limited to: <input type="checkbox"/> soft infrastructure such as housing, medical, education, childcare and emergency services; <input type="checkbox"/> hard infrastructure such as local and regional roads and rail; <input type="checkbox"/> economic/business development; and <input type="checkbox"/> workforce demand/supply factors, such as training needs; and <input type="checkbox"/> labour availability impacts on other sectors, such as agricultural enterprises; (e) incorporate the housing availability and affordability initiatives identified in the EA, including the Boggabri Coal Housing Commitment; (f) identify proposed initiatives for promoting workforce opportunities for residing in the area/region as opposed to FIFO/DIDO; (g) include a management and mitigation program to minimise and/or mitigate social impacts; and (h) include a monitoring program, incorporating key performance indicators and a review and reporting protocol, including reporting in the annual review.	Compliant	Latest version of the Social Impact Management Plan is dated October 2020. Approval by DPIE is pending. The latest approved version is was approved by DPIE in April 2014. The below assessment of preparation is based on the revised 2020 version. a) Endorsement letter for Bronwyn Pressland and Lauren Jessup of Hansen Bailey provided in Appendix A. b) The October document has recently been finalised and will be distributed to the stakeholders listed in the condition c) Included as Section 2.6.1 d) Addressed in Section 5.3, 3.25 and 4.9 e) Addressed in Sections 2.2.2., 4.7 and 5.3.1 f) Included in Sections 3.2.3 and 5.3.2 g) Section 7 h) Section 7 <u>Implementation</u> Detailed reporting on social impacts are provided in the section 4.15 of the Annual Reviews.	
Schedule 4 Additional Procedures				
NOTIFICATION OF LANDOWNERS/TENANTS				
1	Within 3 months of the date of this approval, the Proponent shall: (a) notify in writing the owner(s) of: <input type="checkbox"/> the land identified in conditions 3 and 25 of schedule 3 that they have the right to require the Proponent to acquire their land at any stage during the project; <input type="checkbox"/> any residence on the land listed in conditions 3 and 26 of schedule 3 that they have the right to request the Proponent for additional noise and/or air quality mitigation measures to be installed at their residence at any stage during the project; and <input type="checkbox"/> any privately-owned land within 2 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; (b) notify the tenants of any mine-owned land of their rights under this approval; and (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 EA identify that dust emissions generated by the project are likely to be greater than the relevant air quality criteria in schedule 3 at any time during the life of the project.	Not triggered	Evidence sighted. However this was undertaken prior to the audit period.	
2	Prior to entering into any tenancy agreement for any land owned by the Proponent that is predicted to experience exceedances of the recommended dust criteria, the Proponent shall: (a) advise the prospective tenants of the potential health and amenity impacts associated with living on the land; (b) advise the prospective tenants of the rights they would have under this approval; and (c) provide the prospective tenants with a copy of the NSW Health fact sheet entitled "Mine Dust and You" (as may be updated from time to time); and (d) request the prospective tenants consult their medical practitioner to discuss the air quality monitoring data and predictions and potential health impacts arising from this information, to the satisfaction of the Secretary.	Not triggered	No tenancy agreements in place for land to 'exceed dust criteria'.	
3	As soon as practicable after obtaining monitoring results showing: (a) an exceedance of the relevant criteria in schedule 3, the Proponent shall notify the affected landowner in writing of the exceedance, and provide regular monitoring results to each of these parties until the project is complying with the relevant criteria again; and (b) an exceedance of the relevant air quality criteria in schedule 3, the Proponent shall send a copy of: <input type="checkbox"/> the NSW Health fact sheet entitled "Mine Dust and You" (as may be updated from time to time); and <input type="checkbox"/> the air quality monitoring data, in an appropriate format so that a medical practitioner can assist the resident in making an informed decision on the health risks associated with occupation of the property, to the landowner/s and/or existing tenants of the land.	Non-Compliant (Low Risk)	a) <u>Non-compliant</u> - A blast on the 21 August 2019 exceeded the limit of 120 dBA. A recording of 123dBA was recorded at Wilderoi East. Verbal notification was provided to landowners. However, this was not notified to EPA and residents until 28 August. The DPIE and EPA issued notices for the non reporting. b) No reportable dust exceedances were recorded in the audit period.	
INDEPENDENT REVIEW				
Landowners				
4	If an owner of privately-owned land considers the project to be exceeding the criteria in schedule 3 (other than the noise criteria), then he/she may ask the Secretary in writing for an independent review of the impacts of the project on his/her land. If the Secretary is satisfied that an independent review is warranted, then within 2 months of the Secretary's decision, the Proponent shall: (a) commission a suitably qualified, experienced and independent expert, whose appointment has been approved by the Secretary, to: <input type="checkbox"/> consult with the landowner to determine his/her concerns; <input type="checkbox"/> conduct monitoring to determine whether the project is complying with the relevant impact assessment criteria in schedule 3; and <input type="checkbox"/> if the project is not complying with these criteria then: i. determine if the more than one mine is responsible for the exceedance, and if so the relative share of each mine towards the impact on the land; ii. identify the measures that could be implemented to ensure compliance with the relevant criteria; and (b) give the Secretary and landowner a copy of the independent review.	Not triggered	No requests have been made to the Secretary within the audit period regarding an independent review.	
5	If the independent review determines that the project is complying with the relevant criteria in schedule 3, then the Proponent may discontinue the independent review with the approval of the Secretary. If the independent review determines that the project is not complying with the relevant criteria, and that the project is primarily responsible for this non-compliance, then the Proponent shall: (a) acquire the land in accordance with the procedures in conditions 8-9 below; or if preferred by the landowner, (b) implement all reasonable and feasible mitigation measures, in consultation with the landowner and appointed independent expert, and conduct further monitoring until the project complies with the relevant criteria; or	Not triggered	No independent reviews undertaken during the audit period.	

Condition Number	Condition	Compliance Status	Evidence	Recommended Action
	(c) secure a written agreement with the landowner to allow exceedances of the relevant criteria, to the satisfaction of the Secretary. If the independent review determines that the project is not complying with the relevant acquisition criteria, and that the project is primarily responsible for this non-compliance, then upon receiving a written request from the landowner, the Proponent shall acquire all or part of the landowner's land in accordance with the procedures in condition 8-9 below.			
6	If the independent review determines that the relevant criteria are being exceeded, but that more than one mine is responsible for this exceedance, then together with the relevant mine/s the Proponent shall: (a) acquire the land in accordance with the procedures in conditions 8-9 below; or if preferred by the landowner, (b) implement all reasonable and feasible mitigation measures, in consultation with the landowner and appointed independent expert, and conduct further monitoring until there is compliance with the relevant criteria; or (c) secure a written agreement with the landowner and other relevant mine/s to allow exceedances of the relevant impact assessment criteria, to the satisfaction of the Secretary.	Not triggered	No independent reviews undertaken during the audit period.	
Biodiversity & Heritage				
7	If a person has good reason to believe the Proponent is not implementing the biodiversity and/or heritage conditions in schedule 3 satisfactorily, then he/she may ask the Secretary in writing for an independent review of the matter. If the Secretary is satisfied that an independent review is warranted, then within 2 months of the Secretary's decision, the Proponent shall: (a) commission a suitably qualified, experienced and independent person, whose appointment has been approved by the Secretary, to: <input type="checkbox"/> consult with the person and/or any relevant agencies; <input type="checkbox"/> investigate the person's complaints/claims; <input type="checkbox"/> review the environmental performance of the Proponent; <input type="checkbox"/> determine whether the Proponent's performance is satisfactory or not; and if necessary <input type="checkbox"/> recommend measures to improve the Proponent's performance; and (b) give the Secretary and complainant a copy of the independent review.	Not triggered	No requests have been made to the Secretary within the audit period.	
LAND ACQUISITION				
8	Within 3 months of receiving a written request from a landowner with acquisition rights, the Proponent shall make a binding written offer to the landowner based on: (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 project, having regard to the: <input type="checkbox"/> existing and permissible use of the land, in accordance with the applicable planning instruments at the date of the written request; and <input type="checkbox"/> 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 mitigation measures required under conditions 3 and 26 of schedule 3; (b) the reasonable costs associated with: <input type="checkbox"/> relocating within the Tamworth, Narrabri, Gunnedah or Moree local government area, or to any other local government area determined by the Secretary; and <input type="checkbox"/> 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 (c) reasonable compensation for any disturbance caused by the land acquisition process. However, if at the end of this period, the Proponent 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. Upon receiving such a request, the Secretary shall request the President of the NSW Division of the Australian Property Institute to appoint a qualified independent valuer to: <input type="checkbox"/> consider submissions from both parties; <input type="checkbox"/> 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; <input type="checkbox"/> prepare a detailed report setting out the reasons for any determination; and <input type="checkbox"/> provide a copy of the report to both parties. Within 14 days of receiving the independent valuer's report, the Proponent shall make a binding written offer to the landowner to purchase the land at a price not less than the independent valuer's determination. 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. Within 14 days of this determination, the Proponent shall make a binding written offer to the landowner to purchase the land at a price not less than the Secretary's determination. If the landowner refuses to accept the Proponent's binding written offer under this condition within 6 months of the offer being made, then the Proponent's obligations to acquire the land shall cease, unless the Secretary determines otherwise.	Not triggered	There has been no acquisition of land during the audit period	
9	The Proponent shall pay all reasonable costs associated with the land acquisition process described in condition 6 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.	Not triggered	Not triggered during audit period.	
Schedule 5 ENVIRONMENTAL MANAGEMENT, REPORTING AND AUDITING				
ENVIRONMENTAL MANAGEMENT				
Environmental Management Strategy				
	The Proponent shall prepare and implement an Environmental Management Strategy for the project to the satisfaction of the Secretary. The strategy must: (a) be submitted to the Secretary for approval within 6 months of the date of this approval; (b) provide the strategic framework for environmental management of the project; (c) identify the statutory approvals that apply to the project; (d) describe the role, responsibility, authority and accountability of all key personnel involved in the environmental management of the project;		Latest version of the EMS is dated June 2020. Approval by DPIE is pending. The latest approved version is was approved by DPIE in 2013 and was assessed in the previous audit. The below assessment of preparation is based on the revised 2020 version. Preparation: a) Environmental Management Strategy dated January 2013 and was submitted within six months of the Project Approval date. A 2016 Environmental Management Strategy has been prepared. This is still draft for consultation and has not yet been approved.	

Condition Number	Condition	Compliance Status	Evidence	Recommended Action
1	<p>(e) describe the procedures that would be implemented to:</p> <ul style="list-style-type: none"> <input type="checkbox"/> keep the local community and relevant agencies informed about the operation and environmental performance of the project; <input type="checkbox"/> receive, handle, respond to, and record complaints; <input type="checkbox"/> resolve any disputes that may arise during the course of the project; <input type="checkbox"/> respond to any non-compliance; <input type="checkbox"/> respond to emergencies; and <p>(f) include:</p> <ul style="list-style-type: none"> <input type="checkbox"/> copies of any strategies, plans and programs approved under the conditions of this consent; and <p><input type="checkbox"/> a clear plan depicting all the monitoring to be carried out in relation to the project.</p>	Compliant	<p>b) Section 2.3. Covered in entire document.</p> <p>c) Section 2.1</p> <p>d) Section 3.1</p> <p>e) Section 3 and 5.</p> <p>f) Section 3.2 lists structure of the EMS, including plans. Appendix A outlines environmental monitoring locations.</p> <p>Implementation:</p> <ul style="list-style-type: none"> * Evidence of logging and management of complaints and incidents; * Evidence of community liaison; * Evidence of monitoring program; * Evidence of inspections from BCOPL. 	
Adaptive Management				
2	<p>The Proponent must assess and manage project-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 approval and may be subject to penalty or offence provisions under the EP&A Act or EP&A Regulation.</p> <p>Where any exceedance of these criteria and/or performance measures has occurred, the Proponent must at the earliest opportunity:</p> <p>(a) take all reasonable and feasible steps to ensure that the exceedance ceases and does not recur ;</p> <p>(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 courses of action; and</p> <p>(c) implement remediation measures as directed by the Secretary, to the satisfaction of the Secretary.</p>	Compliant	<p>A blast on the 21 August 2019 exceeded the limit of 120 dBA. A recording of 123dBA was recorded at Wilderoi East. Notification to DPIE was provided on the 28 August. An analysis of meteorological conditions was undertaken by Todoroski Air Sciences. Exceedance was due to short term fluctuation in upper wind conditions. Following the identification of the incident an incident report was completed and no further exceedances have been recorded.</p> <p>Based on a review of information provided by site there have been no criteria non-compliances relating to water or air quality during the audit period.</p> <p>The 2019 sound power screening program indicated that there were 22 items of screened plant that recorded exceedances of 3dB or greater. The SPL attenuation exhaust kit trial will continue beyond the audit period</p>	
Management Plan Requirements				
3	<p>The Proponent shall ensure that the management plans required under this consent are prepared in accordance with any relevant guidelines, and include:</p> <p>(a) detailed baseline data;</p> <p>(b) a description of:</p> <ul style="list-style-type: none"> <input type="checkbox"/> the relevant statutory requirements (including any relevant consent, licence or lease conditions); <input type="checkbox"/> any relevant limits or performance measures/criteria; <input type="checkbox"/> 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; <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"> <input type="checkbox"/> impacts and environmental performance of the project; <input type="checkbox"/> effectiveness of any management measures (see c above); <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 project over time;</p> <p>(g) a protocol for managing and reporting any:</p> <ul style="list-style-type: none"> <input type="checkbox"/> incidents; <input type="checkbox"/> complaints; <input type="checkbox"/> non-compliances with statutory requirements; and <input type="checkbox"/> exceedances of the impact assessment criteria and/or performance criteria; and <p>(h) a protocol for periodic review of the plan.</p>	Compliant	<p>Management plans prepared and approved comply with the requirements of a) to h). Some management plans require specific items to be addressed which are in addition to requirements of a-h.</p>	
Annual Review				
4	<p>By the end of March each year, the Proponent shall review the environmental performance of the project 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 project over the past year, which includes a comparison of these results against the:</p> <ul style="list-style-type: none"> <input type="checkbox"/> relevant statutory requirements, limits or performance measures/criteria; <input type="checkbox"/> monitoring results of previous years; and <input type="checkbox"/> relevant predictions in the EA; <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 project;</p> <p>(e) identify any discrepancies between the predicted and actual impacts of the project, 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 project.</p>	Administrative non-compliance	<p>Annual reviews for 2017, 2018 and 2019 were provided. They are also available on the BCOPL website. Each were submitted to DPIE prior to the end of March.</p> <p>A) Rehabilitation details are provided in Section 8 of the Annual Review</p> <p>b) Monitoring results and comparison with performance are included in Section. 4. Complaints are summarised in Section 7.3</p> <p>c) non compliances are summarised in Section 5</p> <p>d) trends in monitoring are included in Section 4. As noted in the previous audit, while long term trends associated with groundwater are presented in the annual reviews, there is little information relating to longer terms trends for air quality, surface water and noise over the life of mine as required by this condition..</p> <p>e) discrepancies against predictions (as relevant) are covered in Section 4</p> <p>f) next years activities and improvements are included in section 5 and 9</p>	Improvement REC: Include additional information in the annual reviews regarding longer term trends particularly in terms of surface water, noise and air quality
Revision of Strategies, Plans and Programs				

