



# Independent Environmental Audit 2020



Werris Creek Coal Mine

22 July 2020

Project No: 0552611

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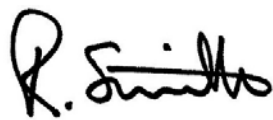
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## Signature Page

22 July 2020

# Independent Environmental Audit 2020

Werris Creek Coal Mine



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Lead Auditor



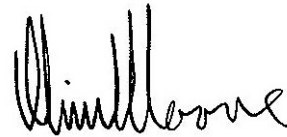
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# Independent Audit Certification Form

## Independent Audit Certification Form

Development Name	Werris Creek Coal Mine
Development Consent No.	PA 10_0059 Modification 2
Description of Development	Werris Creek Coal Mine is a conventional open-cut coal mine
Development Address	4 km south of Werris Creek, New South Wales (NSW) off Werris Creek Road
Operator	Whitehaven Coal Limited
Operator Address	231 Conadilly Street, Gunnedah NSW 2380 Australia

## Independent Audit

Title of Audit	Werris Creek Conditions of Approval Independent Environmental Audit
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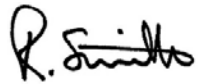
*I certify that I have undertaken the independent audit and prepared the contents of the attached independent audit report and to the best of my knowledge:*

- *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*
- *The findings of the audit are reported truthfully, accurately and completely;*
- *I have exercised due diligence and professional judgement in conducting the audit;*
- *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 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 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);*
- *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 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.*

*Note.*

*a) 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.*

*b) 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).*

Signature	
Name of Lead / Principal Auditor	Robert Smith
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Auditor Certification (if relevant)	N/A
Date	22/07/20

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## EXECUTIVE SUMMARY

Environmental Resources Management Australia Pty Ltd (ERM) was commissioned to perform an Independent Environmental Audit (IEA) of the Werris Creek Coal Mine (WCC) on behalf of Whitehaven Coal Limited (WCL). The mine is located approximately 4 km south of Werris Creek, New South Wales (NSW). The primary purpose of the audit was to satisfy the Department of Planning, Industry and Environment (DPIE) Ministers' Conditions of Approval (CoA) Project Approval number PA 10\_0059 Modification 2, which requires completion of an independent audit by the end of June 2014, and every 3 years thereafter. The audit period assessed in this IEA is 1 July 2017 through 12 June 2020 (the date the site visit was completed as part of the audit).

The audit included a review of:

- Project Approval – PA 10\_0059 Modification 2 (including management plans and programs);
- Environment Protection Licence – EPL12290;
- Environmental Assessment (EA) Modification 2 (MOD 2) Statement of Commitments;
- Mining Leases – ML 1671, ML 1672 and ML 1563; and
- Water Access Licence – WAL 29506 and WAL 32224.

Whitehaven Coal has established the control systems generally required for the stage of development i.e. operational. All staff interviewed demonstrated an understanding of requirements and a commitment to the application of the requisite management systems and plans.

A qualitative risk assessment was also completed on the findings, consistent with AS/NZS 4360:2004 Risk management and HB 436:2004 Risk Management Guidelines Companion to AS/NZS 4360:2004 and as described in the Department of Planning & Environment publication "Independent Audit Guidelines" issued October 2015. The number of non-conformances with the statutory conditions and implementation of the management plans is summarised in *Table E1* below.

**Table E.1 Summary of Audit Findings**

Review	Non-compliances (NC)	Observation (NC Obs)	Observations (C Obs)
<b>Statutory Instruments</b>	7	-	4
<b>Implementation of Plans</b>	-	-	-

Of the findings described in *Table E.1* two of the non-compliances were administrative in nature.

An action table addressing all findings of the audit has been developed by Whitehaven Coal and will be issued separately to this report.

## 1. INTRODUCTION

Environmental Resources Management Australia Pty Ltd (ERM) was commissioned to perform an Independent Environmental Audit (IEA) of the Werris Creek Coal Mine (WCC), on behalf of Whitehaven Coal Limited (herein referred to as 'WHC'). The mine is located approximately 4 km south of Werris Creek, New South Wales (NSW). The primary purpose of the audit was to satisfy the Department of Planning, Industry and Environment (DPIE)<sup>1</sup> Ministers' Conditions of Approval (CoA) Project Approval number PA 10\_0059 Modification 2 which requires completion of an independent audit by the end of June 2014, and every 3 years thereafter. The audit period assessed in this IEA is 1 July 2017 through 12 June 2020 (the date the site visit was completed as part of the audit). The audit must:

- (a) be conducted by 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 relevant requirements of this approval and any relevant mining lease or EPL (including any strategy, plan or program required under these approvals);
- (d) review the adequacy of strategies, plans or programs required under these approvals; and, if appropriate; and
- (e) recommend measures or actions to improve the environmental performance of the project, and/or any strategy, plan or program required under these approvals.

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.

### 1.1 Overview of Operations and Approvals

The Werris Creek Coal Mine is an open pit coal mine which was originally approved by the Minister for Planning under Project Approval number PA 10\_0059 Modification 2 which limits mining until 31 December 2032. The Mining Operations Plan (MOP) covers a 7 year period from the 14 January 2016 to the 30 November 2022.

The WCC lies within the mining leases ML 1671, ML 1672 and ML 1563. WCC is owned and operated by Werris Creek Coal Pty Limited (WCC), a wholly owned subsidiary of Whitehaven Coal Limited (WHC).

The site holds Environmental Protection Licence (EPL) 12290, which was last varied on 16 January 2020.

#### 1.1.1 Description of primary processes undertaken during the audit period

Current activities at the site include the following: Land preparation and clearing; Drilling; Blasting; Earthworks and associated haulage; Coal extraction; Coal stockpiling; Coal haulage; Rehabilitation including landform establishment, contouring, topsoiling and seeding; Water Management; Maintenance Facility; and Waste Management.

##### 1.1.1.1 Exploration

Exploration drilling was conducted during the audit period for coal quality, geotechnical and/or hydrogeological evaluation purposes.

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<sup>1</sup> Formerly the Department of Planning and Environment (DP&E).

### *1.1.1.2 Land preparation*

During the audit period, clearing of vegetation was conducted to facilitate surface drilling, and other operational works. Prior to the commencement of any clearing activities, flora and fauna pre-clearing surveys are conducted. Once cleared, soil stripping and stockpiling is conducted in the cleared areas. This is followed by the blasting of overburden and interburden material which is subsequently loaded into earthmoving trucks by excavators for hauling to the overburden dumps.

### *1.1.1.3 Mining operations & stockpile*

Coal excavated from the mining pit is hauled to the Run-Of-Mine (ROM) stockpiles. Coal is segregated at the ROM stockpile based on the expected ash content of the coal. The higher ash coal products are processed through the fixed plant crusher at an average 420t/hr using a Front End Loader to feed the primary crusher (to <150mm) and subsequently processed through the secondary crusher to <50mm size for marketing as export quality coal. Low ash coal products are processed by the mobile crushers at an average 240t/hr to <50mm product and then screened.

### *1.1.1.4 Coal transport*

Processed coal is carted using road trains to the Train Load Out (TLO) facility for loading on to trains. Train loading operations occur 24 hours per day, 7 days per week dependent on train scheduling. Product coal is transported by road trucks from the coal processing area to the product coal stockpile area at the train load out facility via the private coal haul road. The despatch of product coal from WCC is either transported by rail to the Port of Newcastle or by road to domestic customers.

### *1.1.1.5 Maintenance activities*

Maintenance of plant and equipment is carried out in a maintenance workshop located to the north of the main administration building. The workshop comprises a steel frame steel clad warehouse extending to approximately 1,200 square metres in area. The interior of the workshop is dedicated to small offices, workbenches, equipment and vehicle repair. Flammable substances were stored within cabinets and ERM observed adequate segregation distances between flammable and oxidising gases used for welding, cutting etc. An oil tank is located to the north-west of the warehouse, situated within a self bunded shipping container. An equipment and vehicle washbay is located to the north-west of the warehouse. Washwater from the washbay is discharged via an open pit to collect gross sediment, then to an oil/water separator system before discharge to the on-site stormwater drainage ditch network. Doorways to the workshop are protected by threshold drains which capture any spills from inside the workshop and discharge them to a nearby oil/water separator unit. Waste oil is stored under cover on the northern elevation of the workshop. On-site vehicles are fuel by three diesel above ground storage tanks (ASTs) located to the north-east of the maintenance workshop. These ASTs were self bunded. Concrete hardstand surrounded these ASTs and any spills in the area discharged via drains to the nearby oil/water interceptor. General wastes, scrap metal etc. were observed to be stored in skip bins and are reportedly removed by licenced waste contractors.

Housekeeping inside and in the vicinity of the warehouse was considered to be excellent. Minimal hydrocarbon staining was observed at the site. Hazardous substance storage arrangements were considered to be excellent.

### *1.1.1.6 Waste management*

Wastes produced at the site include general waste, scrap metal, waste sludge and hydrocarbon impacted wastes, which are removed from site as required by licenced contractors on an as needs basis (typically monthly). Waste segregation was noted to be good during the audit.



### 1.1.1.7 Rehabilitation

Progressive rehabilitation activities have occurred during the audit period and generally comprise reshaping, topsoiling and seeding of the overburden emplacement to achieve the rehabilitation objectives of WCC.

## 1.2 Audit Objectives

The primary objectives of the audit included:

- assess the environmental performance of the project and assess whether it is complying with the requirements in the CoA and any relevant EPL, Mining Lease and Water Access Licences (including any assessment, plan or program required under these approvals);
- review the adequacy of any approved strategy, plan, or program required under the abovementioned consents/approvals; and
- recommend appropriate measures or actions to improve the environmental performance of the project, and/or any assessment, plan or program required under the abovementioned approvals.

## 1.3 Audit Scope

The scope of works in order to complete the Audit includes the following:

- the audit to be carried out in accordance with DPIE's Guidelines for Independent Audits and AS/NZS ISO 19011:2018: Guidelines for auditing management systems;
- review of compliance against the documentation identified in CoA (as it relates to the current activities at the Werris Creek Mine) which included;
  - document review of compliance against the CoA, statement of commitments, and any other relevant consents/approvals;
  - a site inspection to assess compliance against field implementation of the active CoA;
  - review of supporting plans developed as part of the CoA and assessment of their adequacy towards effective environmental performance;
- review of monitoring results and trends with comparison of monitoring results against regulatory limits and CoA limits (where applicable);
- confirmation if any additional monitoring required for identified trends;
- community complaints with review completed for any trends and identifying the source of an established trend;
- review of any regulatory actions including any letters, penalty notices and prosecutions;
- review of previous Independent Environment Report audit report to verify close-out of actions;
- consultation with the relevant agencies such as Department of Planning, Industry and Environment (DPIE) (various divisions: planning and post approvals, compliance, water, resources, biodiversity and conservation), Environment Protection Authority (EPA), Liverpool Plains Shire Council (LPSC) and Werris Creek Coal Mine Community Consultative Committee (CCC);
- draft report with results of compliance assessment to be issued for comment to Whitehaven Coal; and
- final report issued for submission to the DPIE.

The audit covers the period 1 July 2017 through 12 June 2020 and is limited to assessing the activities completed during the audit period.

## 1.4 Audit Criteria

The audit covered the following specifications and standards, with a particular focus on activities associated with the current stages of operation. The documents relevant to this audit included:

- Conditions of Approval PA 10\_0059 Modification 2 including Statements of Commitments;
- Environment Protection Licence – EPL12290;
- Environmental Assessment (EA) Modification 2 (MOD 2) Statement of Commitments;
- Mining Leases – ML 1671, ML 1672 and ML 1563;
- Water Access Licence – WA29506, WAL32224 and water works approvals 90WA822532 and 90WA828345;
- Management Plans:
  - Mining Operations Plan, December 2015
  - Water Management Plan, November 2017
  - Air Quality Greenhouse Gas Management Plan, March 2014
  - Biodiversity and Offset Management Plan, August 2013
  - Biodiversity and Offset Management Plan Submission to DPE, OEH and DoEE for approval, September 2016
  - Blast Management Plan, August 2019
  - Heritage Management Plan, July 2014
  - Noise Management Plan, April 2014
  - Pollution Incident Response Management Plan, June 2020

## 1.5 Limitations of this Report

This disclaimer, together with any limitations specified in the report, applies to this report and its use.

This report was prepared in accordance with the contracted scope of services for the specific purpose stated and subject to the applicable cost, time and other constraints. In preparing this report, ERM relied on:

- a) client/third party information which was not verified by ERM except to the extent required by the scope of services, and ERM do not accept responsibility for omissions or inaccuracies in the client/third party information; and
- b) information taken at or under the particular times and conditions specified, and ERM do not accept responsibility for any subsequent changes.

This report has been prepared solely for use by, and is confidential to, the client and ERM accepts no responsibility for its use by other persons. This report is subject to copyright protection and the copyright owner reserves its rights. This report does not constitute legal or financial advice.

## 2. AUDIT METHODOLOGY

### 2.1 Methodology and Process

The audit comprised a site inspection during the dates 10 to 12 June 2020, interviews with key personnel, and review of records and other related documentation.

The audit process included the following primary components:

- development of a Terms of Reference developed which included:
  - audit scope and objectives;
  - date and location of audit;
  - members of audit team;
  - list of people to be audited;
  - list of reference documents and audit criteria;
- a project inception meeting was held on 30 April 2020 to confirm details of the Terms of Reference, site inspection logistics and request for documentation required prior to the site inspection component of the audit;
- an opening meeting was held on 10 June 2020 at site to confirm the audit objectives and scope for the site inspection. Attendees included:
  - Robert Smith (ERM Lead Auditor);
  - Aaron Mckenzie (ERM Support Auditor);
  - Lynden Cini (Group Superintendent – Environment);
  - Matt Hollis (Environmental Superintendent);
- Site inspections were undertaken between 10 to 12 June 2020;
- A debrief / closeout meeting was held at the site on 12 June 2020 to discuss initial findings and recommendations. Attendees were:
  - Robert Smith (ERM Lead Auditor);
  - Aaron Mckenzie (ERM Support Auditor);
  - Lynden Cini (Group Superintendent – Environment);
  - Matt Hollis (Environmental Superintendent); and
- Preparation of the draft audit report (this report).

### 2.2 Agency and Community Consultation

ERM consulted with the agencies and stakeholders as required including Department of Planning, Industry and Environment (DPIE) (including its various departments such as Compliance, Post approvals, Resources Regulator and Biodiversity and Conservation Division), CCC, New South Wales Environment Protection Authority (NSW EPA), as well as Liverpool Plains Shire Council. Emails were issued on 25 May 2020, with a follow up email submitted on 9 June 2020 to those that had not yet replied. Responses are outlined in *Table 2.1*.