Condition Number	Condition	Compliance Status	Evidence	Recommended Action
5	<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 8 below;</p> <p>(c) an audit under condition 10 below; and</p> <p>(d) any modification to the conditions of this approval.</p> <p>the Proponent shall review the strategies, plans, and programs required under this approval.</p> <p>Where this review results in revisions to any such document, then within 4 weeks of the completion of the revision, unless the Secretary agrees otherwise, the revised document must be submitted to the Secretary for approval.</p>	Administrative non-compliance	<p>It is acknowledged that BCOPL has been progressively working on updating management plans for several years with revised versions submitted to department.</p> <p>Management plans and strategies have been updated over the last three years with the exception of the CHMP which is dated November 2016.</p>	Improvement REC: Prepare a document review register to evidence dates when documents are reviewed. Register should identify if any changes are identified as being required.
Management of Cumulative Impacts				
6	In conjunction with the owners of the nearby mines in the Leard Forest Mining Precinct, the Proponent shall use its best endeavours to minimise the cumulative impacts of the project on the surrounding area to the satisfaction of the Secretary.	Compliant	Meeting minutes from the BTM monthly meetings. BTM Strategies and management plans in place.	
Community Consultative Committee				
7	<p>The Proponent shall operate a Community Consultative Committee (CCC) for the project to the satisfaction of the Secretary. This CCC must be operated in general accordance with the Guidelines for Establishing and Operating Community Consultative Committees for Mining Projects (Department of Planning, 2007, or its latest version), and be operating within 6 months of the date of this approval.</p> <p>The CCC must include one member representing the MCCC (if the MCCC is still operating and agreed to by the MCCC), one member from Aboriginal stakeholder groups, and seek to include some joint membership with CCCs for other operating coal mines within the Leard Forest Mining Precinct, unless otherwise agreed by the Secretary.</p> <p>Notes:</p> <p><input type="checkbox"/> The CCC is an advisory committee. The Department and other relevant agencies are responsible for ensuring that the Proponent complies with this approval; and</p> <p><input type="checkbox"/> In accordance with the Department's guideline, the CCC should be comprised on an independent chair and appropriate representation from the Proponent, Council, recognised environmental groups and the local community.</p>	Compliant	<p>Evidence of CCC meetings on website. CCC consists of relevant structure as per this condition including an independent chair.</p> <p>CCC minutes are provided on the website dating back to 2012.</p>	
REPORTING				
Incident Reporting				
8	The Proponent shall notify, at the earliest opportunity, the Secretary and any other relevant agencies of any incident that has caused, or threatens to cause, material harm to the environment. For any other incident associated with the project, the Proponent shall notify the Secretary and any other relevant agencies as soon as practicable after the Proponent becomes aware of the incident. Within 7 days of the date of the incident, the Proponent shall provide the Secretary and any relevant agencies with a detailed report on the incident, and such further reports as may be requested.	Non-Compliant (Low Risk)	This exceedance was reported to DPIE on 28 August 2019. BCOPL was issued with a warning letter from DPIE on 18 October 2019 for not reporting the blast overpressure exceedance within seven days of the incident. Notification of the exceedance was sent via text and email but was originally missed. This is attributable to the amount of trigger text messages which were received, particularly under the old system.	NC REC: Implement changes to the TARP notifications system to distinguish "triggers" from "exceedances" so that reportable exceedances are not missed.
Regular Reporting				
9	The Proponent shall provide regular reporting on the environmental performance of the project on its website, in accordance with the reporting arrangements in any plans or programs approved under the conditions of this approval.	Compliant	<p>Environmental performance is outlined on the website through environmental reporting. Including summaries for groundwater, surface water, dust and noise.</p> <p>Annual reviews are available on the website.</p>	
AUDITING				
Independent Environmental Audit				
10	<p>By the end of June 2014 and every 3 years thereafter, unless the Secretary directs otherwise, the Proponent shall commission and pay the full cost of an Independent Environmental Audit of the project. 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;</p> <p>(c) assess the environmental performance of the project and assess whether it is complying with the requirements in this approval, and any other relevant approvals, relevant EPL/s and/or Mining Lease (including any assessment, plan or program required under these approvals);</p> <p>(d) assess whether the Proponent is implementing best noise, blasting and air quality management practice;</p> <p>(e) investigate and report on the measures taken to minimise the noise impacts of the project during meteorological conditions when the noise limits in this approval do not apply, including:</p> <p><input type="checkbox"/> the effectiveness of these measures in maintaining noise impacts within the relevant noise criteria in this approval and/or the limits in the relevant EPL; and</p> <p><input type="checkbox"/> any additional measures available to mitigate noise impacts under such meteorological conditions</p> <p>(f) investigate and report on the measures taken to minimise the air quality impacts of the project during adverse meteorological conditions and extraordinary events (see condition 30(d) of Schedule 3), including:</p> <p><input type="checkbox"/> the effectiveness of these measures in maintaining air quality impacts within the criteria in Table 9, Table 10 and Table 11 of Schedule 3; and</p> <p><input type="checkbox"/> any additional measures available to mitigate air quality impacts under such conditions;</p> <p>(g) review the adequacy of any approved strategy, plan or program required under the abovementioned approvals; and</p> <p>(h) recommend measures or actions to improve the environmental performance of the project and/or any strategy, plan or program required under these approvals.</p> <p>Note: This audit team must be led by a suitably qualified auditor, and include experts in noise, air quality, ecology, Aboriginal heritage and any other fields specified by the Secretary.</p>	Compliant	<p>Previous audits were undertaken in 2014 (Graham Brown and Associates and 2017 and 2020 (SLR Consulting). The audit team was approved by DPIE prior to the audit being undertaken.</p> <p>b) consultation was undertaken with relevant agencies as well as the CCC at the start of the audit</p> <p>c) Environmental performance was assessed against all relevant approvals in the 2014, 2017 and 2020 audit</p> <p>d) review of relevant management plans (air, noise and blast) was undertaken and monitoring was undertaken. Site activities in compliance with these parameters were observed during the site visit</p> <p>e) Audits of noise specialist was undertaken</p> <p>f) Air quality specialists undertook compliance assessment</p> <p>g) Each approved management plan was reviewed for its adequacy, particularly with reference to PA 09_0182</p> <p>h) Recommendations as well as observations were detailed in the audits.</p>	

Condition Number	Condition	Compliance Status	Evidence	Recommended Action
11	Within 3 months of commissioning this audit, or as otherwise agreed by the Secretary, the Proponent shall submit a copy of the audit report to the Secretary, together with its response to any recommendations contained in the audit report.	Compliant	The 2017 Audit was undertaken in August 2017 and submitted to DPIE on 26 October 2017. Submission was within the specified three month period. As per the <i>Appointment of Experts</i> by the DPIE, the approved submission date of this 2020 IEA is required by 20 December 2020.	
ACCESS TO INFORMATION				
12	The Proponent shall: (a) within 3 months of the date of this approval, make the following information publicly available on its website: <input type="checkbox"/> the EA; <input type="checkbox"/> all current statutory approvals for the project; <input type="checkbox"/> approved strategies, plans and programs required under the conditions of this consent; <input type="checkbox"/> a comprehensive summary of the monitoring results of the project, which have been reported in accordance with the various plans and programs approved under the conditions of this consent; <input type="checkbox"/> a complaints register, which is to be updated on a monthly basis; <input type="checkbox"/> minutes of CCC meetings; <input type="checkbox"/> the last five annual reviews; <input type="checkbox"/> any independent environmental audit, and the Proponent's response to the recommendations in any audit; <input type="checkbox"/> any other matter required by the Secretary; and (b) keep this information up to date, to the satisfaction of the Secretary.	Compliant	All relevant information required by this condition has been sighted and accessed via the Boggabri website https://www.idemitsu.com.au/mining/operations/boggabri-coal/approvals-plans-reports/	
Online Communication of Onsite Activities and Monitoring of Noise and Air Quality				
13	The Proponent shall ensure that the noise and air quality risk/response matrices required to be developed in the Noise and Air Quality Management Plans and validated real time monitoring data are available on line and includes: (a) timely publication of validated monitoring data in a clearly understandable form; (b) identification of mine operational responses to monitoring data and weather forecasts; and (c) provision for on-line input /response by members of the community and real time engagement with regionally-based regulatory compliance staff, to the satisfaction of the Secretary.	Compliant	The Noise Management Plan and AQGHGMP are available online. a) Evidence sighted of real-time air quality monitoring (PM10) and noise monitoring data is presented online showing: a) the average results for the previous 24 hour period and upcoming 7 day weather forecast b) Operational responses to the levels and weather forecast are presented for the current period. However, the presented real time monitoring only presents the daily monitoring and operational results from the previous 24 hour period and the monitoring results only present noise levels. It would be useful to be able to provide operational summaries with the monitoring summary reports. c) A Site Monitoring and Reporting Community Feedback Form. https://www.idemitsu.com.au/operations/boggabri-coal/operational-information-and-monitoring/ The compiled monthly realtime monitoring results are also summarised on the website. <u>Observation</u> During the audit the auditor regularly checked the website operational responses and no occasions were observed when operational changes were stated on the website.	Improvement REC: Include the daily operational response information in the real time summary report.

EA Statement of Commitments 2016

Reference	Commitment	Section	Compliance Status	Evidence	Recommended Action
Mining Operations					
1	Upon the Receipt of Project Approval, Boggabri Coal will relinquish DA 36/88 at the appropriate time as agreed between Boggabri Coal and DP&I.	Section 4.0 of the Boggabri EA & Section 5 of the Response to Submissions	Compliant	Old DA has been relinquished.	
2	Boggabri Coal commits to using reasonable endeavours to reach in good faith an appropriate barrier coal extraction agreement with Aston by the end of Year 5 of operations.	Section 2.1.1 of the Residual Matters Report	Not verified	The end of Year 5 of operations has passed at the site. No evidence of an agreement has been sighted however, mining and disturbance areas at Boggabri are in accordance with an approved MOP. Based on mapped disturbance areas presented in Plans 3A to 3E of the MOP and current disturbance presented in the Annual Review Plans the closest disturbance to the Maules Creek Boundary is >1km.	
Environmental Management and Monitoring					
3	Boggabri Coal 's Environmental Monitoring Programs for air quality, water quality, noise and blasting will be reviewed and updated as required, in consultation with the relevant regulators for approval by DP&I as specified in conditions of Project Approval.		Compliant	Air, water, noise and blasting management plans have been reviewed, updated and approved by the DPIE during the audit period.	
4	Boggabri Coal's EMPs will be revised and updated as required, in consultation with the relevant regulators for approval by DP&I as specified in any conditions of Project Approval for Surface and Groundwater Management, Flora and Fauna, Rehabilitation and Landscape Management (including Void Management) and Aboriginal Archaeology and Cultural Heritage Management.	Section 8.0 of the Boggabri EA	Compliant	Management plans and strategies have been updated over the last three years with the exception of the CHMP which is dated November 2016. Management plans have been assessed to have addressed the required Project Approval conditions.	
Air Quality					
5	Boggabri Coal will utilise technologies and initiatives as required to ensure that the air quality outcomes described in the EA are achieved.		Compliant	Evidence of air quality mitigation. Evidence of monitoring including real-time monitoring. Results within criteria for TSP, PM10 and depositional dust gauges.	
6	Boggabri Coal will undertake regular monitoring of greenhouse gas emissions and energy efficiency initiatives to ensure that greenhouse gas emissions per tonne of product coal are kept to the minimum practicable level.	Section 8.1.3 of the Boggabri EA	Compliant	AQGHGMP. GHG emissions reported in the Annual Reviews. Also NGRS and NPI Reporting.	
7	Boggabri Coal will install a TEOM air quality monitoring unit(s).		Compliant	BCOPL has four TEOMs which currently measures PM10 as well as PM2.5 at Wilberoi East.	
Noise and Blasting					
8	Boggabri Coal will implement the necessary noise control and management measures to ensure that the EA predicted noise levels at private receivers as listed in Table 25 of the EA are not exceeded.		Compliant	Noise controls generally in place. Evidence of noise attenuation of plant. There was only one occasion when noise monitoring results were above criteria.	
9	Boggabri Coal will manage its blasting practices such that the recommended DECCW guidelines, existing at the time of approval; will be met at all privately owned receivers.	Section 8.2.4 of the Boggabri EA	Non-compliant (low risk)	As reported in the 2019 Annual Review, a blast fired on 21 August 2019 recorded an airblast overpressure of 123 dBL exceeding the 120dBL criteria. This exceedance was attributed to a short term fluctuation in the upper air wind conditions that could not have been reasonably foreseen.	
10	Boggabri Coal will install a real time noise monitoring system and a real time meteorological monitoring system with predictive software capabilities.	Section 8.2.4 of the Boggabri EA	Compliant	Real-time noise monitoring system has been established.	
11	Boggabri Coal will use its reasonable endeavours to establish negotiated agreements with near neighbours as described in Section 2.4.3 of the Residual Matters report.	Section 2.4.3 of the Residual Matters Report	Compliant	There is evidence of consultation relating to negotiated agreements.	

12	Boggabri Coal will install a system for monitoring inversion strengths.	Section 2.4.2 of the Residual Matters Report	Compliant	The meteorological station has a system to monitor inversions.	
Water Resources					
13	Boggabri Coal will continue to monitor groundwater ingress and impacts on surrounding privately owned bores. In the event that monitoring confirms a deleterious impact on any privately owned water bore Boggabri Coal will meet the cost of modifying the bore or replace any water loss.	Section 8.10.4 of the Boggabri EA	Compliant	Detailed groundwater monitoring by specialists. Reporting in AEMR and website. Annual report provides additional information relating to trends.	
14	Boggabri Coal will use best endeavours to acquire additional water entitlements to ensure maximum operational capabilities in extreme dry years.		Compliant	BCOPL have a series of Water Access Licences. The AEMR provides an outline of these licences.	
Traffic					
15	To offset the closure of a section of Leard Forest Road Boggabri Coal will upgrade Harparary Road including three culverts and a new bridge over the Namoi River as described in its VPA with NSC.	Section 8.19 of the Boggabri EA	Compliant	Funding to complete this work was outlined in the 2014 AEMR.	
16	Boggabri Coal will continue to investigate alternative road access options to the Maules Creek Community to mitigate the closure of a section of Leard Forest Road in consultation with the NSC and MCCC.	Section 4.12.2 of the Response to Submissions	Compliant	Goonbri Road upgrade was constructed to provide an alternative to the closure of Leard Forest Road. Executed agreement for Goonbri Road upgrade was sighted - dated 16 April 2017.	
17	Boggabri Coal will construct an overpass on Therribri Road across the Private Coal Haul Road should road coal haulage reach 5.5 Mtpa.	Section 8.19 of the Boggabri EA	Not Triggered	There was no haulage of coal via road during the audit period.	
18	Boggabri Coal will commit to a financial contribution to the upgrade of the intersections identified in the road safety audit commensurate with the impacts of the Project.		Not Triggered	Upgrades to intersections completed prior to the audit period.	
19	Prior to the construction of the rail spur overpass within the easement of the Kamilaroi Highway Boggabri Coal will consult with all relevant regulatory authorities and will develop a rail construction and traffic management plan in consultation with the RMS.		Not Triggered	This was completed in prior audit periods.	
Ecology					
20	To offset impacts on fauna and flora from the Project, Boggabri Coal will establish a Regional East-West Wildlife Corridor which will be proactively managed to enhance its ecological values as detailed in Section 8.5 of the EA.	Section 8.5 of the Boggabri EA	N/A	Biodiversity offset conditions not applicable to this audit.	
21	The mine rehabilitation program will focus on the re-establishment of Box-Gum Woodland.		N/A		
22	Boggabri Coal will establish a 186 ha hardwood commercial forest in consultation with Forest NSW.		N/A		
23	Boggabri Coal will maintain a natural vegetation corridor link between its operations and the Maules Creek Coal Project until further assessments are undertaken, relevant approvals are received and appropriate offset measures are put in place.	Section 2.1.1 of the Residual Matters Report	N/A		
24	Boggabri Coal will acquire an additional offset property(s) consisting of 1,000 ha of remnant vegetation including 650 ha of Box Gum Woodland ('like for like') and 350 ha of Derived Native Grassland to add to its biodiversity offset strategy within 3 years of the grant of Project Approval in one of the following local areas: 1. Nandewar Corridor – north-south Mt Kaputar National Park to Kelvin State Forest; 2. Pilliga Corridor – east-west Mt Kaputar National Park to Pilliga East State Forest; and 3. Leard Corridor – west-east Leard State Forest to Nandewar Range.	Section 2.2.3 of the Residual Matters Report	N/A		

Visual					
25	Boggabri Coal will progressively rehabilitate the mining and OEAs to minimise visual impact.	Section 8.3 of the Boggabri EA	Compliant	Evidence of progressive rehabilitation noted during site inspection.	
Aboriginal Archaeology and Cultural Heritage					
26	The salvage and the protection of all known Aboriginal objects within the Project Boundary will continue to be managed in accordance with a revised Aboriginal Archaeology and Cultural Heritage Management Plan in consultation with the local Aboriginal community and EPA.	Section 8.6.3 of the Boggabri EA	Compliant	The audit has found that, from the documents provided, the salvage and protection of all known Aboriginal objects within the project boundary appears to be occurring in accordance with the CHMP in consultation with RAPs and Heritage NSW.	
27	Boggabri Coal will establish a keeping place for the purpose of housing salvaged Aboriginal artefacts from the mine site.		Compliant	The CHMP states that a sub-committee is under formation that will determine the location of a Keeping Place. However, an outline of progress being made toward the establishment of a long-term Keeping Place in consultation with RAPs is not provided. Based on the annual reviews, the Keeping place has not yet been determined, however this was raised at the 2019 Aboriginal Stakeholder Community Forum (ASCF).	
Non Aboriginal Heritage					
28	Boggabri Coal will undertake archival recordings of the Daisymede shearing shed and yards, Daisymede piggery and the Heathcliff property residence prior to any disturbance or relocation of these sites.	Section 8.7 of the Boggabri EA	Not verified	Archival recording of the Daisymede 3 piggery and the Heathcliff residence are reported to have occurred, but the archival recording reports have not been provided. The Daisymede 3 piggery has been demolished, which is documented in the Monitoring Report: Demolition of Daisymede Piggery (Monitoring_V1_030614: ID13). This report does not fulfil the requirements of an archival photographic recording report as outlined in NSW Heritage Office (2006) Photographic Recording of Heritage Items Using Film or Digital Capture. Impacts to the Heathcliff residence have been avoided. There are no planned impacts to the Daisymede shearing shed and yards and therefore archival recording of is not required at this time.	
Community					
29	Boggabri Coal will enter into a Voluntary Planning Agreement with NSC with regard to the Project including a commitment of up to \$9.67 Million to be contributed to NSC for the purpose of funding the following upgrades or works to NSC infrastructure: <ul style="list-style-type: none"> • Upgrades to the Boggabri Caravan Park; • Erection of a monument in recognition of the achievements of Ben Lexcen; • Improve public seating throughout Boggabri; • Support for the Boggabri Home and Community Care organisation; • Upgrades to Harparary Road and Bridge over the Namoi River; and • In full satisfaction of any requirements under Section 94 of the EP&A Act. 	Section 8.13.8 of the Boggabri EA	Compliant	Community programs and investment is outlined in the AEMR - Section 7.1 of 2019 Annual Review. There is a wide range of programs across the area including the soon to be opened childcare centre.	
Housing					
30	Boggabri Coal will implement the strategies outlined in Section 2.6.2 of the Residual Matters Report to ensure the Project does not have a material impact on housing availability and affordability in the Narrabri and Gunnedah LGA's.	Section 2.6.2 of the Residual Matters Report	Compliant	Evidence of SIMP. Annual Reviews outlines the status of the Social Impact Monitoring Summary. This is still an ongoing project.	
Reporting					
31	Boggabri Coal will prepare an Annual Review (which summarises monitoring results and reviews performance) and distribute it to the relevant regulatory authorities and the Boggabri CCC.	Section 8.0 of the Boggabri EA	Compliant	The Annual Reviews have been completed however SLR provided recommendations for areas of improvement	
Rail					
32	Boggabri Coal will actively coordinate with ARTC to ensure environmental impacts on the ARTC rail network are minimised as far as practical.	Section 2.4.5 of the Residual Matters Report	Not verified	No evidence of consultation with ARTC has been sighted. However, as per PA noise requirements Based on site communications only approved locomotives are used for Boggabri rail transportation.	
33	Boggabri Coal will continue to work with the GSC in the development of a solution to potential cumulative rail impacts on traffic in Gunnedah.	Section 2.4.6 of the Residual Matters Report	Compliant	GSC are regularly consulted as part of the project. This includes the consultation for the CCC, audits and management plans. The GSC are sent a copy of the AEMR.	
Rehabilitation					

34	Boggabri Coal will revise its existing RMP and undertake rehabilitation trials in the development of its topsoil utilisation strategy and rehabilitation success criteria to the satisfaction of EPA & DTIRIS–Resources Regulator and for approval by DP&I.	Section 2.3.1 of the Residual Matters Report	Compliant	<p>Rehabilitation monitoring is being undertaken, with this including a review of the rehabilitation success criteria.</p> <p>Most recent Rehabilitation Management Plan dated April 2020.</p> <p>The Annual Reviews provides a summary of rehabilitation activities for the reporting period and those planned for following. Due to prolonged dry conditions no trials have been planned over the audit period.</p>	
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EPL 12407

Anniversary 11-Jan
 Version Date 09-Nov-18
 Authority EPA

2020 Audit Findings																
Condition Number	Condition	Compliance Status	Evidence	Recommended Action												
1 ADMINISTRATIVE CONDITIONS																
A1 What the Licence Authorises and Regulates																
A1.1	<p>This licence authorises the carrying out of the scheduled activities listed below at the premises specified in A2. The activities are listed according to their scheduled activity classification, fee-based activity classification and the scale of the operation.</p> <p>Unless otherwise further restricted by a condition of this licence, the scale at which the activity is carried out must not exceed the maximum scale specified in this condition.</p> <table border="1"> <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>> 5000000 T annual handing capacity</td> </tr> <tr> <td>Crushing, grinding or separating</td> <td>Crushing, grinding or separating</td> <td>> 500000 - 2000000 T annual processing capacity</td> </tr> <tr> <td>Mining for coal</td> <td>Mining for coal</td> <td>> 5000000 T annual production capacity</td> </tr> </tbody> </table>	Scheduled Activity	Fee Based Activity	Scale	Coal works	Coal works	> 5000000 T annual handing capacity	Crushing, grinding or separating	Crushing, grinding or separating	> 500000 - 2000000 T annual processing capacity	Mining for coal	Mining for coal	> 5000000 T annual production capacity	Compliant	As reported in the Annual Reviews works are to this scale.	
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A2 Premises or Plant to which this Licence applies																
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A4 Information supplied to the EPA																
A4.1	<p>Works and activities must be carried out in accordance with the proposal contained in the licence application, except as expressly provided by a condition of this licence.</p> <p>In this condition the reference to "the licence application" includes a reference to:</p> <ol style="list-style-type: none"> 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 the licence information form provided by the licensee to the EPA to assist the EPA in connection with the issuing of this licence. 	Compliant	Activities on site are carried out generally in accordance with licence.													
2 DISCHARGES TO AIR AND WATER AND APPLICATIONS TO LAND																
P1 Location of Monitoring/discharge points and areas																

Condition Number	Condition	Compliance Status	Evidence	Recommended Action																												
P1.1	<p>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.</p> <table border="1"> <thead> <tr> <th colspan="4"><i>Air</i></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>24</td> <td>Ambient air quality monitoring</td> <td></td> <td>Deposited dust gauge labelled D4 on Plan No. 1 titled "EPL Boundary and Environmental Monitoring locations" dated 26-06-18. (DOC18/768113).</td> </tr> <tr> <td>25</td> <td>Ambient air quality monitoring</td> <td></td> <td>Deposited dust gauge labelled D5 on Plan No. 1 titled "EPL Boundary and Environmental Monitoring locations" dated 26-06-18. (DOC18/768113).</td> </tr> <tr> <td>26</td> <td>Ambient air quality monitoring</td> <td></td> <td>Deposited dust gauge labelled D6 on Plan No. 1 titled "EPL Boundary and Environmental Monitoring locations" dated 26-6-18. (DOC18/768113).</td> </tr> <tr> <td>45</td> <td>Ambient air quality monitoring</td> <td></td> <td>High Volume Air Sampler on the 'Roma' Property, labelled PM10. As shown on Plan No. 1 titled "EPL Boundary and Environmental Monitoring locations" dated 26-6-18. (DOC18/768113).</td> </tr> </tbody> </table>	<i>Air</i>				EPA identification no.	Type of Monitoring Point	Type of Discharge Point	Location Description	24	Ambient air quality monitoring		Deposited dust gauge labelled D4 on Plan No. 1 titled "EPL Boundary and Environmental Monitoring locations" dated 26-06-18. (DOC18/768113).	25	Ambient air quality monitoring		Deposited dust gauge labelled D5 on Plan No. 1 titled "EPL Boundary and Environmental Monitoring locations" dated 26-06-18. (DOC18/768113).	26	Ambient air quality monitoring		Deposited dust gauge labelled D6 on Plan No. 1 titled "EPL Boundary and Environmental Monitoring locations" dated 26-6-18. (DOC18/768113).	45	Ambient air quality monitoring		High Volume Air Sampler on the 'Roma' Property, labelled PM10. As shown on Plan No. 1 titled "EPL Boundary and Environmental Monitoring locations" dated 26-6-18. (DOC18/768113).	Compliant	Monitoring locations are provided in the AQGHGMP. Air quality monitoring results are reported in the Annual Review. PM10 compliance site has been moved to Glenhope (private property). Application made to EPA in January 2019 to vary the EPL to reflect updated monitoring locations.					
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4	Wet weather discharge Discharge water quality monitoring	Wet weather discharge Discharge water quality monitoring	Discharge point from sediment dam for controlled drainage from Coal Train Loading Facility labelled SD4 on the map titled Plan No. 1 EPL Boundary and Environmental Monitoring locations dated 26-6-18. (DOC18/768113).																													
5	Ambient Water Quality Monitoring		Nagero Creek downstream of discharge from premises labelled SW1 on the map titled Plan No. 1 EPL Boundary and Environmental Monitoring locations dated 26-6-18. (DOC18/768113).																													
6	Ambient water quality monitoring		As shown as point SW2 on map titled Plan No. 1 "EPL Boundary and Environmental Monitoring Locations, dated 26-06-18. (DOC18/768113).																													