Table 2.1 Agency and Stakeholder Consultation Summary

Agency/Stakeholder	Method	Consultation summary	Response	Location Addressed in Report
Department of Planning, Industry and Environment (DPIE) – Planning & Assessment - Compliance	Email on 25 May 2020	Provision of Audit Terms of Reference, introduction to team, outline date of audit and provide opportunity to comment.	Response received on 25 May 2020 outlining no concerns or issues.	N/A
Natural Resource Access Regulator (Water)	Email on 25 May and 9 June 2020	Provision of Audit Terms of Reference, introduction to team, outline date of audit and provide opportunity to comment.	Response received on 10 June 2020 outlining the following areas of interest: <ul style="list-style-type: none"> <li>■ Assessment as to whether the project holds the required water entitlements and licences under the <i>Water Management Act 2000</i>;</li> <li>■ Compliance with the conditions of any water licences/approvals held.</li> <li>■ Identification of all water storages for the mine and identification of their licensing status being either exempt/excluded, subject to harvestable rights or regulated via a Water Access Licence.</li> <li>■ Quantification of both active and passive take by the project from each relevant water source and a comparison against previous predictions.</li> <li>■ Compliance with the management, monitoring and contingency requirements in the Water Management Plan for the site.</li> <li>■ Assessment as to whether the project holds the required water entitlements and licences under the <i>Water Management Act 2000</i>;</li> <li>■ Compliance with the conditions of any water licences/approvals held.</li> <li>■ Identification of all water storages for the mine and identification of their licensing status being either exempt/excluded, subject to harvestable rights or regulated via a Water Access Licence.</li> <li>■ Quantification of both active and passive take by the project from each relevant water source and a comparison against previous predictions.</li> <li>■ Compliance with the management, monitoring and contingency requirements in the Water Management Plan for the site.</li> </ul>	The department's request is addressed to the extent possible within the scope of the IEA.

Agency/Stakeholder	Method	Consultation summary	Response	Location Addressed in Report
New South Wales Environment Protection Authority (NSW EPA)	Email on 25 May 2020 and 9 June 2020	Provision of Audit Terms of Reference, introduction to team, outline date of audit and provide opportunity to comment.	No response received.	N/A
Liverpool Plains Shire Council	Email on 25 May 2020	Provision of Audit Terms of Reference, introduction to team, outline date of audit and provide opportunity to comment.	Response received on 4 June 2020 outlining the following areas of interest: <ul style="list-style-type: none"> <li>■ Water and air quality management at the site remain an area of sustained and broader community interest.</li> </ul>	The Council's request is addressed to the extent possible within the scope of the IEA.
Community Consultation Committee (CCC)	Email on 25 May 2020	Provision of Audit Terms of Reference, introduction to team, outline date of audit and provide opportunity to comment.	Response received on 1 June 2020 from the CCC chair outlining no concerns or issues. Any issues or concerns with the mine, raised by members of the Committee have always been quickly and comprehensively discussed at meetings.	N/A

In each case, an email was sent to representatives of each agency requesting feedback on those issues considered most relevant by their Department at the time of the audit. The consultation outlining the terms of reference was provided prior to the site inspection to obtain feedback and draw attention to any key issues, within the agreed scope of the audit. The Departmental correspondence is provided in *Appendix B*.

Responses received required the audit to focus on compliance against CoA as well as environmental monitoring relating to noise, dust and waste management practices. These areas are captured in the audit findings.

## 2.3 Classification of Audit Findings

Findings resulting from an assessment of audit evidence were divided into four categories as follows:

- **Compliant (C):** the intent and all elements of the audit criteria requirements have been complied with within the scope of the audit.
- **Non-Compliant (NC):** Failure to meet the audit requirements, failure to achieve the field performance outcomes identified in documentation, or ineffective environmental management of the activity.
- **Not Triggered (NT)** – A regulatory approval requirement has an activation or timing trigger that had not been met at the time of the audit inspection, and therefore a determination of compliance could not be made.
- **Note:** A statement or fact, where no assessment of compliance is required.

A qualitative risk assessment was also completed on the findings, consistent with AS/NZS 4360:2004 Risk management and HB 436:2004 Risk Management Guidelines Companion to AS/NZS 4360:2004 and as described in the DPIE publication “Independent Audit Guidelines” issued October 2015.

The overall level of risk was estimated by combining the likelihood of harm occurring with the estimated level of harm associated with each finding. Risk levels have been assigned as follows:

- **High:** Non-compliance with potential for significant environmental consequences, regardless of the likelihood of occurrence;
- **Medium:** Non-compliance with:
  - potential for serious environmental consequences, but is unlikely to occur; or
  - potential for moderate environmental consequences, but is likely to occur;
- **Low:** Non-compliance with:
  - potential for moderate environmental consequences, but is unlikely to occur; or
  - potential for low environmental consequences, but is likely to occur.

Where a finding has been considered administrative in nature (i.e. a technical non-compliance which relates to documentation rather than being related to a specific operational risk) we have described this in the comments field of the report.

### 3. AUDIT FINDINGS

#### 3.1 Previous Audit Follow Up

The last audit was conducted by SLR for the period 1 July 2014 to 30 June 2017. A summary of the 2017 audit findings and their status is summarised below in *Table 3.1*.

Table 3.1 Summary of 2017 Audit Findings

Item No	Assessment Requirement	Comment	2017 Audit Classification	WCC Response/Action	2020 Status
<b>Project Approval – PA 10_0059</b>					
Sch.2, C12	<p><b>Operation of Plant and Equipment</b></p> <p>The Proponent shall ensure that all the plant and equipment used on site, or to transport coal from the site, is:</p> <ul style="list-style-type: none"> <li>(a) Maintained in a proper and efficient condition; and</li> <li>(b) Operated in a proper and efficient manner.</li> </ul>	<p><b>Findings from Inspection and Review of Records:</b></p> <p>Requested maintenance records were sighted at WCC. Including blasting services, water pumps and level sensors. Based on the inspection and review of records plant and equipment on site generally operated in a competent manner.</p> <p><b>Findings from EPA:</b></p> <p>The EPA noted that the licensee was not maintaining two sedimentation dams at the site in a proper and efficient condition, and the licensee's maintenance system was found to be not effective in ensuring maintenance issues are addressed.</p> <p>The works associated with upgrading SB18 was shown to SLR during the field inspection. There is still some additional works required for SB17.</p>	Non-Compliant (Low Risk)	Additional maintenance works are required for SB17, with WCC committing to this by 30 September 2017.	Deemed as <b>Compliant</b> during this audit.
Sch.3, C4	<p><b>Operating Conditions</b></p>	<ul style="list-style-type: none"> <li>(a) Reviewed Noise Management Plan. Evidence of decreased noise complaints over the audit period over successive Annual Review periods.</li> <li>(b) Noise Control Operators (NCOs) in operation during night-time period, evidence of revised operations during night-time period when noise issues identified.</li> <li>(c) See section 8.5 &amp; 10.1 of <i>Noise Management Plan</i>.</li> <li>(d) Evidence of best practice through monitoring, NCO's and implementation of changes to operations based on NCO's monitoring and measurements. However, there is no evidence of reporting the progress towards the achievement of the long term noise goals in the annual review. No trending information is provided to show the long term noise levels of the project. Only exceedances of the approved are reported.</li> <li>(e) This audit. Separate Noise Report has been prepared as part of this audit.</li> </ul> <p>OCE Shift change diary detailing noise levels, shut downs etc.</p>	Administrative non-compliance	<p>(d) it is recommended that the future Annual Reviews should present trended noise data to show how WCC is progressing towards the long term noise goal of 35 dBA. The current versions only state where noise criteria have been exceeded.</p> <p>It should be noted that the 2016 Annual Review was amended to reflect some commentary on historical trends in relation to the long term goal of 35 dBA. Inclusions reviewed and approved by DPE.</p>	Deemed as <b>Compliant</b> during this audit.



Item No	Assessment Requirement	Comment	2017 Audit Classification	WCC Response/Action	2020 Status
Sch.3, C 23	<p><b>Water Management Plan</b></p> <p>(b) a Surface Water Management Plan, that includes:</p> <ul style="list-style-type: none"> <li>• detailed baseline data of the surface water flows and quality in the waterbodies that could be affected by the project;</li> <li>• a detailed description of the water management system on site, including the:                             <ul style="list-style-type: none"> <li>- clean water diversion systems;</li> <li>- erosion and sediment controls; and</li> <li>- water storages;</li> </ul> </li> <li>• a plan for identifying, extracting, handling, and the long-term storage of potentially acid forming material on site;</li> <li>• detailed plans, including design objectives and performance criteria, for:                             <ul style="list-style-type: none"> <li>- design and management of the final void;</li> <li>- reinstatement of drainage lines on the rehabilitated areas of the site; and</li> <li>- control of any potential water pollution from the rehabilitated areas of the site;</li> <li>- a program to monitor the effectiveness of the water management system;</li> </ul> </li> <li>• a plan to respond to any exceedances of the performance criteria, and mitigate and/or offset any adverse surface water impacts of the project;</li> </ul>	<p><u>Plan Preparation:</u></p> <ul style="list-style-type: none"> <li>• Baseline - Section 4</li> <li>• Section 8.1 and 8.2 outline water management system.</li> <li>• Storage of water - Section 8.2, including details about void water storage dams.</li> <li>• Water objectives and criteria - Section 7.</li> <li>• Drainage management in rehabilitation outlined in Section 8.3.4.</li> <li>• Monitoring outlined in Section 9.</li> <li>• Contingency Plan - Section 14.</li> </ul> <p><u>Implementation:</u></p> <p>At the Training Load Out (TLO) there was one culvert (part of dirty water management system) that was blocked. During heavy rainfall this may cause disruptions at site as water may not be able to reach the main sediment dam at the TLO. Based on evidence provided from WCC this has since been cleaned out, with no further recommendation required post audit. There were 2 government audits during the IEA audit period (EPA audit and multi-agency audit). The key aspects of these audits are outlined within Section 5 of the main report. Some of these non - compliances related to implementing this management plan, including:</p> <ul style="list-style-type: none"> <li>• At time of inspection dam heights above designed capacity;</li> <li>• Lack of implementing a pre-start checklist;</li> <li>• Lack of calculations for sediment dams within the <i>Water Management Plan</i>; and</li> <li>• Sediment dams not fully compliant with the Blue Book designs.</li> </ul>	<p>Non-Compliant (Low Risk)</p>	<p>Outcomes from the multi-agency audit to be implemented as per Action Plans previously submitted to the relevant Departments.</p> <p>Additional details relating to water monitoring trends included within the updated and approved Annual Review 2016. Completed.</p>	<p>Deemed as <b>Compliant</b> during this audit.</p>

Item No	Assessment Requirement	Comment	2017 Audit Classification	WCC Response/Action	2020 Status
Sch.3, C43	<p>43. The Proponent shall prepare and implement a Rehabilitation Management Plan for the project to the satisfaction of DRE. This plan must:</p> <p>(a) be prepared in consultation with the Department, DPI Water, OEH, Council and the CCC;</p> <p>(b) be submitted to DRE by the end of April 2012</p> <p>(c) be prepared in accordance with any relevant DRE guideline;</p> <p>(d) describe how the rehabilitation of the site would be integrated with the implementation of the biodiversity offset strategy;</p> <p>(e) include detailed performance and completion criteria for evaluating the performance of the rehabilitation of the site, and triggering remedial action (if necessary);</p> <p>(f) describe the measures that would be implemented to ensure compliance with the conditions of this approval, and address all aspect of rehabilitation including mine closure, final landform, and final land use;</p> <p>(g) include a program to monitor and report on the effectiveness of the measures, and progress against the detailed performance and completion criteria; and</p> <p>(h) build to the maximum extent practicable on the other management plans required under this approval.</p>	<p>For the next MOP update, send the key sections of the MOP document to these agencies for review/comment.</p>	Administrative non-compliance	Noted.	Deemed as <b>Compliant</b> during this audit.
Sch.5, C3	<p><b>Annual Review</b></p> <p>By the end of March each year, the Proponent shall review the environmental performance of the project 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 year, and the development that is proposed to be carried out over the next 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"> <li>• relevant statutory requirements, limits or performance measures/criteria;</li> <li>• monitoring results of previous years; and</li> <li>• relevant predictions in the EA;</li> </ul> <p>(c) identify any non - compliance over the past 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 analyze 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>	<p>The 2016, 2015-16 and 2014 - 15 Annual Reviews have been reviewed for this audit.</p> <p>a) Outlined in Annual Reviews. Including Section 4 and 8 of 2016 Annual Review.</p> <p>b) Monitoring results have been reviewed for key aspects and is outlined within Section 6 of the 2016 Annual Review.</p> <p>c) Section 1 of Annual Review outlines the Statement of Compliance.</p> <p>d) NC. Annual Reviews from 2014-15 under the previous guidelines had trends for water and air. The most recent Annual Reviews from 2015 and 2016 have minimal information relating to trends or how the site performed against previous years.</p> <p>e) There is little information relating performance against predictions (EA predictions).</p> <p>f) Proposed improvements are outlined in Annual Reviews.</p> <p>There is minimal information relating to trends in the Annual Reviews.</p> <p>Additional information relating to trends should be outlined in the Annual Review. This may include aspects such as water, noise and air. Comparison of monitoring results against EA predictions.</p> <p>Additional information relating to groundwater quality.</p>	Administrative non-compliance	The Werris Creek Coal Annual Review 2016 has been updated to reflect these recommendations and subsequently approved. Completed.	Deemed as <b>Compliant</b> during this audit

Item No	Assessment Requirement	Comment	2017 Audit Classification	WCC Response/Action	2020 Status
Sch.5, C4	<p><b>Revision of Strategies, Plans and Programs</b>                      Within 3 months of:                      (a) the submission of an annual review under condition 3 above;                      (b) the submission of an incident report under condition 6 below;                      (c) the submission of an audit under condition 8 below;                      or                      (d) any modification to the conditions of this approval (unless the conditions require otherwise), the Proponent shall review, and if necessary revise, the strategies, plans, and programs required under this approval to the satisfaction of the Secretary. Where this review leads to revisions of any plan then within four weeks of the review the revised document must be submitted to the Secretary and any other relevant agencies for approval.</p> <p>Note: This is to ensure the strategies, plans and programs are updated on a regular basis, and incorporate any recommended measures to improve the environmental performance of the project.</p>	<p>Plans have not been reviewed and revised as required annually. There are a series of plans currently sitting with DPE. Some plans were also not updated within three months of the 2014 independent environmental audit. Continue to liaise with DPE to discuss the status of the revised management plans. Undertake management plan 'review' as per the required condition.</p> <p>In the Annual Review state whether management plans need to be revised and reasons for revisions. Resubmission of management plans to DPE.</p>	Administrative non-compliance	<p>Noted.                      Included in the Annual Review 2016. Completed.</p>	Deemed as <b>Compliant</b> during this audit.
<b>Environment Protection Licence – EPL 12290</b>					
O1.1	<p><b>Activities must be carried out in a competent manner</b>                      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.</p>	<p><u>Water Management:</u>                      Water levels in all Void Water Dams were low at the site of the audit by SLR. However the multi agency audit noted that there the site had not been 'minimising water levels in the wastewater holding dams to prevent uncontrolled discharge'. Since the EPA and multi agency audit the site has completed several updates including:</p> <ul style="list-style-type: none"> <li>• Bathometric survey - completed May 2017;</li> <li>• Review of Void Water Dams volume spreadsheet; and</li> <li>• Further development of strategy for alternative water use/augmented storage arrangements.</li> </ul> <p>Continue to implement agreed actions relating to water management.</p>	Non-Compliant (Low Risk)	Noted	Deemed as <b>Compliant</b> during this audit.
O2.1	<p><b>Maintenance of plant and equipment</b>                      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.</p>	<p><u>Findings from Inspection and Review of Records:</u>                      Requested maintenance records were sighted at WCC. Including blasting services, water pumps and level sensors. Plant and equipment on site generally operated in a competent manner.</p> <p><u>Findings from EPA:</u>                      The EPA noted that 'the licensee was not maintaining two sedimentation dams at the site in a proper and efficient condition, and the licensee's maintenance system was found to be not effective in ensuring maintenance issues are addressed'.                      The works associated with upgrading SB18 was shown to SLR during the field inspection. There is still some additional works required for SB17.</p>	Non-Compliant (Low Risk)	Completed	Deemed as <b>Compliant</b> during this audit.