Condition Number	Condition	Compliance Status	Evidence	Recommended Action
7	Groundwater monitoring	Administrative non-compliance	<p>Review of "EPL Boundary and Environmental Monitoring Locations" figure confirm locations of each EPA monitoring ID number.</p> <p>There was no water discharge events in 2017 to 2019 therefore sampling was not triggered. In February 2020 there was one discharge event. Sampling was undertaken at SW1, SW2 and SD6.</p> <p>Groundwater bores 2102 and 2103 were not monitored in 2018 and 2019 due to damage of the bore casing. Monitoring at 2104 and 2105 was not undertaken as they were not accessible and MW6 was not monitored as it was blocked.</p>	NC REC: Continue to liaise with EPA regarding EPL variation to ensure that monitoring points in EPL align with those utilised by the site.
10	Groundwater monitoring			
11	Groundwater monitoring			
12	Groundwater monitoring			
13	Groundwater monitoring			
18	Groundwater monitoring			
36	Surface water quality monitoring			
38	Surface water quality monitoring			
39	Surface water quality monitoring			
41	Surface water quality monitoring			

Condition Number	Condition	Compliance Status	Evidence	Recommended Action																								
P1.4	<p>Weather monitoring The following point(s) in the table are identified in this licence for the purpose of the monitoring of weather parameters at the point.</p> <table border="1"> <thead> <tr> <th>EPA Identification Number</th> <th>Type of Monitoring Point</th> <th>Description of Location</th> </tr> </thead> <tbody> <tr> <td>W1</td> <td>Weather Analysis</td> <td>Weather station located on the property "Nagero" labelled "MS" shown on the map titled "EPL Boundary and Environmental Monitoring locations" dated 26-06-18. (DOC18/768113).</td> </tr> </tbody> </table>	EPA Identification Number	Type of Monitoring Point	Description of Location	W1	Weather Analysis	Weather station located on the property "Nagero" labelled "MS" shown on the map titled "EPL Boundary and Environmental Monitoring locations" dated 26-06-18. (DOC18/768113).	Compliant	Meteorological station located at location of MS as sighted during the site inspection. Results are reported in the Annual Review																			
EPA Identification Number	Type of Monitoring Point	Description of Location																										
W1	Weather Analysis	Weather station located on the property "Nagero" labelled "MS" shown on the map titled "EPL Boundary and Environmental Monitoring locations" dated 26-06-18. (DOC18/768113).																										
3 LIMIT CONDITIONS																												
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 Protection of the Environment Operations Act 1997.	Compliant	Based on the information provided and discussions with site, there was one discharge during heavy rainfall event in the audit period. No evidence that the site did not meet the requirements of the POEO Act.																									
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).	Compliant	No discharge of water resulted in the pollution to receiving waters.																									
L2.4	<p>Water and/or Land Concentration Limits POINT 1,3,4</p> <table border="1"> <thead> <tr> <th>Pollutant</th> <th>Units of Measure</th> <th>50 percentile concentration limit</th> <th>90 percentile concentration limit</th> <th>3DGM concentration limit</th> <th>100 percentile concentration limit</th> </tr> </thead> <tbody> <tr> <td>Oil and Grease</td> <td>milligrams per litre</td> <td>-</td> <td>-</td> <td>-</td> <td>10</td> </tr> <tr> <td>pH</td> <td>pH</td> <td>-</td> <td>-</td> <td>-</td> <td>6.5-8.5</td> </tr> <tr> <td>Total suspended solids</td> <td>milligrams per litre</td> <td>-</td> <td>-</td> <td>-</td> <td>50</td> </tr> </tbody> </table>	Pollutant	Units of Measure	50 percentile concentration limit	90 percentile concentration limit	3DGM concentration limit	100 percentile concentration limit	Oil and Grease	milligrams per litre	-	-	-	10	pH	pH	-	-	-	6.5-8.5	Total suspended solids	milligrams per litre	-	-	-	50	Compliant	During the audit period, there was one discharge event from SD 6 on the 8 February 2020. Sampling was undertaken at SD 6 and SW1 and SW2 for the pollutants listed in this condition. TSS at SD6 was reported as 326. Based on communication with site the discharge event was due to rainfall exceeding 38.4 mm over a consecutive 5 day period and therefore allows exceedance in accordance with L2.5.	
Pollutant	Units of Measure	50 percentile concentration limit	90 percentile concentration limit	3DGM concentration limit	100 percentile concentration limit																							
Oil and Grease	milligrams per litre	-	-	-	10																							
pH	pH	-	-	-	6.5-8.5																							
Total suspended solids	milligrams per litre	-	-	-	50																							
L2.5	<p>The Total Suspended Solids concentration limits specified for Points 1, 3, 4 may be exceeded for water discharged provided that:</p> <p>(a) the discharge occurs solely as a result of rainfall measured at the premises that exceeds 38.4 millimetres over any consecutive 5 day period immediately prior to the discharge occurring; and</p> <p>(b) all practical measures have been implemented to dewater all sediment dams within 5 days of rainfall such that they have sufficient capacity to store run off from a 38.4 millimetre, 5 day rainfall event.</p> <p>Note: 38.4 mm equates to the 5 day 90%ile rainfall depth for Gunndah sourced from Table 6.3a Managing Urban Stormwater: Soils and Construction Volume 1: 4th edition, March 2004.</p>	Compliant	Communication with site confirmed reporting of the discharge event was not required due to rainfall exceeding 38.4 mm over a consecutive 5 day period.																									
L3 Noise Limits																												
L3.1	<p>Noise generated at the premises must not exceed the noise limits in the table below.</p> <table border="1"> <thead> <tr> <th>Locality and Location</th> <th>Day- LAeq(15 minute)</th> <th>Evening- LAeq(15 minute)</th> <th>Night- LAeq(15 minute)</th> <th>Night- LA1(1 minute)</th> </tr> </thead> <tbody> <tr> <td>All privately owned residences</td> <td>35 dB(A)</td> <td>35 dB(A)</td> <td>35 dB(A)</td> <td>45 dB(A)</td> </tr> </tbody> </table>	Locality and Location	Day- LAeq(15 minute)	Evening- LAeq(15 minute)	Night- LAeq(15 minute)	Night- LA1(1 minute)	All privately owned residences	35 dB(A)	35 dB(A)	35 dB(A)	45 dB(A)	Compliant	There was no exceedances of noise limits during the audit period at privately owned residences or those where there is no private agreement relating to noise															
Locality and Location	Day- LAeq(15 minute)	Evening- LAeq(15 minute)	Night- LAeq(15 minute)	Night- LA1(1 minute)																								
All privately owned residences	35 dB(A)	35 dB(A)	35 dB(A)	45 dB(A)																								
L3.2	<p>The noise limits identified in the above table do not apply at privately owned residences that are:</p> <p>a) identified as residences subject to acquisition or noise mitigation on request within the Project Approval Conditions (09_0182); or</p> <p>b) subject to a private agreement, relating to the noise levels, between the licensee and the land owner.</p>	Compliant	There was no exceedances of noise limits during the audit period at privately owned residences or those where there is no private agreement relating to noise																									

Condition Number	Condition	Compliance Status	Evidence	Recommended Action																												
L3.3	<p>For the purpose of condition L3.2(a) above, those properties identified as residences subject to acquisition or noise mitigation on request within the Project Approval Conditions (PA 10_0138) are:</p> <table border="1"> <thead> <tr> <th>Property No.</th> <th>Lot/ DP</th> </tr> </thead> <tbody> <tr><td>54</td><td>Lot 121/ DP 754926</td></tr> <tr><td>52</td><td>Lot 2/ DP 718002</td></tr> <tr><td>67</td><td>Lot 2/ DP 754927</td></tr> <tr><td>68</td><td>Lot 3/ DP 754927</td></tr> <tr><td>23</td><td>Lot 1/ DP 754926</td></tr> <tr><td>27</td><td>Lot 41/ DP 754926</td></tr> <tr><td>48</td><td>Lot 22/ DP 618032</td></tr> <tr><td>88</td><td>Lot 2/ DP 1131282</td></tr> <tr><td>43</td><td>Lot 1/ DP 509312</td></tr> <tr><td>44</td><td>Lot 11/ DP 775513</td></tr> <tr><td>32</td><td>Lot 1/ DP 1099042</td></tr> <tr><td>79</td><td>Lot 132/ DP 754926</td></tr> <tr><td>90</td><td>Lot 143/ DP 754926</td></tr> </tbody> </table>	Property No.	Lot/ DP	54	Lot 121/ DP 754926	52	Lot 2/ DP 718002	67	Lot 2/ DP 754927	68	Lot 3/ DP 754927	23	Lot 1/ DP 754926	27	Lot 41/ DP 754926	48	Lot 22/ DP 618032	88	Lot 2/ DP 1131282	43	Lot 1/ DP 509312	44	Lot 11/ DP 775513	32	Lot 1/ DP 1099042	79	Lot 132/ DP 754926	90	Lot 143/ DP 754926	Compliant	A copy of the current ownership status of surrounding properties was cited and is included as Figure A-1 of the Annual Review.	
Property No.	Lot/ DP																															
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L3.4	<p>For the purpose of the table above:</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.</p>	Note																														
L3.5	<p>The noise limits set out in the Noise Limits table apply under all meteorological conditions except for the following:</p> <p>a) Wind speeds greater than 3 metres/second at 10 metres above ground level.</p> <p>For the purposes of this condition:</p> <p>a) Data recorded by the meteorological station identified as EPA Identification Point(s) W1 must be used to determine meteorological conditions; and b) Temperature inversion conditions (stability category) are to be determined by the sigma-theta method referred to in Part E4 of Appendix E to the NSW Industrial Noise Policy.</p>	Compliant	<p>Attended noise monitoring is undertaken by a noise specialist consultant on a monthly basis. Calibration of acoustic equipment is provided in Appendix B of the monthly noise report.</p> <p>The meteorological station is located at W1 and is calibrated annually.</p> <p>As reported in the monthly noise monitoring reports:</p> <p>As noise limits apply under the strongest inversion conditions (Stability Class G), no exemptions for inversion conditions are applicable for BCM. Based on the information above, noise limits have been assumed to apply under all meteorological conditions except during periods of rainfall or wind speeds greater than 3 m/s at 10 metres above ground level.</p>																													
L3.6	<p>For the purposes of determining the noise generated at the premises the modification factors in Section 4 of the NSW Industrial Noise Policy must be applied, as appropriate, to the noise levels measured by the noise monitoring equipment.</p>	Compliant	<p>Monthly monitoring report includes modifying factors in section 3.4. It is noted that the INP has been superseded by the Noise Policy for Industry (NPII).</p>																													
L3.7	<p>Determining Compliance</p> <p>To determine compliance:</p> <p>a) with the Leq(15 minute) noise limits in the Noise Limits table, the noise measurement equipment must be located:</p> <p>i) approximately on the property boundary, where any dwelling is situated 30 metres or less from the property boundary closest to the premises; or ii) within 30 metres of a dwelling façade, but not closer than 3m, where any dwelling on the property is situated more than 30 metres from the property boundary closest to the premises; or on any suitable alternate location. iii) within approximately 50 metres of the boundary of a National Park or a Nature Reserve.</p> <p>b) with the LA1(1 minute) noise limits in the Noise Limits table, the noise measurement equipment must be located at any suitable alternate location.</p> <p>c) with the noise limits in the Noise Limits table, the noise measurement equipment must be located:</p> <p>i) at the most affected point at a location where there is no dwelling at the location; or ii) at the most affected point within an area at a location prescribed by part (a) or part (b) of this condition.</p>	Compliant	<p>The monthly noise reports outline that attended monitoring is undertaken in accordance with NSW EPA requirements as well as Australian Standard AS 1055 Acoustics Description and Measurement of Environmental Noise".</p> <p>Noise monitoring is undertaken at the following locations: N2 - 'Sylvania' Dripping Rock Road N3 - 'Picton' Dripping Rock Road N4 - Barbers Lagoon Boggabri - Manilla Road</p> <p>Noise monitoring is considered to be undertaken at appropriate locations.</p>																													
L4 Blasting																																