Item No	Assessment Requirement	Comment	2017 Audit Classification	WCC Response/Action	2020 Status												
		Additional maintenance works are required for SB17, with WCC committing to this by 30 September 2017.															
O5.2	<p><b>Blast Fume</b></p> <p>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:</p> <ul style="list-style-type: none"> <li>(i) are harmful to (or is likely to be harmful to) a person that is outside the premises from which it is emitted, or</li> <li>(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.</li> </ul>	<p>Blast fume management is required in blast design at the site.</p> <p>There was one blast related non-compliance (Condition 4 – O1.1 of EPL 12290) during the period on the 2nd July 2014 generating fume that travelled off the mine site but did not result in any offsite impacts. WCC fired a production blast #45 on Wednesday 2nd July 2014 at 1:05pm (S15_B12- B16_330_EXT) with the fume cloud generated travelling north-north west above the ground surface, across Escott Road (a closed, private road owned by WCC) and off the Mine site at 1:25pm, at a height of approximately 50m above the ground surface. The blast fume cloud dispersed at 1:41pm over the "Cintra" property owned by WCC. WCC was not able to establish whether there was a definitive cause, however the "Incident Investigation Report into the Blast Related Fume Incident" prepared by Safety Wise Solutions Pty Ltd (the Investigation Report) identified some contributing factors.</p>	Non-Compliant (Low Risk)	No further action.	Deemed as <b>compliant</b> during this audit.												
O5.3	<p><b>Pollution Incident Response Management Plan</b></p> <p>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.</p>	Since this was noted during the audit the PIRMP (internal and website versions) were updated by WCC. No further recommendations.	Administrative non-compliance	No further action.	Deemed as <b>Compliant</b> during this audit												
M2.2	<p><b>Air Monitoring Requirements</b></p> <p>Point 28, 29, 30</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 5 days</td> <td>AM-10</td> </tr> <tr> <td>Solid Particles</td> <td>grams per square metre per month</td> <td>Continuous</td> <td>AM-10</td> </tr> </tbody> </table>	Pollutant	Units of measure	Frequency	Sampling Method	PM10	micrograms per cubic metre	Every 5 days	AM-10	Solid Particles	grams per square metre per month	Continuous	AM-10	<p>M2.2 requires monitoring of PM10 concentrations every 6 days at "R98" ("Kyooma"). Due to a power loss, this monitoring was not undertaken on the 28th July, 3rd and 9th of August 2015 - outlined in the 2015-16 EPL Annual Return.</p> <p>TEOM suffered a series of faults in March 2015.</p>	Non-Compliant (Low Risk)	No further action.	Deemed as <b>Compliant</b> during this audit
Pollutant	Units of measure	Frequency	Sampling Method														
PM10	micrograms per cubic metre	Every 5 days	AM-10														
Solid Particles	grams per square metre per month	Continuous	AM-10														
M3.2	<p><b>Testing Methods</b></p> <p>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.</p>	<p>The EPA audit found there to be a potential discrepancy relating to monitoring as per the Approved Methods Publication for analysing water samples. The EPA and WCC are still liaising regarding this finding.</p> <p>Continue to liaise with the EPA regarding this aspect and implement any actions if required.</p>	Non-Compliant (Low Risk)	Noted.	Deemed as <b>Compliant</b> during this audit												

Item No	Assessment Requirement	Comment	2017 Audit Classification	WCC Response/Action	2020 Status												
M8.1	<p><b>Blasting</b> POINTS: Within 30 metres of the residences at the locations marked as "R98" ("Kyooma"), "R11" ("Glenara") and "R62" (43 Kurrara Street, Werris Creek) on Appendix 3 of Project Approval 10_0059 and within 30 metres of the location marked as "R92" in Figure 4A.5 of Environmental Assessment for Werris Creek Coal Mine, Life of Mine Project, dated December 2010 and prepared by R.W. Corkery and Co. Pty Limited.</p> <table border="1"> <thead> <tr> <th>Parameter</th> <th>Units of Measure</th> <th>Frequency</th> <th>Sampling Method</th> </tr> </thead> <tbody> <tr> <td>Blast Noise</td> <td>dB (Lin Peak)</td> <td>Every Blast</td> <td>Type 1 Noise/Blast Logger</td> </tr> <tr> <td>Blast Vibration</td> <td>mm/s</td> <td>Every Blast</td> <td>Geophone Logger or similar</td> </tr> </tbody> </table>	Parameter	Units of Measure	Frequency	Sampling Method	Blast Noise	dB (Lin Peak)	Every Blast	Type 1 Noise/Blast Logger	Blast Vibration	mm/s	Every Blast	Geophone Logger or similar	<p>On 3/3/ 2016 - Glenara blast monitor did not record blast vibration and air overpressure. 2015-16 Annual Review stated: Loss of communications due to changes in mobile network in local area and subsequent corruption of memory card. WCC have stated that a review of other blast monitors and past performance suggests it is highly unlikely criteria would have been exceeded. Blast monitor upgraded with 4metre directional antenna and key electronics replaced.</p> <p>No further recommendations.</p>	Non-Compliant (Low Risk)	No further action.	Deemed as <b>Complaint</b> during this audit
Parameter	Units of Measure	Frequency	Sampling Method														
Blast Noise	dB (Lin Peak)	Every Blast	Type 1 Noise/Blast Logger														
Blast Vibration	mm/s	Every Blast	Geophone Logger or similar														
E1.1	<p><b>E1 Three Yearly Independent Noise Audit</b> E1.1 The licensee must provide the EPA with a copy of any Noise Audit and Independent Environmental Audit Report required by condition 4 of Schedule 3 and conditions 8 and 9 of Schedule 5 of the Werris Creek Mine Extension Project Approval (No. 10_0059). If the Noise Audit and Independent Environmental Audit Report do not incorporate the following information or assessments, then the licensee must also provide a separate report to the EPA that incorporates the following:</p> <p>(a) The reports required by this condition must be submitted to the EPA's Armidale office within 6 weeks of the 30 June 2014, and every three years thereafter.</p>	<p>This was completed in 2014 and 2017. 2014 met this requirement. 2017 report prepared to meet these requirements.</p> <p>However no evidence has been able to be provided of submission of the Three Yearly Noise Audit within 6 weeks of 30 June 2014.</p> <p>Liaison with the EPA regarding the future submissions of the Three Yearly Noise Audit.</p>	Administrative non-compliance	Noted.	Deemed as <b>Complaint</b> during this audit												

**EA Statement of Commitments**

3.1	<p><b>Surface Water</b> Construct and maintain surface water management infrastructure of the Mine in accordance with an approved Site Water Management Plan.</p>	<p>During the site inspection, void water dams were well below freeboard and there only minor aspects noted by the SLR audit team. SLR were provided evidence through photos on 13 July 2017 outlining this culvert had been cleaned out.</p> <p>The audits from the EPA and multi agency audit noted some mitigation measures from the <i>Water Management Plan</i> were not fully implemented. It should be noted that the <i>Water Management Plan</i> has been updated and approved since the findings of the multi-agency audit.</p> <p>Continue to implement agreed actions from the EPA and multi agency audit relating to water management.</p>	Non-Compliant (Low Risk)	Noted.	Deemed as <b>Complaint</b> during this audit
3.2	<p><b>Surface Water</b> Operate void water dams with sufficient freeboard to prevent discharge during high rainfall events.</p>	<p>During the site inspection by SLR, void water dams were well below freeboard. However the audits from the EPA and multi agency audit noted some mitigation measures from the <i>Water Management Plan</i> were not fully implemented.</p> <p>Continue to implement agreed actions from the EPA and multi agency audit relating to water management.</p>	Non-Compliant (Low Risk)	Noted.	Deemed as <b>Complaint</b> during this audit

**Mining Leases ML1671, ML1672, ML1563**

Nil – no non-compliances

**Water Access Licences – WAL 29506 and WAL 32224**

Nil – no non-compliances

## 3.2 Complaints Summary

Complaints registers for the auditing period were available online and/or for review. Complaints over the reporting period include:

- A total of 13 complaints were recorded during 2017 during the period 1 July – 30 December. Of these five related to blast, three related to odour, two related to odour/dust, two related to noise and one related to blast/dust.
- A total of 35 complaints were recorded during 2018. Of these 20 related to blast, seven related to odour, six related to dust, one related to vibration and one related to water.
- A total of 17 complaints were recorded during 2019. Of these 12 related to blast, three related to dust one related to odour and one related to vibration.
- A total of three complaints were recorded during 2020 up until 12 June 2020. Of these two were related to vibration and one in relation to lighting.

During the audit, ERM tested the complaints telephone number published on the Werris Creek Mine Whitehaven Coal website. The complaints number was not functional. It is noted that the complaints telephone number at the entrance to the mine was correct. ERM recommends WCC update the website complaints line number to reflect the correct phone number.

The detailed summaries as prepared by WCC are provided on the Whitehaven Coal website.

## 3.3 Incident Summary

A review of the incidents was undertaken through a review the WCC incident management system, as well as the notified exceedances. During the audit period incidents recorded were limited to the following:

- A low pH exceedance at dam EP14 occurred during a 'Special Frequency' event when rainfall exceeded 39.2mm. The exceedance was reported to the EPA as required. Investigation of this event did not identify a source and no subsequent monitoring has identified similar results. No further action was requested by the EPA; and
- An exceedance occurred from a blast undertaken on 4<sup>th</sup> May 2018, recording an overpressure greater than 120 dBL at two monitoring locations: 120.4dBL at Glenara (R11) and 120.2dBL at Kyooma (R98). WCC undertook an investigation into the incident, with appropriate notifications to the EPA and DPIE. Upon completion of the investigation, control measures were implemented to prevent or mitigate against a similar exceedance in the future.

## 3.4 Environmental Monitoring Performance

### 3.4.1 Noise

Monthly acoustic monitoring was undertaken in 2017 to 2019 by qualified third party contractors, this included Global Acoustics and Spectrum Acoustics.

During the audit period, there were no reported exceedances of the noise criteria for both the EPL noise limit and the long term noise goals

Attended noise monitoring was undertaken at locations labelled "R24 Hazeldene", "R12 Quipolly Railway Cottage", "R96 Talavera", "R98 Kyooma" and "R57 33 Kurrara St, Werris Ck".

EPL Monitoring reports for 2017 and 2018 are missing data for location R57 for the following months; June to December 2017, January and March 2018. Sighted acoustic reports prepared by Global Acoustics in this period indicated results for R57 were in compliance with the criteria, however the location monitoring results were missed in the EPL monitoring reports for 2017 and 2018.

Monthly operator attended noise monitoring results have demonstrated that the noise management and mitigation strategies employed by WCC are effective in managing noise impacts from the site.

### 3.4.2 Air quality

Monthly Air Quality Monitoring was undertaken by WCC, sampling PM10 and Solid Particles. There were exceedances of the criteria during the reported audit period.

The following exceedances of assessment criteria were recorded during the reported audit period:

- 23<sup>rd</sup> June 2017: R11(Glenara) HVAS - PM10 concentration of 52.4 µg/m<sup>3</sup>;
- 27<sup>th</sup> September 2017: R11(Glenara) HVAS - PM10 concentration of 67.6 µg/m<sup>3</sup>;
- 18<sup>th</sup> February 2018 R11(Glenara) - PM10 concentrations of 53.6 µg/m<sup>3</sup>; and
- 15<sup>th</sup> December 2018 at HVP1 (Escott) - PM10 concentrations of 67.1 µg/m<sup>3</sup>.

A notification regarding the elevated results in 2017 was provided to the DPIE following receipt of the monitoring results via email on 14<sup>th</sup> July 2017 and 13<sup>th</sup> November 2017 respectively. Subsequent investigations demonstrated that WCC was not the cause of the elevated PM10 levels on both occasions, with WCC operations identified downwind of the monitor and therefore the elevated results were not non-compliances.

Subsequent investigations demonstrated that WCC was not the cause of the elevated PM10 levels in 2018 on both occasions. On the 18<sup>th</sup> February 2018, WCC operations were downwind of the monitor at the time of the exceedance with field notes from the day of sampling noting farming activity (ploughing) in the vicinity of the monitor. On the 15<sup>th</sup> December 2018 widespread high regional dust alerts were in place and WCC operations were downwind of the monitor at the time of monitoring.

The following exceedances of long term criteria was recorded during the reported audit period:

- 2017: DG22 (Mountain View) Dust Deposition maximum concentration of 8.8 µg/m<sup>3</sup>;
- 2017: DG34 (8 Kurrara Street) Dust Deposition multiple exceedances with maximum concentration of 19.5 µg/m<sup>3</sup>;
- 2018 - Dust Deposition exceedance of the long-term criteria in DG2 (Cintra), which was above the annual average criteria for the 2018 reporting period. Located directly north of WCC operations, DG2 is located on a project related property; and
- An investigation of the results at dust gauge site DG34 (8 Kurrara street) and DG9 (Marengo) with elevated measurements during the reporting period showed elevated results and low deposited dust levels at nearby gauges, indicating a localised source of dust generation or contamination at both sites, unrelated to activities at WCC.

Exceedances in 2017 showed consistently high results and low deposited dust levels at nearby gauges indicating a localised source of dust generation or contamination, unrelated to activities at WCC.

The following exceedances of 24h average criteria was recorded during the reported audit period:

- 2018: TEOM - 7 PM10 concentrations exceedances: 15<sup>th</sup> April, 4<sup>th</sup> August, 1<sup>st</sup> September, 22<sup>nd</sup> November, 23<sup>rd</sup> November, 14<sup>th</sup> December, 15<sup>th</sup> December.

Widespread high regional dust alerts were received on all the abovementioned dates, advising elevated PM10 levels were present in the area and operations were located downwind of the TEOM location during monitoring.

Complaints registers for the auditing period were available online and/or for review. Odour complaints over the reporting period include:

- The Site has received 15 odour related complaints during the audit period, primarily relating to a 'burning' smell attributed to spontaneous combustion odours. The mine has implemented procedures to minimise emissions of odour from spontaneous combustion through the use of water curtains or sprinklers to suppress hot areas; and uncovering and mining the higher risk workings quickly and soaking any hot coal immediately. It is noted that the higher risk of spontaneous combustion areas of the mine (the former underground workings) have now been mined, reducing the future odour emission risk profile of the mine.

### 3.4.3 Blasting

Blast monitoring occurred during all blast events with one recorded exceedance events reported to the Department during the audit period. Exceedance occurred from a blast undertaken on 4<sup>th</sup> May 2018, recording an overpressure greater than 120 dBL at two monitoring locations: 120.4dBL at Glenara (R11) and 120.2dBL at Kyooma (R98).

## 3.5 Water Management

### 3.5.1.1 Surface water

Surface water management comprising a series of water storage dams used to collect, store and dispose of pumped out mine water and dirty water run-off, sediment basins, and clean / dirty surface water drains were in place and established as per the Water Management Plan (dated 2016). The dams are subject to weekly, monthly and quarterly inspections by a trained WCC employee. Annual and 5 – yearly inspections are undertaken by a Dam Engineer in accordance with the Dams Safety Act.

Licensed surface water discharge points onsite included sediment basin 2 (SB2 – EPL10), sediment basin 9 (SB9 – EPL12), sediment basin 10 (SB10 – EPL14), sediment basin 18 (SB18-EPL32).

Void Water is managed via 6 Void water dams with water recirculated on site for reuse as dust suppression. Excess void water is irrigated to the Plainview irrigation area to the south of the project via void water dam 1.

No significant issues were observed or identified with regards to erosion or sediment run off during the site inspection.