Condition Number	Condition	Compliance Status	Evidence	Recommended Action
L4.1	The airblast overpressure level from blasting operations at the premises must not exceed 120dB (Lin Peak) at any time at any noise sensitive locations. Error margins associated with any monitoring equipment used to measure this are not to be taken into account in determining whether or not the limit has been exceeded.	Non-compliant (low risk)	As reported in the 2019 Annual Review, a blast fired on 21 August 2019 recorded an airblast overpressure of 123 dBL exceeding the 120dBL criteria. This exceedance was attributed to a short term fluctuation in the upper air wind conditions that could not have been reasonably foreseen. An incident report was prepared which concluded that: Blast design investigations indicate that tie in and firing conditions of the blast would ordinarily result in basic blast emission of less than 115dBL and that 123dBL can only be explained by the effects of meteorology. This exceedance was reported to DPIE on 28 August. BCOPL was issued with a warning letter from DPIE on 18 October 2019 for not reporting the blast overpressure exceedance within seven days of the incident. Notification of the exceedance was sent via text and email but was originally missed. This is attributable to the amount of trigger text messages which were received, particularly under the old system. On 8 July 2020 the EPA issued a Formal Warning in Relation to Breaches of the EPL with regard to this incident.	NC REC: Ensure blasts are undertaken under appropriate weather conditions. Delays to blasts should be implemented if required based on real time weather data review. NC REC: Implement changes to the TARP notifications system to distinguish "triggers" from "exceedances" so that reportable exceedances are not missed.
L4.2	The airblast overpressure level from blasting operations at the premises must not exceed 115dB (Lin Peak) at any noise sensitive locations for more than five per cent of the total number of blasts over each reporting period. Error margins associated with any monitoring equipment used to measure this are not to be taken into account in determining whether or not the limit has been exceeded	Compliant	Based on the Annual Reviews the following numbers of blasts exceeded 115 dBL. This was less than 5% of the total blasts for each year: 1 blast in 2017, 3 blasts in 2018 and 1 blast in 2019	
L4.3	Ground vibration peak particle velocity from the blasting operations at the premises must not exceed 10mm/sec at any time at any noise sensitive locations. Error margins associated with any monitoring equipment used to measure this are not to be taken into account in determining whether or not the limit has been exceeded.	Compliant	A review of blast monitoring records confirmed that ground vibration peak particle velocity had not been exceeded over the audit period.	
L4.4	Ground vibration peak particle velocity from the blasting operations at the premises must not exceed 5mm/sec at any noise sensitive locations for more than five per cent of the total number of blasts over each reporting period. Error margins associated with any monitoring equipment used to measure this are not to be taken into account in determining whether or not the limit has been exceeded.	Compliant	A review of blast monitoring records confirmed that ground vibration peak particle velocity had not been exceeded over the audit period.	
L4.5	Blasting operations at the premises may only take place between 9:00am-5:00pm Monday to Saturday. Blasting is not permitted on public holidays. Blasting outside the hours specified above can only take place with the written approval of the EPA.	Compliant	A review of the blast log from 2017 to the 30th August was undertaken. It was identified that a blast was undertaken on 14 April 2019 which was a Sunday. Follow up correspondence with BCOPL stated that "The blast noted as occurring on 14 4 2019 occurred on the 15 4 2019. The date of the blast was erroneously recorded in the blast monitoring summary." SLR has no reason to believe this is not the case.	
L4.6	Blasting at the premises is limited to 1 blast on each day on which blasting is permitted. Note: Additional blasts are permitted where it is demonstrated to be necessary for safety reasons and the EPA and neighbours have been notified of the intended blast prior to the additional blast being fired.	Compliant	A review of the blast log from 2017 to the 30th August was undertaken, it was confirmed that blasting was only undertaken once per day.	
L4.7	Condition L4.6 does not apply to blasts that generate ground vibration of 0.5 mm/s or less at any residence on privately- owned land, or to blasts required to ensure the safety of the mine or its workers.	Note		
Note	For the purpose 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.	Note		
4 OPERATING CONDITIONS				
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.	Compliant	Site inspection confirmed that site operations are undertaken in a competent manner. Waste areas are well organised and labelled. Appropriate bunding is present around fuel and chemical storage areas. Evidence of waste being transported by a licenced operator was observed.	
O2 Maintenance of Plant and Equipment				

Condition Number	Condition	Compliance Status	Evidence	Recommended Action
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	Evidence was provided of maintenance "job cards" which are provided through BCOPL SAP system which schedules any maintenance required. Site inspection observed equipment being cleaned prior to entering the workshop. Monitoring equipment and meteorological station is calibrated on a regular cycle. Sound power levels exceedances for a number of mobile plant were reported in the 2017, 2018 and 2019 Annual Reviews. BCOPL have been implementing a plant attenuation, monitoring and review program across the audit period which has involved the trial of three sound attenuation kits on six 930E Komatsu trucks. This trial is ongoing.	
O3 Dust				
O3.1	All operations and activities occurring at the premises must be carried out in a manner that will minimise the emission of dust from the premises.	Compliant	The site has in total five water carts, the number of which operating will depend on prevailing weather conditions. Water carts were observed during the site inspection both in pit and watering service roads and the CHPP. Water sprays were also in use at the CHPP. Site inspection did not observe any dust leaving the site.	
O3.2	Trucks transporting coal from the premises must be covered immediately after loading to prevent wind blown emissions and spillage. The covering must be maintained until immediately before unloading the trucks.	Not triggered	There is no coal being transported from the premises.	
O4 Effluent application to Land				
O4.1	The quantity of effluent applied to the utilisation area(s) must not exceed the capacity of the utilisation area(s) to effectively utilise the effluent. For the purpose of this condition, "effectively utilise" includes the ability of the soil to absorb the nutrient, salt and hydraulic loads and the applied organic material without causing harm to the environment.	Compliant	Effluent management system maintenance records provided for the audit period. Site inspection viewed transpiration areas. There is no evidence that the effluent applied exceeds the capacity of the area to utilise it.	
O4.2	Effluent application to the utilisation area(s) must not occur in a manner that causes surface run-off from the utilisation area(s).	Compliant	Area of effluent application inspected. No evidence of run off noted.	
O4.3	Spray from effluent application to the utilisation area(s) must not drift beyond the boundary of the utilisation area(s) to which it has been applied.	Compliant	Effluent sprays were not operating at the time of the inspection. Sprays appear low to the ground therefore the likelihood of drift is unlikely.	
O5 Other Operating Conditions				
O5.1	Blast Fume Offensive blast fume must not be emitted from the premises. Definition: Offensive blast fume means post-blast gases (whether visible or invisible, odorous or odourless) 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) are harmful to (or is likely to be harmful to) a person that is outside the premises from which it is emitted, or (ii) 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.	Not verified	Two complaints were made in 24 and 31 July 2020 relating to blast fume and associated odour. BCOPL provided details of the complaints to DPIE, RR and EPA. BCOPL provided the requested information to EPA. Drone footage of the event was viewed during the site visit, the footage ceased before evidence of the dispersal of the fume or offsite transport could be confirmed. Complaints log sighted detailing requests to follow up with the complainant. No reply was received. Whilst two complaints were received, BCOPL has made efforts to undertake follow up investigations with the EPA and complainant, however there has been no response to date. Based on the lack of evidence provided by the complainant, there is insufficient evidence for the auditor to assess whether or not the complaint elicits a non-compliance at this stage. Further, the EPA has been provided with details of the incident and has not made a judgement on the issue. For this reason this condition has not been verified. Notwithstanding this, recommendations have been made with regard to improvements to blast fume monitoring to allow for improved verification of blast fume impacts and confirmation of whether blast fumes are emitted from the site.	Improvement REC: Recommend for drone footage to continue for longer so that future complaints may be verified to determine whether blast fume did remain and travel off site at a distance.
O5.2	Pollution Incident Response Management Plan The licensee must maintain, and implement as necessary, a current Pollution Incident Response Management Plan (PIRMP) for the premises. The PIRMP must document systems and procedures to deal with all types of incidents (e.g. spills, explosions, fire) that may occur at the premises or that may be associated with activities that occur at the premises and which are likely to cause harm to the environment.	Compliant	PIRMP dated July 2020 cited and available on the website.	
O5.3	The licensee must keep the PIRMP on the premises at all times.	Compliant	A copy of the PIRMP is located on the premises and available on the website	
5 MONITORING AND RECORDING CONDITIONS				
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	Evidence of monitoring records relevant to the EPL were provided and are available on the companies website.	

Condition Number	Condition	Compliance Status	Evidence	Recommended Action																																				
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	Review of monitoring records confirmed that date, time and point of each sample (and person where relevant) was recorded.																																					
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:	Noted																																						
M2.2	Air Monitoring Requirements POINT 24,25,26 <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>Particulates - Deposited Matter</td><td>grams per square metre per month</td><td>Continuous</td><td>AM-19</td></tr></tbody></table> POINT 45 <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>Every 6 days</td><td>AM-18</td></tr></tbody></table>	Pollutant	Units of measure	Frequency	Sampling Method	Particulates - Deposited Matter	grams per square metre per month	Continuous	AM-19	Pollutant	Units of measure	Frequency	Sampling Method	PM10	micrograms per cubic metre	Every 6 days	AM-18	Administrative non-compliance	In the 2019 - 2020 annual return sampling at three of the HVAS was not undertaken as private residences requested urgent removal of the monitoring units.	NC REC: Continue to liaise with EPA regarding EPL variation to ensure that monitoring points in EPL align with those utilised by the site.																				
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M2.3	POINT 1,3,4 <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>Special Frequency 1</td><td>In situ</td></tr><tr><td>Nitrate</td><td>milligrams per litre</td><td>Special Frequency 1</td><td>Grab sample</td></tr><tr><td>Nitrogen (total)</td><td>milligrams per litre</td><td>Special Frequency 1</td><td>Grab sample</td></tr><tr><td>Oil and Grease</td><td>milligrams per litre</td><td>Special Frequency 1</td><td>Grab sample</td></tr><tr><td>pH</td><td>pH</td><td>Special Frequency 1</td><td>In situ</td></tr><tr><td>Phosphorus (total)</td><td>milligrams per litre</td><td>Special Frequency 1</td><td>Grab sample</td></tr><tr><td>Reactive Phosphorus</td><td>milligrams per litre</td><td>Special Frequency 1</td><td>Grab sample</td></tr><tr><td>Total suspended solids</td><td>milligrams per litre</td><td>Special Frequency 1</td><td>Grab sample</td></tr></tbody></table>	Pollutant	Units of measure	Frequency	Sampling Method	Conductivity	microsiemens per centimetre	Special Frequency 1	In situ	Nitrate	milligrams per litre	Special Frequency 1	Grab sample	Nitrogen (total)	milligrams per litre	Special Frequency 1	Grab sample	Oil and Grease	milligrams per litre	Special Frequency 1	Grab sample	pH	pH	Special Frequency 1	In situ	Phosphorus (total)	milligrams per litre	Special Frequency 1	Grab sample	Reactive Phosphorus	milligrams per litre	Special Frequency 1	Grab sample	Total suspended solids	milligrams per litre	Special Frequency 1	Grab sample	Compliant	Sampling was undertaken for the one discharge event over the audit period.	
Pollutant	Units of measure	Frequency	Sampling Method																																					
Conductivity	microsiemens per centimetre	Special Frequency 1	In situ																																					
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M2.4	For the purposes of the table(s) above Special Frequency 1 means the collection of samples as soon as practicable after a discharge and in any case not more than 12 hours after a discharge commences.	Note																																																																																														
M2.5	For the purposes of the table(s) above Special Frequency 2 means the collection of samples as soon as practicable after a wet weather discharge from points 1, 2, 3, 4 and 40 and in any case not more than 12 hours after a discharge commences.	Note																																																																																														
Note	The frequency of monitoring and the pollutant/s to be monitored may be varied by the EPA once the variability of the monitoring results is established.	Note																																																																																														
Note	Groundwater monitoring points BC2185, BC2186, BC2187, BC2188, BC2189, BC2190 and BC2191 have not been formally included in the licence. However, the licensee is required to undertake groundwater monitoring in accordance with a Department of Planning approved Irrigation Management Plan required under section 26 and 27 of the Approved Modification Consent DA79/1443 MOD1 dated 22 July 2009. The licensee has submitted the document "Boggabri Coal Project – Irrigation Environmental Management Plan – Irrigation EMP." The results of this monitoring are required to be reported in the Annual Environmental Management Report (AEMR).	Note																																																																																														
M2.6	For the purposes of the table(s) above, monitoring at points 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17 and 18 is not required when the bore is dry or inadequate water is available to collect a sample.	Note																																																																																														
M2.7	For the purposes of the table(s) above, monitoring at points 19, 20, 36, 37, 38, 39, 41 and 42 is not required in the quarterly period if the monitoring site is dry or inadequate water is available to collect a sample.	Note																																																																																														
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.	Compliant	Air quality monitoring is undertaken in accordance with the approved AQGHGMP. Monitoring is to be undertaken in accordance with the document 'Approved Methods for Sampling and Analysis of Ambient Air Pollutants in NSW' (EPA, 2006). The approved sampling methods to be followed for the various types of air quality monitoring at the BCOPL are provided in Appendix C of the management plan.																																																																																													