## 3.6 Groundwater

Groundwater monitoring locations are stipulated within Table 7.4 of the approved WMP (dated November 2017). Under the WMP, depending on their location, piezometers and groundwater bores are required to be monitored on a monthly, quarterly, or annual basis. Groundwater monitoring data provided showed that monitoring is typically completed within the WMP timeframes.

## 3.7 Management Plan Adequacy

The Management Plans for the site were reviewed and the adequacy in meeting the relevant approval requirements was assessed in view of current operations at the site. The Water Management Plan, Air Quality Greenhouse Gas Management Plan, Biodiversity and Offset Management Plan, Heritage Management Plan, Noise Management Plan have been revised and submitted to the Secretary at various times between 2014 and 2019. No management plans are currently under Department review.

In general, Management Plans were considered to be appropriate for the site's operations at the time of the site visit. The findings of the Management Plan review are outlined in *Table 3.2* and *Appendix A*.

## 3.8 Environmental Protection Licence

The site operates under Environment Protection Licence (EPL) 12789 issued to Werris Creek Coal Operations Pty Ltd. The EPL has been varied two times during the audit period as follows:

- 21 March 2018; and



- 16 January 2020.

The site submitted Annual Returns to the EPA, as required for the audit period. The following non-compliances were noted:

2017:

- O1.1 b) - Finding from an EPA compliance audit undertaken on the 26 and 27 October 2016. The audit identified that WCC had not been minimising water levels in the void water dams (VWDs) to prevent uncontrolled discharges to surface waters;
- L4 - Monthly attended noise monitoring undertaken for Werris Creek Coal (WCC) on Tuesday 27th September 2016 identified a 1dB(A) noise exceedance at the Kyooma property (R98);
- O4.3 - WCC PIRMP test exceeded the 12 month time period between test scenarios; and
- O2.1 a) - Finding from an EPA compliance audit undertaken on the 26 and 27 October 2016. The audit identified that two sediment dams were not maintained in a proper and efficient manner.

2018:

- M3.2 – Methods used for analysing the concentration of pollutants discharged to a utilisation area were not all in accordance with the Approved Methods Publication and had not been approved in writing by the EPA before tests were conducted; and
- L4.1 - Noise monitoring at R98 measured operational noise levels of 37 dB(A) Leq, (criteria for R98 is 38 dB(A)Leq). A low frequency penalty adjustment of 5dB(A)Leq was applied using the Industrial Noise Policy methodology, levels were 42 dB(A) Leq.

2019:

- L5.1 - Blast overpressure record of greater than 120 dBL at monitoring locations Glenara and Kyooma. (RL 11 Glenara – 120.4dBL and RL 98 Kyooma – 120.2dBL); and
- M3.2 – Methods used for analysing the concentration of pollutants discharged to a utilisation area were not all in accordance with the Approved Methods Publication and had not been approved in writing by the EPA before tests were conducted.

The 2018 Annual Return was submitted on 31 May 2018. The due date for the submission is 30 May 2018. The late submission of an Annual Return in 2018 related to a misunderstanding at Site level regarding the submission date. Management reported that they have historically worked to an 'end of May' deadline, when the statutory submission date is on 30th May each year. Management report they have updated the Environmental Team and updated reporting calendars accordingly.

DPIE Ministers' Conditions of Approval (CoA) Project Approval number PA 10\_0059 Modification 2, requires completion of an independent audit by the end of June 2014, and every 3 years thereafter. The 2017 IEA report and RAR were due for submission on 31 August 2017 but were submitted on 29 September 2017. WCC were aware of the delay and obtained a letter approving a requested extension of the deadline to 31 August 2017.

Findings identified against the site's EPL are outlined in *Table 3.2* and *Appendix A*.

### 3.9 Mining Lease

Werris Creek Coal Mine lies within the mining lease (ML) 1671 and ML 1672 issued to Werris Creek Coal Pty Ltd and ML 1563 issued to Creek Resources Pty Ltd and Betalpha Pty Ltd. The Mining Lease conditions and the summary of audit findings are provided in *Table 3.2* and *Appendix A*.

### 3.10 Water Access Licences

Water Access Licence (WAL) 29506 and 32224 were reviewed as part of this audit. WCC were compliant with the conditions of the water access licences. A review of performance against the water access licences are outlined in the table below:

Access Licence	Access Licence Annual Allocation (ML)	Total Take 2017	Total Take 2018	Total Take 2019
WAL 32224	211	68.2	55	53
WAL 29506	50	0	0	0

### 3.11 Compliance with Regulatory Instruments

A compliance check of the CoA, EPL and ML conditions as well as management plan review has been completed and is provided in Appendix A. Non-compliances and observations for each component are summarised in *Table 3.2*.

As discussed in *Section 2.3*, a qualitative risk assessment was also completed on the findings as follows:

- non-compliance assessed as 'high' have been colour coded red;
- non-compliance assessed as 'moderate' have been colour coded orange; and
- non-compliance assessed as 'low' have been colour coded yellow.

Table 3.2 Summary of 2020 Audit Findings

Item No	Assessment Requirement	Comment	Audit Classification	Response/Action
<b>Minister's Conditions of Approval PA 10_0059 MODIFICATION 2</b>				
Sch 3 (8)	The Proponent shall not carry out more than: (a) 1 blast a day on site, unless an additional blast is required following a blast misfire; and (b) 15 blasts a month on site. This condition does not apply to blasts that generate ground vibration of 0.5 mm/s or less at any residence on privately-owned land, or blasts required to ensure the safety of the mine or its workers. <i>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.</i>	There were 365 blasts undertaken during the reported audit period. The blasting frequency was of approximately 10 blasts per month.  September 2018 had 17 blasts, two blasts over the criteria limits. Blast were divided along four receptors: R11, R98, R62 and R92.  Maximum values were above of the Blast Vibration criteria for the receptors R98 (0.93 mm/s), R62 (0.68 mm/s) and R92 (0.54 mm/s).  Average values were only slightly above the criteria for the receptor R98 (0.51 mm/s).  There were only 5 blast events that exceeded 0.5 mm/s during September 2018. Therefore condition is considered compliant. .	C (Obs)	Consider implementing an alert mechanism to identify potential blast exceedances.
Sch (14)	3 The Proponent shall ensure that no offensive odours, as defined under the POEO Act, are emitted from the site.	The Site has received 15 odour related complaints during the audit period, primarily relating to a 'burning' smell attributed to spontaneous combustion odours:  <ul style="list-style-type: none"> <li>June 2017 to June 2018 – 10 complaints;</li> <li>June 2018 to June 2019 – 5 complaints; and</li> <li>June 2019 to June 2020 – No complaints.</li> </ul>	NC	Although the Site did receive odour related complaints, indicating offensive odour was emitted from Site, the site has robust odour management process to mitigate odours from spontaneous combustion.  No actions required.
<b>Statement of Commitments</b>				
14.2	Complete and distribute regular newsletters regarding project progress and operations.	A Water Management information flyer was made publically available during the audit period (2017) and is available for any community member who raises any water related concerns. The Site regularly communicates with the community through the CCC and Annual Reporting. It is noted that the only significant change to operations which has occurred during the audit period relates to water management.	C (Obs)	It is ERM's opinion that publication of a 'regular newsletter' would duplicate effort already achieved during CCC meetings and Annual Reporting. No action deemed required.
<b>Environment Protection Licence (EPL) 12290</b>				
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.	An uncontrolled discharge occurred from dam EPA14 commenced on 9 February 2020. The discharge event was 'Special Frequency' as rainfall exceeded 39.2mm, therefore the discharge itself was not a non-compliance. However, a low pH exceedance at EP14 occurred during this discharge event which was reported to the EPA and included in annual returns as required. Investigation of this event did not identify a source of the exceedance and no subsequent monitoring has identified similar results.	NC	Investigation indicates that the exceedance appears to be anomalous. No further action required.  Continue to monitor water quality during discharge events.
L2.2	Where a pH quality limit is specified in the table, the specified percentage of samples must be within the specified ranges.	One exceedance reported low pH 5.5 for discharge point EPL14 uncontrolled discharge, sampled on 18th February 2020.	NC (duplicate)	As above

Item No	Assessment Requirement	Comment	Audit Classification	Response/Action
L7.1	<p>No condition in this licence identifies a potentially offensive odour for the purposes of section 129 of the Protection of the Environment Operations Act 1997.</p> <p>Note: Section 129 of the Protection of the Environment Operations Act 1997 provides that the licensee must not cause or permit the emission of any Offensive odour from the premises but provides a defence if the emission is identified in the relevant environment protection licence as a potentially offensive odour and the odour was emitted in accordance with the conditions of a licence directed at minimising odour.</p>	<p>The Site has received 15 odour related complaints during the audit period, primarily relating to a 'burning' smell attributed to spontaneous combustion odours:</p> <ul style="list-style-type: none"> <li>June 2017 to June 2018 – 10 complaints;</li> <li>June 2018 to June 2019 – 5 complaints; and</li> <li>June 2019 to June 2020 – No complaints.</li> </ul> <p>The mine has implemented procedures to minimise emissions of odour from spontaneous combustion through the use of water curtains or sprinklers to suppress hot areas; and uncovering and mining the higher risk workings quickly and soaking any hot coal immediately.</p> <p>Workers utilise personal gas monitors at the boundary of the site in the direction of complaints when they occur to identify whether detectable hydrogen sulphide is present. ERM sighted photographs of multi-gas monitoring units on days when spontaneous combustions complaints had been received. No elevated gas readings were detected at the boundary.</p> <p>It is noted that the higher risk of spontaneous combustion areas of the mine (the former underground workings) have now been mined, reducing the future odour emission risk profile of the mine.</p>	NC	<p>No actions required.</p> <p>The site has robust odour management process to mitigate odours from spontaneous combustion.</p>
O5.3	<p><b>Pollution Incident Response Management Plan</b></p> <p>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.</p>	<p>The scope and content of the PIRMP complies with the requirements of this condition. It was observed that the previous Operations Manager's contact details were in the PIRMP (the change in roles has only occurred within the last few months).</p>	C (Obs)	<p>The operations manager's contact details should be updated in the PIRMP and amended copies issued where relevant.</p>
M6.2	<p>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.</p>	<p>ERM tested the complaints number published on the Werris Creek Mine Whitehaven Coal website. The complaints number was not functional. It is noted that the complaints number on the sign at the entrance to the mine was correct.</p>	NC	<p>Update the website complaints line number to reflect the correct phone number.</p>
R1.5	<p>The Annual Return for the reporting period must be supplied to the EPA via eConnect EPA or by registered post not later than 60 days after the end of each reporting period or in the case of a transferring licence not later than 60 days after the date the transfer was granted (the 'due date').</p>	<p>The submission times for Annual Returns are summarised below:</p> <ul style="list-style-type: none"> <li>2020 – on 29<sup>th</sup> May 2020 (due date 30<sup>th</sup> May 2020);</li> <li>2019 – on 30<sup>th</sup> May 2019 (due date 30<sup>th</sup> May 2019); and</li> <li>2018 – on 31<sup>st</sup> May 2018 (due date 30<sup>th</sup> May 2018).</li> </ul> <p>The late submission of an Annual Return in 2018 related to a misunderstanding at executive level with regard to electronic signoff by Executive general Manager Management reported that they have historically worked to an 'end of May' deadline, when the statutory submission date is on 30<sup>th</sup> May each year.</p>	NC	<p>Communicate with Environmental Team at Whitehaven confirming Annual Return submission date is 30<sup>th</sup> May each year. Update calendars accordingly.</p>
R4.1	<p>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:</p> <ol style="list-style-type: none"> <li>an assessment of compliance with noise limits presented in the Noise Limits table; and</li> <li>an outline of any management actions taken within the monitoring period to address any exceedences of the limits contained in the Noise Limits table.</li> </ol>	<p>Consultants are taking more than 30 days to create report.</p>	NC	<p>WCC should review noise monitoring supplier contract to require reporting completed within 30 days.</p>

## 4. CONCLUSION

An audit of CoA, Mining Lease and Environmental Protection Licence conditions has been completed as well as a check against commitments made in the management plans developed as part of CoA conditions for the site.

Overall, compliance was generally achieved with the audit documents that were reviewed. The number of non-compliances with the statutory conditions and implementation of the management plans is summarised in *Table 4.1* below.

**Table 4.1 Summary of Audit Findings**

Review	Non-compliances (NC)	Observation (NC Obs)	Observations (C Obs)
Statutory Instruments	7	-	4
Implementation of Plans	-	-	-

Two of the non-compliances are administrative in nature. An action response table has been developed by Whitehaven Coal addressing all audit findings and will be submitted separately to this report.

**APPENDIX A    CONDITIONS OF APPROVAL, ENVIRONMENTAL  
PROTECTION LICENCE AND MINING LEASE COMPLIANCE  
TABLES**

<b>Document details</b>	
Document title	Appendix A1 – Project Approval
Document subtitle	Compliance with Project Approval 10_0059
Project No.	0552611
Date	22 July 2020
Version	1.0
Author	Robert Smith, Aaron McKenzie
Client Name	Whitehaven Coal

No	Assessment Requirement	Reference/ Evidence	Comments	Compliance Status	Recommendations
<b>SCHEDULE 2 – ADMINISTRATIVE CONDITIONS</b>					
<b>OBLIGATION TO MINIMISE HARM TO THE ENVIRONMENT</b>					
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 project.	Werris Creek Coal Mine, Mining Operations Plan, December 2015 Various management plans associated with water; biodiversity; greenhouse gasses; air quality; noise; blasting; vegetation; heritage etc. and observations made during the site visit	ERM's assessment of the Site's operations indicates that the Proponent has implemented 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 project.	C	
<b>Terms of Approval</b>					
2.	The Proponent shall carry out the project: (a) generally in accordance with the EA; (b) in accordance with the statement of commitments; and (c) in accordance with the conditions of this approval.  <i>Notes:</i> <ul style="list-style-type: none"> <li>The general layout of the project is shown in Appendix 2; and</li> <li>The statement of commitments is reproduced in Appendix 6.</li> </ul>	Quarterly Environmental Monitoring Reports 2017 to 2020 Werris Creek Coal Mine, Mining Operations Plan, December 2015 Various management plans associated with water; biodiversity; greenhouse gasses; air quality; noise; blasting; vegetation; heritage etc. and observations made during the site visit	Based on the observations made during the Site visit; interviews with on-site and WHC corporate management; and ERM's review of relevant monitoring reports; management plans etc., it is considered that the Proponent has carried out the project: (a) generally in accordance with the EA; (b) in accordance with the statement of commitments; and (c) in accordance with the conditions of this approval.	C	
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.	Not applicable	No material inconsistencies which had an impact on the results of this audit were identified.	NT	
4.	The Proponent shall comply with any reasonable requirement/s of the Secretary arising from the Department's assessment of: (a) any reports, strategies, plans, programs, reviews, audits or correspondence that are submitted in accordance with this approval; and (b) the implementation of any actions or measures contained in these documents.	Not applicable	No such requests have been submitted by the Secretary during the audit period.	NT	
<b>LIMITS ON APPROVAL</b>					
<b>Mining Operations</b>					
5.	The Proponent may carry out mining operations on site until the end of December 2032. <i>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 the Executive Director, Mineral Resources in DRE. 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 those additional undertakings have been carried out satisfactorily.</i>	Not applicable	Not Triggered.	NT	
<b>Coal Extraction</b>					
6.	The Proponent shall not extract more than 2.5 million tonnes of ROM coal from the site in a calendar year.	Werris Creek Coal Mine 2017 Annual Review Werris Creek Coal Mine 2018 Annual Review Werris Creek Coal Mine 2019 Annual Review	The Proponent has not extracted more than 2.5 million tonnes of ROM coal from the site in a calendar year during the audit period. ROM extraction values during completed calendar years within the Audit period are summarised below: <ul style="list-style-type: none"> <li>January to December 2017 - 1,867,752 ROM Coal (t);</li> <li>January to December 2018 - 1,804,869 ROM Coal (t); and</li> <li>January to December 2019 - 1,546,118 ROM Coal (t).</li> </ul>	C	



No	Assessment Requirement	Reference/ Evidence	Comments	Compliance Status	Recommendations
<b>Coal Stockpiling</b>					
7.	The Proponent shall not stockpile more than 250,000 tonnes of product coal on the site.	Annual Reviews 2017 to 2019 Storage reconciliation xls	The maximum mass of stockpiled product coal present on-site at the Train Load Out (TLO) during the audit period at any one time was ~249,500 tonnes.	C	
<b>Coal Transport</b>					
8.	The Proponent shall not transport: <ul style="list-style-type: none"> <li>(a) more than 50,000 tonnes of product coal from the site by public road in any calendar year;</li> <li>(b) any product coal from the site by public road to the Muswellbrook, Singleton, Mid-Western Regional, Cessnock or Newcastle local government areas without the written approval of the Secretary; and</li> <li>(c) any coal to the Whitehaven CHPP.</li> </ul>	Werris Creek Coal Mine Rail and Truck Movements 2017 to 2019	The site ships less than 1,000 tonnes per annum of coal by road. Road shipments during the audit period included: <ul style="list-style-type: none"> <li>• 743 tonnes in 2017;</li> <li>• 691 tonnes in 2018;</li> <li>• 661 tonnes in 2019.</li> </ul> ERM reviewed a sample of transport dockets which confirmed that all road transport of coal by road to customers travels north from the site, therefore does not travel to the Muswellbrook, Singleton, Mid-Western Regional, Cessnock or Newcastle local government areas. No coal from the site is sent to the Whitehaven CHPP.	C	
<b>SURRENDER OF EXISTING DEVELOPMENT CONSENT</b>					
9.	By the end of October 2012, or as otherwise agreed by the Secretary, the Proponent shall surrender the existing development consent (DA 172-7-2004) for the Werris Creek 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.	Correspondence between Department of Planning and Infrastructure and WHC, dated 25 <sup>th</sup> September 2012, Reference dy06012	ERM reviewed a letter dated 25 <sup>th</sup> September 2012, Reference dy06012, signed off by Danny Young of the Department of Planning and Infrastructure confirming that the Proponent had surrendered the existing development consent (DA 172-7-2004) for the Werris Creek mine in accordance with section 104A of the EP&A Act.	C	
<b>STRUCTURAL ADEQUACY</b>					
10.	The Proponent shall ensure that all new buildings and structures, and any alterations or additions to existing buildings and structures, are constructed in accordance with the relevant requirements of the BCA.  <i>Notes:</i> <ul style="list-style-type: none"> <li>• Under Part 4A of the EP&amp;A Act, the Proponent is required to obtain construction and occupation certificates (where necessary) for the proposed building works; and</li> <li>• Part 8 of the EP&amp;A Regulation sets out the requirements for the certification of the project.</li> </ul>	Verbal management disclosures Google Earth Aerial Photography dated: <ul style="list-style-type: none"> <li>• 10/06/16;</li> <li>• 08/05/19; and</li> <li>• 03/02/19.</li> </ul> Sample of occupancy and building certificates.	Site management reported that there have been no new buildings or structures constructed on-site during the audit period. ERM reviewed a sample of building certificates from 2006 confirming compliance with this condition (outside of the audit period). ERM reviewed aerial photography from 10/06/16; 08/05/19; and 03/02/19 which confirmed that no visible new buildings had been constructed during this part of the audit period. The layout on these aerial photographs aligned with ERM's observations during the site visit.	C	
<b>DEMOLITION</b>					
11.	The Proponent shall ensure that all demolition work on site is carried out in accordance with <i>Australian Standard AS 2601-2001: The Demolition of Structures</i> , or its latest version.	Verbal management disclosures Google Earth Aerial Photography dated: <ul style="list-style-type: none"> <li>• 10/06/16;</li> <li>• 08/05/19; and</li> <li>• 03/02/19.</li> </ul>	Site management reported that there have been no buildings or structures demolished on-site during the audit period. ERM reviewed aerial photography from 10/06/16; 08/05/19; and 03/02/19 which confirmed that no visible buildings had been demolished during this part of the audit period. The layout on these aerial photographs aligned with ERM's observations during the site visit.	NT	

No	Assessment Requirement	Reference/ Evidence	Comments	Compliance Status	Recommendations
<b>OPERATION OF PLANT AND EQUIPMENT</b>					
12.	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.	Pulse preventative maintenance records	The preventative maintenance system utilised by the Site is called 'Pulse'. The system records all preventative maintenance tasks and creates electronic work orders for the maintenance team as required. ERM reviewed Pulse records for a randomly selected dozer and pump system (pump 410). ERM also reviewed a sample of calibration records for blast monitors. The work orders were detailed (including environmental noise control systems on the dozer) and included evidence that the required preventative maintenance had been completed on time. No inspections by regulatory bodies raised preventative maintenance as a concern. ERM did not observe any examples of poorly maintained plant during the site inspection.	C	
<b>STAGED SUBMISSION OF ANY STRATEGY, PLAN OR PROGRAM</b>					
13.	With the approval of the Secretary, the Proponent may submit any strategy, plan or program required by this approval on a progressive basis.  <i>Notes:</i> • While any strategy, plan or program may be submitted on a progressive basis, the Proponent will need to ensure that the existing operations on site are covered by suitable strategies, plans or programs at all times; and • 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.	WHS Revision of Strategies, Plans and Programs MS Excel Register Review of selection of management plans (MOP; Water Management Plan)	The Site has developed numerous management plans and updated them progressively as the mining operation has expanded within the mining lease footprints and potential risks and interactions with the environment have evolved. Management retain a record of all updates to management plans in a WHS Revision of Strategies, Plans and Programs MS Excel Register. The register includes: • Document review date; • A record of whether a revision was required; • The review submission date; • Review approval; • The date the document was submitted to the Secretary; and • When the document was approved by the secretary.  In all management plans, non-compliances with the relevant topic (e.g. water; blasting; biodiversity) trigger an update to the management plan. The Mining Operations Plan (2015) describes the specific stage to which the plan applies (2015 to 2022), the relationship of this stage to any future stages (all lease areas shown on multiple figures), and as above, the trigger for updating the plan would be a non-compliance occurring to which the MOP had some bearing.	C	
14.	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 that apply under DA 172-7-2004.	All in scope Strategies, Plans and Programs	No evidence to suggest that approved Strategies, Plans and Programs have not been implemented in accordance with DA requirements was observed during this assessment.	C	
<b>COMMUNITY ENHANCEMENT</b>					
15.	The Proponent shall establish and operate a Community Enhancement Fund for the project to the satisfaction of the Secretary. This fund must: (a) be established and operated in consultation with Council and the CCC; (b) be directed towards providing benefits to the local communities affected by the project; (c) provide for the expenditure of at least \$300,000 (indexed to CPI) over 6 calendar years (2012 to 2017), and include at least \$200,000 of expenditure within the town of Werris Creek; and	Werris Creek Coal Mine Annual Review 2017 CCC minutes 2017	Written evidence of the requisite spend via the Community Enhancement Fund was observed during the site visit. The spend occurred during the six calendar years from 2012 to 2017 (overlapping this Audit period by six months). Approximately \$30k was spent at Spring Ridge and \$336,000 was spent in Werris Creek.	C	

No	Assessment Requirement	Reference/ Evidence	Comments	Compliance Status	Recommendations
	(d) be operating from the end of April 2012, unless the Secretary agrees otherwise.		The local council (Liverpool Plains Shire Council) were the recipients of the funds for community projects and the spend was discussed in relevant CCC meetings. Details of the projects funded were discussed in the Werris Creek Coal Mine Annual Review 2017 which is submitted to the Department.		

### SCHEDULE 3 – ENVIRONMENTAL PERFORMANCE CONDITIONS

#### NOISE

##### Noise Criteria

1.	<p>The Proponent shall ensure that the noise generated by the project (including noise generated on the Werris Creek Rail Spur) does not exceed the criteria in Table 1 at any residence on privately-owned land.</p> <p><i>Table 1: Noise criteria</i></p> <table border="1"> <thead> <tr> <th>Location</th> <th>Day dB(A) <math>L_{Aeq}(15\ min)</math></th> <th>Evening &amp; Night dB(A) <math>L_{Aeq}(15\ min)</math></th> <th>Night dB(A) <math>L_{A1}(1\ min)</math></th> </tr> </thead> <tbody> <tr> <td>R10, R11</td> <td>39</td> <td>39</td> <td>45</td> </tr> <tr> <td>R21</td> <td>39</td> <td>37</td> <td>45</td> </tr> <tr> <td>R12</td> <td>38</td> <td>38</td> <td>45</td> </tr> <tr> <td>R96</td> <td>38</td> <td>38</td> <td>45</td> </tr> <tr> <td>R7, R8, R9, R24</td> <td>37</td> <td>37</td> <td>45</td> </tr> <tr> <td>R22</td> <td>36</td> <td>37</td> <td>45</td> </tr> <tr> <td>R98</td> <td>36</td> <td>38</td> <td>45</td> </tr> <tr> <td>All other privately-owned residences</td> <td>35</td> <td>35</td> <td>45</td> </tr> </tbody> </table> <p><i>Notes:</i></p> <ul style="list-style-type: none"> <li>To interpret the locations referred to in Table 1, see the applicable figure in Appendix 3; and</li> <li>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.</li> </ul> <p>However, these criteria do not apply if the Proponent has an agreement with the relevant owner/s of these residences/land to generate higher noise levels, and the Proponent has advised the Department in writing of the terms of this agreement.</p>	Location	Day dB(A) $L_{Aeq}(15\ min)$	Evening & Night dB(A) $L_{Aeq}(15\ min)$	Night dB(A) $L_{A1}(1\ min)$	R10, R11	39	39	45	R21	39	37	45	R12	38	38	45	R96	38	38	45	R7, R8, R9, R24	37	37	45	R22	36	37	45	R98	36	38	45	All other privately-owned residences	35	35	45	Annual reviews 2017 and 2018. EPL Monitoring reports 2017 to 2020.	No exceedances of noise criteria limits occurred during the reported audit period.	C	
Location	Day dB(A) $L_{Aeq}(15\ min)$	Evening & Night dB(A) $L_{Aeq}(15\ min)$	Night dB(A) $L_{A1}(1\ min)$																																						
R10, R11	39	39	45																																						
R21	39	37	45																																						
R12	38	38	45																																						
R96	38	38	45																																						
R7, R8, R9, R24	37	37	45																																						
R22	36	37	45																																						
R98	36	38	45																																						
All other privately-owned residences	35	35	45																																						

##### Noise Acquisition Criteria

2.	<p>If the noise generated by the project causes sustained exceedances of the criteria in Table 2 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 5 - 6 of schedule 4.</p> <p><i>Table 1: Noise criteria</i></p> <table border="1"> <thead> <tr> <th>Location</th> <th>Day/Evening/Night dB(A) <math>L_{Aeq}(15\ min)</math></th> </tr> </thead> <tbody> <tr> <td>All privately-owned land</td> <td>40</td> </tr> </tbody> </table> <p><i>Note: 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.</i></p>	Location	Day/Evening/Night dB(A) $L_{Aeq}(15\ min)$	All privately-owned land	40	Annual reviews 2017 and 2018. EPL Monitoring reports 2017 to 2020.	Not requested for acquisition from the landowner, as there were no exceedances of noise acquisition criteria during the reported audit period.	C	
Location	Day/Evening/Night dB(A) $L_{Aeq}(15\ min)$								
All privately-owned land	40								

##### Additional Noise Mitigation Measures

3.	<p>Upon receiving a written request from the owner of the land listed in Table 3, the Proponent shall implement additional noise mitigation measures (such as double glazing, insulation, and/or air conditioning) at any residence on the land in consultation with the owner. These measures must be reasonable and feasible.</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</p>	Annual reviews 2017 and 2018. EPL Monitoring reports 2017 to 2020.	Not requested - Advised by Site Environmental Manager. WCC have implemented a number of mitigation strategies to minimise the effects of noise on the community, including: <ul style="list-style-type: none"> <li>Property acquisitions;</li> </ul>	C	
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No	Assessment Requirement	Reference/ Evidence	Comments	Compliance Status	Recommendations				
	<p>implementation of these measures, then either party may refer the matter to the Secretary for resolution.</p> <p><i>Table 3: Land subject to additional noise mitigation measures</i></p> <p style="text-align: center;"><b>Location</b></p> <p style="text-align: center;">R10, R11, R12, R21, R96</p> <p><i>Note: To interpret the locations referred to in Table 3, see the applicable figure in Appendix 3.</i></p>		<ul style="list-style-type: none"> <li>Private agreements;</li> <li>Installation and maintenance of an acoustic and visual amenity bund; and</li> <li>Installation and maintenance of a mine infrastructure area bund.</li> </ul>						
<b>Operating Conditions</b>									
4.	<p>The Proponent shall:</p> <ol style="list-style-type: none"> <li>implement best practice noise management to minimise the operational, low frequency, rail and road traffic noise of the project;</li> <li>regularly assess the real-time noise monitoring and meteorological forecasting data and relocate, modify, and/or stop operations on site to ensure compliance with the relevant conditions of this approval;</li> <li>minimise the noise impacts of the project during temperature inversions; and</li> <li>use its best endeavours to achieve the long-term noise goals in Table 4, where this is reasonable and feasible, and report on the progress towards achieving these goals in the annual review;</li> <li>carry out a comprehensive noise audit of the project in conjunction with each independent environmental audit,</li> </ol> <p>to the satisfaction of the Secretary.</p> <p><i>Table 4: Long-term noise goal</i></p> <table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="width: 60%;"><b>Location</b></th> <th style="width: 40%;"><b>Day/Evening/Night dB(A) <math>L_{Aeq}(15min)</math></b></th> </tr> </thead> <tbody> <tr> <td style="text-align: center;">All privately-owned land</td> <td style="text-align: center;">35</td> </tr> </tbody> </table> <p><i>Note: 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.</i></p>	<b>Location</b>	<b>Day/Evening/Night dB(A) <math>L_{Aeq}(15min)</math></b>	All privately-owned land	35	Annual reviews 2017, 2018 and 2019.	<p>During the reporting period a number of operational strategies were in place to respond to potential noise impacts from mining operations including:</p> <ul style="list-style-type: none"> <li>Continuous noise monitoring;</li> <li>Attended noise monitoring;</li> <li>Noise control operators engaged;</li> <li>Sound filtering and interpretation to isolate the masking effects of extraneous noise sources from birds, insects, and other environmental noise sources during monitoring;</li> <li>Modification of operations, including shutting down plant items, to reduce offsite impacts;and</li> <li>Night time surface operations and dump locations planned to minimise noise where possible.</li> </ul> <p>WCC plans to construct the remainder of the visual and acoustic bund, prior to mining through Old Colliery Hill, to minimise potential noise impacts on Werris Creek residents.</p> <p>No exceedances of the long-term goal occurred during the reported audit period.</p>	C	
<b>Location</b>	<b>Day/Evening/Night dB(A) <math>L_{Aeq}(15min)</math></b>								
All privately-owned land	35								
<b>Noise Management Plan</b>									
5.	<p>The Proponent shall prepare and implement a Noise Management Plan for the project to the satisfaction of the Secretary. This plan must:</p> <ol style="list-style-type: none"> <li>be prepared in consultation with EPA by a suitably qualified expert whose appointment has been approved by the Secretary;</li> <li>be submitted to the Secretary for approval by the end of April 2012;</li> <li>describe the measures that would be implemented to ensure compliance with the relevant conditions of this approval, including: <ul style="list-style-type: none"> <li>a real-time noise management system that employs both reactive and proactive mitigation measures; and</li> <li>rail spur management plan, that has been prepared in consultation with ARTC and the rail freight company; and</li> </ul> </li> <li>include a Noise Monitoring Program that: <ul style="list-style-type: none"> <li>uses a combination of real-time and supplementary attended noise monitoring measures to evaluate the performance of the project;</li> <li>is capable of monitoring temperature inversion strengths at an appropriate sampling rate;</li> <li>evaluates and reports on the effectiveness of the real-time noise management system;</li> <li>includes a protocol for determining exceedances of the relevant conditions of this approval.</li> </ul> </li> </ol>	Noise Management Plan (16 April 2014). Annual reviews 2017 and 2018.	<p>WCC was granted Project Approval (PA 10_0059) on 25th October 2011 from DoP for the Life of Mine (LOM) extension project.</p> <p>The NMP summarises the results of the predictive noise impact assessment and outlines the control measures to be implemented as a part of the continued operations at the WCC mine to minimise the potential for noise impacts on the local community and the environment. The NMP also contains an updated Noise Monitoring Program, developed to quantify the noise impacts of the operation and to assess compliance against the revised noise criteria.</p> <p>Real time is based on noise control operator undertaking review of noise levels each 5minute period to determine if noise levels exceed trigger Protocol.</p> <ul style="list-style-type: none"> <li>Management of potential noise impacts from train movements on the Rail Spur including:Speed limit of 15km/h on the Rail Spur;</li> <li>STOP Boards located at the boundary with R20 maximising the distance that the idling train is from the residence while waiting for a rail path on the Great Northern Rail Line;</li> <li>Train movement along the Rail Spur is via push-pull locomotive at either end of the train. This procedure will be revised once the rail loop is constructed. If for</li> </ul>	C					