Condition Number	Condition	Compliance Status	Evidence	Recommended Action																																													
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".	Compliant	Testing is conducted in accordance with the approved methods																																														
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.	Compliant	Testing of waters is undertaken in accordance with Approved Methods Publication																																														
M4 Weather monitoring																																																	
M4.1	<p>For each monitoring point specified below in the table below, the licensee must monitor (by sampling and obtaining results by analysis) the parameters specified in Column 1. The licensee must use the sampling method, units of measure, averaging period and sample at the frequency specified opposite in the other columns.</p> <table border="1"> <thead> <tr> <th>Parameter</th> <th>Units of Measure</th> <th>Frequency</th> <th>Averaging Period</th> <th>Sampling Method</th> </tr> </thead> <tbody> <tr> <td>Temperature @ 2 metres</td> <td>°C</td> <td>Continuous</td> <td>15 minute</td> <td>AM-4</td> </tr> <tr> <td>Wind direction @ 10 metres</td> <td>°</td> <td>Continuous</td> <td>15 minute</td> <td>AM-2 & AM-4</td> </tr> <tr> <td>Wind speed @ 10 metres</td> <td>m/s</td> <td>Continuous</td> <td>15 minute</td> <td>AM-2 & AM-4</td> </tr> <tr> <td>Sigma theta @ 10 metres</td> <td>°</td> <td>Continuous</td> <td>15 minute</td> <td>AM-2 & AM-4</td> </tr> <tr> <td>Rainfall</td> <td>mm/h</td> <td>Continuous</td> <td>1 hour</td> <td>AM-4</td> </tr> <tr> <td>Solar Radiation</td> <td>W/m2</td> <td>Continuous</td> <td>15 minute</td> <td>AM-4</td> </tr> <tr> <td>Temperature @ 10 metres</td> <td>°C</td> <td>Continuous</td> <td>15 minute</td> <td>AM-4</td> </tr> <tr> <td>Additional requirements - Siting - Measurement</td> <td></td> <td></td> <td></td> <td>AM-1 & AM-4 AM-2 & AM-4</td> </tr> </tbody> </table>	Parameter	Units of Measure	Frequency	Averaging Period	Sampling Method	Temperature @ 2 metres	°C	Continuous	15 minute	AM-4	Wind direction @ 10 metres	°	Continuous	15 minute	AM-2 & AM-4	Wind speed @ 10 metres	m/s	Continuous	15 minute	AM-2 & AM-4	Sigma theta @ 10 metres	°	Continuous	15 minute	AM-2 & AM-4	Rainfall	mm/h	Continuous	1 hour	AM-4	Solar Radiation	W/m2	Continuous	15 minute	AM-4	Temperature @ 10 metres	°C	Continuous	15 minute	AM-4	Additional requirements - Siting - Measurement				AM-1 & AM-4 AM-2 & AM-4	Compliant	The installed meteorological station at W1 monitors the required parameters. An example of data was provided	
Parameter	Units of Measure	Frequency	Averaging Period	Sampling Method																																													
Temperature @ 2 metres	°C	Continuous	15 minute	AM-4																																													
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Additional requirements - Siting - Measurement				AM-1 & AM-4 AM-2 & AM-4																																													
M4.2	The meteorological weather station must be maintained so as to be capable of continuously monitoring the parameters specified in this section.	Compliant	Evidence that the station is calibrated annually.																																														
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	A copy of the complaints log was provided. Additional detail was provided around the actioning of the blast fume complaints.																																														
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	The complaints log includes the detail as required.																																														
M5.3	The record of a complaint must be kept for at least 4 years after the complaint was made.	Compliant	Complaints log provided is from start of 2017.																																														
M5.4	The record must be produced to any authorised officer of the EPA who asks to see them.	Note																																															
M6 Telephone Complaint 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	Community hotline number is provided on the website. This is a 24 hour hotline. https://www.idemitsu.com.au/operations/boggabri-coal/community/																																														
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	The complaints line is available on the website.																																														
M6.3	The preceding two conditions do not apply until 3 months after: the date of the issue of this licence.	Note																																															
M7 Blasting																																																	
M7.1	<p>To determine compliance with limit condition(s) for blasting: a) Airblast overpressure and ground vibration levels experienced at the following noise sensitive locations must be measured and recorded for all blasts carried out in or on the premises; - Identified on "Goonbri" and "Wilberoi East" identified on the map titled Plan No. 1 EPL Boundary and Environmental Monitoring locations dated 26-6-18. (DOC18/768113). b) Instrumentation used to measure the airblast overpressure and ground vibration levels must meet the requirements of Australian Standard AS 2187.2-2006.</p>	Compliant	Blast monitoring is undertaken at Goonbri and Wilberoi East. All blast monitoring is undertaken in accordance with the methodology outlined in AS2187.2 Explosives – Storage and Use Part 2: Use of explosives (Standards Australia, 2006)																																														

Condition Number	Condition	Compliance Status	Evidence	Recommended Action
Note	A breach of the licence will still occur where airblast overpressure or ground vibration levels from the blasting operations at the premises exceeds the limit specified in conditions L3.1 to L3.4 at any noise sensitive locations other than the locations identified in the above condition.	Note		
M8 Other monitoring and recording conditions				
M8.1	To assess compliance with the noise limits presented in the Noise Limits table, attended noise monitoring must be undertaken in accordance with the condition titled Determining Compliance, outlined above, and: a) at noise monitoring locations N2, N3, N4, N6 and N7 as shown on the map titled "Noise Management Strategy Boggabri Coal Pty Ltd" in the Boggabri Coal Operations Pty Ltd Noise Management Plan, Rev.9, dated January 2016, and approved by the DPE (DOC15/528364-31); b) occur monthly in a reporting period; and c) occur during each night period as defined in the NSW Industrial Noise Policy for a minimum of 15 minutes	Compliant	(a) Attended noise monitoring is undertaken at N2, N3 and N4 in accordance with the latest approved noise management plan. While monitoring was not undertaken at N6 and N7 they locations were removed from the Noise Management Plan as approved by DPIE on 21 February 2019. According to site correspondence "Noise monitoring locations N6 and N7 were removed from the NMP because they were locations that monitored sources of noise from activities that no longer occur. N6 and N7 monitored noise generated from the haulage of coal by trucks along the haul road. Boggabri Coal ceased truck haulage of coal along the haul rd in 2016." (b) and (c) Monitoring reports show monthly monitoring during the night time.	NC REC: Continue to liaise with EPA regarding EPL variation to ensure that monitoring points in EPL align with those utilised by the site.
6 REPORTING CONDITIONS				
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, 7. a Statement of Compliance- Environmental Management Systems and Practices; and 8. a Statement of Compliance - Environmental Improvement Works. 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	Annual returns for the audit period provided and reviewed.	
R1.2	An Annual Return must be prepared in respect of each reporting period, except as provided below. Note: The term "reporting period" is defined in the dictionary at the end of this licence. Do not complete the Annual Return until after the end of the reporting period.	Compliant	The Annual returns are provided for each reporting period	
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. Note: An application to transfer a licence must be made in the approved form for this purpose.	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 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	Annual returns provided to SLR 2017 - 2020 were submitted within the 60 days at the end of each reporting period.	
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	Copies of 2017 - 2020 was provided.	
R1.7	Within the Annual Return, the Statement of Compliance must be certified and the Monitoring and Complaints Summary must be signed by: a) the licence holder; or b) by a person approved in writing by the EPA to sign on behalf of the licence holder.	Compliant	Cited each annual return signed by two company directors.	
R2 Notification of environmental harm				
	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.	Compliant		

Condition Number	Condition	Compliance Status	Evidence	Recommended Action
R2.1	Notifications must be made by telephoning the Environment Line service on 131 555.	Not triggered	As reported in the 2019 Annual Review, a blast fired on 21 August 2019 recorded an airblast overpressure of 123 dBL exceeding the 120dBL criteria. This exceedance was attributed to a short term fluctuation in the upper air wind conditions that could not have been reasonably foreseen.	
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.	Administrative non-compliance	This exceedance was reported to DPIE on 28 August. BCOPL was issued with a warning letter from DPIE on 18 October 2019 for not reporting the blast overpressure exceedance within seven days of the incident. Notification of the exceedance was sent via text and email but was originally missed. This is attributable to the amount of trigger text messages which were received, particularly under the old system. It is acknowledged that the incident was notified as soon as BCOPL became aware of the exceedance.	
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		
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		
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.	Compliant	Following notification of the blast exceedance, BCOPL prepared investigation report and provided to EPA. Investigation reports have also been prepared with regard to the blast fume events.	
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.	Compliant		
R4 Other Reporting Conditions				
R4.1	Noise Monitoring Report A noise compliance assessment report must be submitted to the EPA within 30 days of the completion of the monthly monitoring. The assessment must be prepared by a suitably qualified and experienced acoustical consultant and include: a) an assessment of compliance with noise limits presented in this licence; and b) an outline of any management actions taken within the monitoring period to address any exceedances of the limits contained in this licence.	Compliant	Monthly attended noise monitoring is undertaken and reported monthly. Copies of the monthly reports are available on the website.	
R4.2	The licensee must report any exceedance of the licence blasting limits to the regional office of the EPA as soon as practicable after the exceedance becomes known to the licensee or to one of the licensee's employees or agents.	Compliant	Email cited which confirms EPA were notified as via email once the blasting exceedance on the 21 August 2019 was identified.	
7 GENERAL CONDITIONS				
G1 Copy of Licence kept at the premises or plant				
G1.1	A copy of this licence must be kept at the premises to which the licence applies.	compliant	Copies of the EPL was provided and is available on the website.	
G1.2	The licence must be produced to any authorised officer of the EPA who asks to see it.	compliant		
G1.3	The licence must be available for inspection by any employee or agent of the licensee working at the premises.	compliant		
G2 Other general conditions				
G2.1	Completed Programs			

Condition Number	Condition	Compliance Status	Evidence	Recommended Action																								
	<table border="1"> <thead> <tr> <th>PRP</th> <th>Description</th> <th>Completed Date</th> </tr> </thead> <tbody> <tr> <td>PRP 1: Site Stormwater Management</td> <td>Aim: To ensure that the clean water from the southern diversion drain does not run across the mining roadway or come into contact with any mining operation areas.</td> <td>04-January-2008</td> </tr> <tr> <td>PRP 2: Site Water Management Plan</td> <td>Aim: Improve onsite operations in relation to water management.</td> <td>31-January-2008</td> </tr> <tr> <td>PRP 3: Dust Management</td> <td>Aim: Reduce dust levels being emitted from the box feeder, crusher and conveyor.</td> <td>15-November-2007</td> </tr> <tr> <td>PRP 4: Coal Mine Particulate Matter Control Best Practice</td> <td>Requires the licensee to conduct a site specific best management practice (BMP) determination to identify ways to reduce particulate emissions.</td> <td>29-June-2012</td> </tr> <tr> <td>PRP 5: Review Mine Water Balance</td> <td>Review of water balance for the mine to determine water needs / excess on current operational practices compared to predicated practices in the EA for the mine project.</td> <td>30-March-2012</td> </tr> <tr> <td>Implement approved water management structures</td> <td>Implement approved water management structures over next 2 years to ensure management of mine water does not impact on future mining operations.</td> <td>05-November-2013</td> </tr> <tr> <td>Particulate Matter Control Best Practice Implementation – Wheel Generated Dust</td> <td>Implementation of particulate matter best management practices to address wheel-generated dust.</td> <td>15-August-2014</td> </tr> </tbody> </table>	PRP	Description	Completed Date	PRP 1: Site Stormwater Management	Aim: To ensure that the clean water from the southern diversion drain does not run across the mining roadway or come into contact with any mining operation areas.	04-January-2008	PRP 2: Site Water Management Plan	Aim: Improve onsite operations in relation to water management.	31-January-2008	PRP 3: Dust Management	Aim: Reduce dust levels being emitted from the box feeder, crusher and conveyor.	15-November-2007	PRP 4: Coal Mine Particulate Matter Control Best Practice	Requires the licensee to conduct a site specific best management practice (BMP) determination to identify ways to reduce particulate emissions.	29-June-2012	PRP 5: Review Mine Water Balance	Review of water balance for the mine to determine water needs / excess on current operational practices compared to predicated practices in the EA for the mine project.	30-March-2012	Implement approved water management structures	Implement approved water management structures over next 2 years to ensure management of mine water does not impact on future mining operations.	05-November-2013	Particulate Matter Control Best Practice Implementation – Wheel Generated Dust	Implementation of particulate matter best management practices to address wheel-generated dust.	15-August-2014	Not triggered	All PRPs completed are outside of the audit period.	
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8 SPECIAL CONDITIONS																												
E1 Noise Management																												
E1.1	Noise impacts where wind speed exceeds 3 metres per second at 10 metres above the ground must be addressed by: a) documenting noise complaints received to identify any higher level of impacts or wind patterns; where levels of noise complaints indicate a higher level of impact then actions to quantify and ameliorate any enhanced impacts where wind speed exceeds 3 metres per second at 10 metres above the ground should be developed and implemented.	Compliant	There were no noise complaints received where wind speed exceeded 3 m/s at 10m. One noise complaint was received during the audit period associated with noise in May 2020.																									
E2 Water Capacity Management																												
E2.1	The licensee must maintain at all times, air capacity of 1000ML for mine water storage on the premises.	Compliant	2 GIG MW5 sighted. As discussed during the site inspections, investigations and design considerations will be required over the coming years to determine requirements for when the MW5 dam is mined through to ensure that EPL requirements for 1 GLair capacity to be maintained within the water management system.	Improvement REC: Undertake appropriate investigations to determine how requirements for 1 GL air capacity can be retained following mining through of MW5.																								
E2.2	The requirements of condition E2.1, do not take effect until the 1 January 2013.	Note																										

CL 368

Grant date 15-11-1990
 Expiry 14-11-2032

		2020 Audit Findings		
Condition Number	Condition	Compliance Status	Evidence	Recommended Action
Notice to Landholders				
1	<p>(a) Within a period of three months from the date of grant/renewal of this lease or within such further time as the Minister may allow, the lease holder must serve on each landholder of the land a notice in writing indicating that this lease has been granted/renewed and whether the lease includes the surface. An adequate plan and description of the lease area must accompany the notice.</p> <p>(b) If there are ten or more landholders affected, the lease holder may serve the notice by publication in a newspaper circulating in the region where the lease area is situated. The notice must indicate that this lease has been granted/renewed; state whether the lease includes the surface and must contain an adequate plan and description of the lease area.</p>	Not triggered	Outside the audit period.	
Environmental Harm				
2	<p>(a) The lease holder must implement all practicable measures to prevent and/or minimise any harm to the environment that may result from the construction, operation or rehabilitation of any activities under this lease.</p> <p>(b) For the purposes of this condition:</p> <p>(i) environment means components of the earth, including:</p> <p>(A) land, air and water, and</p> <p>(B) any layer of the atmosphere, and</p> <p>(C) any organic or inorganic matter and any living organism, and</p> <p>(D) human-made or modified structures and areas,</p> <p>and includes interacting natural ecosystems that include components referred to in paragraphs (A)-(C).</p> <p>(ii) harm to the environment includes any direct or indirect alteration of the environment that has the effect of degrading the environment and, without limiting the generality of the above, includes any act or omission that results in pollution, contributes to the extinction or degradation of any threatened species, populations or ecological communities and their habitats and causes impacts to places, objects and features of significance to Aboriginal people.</p>	Compliant	<p>The site follows an environmental management strategy which is supported by a number of environmental management plans. These outline preventative measures for the protection of and, air, water and human made structures. BCOPL also operate in accordance with their EPL and report environmental performance in the annual review.</p> <p>Based on the findings of this audit, operations have been undertaken with appropriate controls to minimise impacts to the environment.</p>	
Mining Operations Plan				
3	<p>(a) Mining operations must not be carried out otherwise than in accordance with a Mining Operations Plan (MOP) which has been approved by the Director-General.</p> <p>(b) The MOP must:</p> <p>(i) identify areas that will be disturbed by mining operations ;</p> <p>(ii) detail the staging of specific mining operations;</p> <p>(iii) identify how the mine will be managed to allow mine closure;</p> <p>(iv) identify how mining operations will be carried out in order to prevent and or minimise harm to the environment;</p> <p>(v) reflect the conditions of approval under:</p> <ul style="list-style-type: none"> the Environmental Planning and Assessment Act 1979 the Protection of the Environment Operations Act 1997 and any other approvals relevant to the development including the conditions of this lease; and have regard to any relevant guidelines adopted by the Director-General. <p>(c) The leaseholder may apply to the Director-General to amend an approved MOP at any time.</p> <p>(d) It is not a breach of this condition if:</p> <p>(i) the operations constituting the breach were necessary to comply with a lawful order or direction given under</p>	Compliant	<p>BCOP have an approved MOP in place which covers the period of January 2020 to December 2024. The MOP details the post mining land use and rehabilitation strategy. The MOP was developed in accordance with the ESG3 Mop Guidelines 2013.</p> <p>The latest version of the MOP was approved on 8 April 2020.</p> <p>The MOP meets the requirements of ESG3 and the requirements of the mining leases including:</p> <p>(i) Section 7.1 presents rehabilitation and disturbance rates and MOP Plans present mine progression and areas of disturbance;</p> <p>(ii) Section 2.3 of the MOP details the staging of specific mining operations during the MOP term. Section 7.1 presents rehabilitation and disturbance rates and MOP Plans present mine progression;</p> <p>(iii) the MOP identifies how the mine will be managed to allow mine closure, by providing details regarding rehabilitation, post mining land use, completion criteria and the proposed final landform;</p> <p>(iv) Section 4 of the MOP identifies environmental issues management and how operations will be carried out to minimise environmental impacts;</p> <p>(v) Section 1.2 of the MOP addresses the statutory requirements and conditions of approval under:</p>	

Condition Number	Condition	Compliance Status	Evidence	Recommended Action
	the Mining Act 1992, the Environmental Planning and Assessment Act 1979, Protection of the Environment Operations Act 1997, Mine Health and Safety Act 2004 I Coal Mine Health and Safety Act 2002 and Mine Health and Safety Regulation 2007 I Coal Mine Health and Safety Regulation 2006 or the Occupational Health and Safety Act 2000; and (ii) the Director-General had been notified in writing of the terms of the order or direction prior to the operations constituting the breach being carried out. (e) A MOP ceases to have effect 7 years after date of approval or other such period as identified by the Director-General.		<ul style="list-style-type: none"> the Environmental Planning and Assessment Act 1979; the Protection of the Environment Operations Act 1997; and and other approvals relevant to the development including the conditions of this lease. <p>In addition, the MOP has met the PA conditions for a RMP.</p>	
Environment Management Report				
4	<p>(a) The lease holder must lodge Environmental Management Reports (EMR) with the Director-General annually or at dates otherwise directed by the Director-General.</p> <p>(b) The EMR must:</p> <p>(i) report against compliance with the MOP;</p> <p>(ii) report on progress in respect of rehabilitation completion criteria;</p> <p>(iii) report on the extent of compliance with regulatory requirements; and</p> <p>(iv) have regard to any relevant guidelines adopted by the Director-General;</p>	Administrative non-compliance	<p>The site annual reviews are prepared to meet this condition.</p> <p>Annual reviews are prepared for the site for the period 1 January to 31st December</p> <p>All Annual Reviews for audit period are signed and dated prior to end of March. Also sighted submission confirmation of submission for each year.</p> <p>The annual reviews generally cover these requirements.</p> <p>However, progression towards rehabilitation completion criteria is only mentioned with regard to the species richness analogue benchmark. Rehabilitation areas should be tracked against the phases in the MOP with evidence provided to justify whether the rehabilitation has met the rehabilitation objectives of that phase and domains.</p> <p>It is noted that the Resources Regulator has recently released proposed amendments to the rehabilitation compliance and reporting requirements (https://www.resourcesregulator.nsw.gov.au/environment/rehabilitation/rehabilitation-and-compliance-reforms). While not yet legislated, the Annual Rehabilitation Reporting Guideline should be considered with regard to Resources Regulators expectations around rehabilitation reporting.</p>	<p>NC REC: Future Annual Reviews must report on progress in respect of rehabilitation completion criteria.</p> <p>NC REC: Review rehabilitation monitoring process in line with the Resources Regulator Annual Rehabilitation Report guidance (https://www.resourcesregulator.nsw.gov.au/_data/assets/pdf_file/0017/1262330/Form-and-way-Annual-rehabilitation-report-and-forward-program-for-large-mines.pdf) to ensure that progress against completion criteria is completed as required.</p>
Environmental Incident Report				
5	<p>(a) The lease holder must report any environmental incidents. The report must:</p> <p>(i) be prepared according to any relevant Departmental guidelines;</p> <p>(ii) be submitted within 24 hours of the environmental incident occurring;</p> <p>(b) For the purposes of this condition, environmental incident includes:</p> <p>(i) any incident causing or threatening material harm to the environment</p> <p>(ii) any breach of Conditions 1 to 9 and 11 to 24;</p> <p>(iii) any breach of environment protection legislation; or,</p> <p>(iv) a serious complaint from landholders or the public.</p> <p>(c) For the purposes of this condition, harm to the environment is material if:</p> <p>(i) it involves actual or potential harm to the health or safety of human beings or to ecosystems that is not trivial, or</p> <p>(ii) it results in actual or potential loss or property damage of an amount, or amounts in aggregate, exceeding \$10,000, where loss includes the reasonable costs and expenses that would be incurred in taking all reasonable and practicable measures to prevent, mitigate or make good harm to the environment.</p>	Not triggered	<p>No environmental incidents occurred during the audit period relevant to this mining lease.</p> <p>It is noted that the blast incident listed in the EPL and development consent aspect of this audit is covered by condition 10 of this mining lease. This is excluded from this condition by condition b(ii).</p>	
Additional Environmental Reports				
6	Additional environmental reports may be required from time to time as directed in writing by the Director-General and must be lodged as instructed.	Note		
Rehabilitation				

Condition Number	Condition	Compliance Status	Evidence	Recommended Action
7	Any disturbance as a result of activities under this lease must be rehabilitated to the satisfaction of the Director-General.	Compliant	<p>Rehabilitated areas sighted during the site inspection were noted to be in accordance with specified post mining land use in the MOP plan 4 figures.</p> <p>No rehabilitation relinquished or requests for satisfaction of RR</p> <p>BCOPL undertake progressive rehabilitation in accordance with the approved MOP and is reported in the Annual Review. In 2020 there is 6.8 ha of rehabilitation planned.</p> <p>Site inspection was undertaken of both newly established and advanced rehabilitation. General the rehabilitation was good. Evidence of erosion repair due to high rainfall events was observed. Established rehabilitation was quite dense and stable. Mulch and seedlings were observed in newer rehabilitation. Areas prepared for planting was also observed, with planting to commence in the coming weeks.</p> <p>Some areas of weeds were noted during the site inspection to be managed and some areas of scouring in new rehab areas following recent rainfall events.</p> <p>Improvement recommendations have been made with regards to rehabilitation.</p>	<p>Improvement REC: Undertake further investigations to confirm that the proposed "rice paddy" final landform meets this development consent condition of "constructed landforms drain to the natural environment" and the MOP rehabilitation objective of creating a stable free draining landform.</p> <p>Improvement REC: Undertake additional weed management in rehabilitation areas and repairs to erosion / scouring as required.</p> <p>Improvement REC: Consider cover crops and/or hydromulch to assist with stabilisation in tubestock areas until tubestock takes off and ground cover increases.</p>
Subsidence Management				
8	<p>(a) The lease holder shall prepare a Subsidence Management Plan prior to commencing any underground mining operations which will potentially lead to subsidence of the land surface.</p> <p>(b) Underground mining operations which will potentially lead to subsidence include secondary extraction panels such as longwalls or miniwalls, associated first workings (gateroads, installation roads and associated main headings, etc), and pillar extractions, and are otherwise defined by the Applications for Subsidence Management Approvals guidelines (EDG17)</p> <p>(c) The lease holder must not commence or undertake underground mining operations that will potentially lead to subsidence other than in accordance with a Subsidence Management Plan approved by the Director-General, an approval under the Coal Mine Health & Safety Act 2002, or the document New Subsidence Management Plan Approval Process- Transitional Provisions (EDP09).</p> <p>(d) Subsidence Management Plans are to be prepared in accordance with the Guideline for Applications for Subsidence Management Approvals.</p> <p>(e) Subsidence Management Plans as approved shall form part of the Mining Operations Plan required under Condition 3 and will be subject to the Environmental Management Report process as set out under Condition 4. The SMP is also subject to the requirements for subsidence monitoring and reporting set out in the document New Approval Process for Management of Coal Mining Subsidence - Policy.</p>	Not triggered	There is no underground mining at the site.	
Working Requirement				
9	<p>The lease holder must:</p> <p>(a) ensure that at least 138 competent people are efficiently employed in relation to the mining process or mining operations on the lease area OR</p> <p>(b) expend on operations carried out in the course of prospecting or mining the lease area, an amount of not less than \$2,415,000 per annum whilst the lease is in force .</p> <p>The Minister may at any time or times, by instrument in writing served on the lease holder, increase or decrease the expenditure required or the number of people to be employed.</p>	Compliant	Section 7.4 of the annual reviews detail the personnel employed at the site: 2017 - 477 (employed on the site by OneKey the contracted mining operator) 2018 - 444 (employed on the site by Downer the contracted mining operator) 2019 - 542	
Blasting				
10	<p>(a) Ground Vibration</p> <p>The lease holder must ensure that the ground vibration peak particle velocity generated by any blasting within the lease area does not exceed 10 mm/second and does not exceed 5 mm/second in more than 5% of the total number of blasts over a period of 12 months at any dwelling or occupied premises as the case may be, unless determined otherwise by the Department of Environment, Climate Change and Water.</p> <p>(b) Blast Overpressure</p> <p>The lease holder must ensure that the blast overpressure noise level generated by any blasting within the lease area does not exceed 120 dB (linear) and does not exceed 115 dB (linear) in more than 5% of the total number of blasts over a period of 12 months, at any dwelling or occupied premises, as the case may be, unless determined otherwise by the Department of Environment, Climate Change and Water.</p>	Non-compliant (Low Risk)	A blast on the 12 August 2019 exceeded the limit of 120 dBA. A recording of 123dBA was recorded at Wilderoi East. Landowners were verbally notified and notification was provided to DPIE as per PA 09_0182	
Safety				