No	Assessment Requirement	Reference/ Evidence	Comments	Compliance Status	Recommendations
			<p>safety it is possible to propel trains, the additional noise generated assessed in the LOM EA NIA determined that the increased distance between the rail loop and the closest Kurrara St residents in Werris Creek would not result in any additional noise impacts; and</p> <ul style="list-style-type: none"> <li>• Consultation over RSMP controls undertaken with ARTC and the two rail transport contractors that operate at WCC.</li> </ul> <p>The NMP has been prepared with regards to:</p> <ul style="list-style-type: none"> <li>• the Life of Mine (LOM) Project Approval 10_0059 which was approved by the Department of Planning and Infrastructure (DoPI) on 25th October 2011 under delegation from the Minister for Planning and Infrastructure;</li> <li>• the Project Modification (PA 10_0059 MOD1) which was approved by DoPI on 30th August 2012 under delegation from the Minister for Planning and Infrastructure;</li> <li>• Environment Protection License (EPL 12290) issued by the NSW Environment Protection Authority (EPA);</li> <li>• the final “Environmental Assessment for Werris Creek Coal Mine Life of Mine Project” (R.W Corkery &amp; Co, 2010); and</li> <li>• “Response to Submissions for the Environmental Assessment for Werris Creek Coal Mine Life of Mine Project” (R.W. Corkery &amp; Co, 2011).</li> </ul>		

**BLASTING**

**Blasting Criteria**

6.	<p>The Proponent shall ensure that blasting on site does not cause exceedances of the criteria in Table 5.</p> <p><i>Table 5: Blasting Criteria</i></p> <table border="1"> <thead> <tr> <th>Location</th> <th>Airblast Overpressure (dB(Lin Peak))</th> <th>Ground Vibration (ppv(mm/s))</th> <th>Allowable Exceedance</th> </tr> </thead> <tbody> <tr> <td>Any residence on privately-owned land</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>120</td> <td>10</td> <td>0%</td> </tr> <tr> <td></td> <td>-</td> <td>50</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, and has advised the Department in writing of the terms of this agreement.</p>	Location	Airblast Overpressure (dB(Lin Peak))	Ground Vibration (ppv(mm/s))	Allowable Exceedance	Any residence on privately-owned land	115	5	5% of the total number of blasts over a period of 12 months	All public infrastructure	120	10	0%		-	50	0%	<p>Annual reviews 2017 and 2018. EPL Monitoring reports 2017 to 2020.</p>	<p>No exceedances of ground vibration limits occurred during the reported audit period.</p> <p>An exceedance of Condition 6 Schedule 3 of PA 10_0059 occurred with a blast undertaken on 4th May 2018, recording an overpressure greater than 120 dBL at two monitoring locations: 120.4dBL at Glenara (R11) and 120.2dBL at Kyooma (R98).</p> <p>WCC undertook an investigation into the incident, with appropriate notifications to the EPA and DPIE.</p> <p>Upon completion of the investigation, control measures have been implemented to prevent or mitigate against a similar exceedance in the future.</p> <p>These included the erection of “dig fences” to prevent over digging, in the event blasts are located alongside excavation areas. In addition, face profiling will be completed after an excavator has left the area and prior to blast loading, to ensure under burden holes have been detected and addressed prior to firing.</p>	C	<p>WCC should continue undertaking the control measures to make sure the exceedance occurred in May 2018 is not repeated in future years. Consider a revision of plan to minimise risk of future exceedance.</p>
Location	Airblast Overpressure (dB(Lin Peak))	Ground Vibration (ppv(mm/s))	Allowable Exceedance																		
Any residence on privately-owned land	115	5	5% of the total number of blasts over a period of 12 months																		
All public infrastructure	120	10	0%																		
	-	50	0%																		

**Blasting Hours**

7.	<p>The Proponent shall only carry out blasting on 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.</p>	<p>Annual reviews 2017 and 2018.</p>	<p>WCC fires all blasts in the middle of the day generally between 12:00pm and 2:00pm, when atmospheric mixing is generally highest.</p> <p>Blasting records are included in data pack.</p>	C	
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No	Assessment Requirement	Reference/ Evidence	Comments	Compliance Status	Recommendations
<b>Blasting Frequency</b>					
8.	<p>The Proponent shall not carry out more than:</p> <p>(a) 1 blast a day on site, unless an additional blast is required following a blast misfire; and</p> <p>(b) 15 blasts a month on site.</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 blasts required to ensure the safety of the mine or its workers.</p> <p><i>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.</i></p>	<p>Annual reviews 2017 and 2018. EPL Monitoring reports 2017 to 2020. Blast Management Plan.</p>	<p>There were 365 blasts undertaken during the reported audit period. The blasting frequency was of approximately 10 blasts per month.</p> <p>September 2018 had 17 blasts, two blasts over the criteria limits.</p> <p>Blast were divided along four receptors: R11, R98, R62 and R92.</p> <p>Maximum values were above of the Blast Vibration criteria for the receptors R98 (0.93 mm/s), R62 (0.68 mm/s) and R92 (0.54 mm/s).</p> <p>Average values were only slightly above the criteria for the receptor R98 (0.51 mm/s).</p> <p>There were only 5 blast events that exceeded 0.5 mm/s during September 2018. this condition is considered compliant.</p>	Compliant (Obs)	Consider implementing an alert mechanism to identify potential blast exceedances.
<b>Property Inspection</b>					
9.	<p>If the Proponent receives a written request from the owner of any privately-owned land within 2 kilometres of the approved open cut pit on site for a property inspection to establish the baseline condition of any buildings and/or structures on their 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 has been approved by the Secretary to:</p> <ul style="list-style-type: none"> <li>• establish the baseline condition of the buildings and/or structures on the land or update the previous property inspection report; and</li> <li>• identify any measures that should be implemented to minimise the potential blasting impacts of the projects on these buildings and/or structures; and</li> </ul> <p>(b) give the landowner a copy of the new or updated property inspection report.</p>	Annual reviews 2017 and 2018.	<p>No requests were received from landowners during the reported audit period.</p> <p>A property inspection was completed in 2012.</p>	NT	
<b>Property Investigations</b>					
10.	<p>If the owner of any privately-owned land claims that the buildings and/or structures on their land have been damaged as a result of blasting on site, then within 2 months of receiving this claim the Proponent shall:</p> <p>(a) commission a suitably qualified, experienced and independent person, whose appointment has been approved by the Secretary, 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 damage to the satisfaction of the Secretary.</p> <p>If the Proponent or landowner disagrees with the findings of the independent property investigation, then either party may refer the matter to the Secretary for resolution.</p>	Annual reviews 2017 and 2018.	No claims were received from landowners during the reported audit period.	NT	
<b>Operating Conditions</b>					
11.	<p>The Proponent shall:</p> <p>(a) implement best practice blasting management on site to:</p> <ul style="list-style-type: none"> <li>• protect the safety of people and livestock in the surrounding area;</li> <li>• protect private or public property in the surrounding area;</li> <li>• minimise the dust and fume emissions of the blasting; and</li> </ul> <p>(b) minimise the duration and frequency of any road closures for blasting;</p>	Annual reviews 2017 and 2018.	<p>A number of controls were applied to reduce the potential for impacts, including:</p> <ul style="list-style-type: none"> <li>• buffer management through acquisition of a number of adjacent properties thorough private negotiation;</li> <li>• blasts designed with consideration of the predicted vibration of the shot, geology, ground conditions, explosives selection, initiation sequence/timing,</li> </ul>	C	

No	Assessment Requirement	Reference/ Evidence	Comments	Compliance Status	Recommendations
	<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>		<p>powder factor, history/experience, and the sleeping time of the shot;</p> <ul style="list-style-type: none"> <li>• maintenance of the predicted blast vibration objective for Werris Creek of 0.8 mm/s;</li> <li>• explosive product selection and loading, to reduce the risk of auto-ignition and/or blast fume generation;</li> <li>• stemming height and quality monitored by, the shot-firer to minimise the risk of elevated air overpressure from rifling;</li> <li>• initiation sequence strategies are used to minimise vibration and air overpressure impacts;</li> <li>• sleeping shots minimised to avoid potential deterioration of product;</li> <li>• WCC aims to fire all blasts in the middle of the day generally between 12:00pm and 2:00pm, when atmospheric mixing is generally highest;</li> <li>• blast notification prior to every blast;</li> <li>• pre-blast weather assessment conducted;</li> <li>• road closures of the Werris Creek Road when proximity of blasts occurred within 200 meters;</li> <li>• blast fume rating recorded; and</li> <li>• structural inspections - In response to claims of property damage due to blasting operations.</li> </ul>		
12.	<p>The Proponent shall not carry out blasting on site that is within 500 metres of:</p> <ul style="list-style-type: none"> <li>(a) Werris Creek Road without the approval of RMS;</li> <li>(b) the Main Northern Railway without the approval of ARTC; and</li> <li>(c) any land outside the site that is not owned by the Proponent unless: <ul style="list-style-type: none"> <li>• 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 Secretary in writing of the terms of this agreement; or</li> <li>• the Proponent has: <ul style="list-style-type: none"> <li>○ demonstrated to the satisfaction of the Secretary that the blasting can be carried out closer to the land without compromising the safety of people or livestock on the land, or damaging the buildings and/or structures on the land; and</li> <li>○ 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.</li> </ul> </li> </ul> </li> </ul>	<p>Annual reviews 2017 and 2018. Blast Management Plan.</p>	<p>When blasts are planned within 500m of Werris Creek Road and the Main Northern Rail Line, road and rail closures are undertaken as summarised below:</p> <p>Blasts Within 500m:</p> <ul style="list-style-type: none"> <li>• Werris Creek Road will be closed, however, the Main Northern Rail Line will remain open;</li> <li>• Signage on Werris Creek Road day of the blast;</li> <li>• Notification of road closure will be provided 7 days ahead of a required road closure to Liverpool Plains Shire Council (LPSC) and local emergency services;</li> <li>• Sentries will be placed on Werris Creek Road. The sentries will close the road when advised by the Shot-firer. Once the blast is completed the sentries will inspect the road for debris, remove (in the unlikely event of occurrence) and re-open the road within 15 minutes of closure; and</li> <li>• If weather conditions change following road closure, such that they are no longer favourable for blasting, the road will be reopened as soon as practicable to allow stopped traffic to pass.</li> </ul> <p>Blasts Within 200m:</p> <ul style="list-style-type: none"> <li>• Werris Creek Road and the Main Northern Rail Line will be closed;</li> <li>• Closure procedures for Werris Creek Road will be as above;</li> <li>• A short-notice possession of the rail line will be organised with the Australian Rail Track Corporation (ARTC) who will reschedule rail pathways around the blast; and</li> <li>• ARTC recognised Protection Officers will escort WCC personnel to inspect the rail line.</li> </ul> <p>BMP update in 2019. Photos of correspondence with ARTC, and RMS did not respond to request then approved by DPIE.</p>	C	

No	Assessment Requirement	Reference/ Evidence	Comments	Compliance Status	Recommendations
<b>Blast Management Plan</b>					
13.	<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 prepared in consultation with EPA, RMS and ARTC;</p> <p>(b) be submitted to the Secretary for approval by the end of April 2012;</p> <p>(c) describe the mitigation measures that would be implemented to ensure compliance with the relevant conditions of this approval;</p> <p>(d) describe the measures that would be implemented to ensure that the public can get up-to-date information on the proposed blasting schedule on site; and</p> <p>(e) include a blast monitoring program for evaluating the performance of the project, including:</p> <ul style="list-style-type: none"> <li>• compliance with the applicable criteria; and</li> <li>• minimising the fume emissions from the site.</li> </ul>	Blast Management Plan.	<p>The Blast Management Plan (BMP) has been prepared in consultation with the relevant Government Departments, as required under Condition 13 (a), Schedule 2 of PA 10_0059.</p> <p>The BMP was submitted to the Secretary on 27<sup>th</sup> April 2012.</p> <p>Blasts design mitigations may include:</p> <ul style="list-style-type: none"> <li>• Reducing bench heights or ensuring adequate relief in deep holes;</li> <li>• Selecting explosives products appropriate to the blast design and ground conditions;</li> <li>• Following manufacturer's recommendations for priming, timing and sleep time of bulk explosives;</li> <li>• Increasing the level of control and QA/QC checks on deeper shots;</li> <li>• Providing appropriate separation of blast holes and explosive decks;</li> <li>• Reducing the powder factor or modifying the timing, depth or size of a blast; and</li> <li>• Reviewing forecasted weather conditions and proposed deign pattern proximity to Werris Creek Road prior to design.</li> </ul> <p>Prior to every blast, the Blast Notification Webpage on the Whitehaven Coal website will be updated to include the blast date and time.</p> <p>Monitoring is undertaken in accordance with Condition 3(13) (e) of the Modified PA and Condition L5.8 of EPL 12290.</p>	C	