Condition Number	Condition	Compliance Status	Evidence	Recommended Action
11	Operations must be carried out in a manner that ensures the safety of persons or stock in the vicinity of the operations. All drill holes shafts and excavations must be appropriately protected, to the satisfaction of the Director-General, to ensure that access to them by persons and stock is restricted. Abandoned shafts and excavations opened up or used by the lease holder must be notified in writing to the Department and filled in or otherwise rendered safe to a standard acceptable to the Director-General.	Compliant	The site is fenced and access is via a manned security check point. Entry to the private haul road can be locked if required. There is signage onto entry of the haul road to public this is a private haul road. There are no shafts on site. Drill holes are remediated once drilling is complete.	
Prevention of soil erosion and pollution				
12	Prospecting operations must be carried out in a manner that does not cause or aggravate air pollution, water (including groundwater) pollution, soil contamination or erosion, unless otherwise authorised by a relevant approval, and in accordance with an accepted Mining Operations Plan.	Compliant	Prospecting activities are undertaken in accordance with the approved management plans including the surface water management plan, air quality & GHG management plan and the approved MOP.	
Transmission lines, Communication lines and Pipelines				
13	Operations must not interfere with or impair the stability or efficiency of any transmission line, communication line, pipeline or any other utility on the lease area without the prior written approval of the Director-General and subject to any conditions stipulated .	Compliant	There was no interference with any infrastructure during the audit period.	
Roads and Tracks				
14	(a) The lease holder must pay to the relevant roads authority in control of the road or track the reasonable costs incurred by the roads authority in making good any damage to roads or tracks caused by operations carried out under this lease less any amount paid or payable from the Mine Subsidence Compensation Fund. (b) During wet weather the use of any road or track must be restricted so as to prevent damage to the road or track. (c) Existing access tracks should be used for all operations where reasonably practicable. New access tracks must be kept to a minimum and be positioned in order to minimise damage to the land, watercourses or vegetation. (d) Temporary access tracks must be rehabilitated and revegetated to the satisfaction of the Director-General as soon as reasonably practicable after they are no longer required under this lease.	Compliant	There have been no damage to public roads during the audit period. All coal is transported from site via rail minimising road use to service and employee vehicles. There were no new access tracks during the audit period.	
Trees and Vegetation				
15	(a) The lease holder must not fell trees, strip bark or cut timber on any land subject of this lease without the consent of the landholder who is entitled to the use of the timber. (b) The lease holder must contact Forests NSW and obtain any required permit, licence or approval before taking timber from any Crown land within the lease area. Note: Any clearing not authorised under the Act must comply with the requirements of the Native Vegetation Act 2003. Any clearing or taking of timber on Crown land is subject to the requirements of the Forestry Act 1916.	Compliant	BCOPL has a lease in place with Forests NSW which allows for the removal of trees for the purpose of mining. Tree clearing protocol and Biodiversity Management Plan were developed in consultation with Forests NSW.	
Resource Recovery				

Condition Number	Condition	Compliance Status	Evidence	Recommended Action
17	<p>(a) Notwithstanding any description of mining methods and their sequence or of proposed resource recovery contained within the Mining Operations Plan, if at any time the Director-General is of the opinion that minerals which the lease entitles the lease holder to mine and which are economically recoverable at the time are not being recovered from the lease area, or that any such minerals which are being recovered are not being recovered to the extent which should be economically possible or which for environmental reasons are necessary to be recovered, notice in writing to the lease holder may be given requiring the holder to recover such minerals.</p> <p>(b) The notice shall specify the minerals to be recovered and the extent to which they are to be recovered, or the objectives in regard to resource recovery, but shall not specify the processes the lease holder shall use to achieve the specified recovery.</p> <p>(c) The lease holder must, when requested by the Director-General, provide such information as the Director-General may specify about the recovery of the mineral resources of the lease area.</p>	Not triggered	No notice received during the audit period.	
Indemnity				
18	The lease holder must indemnify and keep indemnified the Crown from and against all actions, suits, claims and demands of whatsoever nature and all costs, charges and expenses which may be brought against the lease holder or which the lease holder may incur in respect of any accident or injury to any person or property which may arise out of the construction, maintenance or working of any workings now existing or to be made by the lease holder within the lease area or in connection with any of the operations notwithstanding that all other conditions of this lease shall in all respects have been observed by the lease holder or that any such accident or injury shall arise from any act or thing which the lease holder may be licensed or compelled to do.	Not triggered	No action/suit/claim/demand has been made in relation to any damage/injury to person/property as a result of the exercise of rights	
Security				
19	A security in the sum of \$10,100,000 must be given and maintained with the Minister by the lease holder for the purpose of ensuring the fulfilment by the lease holder of obligations under this lease .	Compliant	A copy of the signed and lodged RCE (dated 14 January 2020) cited.	
Suspension of Mining Operations				
23	The holder of a mining lease may not suspend mining operations in the mining area other than in accordance with the consent of the Minister.	Not triggered	Mine operations ongoing	
Cooperation Agreement				
24	<p>The lease holder must make every reasonable attempt, and be able to demonstrate their 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"> • access arrangements • operational interaction procedures • dispute resolution • information exchange • well location • timing of drilling • potential resource extraction conflicts and • rehabilitation issues. 	Compliant	BCOP have overlapping tenure (A339 / A335 and CL 368) with Santos PEL1. A draft cooperation agreement is currently with Santos. Evidence was provided demonstrating numerous attempts by BCOP to finalise the agreement.	

ML 1755

Approval Date: 30-Jun-17

Condition Number	Condition	Compliance Status	Evidence	Recommended Action
MINING LEASE CONDITIONS 2013				
Notice to Landholders				
1	<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	ML1755 is situated on land wholly owned by BCOPL.	
Rehabilitation				
2	Any disturbance resulting from the activities carried out under this mining lease must be rehabilitated to the satisfaction of the Minister.	Compliant	BCOP have an approved MOP in place which details rehabilitation activities and plans.	
Mining Operations Plan and Annual Rehabilitation Report				
3	<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> <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 minimise harm to the environment; and</p> <p>(v) reflects the conditions of approval under:</p> <ul style="list-style-type: none"> the Environmental Planning and Assessment Act 1979; the Protection of the Environment Operations Act 1997; and any other approvals relevant to the development including the conditions of this mining lease. <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 www.resources.nsw.gov.au/environment</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 www.resources.nsw.gov.au/environment.</p> <p>Note: The Rehabilitation Report replaces the Annual Environmental Management Report.</p>	Compliant	<p>(a) - (d) BCOP have an approved MOP in place which covers the period of January 2020 to December 2024. The MOP details the post mining land use and rehabilitation strategy. The MOP was developed in accordance with the ESG3 Mop Guidelines 2013.</p> <p>The latest version of the MOP was approved on 8 April 2020.</p> <p>f) The Annual Review provides an report on rehabilitation undertaken. The annual reviews generally cover these requirements.</p> <p>However, progression towards rehabilitation completion criteria is only mentioned with regard to the species richness analogue benchmark. Rehabilitation areas should be tracked against the phases in the MOP with evidence provided to justify whether the rehabilitation has met the rehabilitation objectives of that phase and domains.</p> <p>Based on the Annual Reviews and the Rehabilitation Monitoring Reports provided, rehabilitation monitoring focusses on the biodiversity aspects of the rehabilitation. As specified in the MOP, the rehabilitation surveys are required to include "a combination of stability and erosion assessments, soil analysis and various measures of ecosystem diversity and habitat values"</p> <p>It is noted that the Resources Regulator has recently released proposed amendments to the rehabilitation compliance and reporting requirements (https://www.resourcesregulator.nsw.gov.au/environment/rehabilitation/rehabilitation-and-compliance-reforms). While not yet legislated, the Annual Rehabilitation Reporting Guideline should be considered with regard to Resources Regulators expectations around rehabilitation reporting.</p>	<p>NC REC: Future Annual Reviews must report on progress in respect of rehabilitation completion criteria.</p> <p>NC REC: Review rehabilitation monitoring process in line with the Resources Regulator Annual Rehabilitation Report guidance (https://www.resourcesregulator.nsw.gov.au/__data/assets/pdf_file/0017/1262330/Form-and-way-Annual-rehabilitation-report-and-forward-program-for-large-mines.pdf) to ensure that progress against completion criteria is completed as required.</p>
Non-Compliance Reporting				
4	<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 provide in the form specified on the Department's website within (7) days of the mining lease holder becoming aware of the breach.</p>	Compliant	There were no non-compliances within the audit period which breached the conditions of the Mining Lease or environmental legislation.	
Environmental Incident Report				
5	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>	Compliant	There were no incidents within the audit period which breached the conditions of the Mining Lease or environmental legislation.	
Extraction Plan				
6	NOT USED	not triggered		
Resource Recovery				
7	NOT USED	not triggered		
Group Security				
8	<p>The lease holder is required to provide and maintain a security deposit to secure funding for the fulfilment of obligations of all or any kind under the mining lease, including obligations of all or any kind under the mining lease that may arise in the future.</p> <p>The amount of the security deposit to be provided as a group security has been assessed by the Minister at \$39,540,000. The leases covered by the group security include:</p> <p>Coal Lease 368 (Act 1973)</p> <p>This group security is extended to apply to this lease.</p>	Compliant	A copy of the signed revised RCE and submitted group security was cited.	
9 Cooperation Agreement				

	<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"> • access arrangements • operational interaction procedures • dispute resolution • information exchange • well location • timing of drilling • potential resource extraction conflicts; and • rehabilitation issues. 	Compliant	BCOP have overlapping tenure (A339 / A335 and CL 368) with Santos PEL1. A draft cooperation agreement is currently with Santos. Evidence was provided demonstrating numerous attempts by BCOP to finalise the agreement.	
9 Cooperation Agreement				
Note:	<p>Exploration Reports (Geological and Geophysical)</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 59 of the Mining Regulation 2016. 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 and Services 2010).</p>	Compliant	Annual reports for the audit period were provided.	
SPECIAL CONDITIONS				
Note:	The standard conditions apply to all mining leases. The Division of Resources & Geoscience (DRG) reserves the right to impose special conditions, based on individual circumstances, where appropriate.	Note		

APPENDIX D

Photographs



Photo 1 Looking into the pit. Some evidence of localised dust generation, Environmental Superintendent called OCE for additional water carts



Photo 2 Water Cart entering the pit following call



Photo 3 Appropriate waste management and signage



Photo 4 Appropriate liquids storage



Photo 5 Dust sprays in evidence at bin



Photo 6 Good house keeping and minimal dust at CHPP



Photo 7 Dirty water management system including pipelines in drains



Photo 8 Minimal evidence of dust generation at coal stockpile areas



Photo 9 Catch drains in place reporting to sumps



Photo 10 Catch drain around boundary of workshop



Photo 11 Good house keeping and waste management in the workshop area



Photo 12 Effective signage of waste disposal areas and waste segregation



Photo 13 Effective signage of waste disposal areas and waste segregation



Photo 14 Spill kits in place



Photo 15 Liquids storage in bunded containers and bunded laydown area



Photo 16 Appropriate storage of hazardous liquids



Photo 17 Good house keeping at the laydown area



Photo 18 Water pipelines noted to be contained within drainlines.



Photo 19 Sediment dam. Note some weeds evident in batters.



Photo 20 Temporary bunding in place at remote pump



Photo 21 Erosion and sediment controls at disturbance limits.



Photo 22 Mine Water Dam 5. This will be mined through. Consideration required for how the mine will maintain 1GL airspace.



Photo 23 Cleared and grubbed area ahead of mining



Photo 24 Clear demarcation of disturbance limits. Pipelines contained within the site by bund.



Photo 25 Evidence of establishment of rehabilitation areas



Photo 26 Some weeds evident in topsoil areas

APPENDIX E

Independent Audit Certification

Independent Audit Certification Form	
Development Name	Boggabri Coal Mine
Development Consent No.	PA 09_0182
Description of Development	Open Cut Mining Operation
Development Address	Leards Forest Road, Boggabri, NSW 2382
Operator	Boggabri Coal Operations Pty Ltd
Operator Address	Leards Forest Road, Boggabri, NSW 2382
Title of Audit	Boggabri 2020 Independent Environmental Audit
<p><i>I certify that I have undertaken the independent audit and prepared the contents of the attached independent audit report and to the best of my knowledge:</i></p> <p><i>The audit has been undertaken in accordance with relevant approval condition(s) and in accordance with the auditing standard AS/NZS ISO 19011:2014 and Post Approval Guidelines – Independent Audits</i></p> <p><i>The findings of the audit are reported truthfully, accurately and completely;</i></p> <p><i>I have exercised due diligence and professional judgement in conducting the audit;</i></p> <p><i>I have acted professionally, in an unbiased manner and did not allow undue influence to limit or over-ride objectivity in conducting the audit;</i></p> <p><i>I am not related to any owner or operator of the development as an employer, business partner, employee, sharing a common employer, having a contractual arrangement outside the audit, spouse, partner, sibling, parent, or child;</i></p> <p><i>I do not have any pecuniary interest in the audited development, including where there is a reasonable likelihood or expectation of financial gain or loss to me or to a person to whom I am closely related (i.e. immediate family);</i></p> <p><i>Neither I nor my employer have provided consultancy services for the audited development that were subject to this audit except as otherwise declared to the lead regulator prior to the audit; and</i></p> <p><i>I have not accepted, nor intend to accept any inducement, commission, gift or any other benefit (apart from fair payment) from any owner or operator of the development, their employees or any interested party. I have not knowingly allowed, nor intend to allow my colleagues to do so.</i></p> <p><i>Note.</i></p> <p><i>The Independent Audit is an ‘environmental audit’ for the purposes of section 122B(2) of the Environmental Planning and Assessment Act 1979. Section 122E provides that a person must not include false or misleading information (or provide information for inclusion in) an audit report produced to the Minister in connection with an environmental audit if the person knows that the information is false or misleading in a material respect. The maximum penalty is, in the case of a corporation, \$1 million and for an individual, \$250,000.</i></p> <p><i>The Crimes Act 1900 contains other offences relating to false and misleading information: section 192G (Intention to defraud by false or misleading statement—maximum penalty 5 years imprisonment); sections 307A, 307B and 307C (False or misleading applications/information/documents—maximum penalty 2 years imprisonment or \$22,000, or both).</i></p>	
Signature	
Name of Lead / Principal Auditor	Nathan Archer
Address	10 Kings Road, New Lambton NSW 2305, Australia
Email Address	narcher@slrconsulting.com
Auditor Certification (if relevant)	Certified Exemplar Global Lead Auditor (#133601)
Date:	15 December 2020

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