**AIR QUALITY & GREENHOUSE GAS**

**Odour**

14.	<p>The Proponent shall ensure that no offensive odours, as defined under the POEO Act, are emitted from the site.</p>	<p>Annual reviews 2017 and 2018. Complaints register 2017 to 2020 Air Quality and Greenhouse Gas Management Plan.</p>	<p>The Site has received 15 odour related complaints during the audit period, primarily relating to a 'burning' smell attributed to spontaneous combustion odours:</p> <ul style="list-style-type: none"> <li>• June 2017 to June 2018 – 10 complaints;</li> <li>• June 2018 to June 2019 – 5 complaints; and</li> <li>• June 2019 to June 2020 – No complaints.</li> </ul> <p>The mine has implemented procedures to minimise emissions of odour from spontaneous combustion through the use of water curtains or sprinklers to suppress hot areas; and uncovering and mining the higher risk workings quickly and soaking any hot coal immediately.</p> <p>Workers utilise personal gas monitors at the boundary of the site in the direction of complaints when they occur to identify whether detectable hydrogen sulphide is present. ERM sighted photographs of multi-gas monitoring units on days when spontaneous combustions complaints had been received. No elevated gas readings were detected at the boundary.</p>	NC	<p>Although the Site did receive odour related complaints, indicating offensive odour was emitted from Site, the site has robust odour management process to mitigate odours from spontaneous combustion.</p> <p>No actions required.</p>
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No	Assessment Requirement	Reference/ Evidence	Comments	Compliance Status	Recommendations
			<p>It is noted that the higher risk of spontaneous combustion areas of the mine (the former underground workings) have now been mined, reducing the future odour emission risk profile of the mine.</p> <p>Air Quality Management Plan Section 8.2 WCC will ensure that no offensive odours are emitted from the LOM Project. The risk of odour generation as a result of localised spontaneous combustion from coal stockpiles or waste carbonaceous material will be identified by close monitoring for the presence of smoke and heat. If heating is detected the affected material will be dug out, spread and cooled. If localised spontaneous combustion was to be detected, the affected material will be isolated and drenched with water.</p>		

**Greenhouse Gas Emissions**

15.	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.	Air Quality and Greenhouse Gas Management Plan	<p>GHG measures that have been implemented to minimise the release of greenhouse gas emissions by WCC as part of the LOM Project:</p> <ul style="list-style-type: none"> <li>Relocation of the Mine Infrastructure Area (MIA) to the north to reduce the haul lengths of trucks transporting ROM Coal to the Crushing Plant. This initiative will particularly reduce haul lengths later in the life of the mine;</li> <li>Relocated Coal Crushing Plant electrical switch room will be upgraded and will include a power correction factor to improve energy efficiency of the crushing plant outside of peak crushing;</li> <li>Larger mining equipment (1 x Hitachi EX5600 replace 1 x Hitachi EX1900 and 10 x CAT XQ793 replacing 11 x CAT 785) replacing older and smaller equipment will improve productivity (bcm) for the same diesel consumption;</li> <li>Energy efficient external lighting around the MIA connected to main electricity supply replacing mobile lighting plants consuming diesel;</li> <li>New workshop with brand new compressed air system (no leaks) and new air compressor; and</li> <li>Completion of western dump extension will shorten overburden haul lengths and flatten the haul profile.</li> </ul> <p>Emission inventory reporting for GHG.</p>	C	
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**Air Quality Criteria**

16.	<p>The Proponent shall ensure that all reasonable and feasible avoidance and mitigation measures are employed so that particulate matter emissions generated by the project do not exceed the criteria listed in Tables 6, 7 and 8 at any residence on privately-owned land or on more than 25 percent of any privately-owned land.</p> <p><i>Table 6: Long-term criteria for particulate matter</i></p> <table border="1"> <thead> <tr> <th>Pollutant</th> <th>Averaging Period</th> <th>Criterion</th> </tr> </thead> <tbody> <tr> <td>Total suspended particulate (TSP) matter</td> <td>Annual</td> <td>a 90 µg/m<sup>3</sup></td> </tr> <tr> <td>Particulate matter &lt; 10 µm (PM<sub>10</sub>)</td> <td>Annual</td> <td>a 30 µg/m<sup>3</sup></td> </tr> </tbody> </table> <p><i>Table 7: Short-term criterion for particulate matter</i></p> <table border="1"> <thead> <tr> <th>Pollutant</th> <th>Averaging Period</th> </tr> </thead> <tbody> <tr> <td>Particulate matter &lt; 10 µm (PM<sub>10</sub>)</td> <td>24 hour</td> </tr> </tbody> </table> <p><i>Table 8: Long-term criteria for deposited dust</i></p>	Pollutant	Averaging Period	Criterion	Total suspended particulate (TSP) matter	Annual	a 90 µg/m <sup>3</sup>	Particulate matter < 10 µm (PM <sub>10</sub> )	Annual	a 30 µg/m <sup>3</sup>	Pollutant	Averaging Period	Particulate matter < 10 µm (PM <sub>10</sub> )	24 hour	Annual reviews 2017 and 2018. EPL Monitoring reports 2017 to 2020.	<p>The following exceedances of assessment criteria were recorded during the reported audit period:</p> <ul style="list-style-type: none"> <li>23rd June 2017: R11(Glenara) HVAS - PM10 concentration of 52.4 µg/m<sup>3</sup>;</li> <li>27th September 2017: R11(Glenara) HVAS - PM10 concentration of 67.6 µg/m<sup>3</sup>;</li> <li>18th February 2018 R11(Glenara) - PM10 concentrations of 53.6 µg/m<sup>3</sup>; and</li> <li>15th December 2018 at HVP1 (Escott) - PM10 concentrations of 67.1 µg/m<sup>3</sup>.</li> </ul> <p>A notification regarding the elevated results in 2017 was provided to the DPIE following receipt of the monitoring results via email on 14th July 2017 and 13th November 2017 respectively. Subsequent investigations demonstrated that WCC was not the cause of the elevated PM10 levels on both occasions,</p>	C	
Pollutant	Averaging Period	Criterion																
Total suspended particulate (TSP) matter	Annual	a 90 µg/m <sup>3</sup>																
Particulate matter < 10 µm (PM <sub>10</sub> )	Annual	a 30 µg/m <sup>3</sup>																
Pollutant	Averaging Period																	
Particulate matter < 10 µm (PM <sub>10</sub> )	24 hour																	

No	Assessment Requirement	Reference/ Evidence	Comments	Compliance Status	Recommendations
	<p style="text-align: center;"><b>Pollutant</b> c Deposited dust</p> <p style="text-align: center;"><b>Averaging Period</b> Annual</p> <p><i>Notes to Tables 6-8:</i></p> <ul style="list-style-type: none"> <li>• a Total impact (ie incremental increase in concentrations due to the project plus background concentrations due to all other sources);</li> <li>• b Incremental impact (ie incremental increase in concentrations due to the project on its own);</li> <li>• 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.</li> <li>• d Excludes extraordinary events such as bushfires, prescribed burning, dust storms, fire incidents, illegal activities or any other activity agreed by the Secretary in consultation with EPA.</li> </ul>		<p>with WCC operations identified downwind of the monitor and therefore the elevated results were not non-compliances.</p> <p>Subsequent investigations demonstrated that WCC was not the cause of the elevated PM10 levels in 2018 on both occasions. On the 18th February 2018, WCC operations were downwind of the monitor at the time of the exceedance with field notes from the day of sampling noting farming activity (ploughing) in the vicinity of the monitor. On the 15th December 2018 widespread high regional dust alerts were in place and WCC operations were downwind of the monitor at the time of monitoring.</p> <p>The following exceedances of long term criteria was recorded during the reported audit period:</p> <ul style="list-style-type: none"> <li>• 2017: DG22 (Mountain View) Dust Deposition maximum concentration of 8.8 µg/m<sup>3</sup>;</li> <li>• 2017: DG34 (8 Kurrara Street) Dust Deposition multiple exceedances with maximum concentration of 19.5 µg/m<sup>3</sup>;</li> <li>• 2018 - Dust Deposition exceedance of the long-term criteria in DG2 (Cintra), which was above the annual average criteria for the 2018 reporting period. Located directly north of WCC operations, DG2 is located on a project related property; and</li> <li>• An investigation of the results at dust gauge site DG34 (8 Kurrara street) and DG9 (Marengo) with elevated measurements during the reporting period showed elevated results and low deposited dust levels at nearby gauges, indicating a localised source of dust generation or contamination at both sites, unrelated to activities at WCC.</li> </ul> <p>Exceedances in 2017 showed consistently high results and low deposited dust levels at nearby gauges indicating a localised source of dust generation or contamination, unrelated to activities at WCC.</p> <p>The following exceedances of 24h average criteria was recorded during the reported audit period:</p> <p>2018: TEOM - 7 PM10 concentrations exceedances:</p> <ul style="list-style-type: none"> <li>• 15th April;</li> <li>• 4th August;</li> <li>• 1st September;</li> <li>• 22nd November;</li> <li>• 23rd November;</li> <li>• 14th December;and</li> <li>• 15th December.</li> </ul> <p>Widespread high regional dust alerts were received on all the above mentioned dates, advising elevated PM10 levels were present in the area and operations were located downwind of the TEOM location during monitoring.</p>		
<b>Air Quality Acquisition Criteria</b>					
17.	<p>If particulate matter emissions generated by the project exceed the criteria in Tables 9, 10, and 11 at any residence on privately-owned land, or on more than 25 percent of any privately owned land, then upon written request for acquisition from the landowner, the Proponent shall acquire the land in accordance with the procedures in conditions 5-6 of schedule 4.</p> <p><i>Table 9: Long term land acquisition criteria for particulate matter</i></p>		Not applicable.	NT	

No	Assessment Requirement	Reference/ Evidence	Comments	Compliance Status	Recommendations																										
	<table border="0"> <tr> <td><b>Pollutant</b></td> <td><b>Averaging period</b></td> <td><b>a Criterion</b></td> </tr> <tr> <td>Total suspended particulate (TSP) matter</td> <td>Annual</td> <td>a 90 µg/m<sup>3</sup></td> </tr> <tr> <td>Particulate matter &lt; 10 µm (PM<sub>10</sub>)</td> <td>Annual</td> <td>a 30 µg/m<sup>3</sup></td> </tr> </table> <p>Table 10: Short term land acquisition criteria for particulate matter</p> <table border="0"> <tr> <td><b>Pollutant</b></td> <td><b>Averaging period</b></td> <td><b>da Criterion</b></td> </tr> <tr> <td>Particulate matter &lt; 10 µm (PM<sub>10</sub>)</td> <td>24 hour</td> <td>a 150 µg/m<sup>3</sup></td> </tr> <tr> <td>Particulate matter &lt; 10 µm (PM<sub>10</sub>)</td> <td>24 hour</td> <td>b 50 µg/m<sup>3</sup></td> </tr> </table> <p>Table 11: Long term acquisition criteria for deposited dust</p> <table border="0"> <tr> <td><b>Pollutant</b></td> <td><b>Averaging period</b></td> <td><b>Maximum increase in deposited dust level</b></td> <td><b>Maximum total deposited dust level</b></td> </tr> <tr> <td>c Deposited dust</td> <td>Annual</td> <td>b 2 g/m<sup>2</sup>/month</td> <td>a 4 g/m<sup>2</sup>/month</td> </tr> </table> <p>Notes to Tables 9-11:</p> <ul style="list-style-type: none"> <li>a Total impact (i.e. incremental increase in concentrations due to the development plus background concentrations due to all other sources);</li> <li>b Incremental impact (i.e. incremental increase in concentrations due to the development on its own);</li> <li>c Deposited dust is to be assessed as insoluble solids as defined by Standards Australia, AS/NZS 3580.10.1:2003: Methods for Sampling and Analysis of Ambient Air - Determination of Particulate Matter - Deposited Matter - Gravimetric Method; and</li> <li>d Excludes extraordinary events such as bushfires, prescribed burning, dust storms, sea fog, fire incidents or any other activity agreed by the Secretary.</li> </ul>	<b>Pollutant</b>	<b>Averaging period</b>	<b>a Criterion</b>	Total suspended particulate (TSP) matter	Annual	a 90 µg/m <sup>3</sup>	Particulate matter < 10 µm (PM <sub>10</sub> )	Annual	a 30 µg/m <sup>3</sup>	<b>Pollutant</b>	<b>Averaging period</b>	<b>da Criterion</b>	Particulate matter < 10 µm (PM <sub>10</sub> )	24 hour	a 150 µg/m <sup>3</sup>	Particulate matter < 10 µm (PM <sub>10</sub> )	24 hour	b 50 µg/m <sup>3</sup>	<b>Pollutant</b>	<b>Averaging period</b>	<b>Maximum increase in deposited dust level</b>	<b>Maximum total deposited dust level</b>	c Deposited dust	Annual	b 2 g/m <sup>2</sup> /month	a 4 g/m <sup>2</sup> /month				
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**Operating Conditions**

18.	<p>The Proponent shall:</p> <ol style="list-style-type: none"> <li>implement best practice air quality management on site to minimise the off-site odour, fume and particulate matter emissions of the project, including the dust emissions associated with the transport coal produced on site by road or rail;</li> <li>minimise any visible air pollution generated by the project;</li> <li>minimise any surface disturbance on site; and</li> <li>regularly assess the real-time air quality monitoring and meteorological forecasting data and relocate, modify and/or stop operations on site to ensure compliance with the relevant conditions of this approval,</li> </ol> <p>to the satisfaction of the Secretary.</p>	<p>Annual reviews 2017 and 2018. Air Quality and Greenhouse Gas Management Plan (AQHGMP).</p>	<p>During the reported audit period, various controls were implemented to manage dust including:</p> <ul style="list-style-type: none"> <li>Use of water carts across the site with an additional contractor water cart also utilised during rehabilitation activities;</li> <li>Overburden, coal and soil loading activities are not undertaken during periods of adverse weather (high winds or dry conditions), with SMS triggers employed to provide a near-real time operational response;</li> <li>Blasting activities restricted to suitable weather conditions and include notification to key stakeholders and residents;</li> <li>All personnel are instructed that all vehicles must utilise existing tracks on-site and must be driven to the conditions to minimize trafficable dust generation;</li> <li>The extent of disturbed areas (pre-strip clearing and rehabilitation) are minimized to that required for mining operations, with these areas stabilized and revegetated as soon as practicable once no longer required for ongoing operations;</li> <li>Water sprays are used on the coal feed hopper, crusher and at all conveyor transfer and discharge points;</li> <li>A designated pump and sprinkler installed during the reporting period to minimize dust entrainment</li> </ul>	C	
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No	Assessment Requirement	Reference/ Evidence	Comments	Compliance Status	Recommendations
			<p>off the SAIL stockpile in adverse weather conditions;</p> <ul style="list-style-type: none"> <li>Water Sprinklers added to the TLO to aid in dust suppression;</li> <li>Modification of operations, including shutting down plant items, to reduce offsite impacts; and</li> <li>Installed bird deterrents were maintained on depositional dust gauges to reduce contamination.</li> </ul> <p>In management plan based on wind speed, manage operations examples of real time triggers from weather station data including txt messages provided.</p>		

**Air Quality and Greenhouse Gas Management Plan**

19.	<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> <ol style="list-style-type: none"> <li>be prepared in consultation with EPA, and submitted to the Secretary by the end of April 2012;</li> <li>describe the measures that would be implemented to ensure compliance with the relevant conditions of this approval, including a real-time air quality management system that employs both reactive and proactive mitigation measures;</li> <li>describe the measures that would be implemented to minimise the release of greenhouse gas emissions from the site; and</li> <li>include an air quality monitoring program, that: <ul style="list-style-type: none"> <li>uses a combination of real-time monitors and supplementary monitors, to evaluate the performance of the project;</li> <li>evaluates and reports on the effectiveness of the real-time air quality management system; and</li> <li>includes a protocol for determining any exceedances of the relevant conditions of this approval.</li> </ul> </li> </ol>	Air Quality and Greenhouse Gas Management Plan (AQGHGMP).	<p>WCC submitted a draft for approval on 26<sup>th</sup> March 2012.</p> <p>The AQGHGMP summarises the results of the predictive air quality assessment and outlines the control measures to be implemented as a part of the continued operations at the mine to minimise the potential for air quality and greenhouse gas impacts on the local community and the environment. The AQGHGMP also contains an updated Air Quality Monitoring Program, developed to quantify the air quality impacts of the operation and to assess compliance against the revised air quality criteria.</p>	C	
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**METEOROLOGICAL MONITORING**

20.	<p>For the life of the project, the Proponent shall ensure that there is a suitable meteorological station operating in the vicinity of the site that: (a) complies with the requirements in the <i>Approved Methods for Sampling of Air Pollutants in New South Wales</i> guideline; and (b) is capable of continuous real-time measurement of temperature lapse rate, in accordance with the <i>NSW Industrial Noise Policy</i>, or as otherwise approved by EPA.</p>	<p>Noise Management Plan. Blast Management Plan. Air Quality and Greenhouse Gas Management Plan (AQGHGMP)</p>	<p>WCC maintains an on-site weather station identified as "M2" (EPL 12290 EPA ID #9) located on the top level of the overburden emplacement (at final rehabilitated landform surface RL445.5m) as well as "M3" (EPL 12290 EPA ID #31) lower level temperature sensor (base of overburden emplacement area at RL373.5m). Met station observed during site visit, position observed to meet requirements of Approved methods.</p>	C	
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**SOIL AND WATER**

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.

**Water Supply**

21.	<p>The Proponent shall ensure that it has sufficient water for all stages of the project, and if necessary, adjust the scale of mining operations to match its available water supply, to the satisfaction of the Secretary.</p>	Water Management Plan.	<p>6.3.9 Site Water Usage</p> <p>The Environmental Officer will monitor void water usage based on flow meters, void water dam storage levels and water cart load counts. In addition, WCC will engage a hydrogeologist (or similar expertise) to analyse void dewatering records and rainfall levels to update the water model for WCC on an annual basis, and determine the twelve-month total incidental groundwater make for the open cut pit. This will include an assessment of the availability of surplus water for offsite agricultural use over the upcoming year, with particular reference to the security of water supply over the LOM.</p>	C	
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No	Assessment Requirement	Reference/ Evidence	Comments	Compliance Status	Recommendations
			<p>7.2 Water Usage Monitoring</p> <p>WCC maintains a network of inline flow meters, void water dam storage level boards and water cart fill points to record the void water transfer within the water management system onsite. Each month the Environmental Officer records the flow meters and storage levels of void water dams to determine water usage onsite. These locations are subject to change in response to mining operations and are provided as a guide only. The pit dewatering pipelines are key water inputs and dust suppression are the key output from the water management system.</p>		

**Surface Water Discharges**

22.	<p>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.</p>	<p>Water Management Plan. Annual reviews 2017 and 2018.</p>	<p>6.4.2 Dirty Water Discharge</p> <p>EPL 12290 permits WCC to undertake discharges from the licensed discharge points (LDPs) of SB2 (EPL10), SB9 (EPL12), SB10 (EPL14) and SB18 (EPL32). WCC categorises two types of discharges, a discharge due to rainfall runoff and overflowing via the spillway is called a wet weather discharge, while a controlled discharge occurs when the dam water is pumped out.</p> <p>WCC can exceed the Total Suspended Solid limit if over 39.2mm of rainfall is received over a 5-day period, resulting in a wet weather discharge. WCC treats dirty water when required by using polymer based flocculants to lower Total Suspended Solids, reducing turbidity and dosing dams with pool acid to maintain pH within discharge limits. A controlled discharge of settled and (if necessary) treated dirty water would be undertaken in accordance with the EPL 12290 when storage levels within respective LDPs (SB2, SB9 and SB10) are greater than 50%. This would provide the capacity to contain more rainfall events and reduce wet weather discharges.</p> <p>All laboratory results undertaken prior to a controlled discharge are reviewed against exceedance criteria for compliance.</p> <p>Lab reports provided, One exceedance reported low pH 5.5 for discharge point EPL14 uncontrolled discharge, sampled 18 Feb 2020. Other results indicated exceedances up /down stream during storm events (off site locations, results not correlated to discharge point results).</p>	C	
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**Void Water Irrigation**

22A.	<p>The Proponent shall not provide any water for the purpose of irrigation or stock watering, unless the activity has been approved by the Secretary as part of the Water Management Plan.</p>	<p>Water Management Plan.</p>	<p>4.2 Agricultural Use of Void Water Offsite</p> <p>On the basis of the water balance model predictions, the volume of void water generated is predicted to exceed the capacity of the void water dams under median and high rainfall scenarios.</p> <p>In order to alleviate the storage capacity shortfall, the Modified PA permits WCC to make this water available to the owners or users (under lease) of land adjoining or surrounding WCCM for irrigation and/or other agricultural use (i.e. stock watering).</p> <p>In order to demonstrate that the void water could be utilised for agricultural purposes without adversely impacting on the local environment, SEEC (2015)</p>	C	
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No	Assessment Requirement	Reference/ Evidence	Comments	Compliance Status	Recommendations
			<p>undertook an assessment to investigate the use of excess void water from WCCM, via irrigation on agricultural land surrounding WCC. SEEC utilised the EPA endorsed Effluent Reuse Irrigation Model (ERIM) to demonstrate the feasibility of irrigating the void water to surrounding agricultural lands.</p> <p>ERIM uses water and nutrient balances to calculate the amount of water and nutrients that should be applied, and at what times, to meet crop requirements whilst ensuring runoff and percolation are minimised.</p>		

**Water Management Plan**

23.	<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 DPI Water and EPA by suitably qualified and experienced persons whose appointment has been approved by the Secretary, and submitted to the Secretary by the end of April 2012.</p> <p>In addition to the standard requirements for management plans (see condition 2 of schedule 5), this plan must include:</p> <p>(a) Site Water Balance that:</p> <ul style="list-style-type: none"> <li>• includes details of: <ul style="list-style-type: none"> <li>- sources of water supply;</li> <li>- water use on site;</li> <li>- water management on site;</li> <li>- reporting procedures, which provide for the update of the site water balance in each annual review; and</li> </ul> </li> <li>• describes what measures would be implemented to minimise potable water use on site;</li> </ul> <p>(b) a Surface Water Management Plan, that includes:</p> <ul style="list-style-type: none"> <li>• detailed baseline data of the surface water flows and quality in the waterbodies that could be affected by the project;</li> <li>• a detailed description of the water management system on site, including the: <ul style="list-style-type: none"> <li>- clean water diversion systems;</li> <li>- erosion and sediment controls; and</li> <li>- water storages;</li> </ul> </li> <li>• a plan for identifying, extracting, handling, and the long-term storage of potentially acid forming material on site;</li> <li>• detailed plans, including design objectives and performance criteria, for: <ul style="list-style-type: none"> <li>- design and management of the final void;</li> <li>- reinstatement of drainage lines on the rehabilitated areas of the site; and</li> <li>- control of any potential water pollution from the rehabilitated areas of the site;</li> </ul> </li> <li>- a program to monitor the effectiveness of the water management system;</li> <li>• a plan to respond to any exceedances of the performance criteria, and mitigate and/or offset any adverse surface water impacts of the project;</li> </ul> <p>(c) a Groundwater Management Plan, which includes:</p> <ul style="list-style-type: none"> <li>• detailed baseline data of groundwater levels and quality surrounding the site;</li> <li>• groundwater assessment criteria, including trigger levels for investigating any potentially adverse groundwater impacts;</li> <li>• a program to monitor: <ul style="list-style-type: none"> <li>- groundwater inflows to the open cut mining operations;</li> <li>- the impacts of the project on any groundwater bores on privately-owned land;</li> <li>- the seepage/leachate from water storages or backfilled voids on site; and</li> </ul> </li> <li>• a program to validate the groundwater model for the project, and calibrate it to site specific conditions; and</li> <li>• a plan to respond to any exceedances of the performance criteria, and mitigate and/or offset any adverse groundwater impacts of the project; and</li> </ul> <p>(d) an Irrigation Management Plan, which includes:</p>	<p>Water Management Plan (WMP). Annual reviews 2017 and 2018.</p>	<p>The first draft of the WMP was sent for approval on 26<sup>th</sup> March 2012 and has been prepared in consultation with the DP&amp;E, DPI-W, and EPA.</p>	C	
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No	Assessment Requirement	Reference/ Evidence	Comments	Compliance Status	Recommendations
	<ul style="list-style-type: none"> <li>a detailed methodology for the transfer (including for pipeline and/or road transportation) and application of void water for each irrigation site;</li> <li>detailed consideration of the irrigation activities guided by the Environmental Guideline "Use of Effluent by Irrigation, DEC 2014", including site specific soil analysis and consideration of the short and long term impacts of salinity and sodicity on soils;</li> <li>parameters for the sustainable application of void water to maximise water uptake and minimise deep percolation to groundwater and/or run-off from the application site;</li> <li>identification of the appropriate approvals held under the <i>Water Management Act 2000</i>;</li> <li>a program to monitor void water quality and soil characteristics; and</li> <li>a description of the procedures to be implemented to measure and report on the quantity of water supplied to each individual user and the quantity of void water used against the parameters identified.</li> </ul>				

**Void Water Dam 1**

23a.	Within 2 months of the completion of construction works for the expanded Void Water Dam 1, the Proponent shall submit a "works as-executed" report to the Secretary and EPA, certified by a practising engineer, confirming that the expanded dam has been constructed to its design specifications.	Water Management Plan (WMP).	WMP: 6.3.6 Void Water Dam Storage Management. Void Water Dams 1, 3 & 4 have been prescribed by the NSW Dam Safety Committee (DSC) with Significant Sunny Day and Flood Consequence categories requiring the design, construction and operation to be in accordance with DSC and ANCOLD guidelines. An independent dam engineer will be engaged on an annual basis to undertake a review of dam structure and operation of these void water dams. Any actions identified by the dam engineer will be implemented by WCC and reported in the Annual Review. Void Water Dams 1 and 2 are licenced monitoring points 16 and 27 respectively under EPL 12290.	C	
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**BIODIVERSITY**

**Biodiversity Offset Strategy**

24.	<p>The Proponent shall implement the biodiversity offset strategy for the project described in the EA, summarised in Table 12, and shown conceptually on the figure in Appendix 4 to the satisfaction of the Secretary.</p> <p><i>Table 12: Summary of the Biodiversity Offset Strategy</i></p> <table border="1"> <thead> <tr> <th>Offset Areas</th> <th>Minimum Size (hectares)</th> </tr> </thead> <tbody> <tr> <td>Eurunderee</td> <td>363.93</td> </tr> <tr> <td>Hillview</td> <td>57.32</td> </tr> <tr> <td>Marengo</td> <td>284.12</td> </tr> <tr> <td>Railway View</td> <td>243.69</td> </tr> <tr> <td>Mine Site</td> <td>215.86</td> </tr> <tr> <td>Greenslopes/Banool</td> <td>123</td> </tr> <tr> <td><b>TOTAL</b></td> <td><b>1,287.92</b></td> </tr> </tbody> </table> <p>Notes:</p> <ul style="list-style-type: none"> <li>To identify the areas referred to in Table 12, see the applicable figure in Appendix 4;</li> <li>The strategy includes the enhancement of existing fauna habitat within these areas, and where necessary the targeted establishment of naturally scarce fauna habitat; and</li> <li>Greenslopes/Banool must have at least 74 hectares of Box Gum Woodland EEC.</li> </ul>	Offset Areas	Minimum Size (hectares)	Eurunderee	363.93	Hillview	57.32	Marengo	284.12	Railway View	243.69	Mine Site	215.86	Greenslopes/Banool	123	<b>TOTAL</b>	<b>1,287.92</b>	<p>Biodiversity and Offset Management Plan 2013</p> <p>Biodiversity and Offset Management Plan 2016 (Submitted to but unapproved by DPE, OEH, DoEE)</p> <p>EPBC Compliance Reports 2017 to 2019</p>	<p>Whitehaven Coal sent a letter to DP&amp;I on 22/6/2012 seeking approval for BOMP. The BOMP was approved by the DP&amp;I on 30/8/2013.</p> <p>Section 8.8 of the BOMP outlines the management strategy of these areas.</p> <p>Section 6.4 of the Werris Creek Coal Mine Annual Reviews discusses the management of the offset areas. During the reporting period, WHC and DP&amp;E signed the NSW Conveyancing Act 1919 Section 88E Instruments to secure the WCCM BOAs. These instruments were then registered with NSW Land Registry Services on 20th July 2018 and 2nd August 2018, which completed securement of WCC BOAs and finalises compliance with PA 10_0059 Schedule 3 Condition 27 and EPBC Act Approval 2010/5571 Condition 1.</p>	C	
Offset Areas	Minimum Size (hectares)																				
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Greenslopes/Banool	123																				
<b>TOTAL</b>	<b>1,287.92</b>																				
25.	By the end of June 2012, unless the Secretary agrees otherwise, the Proponent shall update the biodiversity offset strategy for the project, in consultation with OEH, and to the satisfaction of the Secretary. The updated strategy must include the specific details of the Additional Offset Area (see Table 12).	<p>Biodiversity and Offset Management Plan 2013</p> <p>Biodiversity and Offset Management Plan 2016 (Submitted to but unapproved by DPE, OEH, DoEE)</p>	The biodiversity offset strategy is discussed in the Biodiversity Offset Management Plan (BOMP). The version history on this document indicates that a Draft of the BOMP was submitted for review by the DoP & OEH by 28 June 2012. The updated strategy must include the specific details of the Additional Offset Area.	C																	

No	Assessment Requirement	Reference/ Evidence	Comments	Compliance Status	Recommendations
		EPBC Compliance Reports 2017 to 2019	This requirement fell outside of this Audit scope timeframe. The previous IEA indicated compliance with this CoC.		
26.	<p>The Proponent shall ensure that the biodiversity offset strategy and/or rehabilitation strategy is focused on the re-establishment and/or enhancement of:</p> <p>(a) the following endangered ecological communities:</p> <ul style="list-style-type: none"> <li>• White Box-Yellow Box-Blakely's Red Gum Woodland EEC; and</li> <li>• White Box-Yellow Box-Blakely's Red Gum Grassy Woodland and Derived Native Grassland CEEC; and</li> </ul> <p>(b) habitat for threatened fauna species, including the:</p> <ul style="list-style-type: none"> <li>• Regent Honeyeater, Swift Parrot, Brown Treecreeper, Hooded Robin, Little Lorikeet, and Barking Owl; and</li> <li>• Eastern Bent-wing Bat, Eastern False pipistrelle, Yellow-bellied Bent-wing Bat and Greater Broad-nosed Bat.</li> </ul>	Biodiversity and Offset Management Plan 2013	Biodiversity Offset Management Plan (BOMP) scope aligns with the requirements of this Condition of Consent.	C	
<b>Long Term Security of Offsets</b>					
27.	The Proponent shall make suitable arrangements to provide appropriate long-term security for the offset areas (excluding the rehabilitation areas) by December 2012, or other date agreed by the Secretary, to the satisfaction of the Secretary.	<p>Email from Whitehaven Coal confirming registrations complete for securing of Werris Creek biodiversity offset lands in accordance with EPBC 2010/5571</p> <p>Letter from Land Register Services to Whitehaven Coal dated 02/08/18</p>	Whitehaven Coal and the then DPE concluded negotiation and agreed on the wording of positive and negative covenants to be registered on individual land titles that make up the WCCM BOA. The s88E covenant instruments were signed by WHC and DPE and submitted to NSW Land and Property information for registration during 2018.	C	
<b>Biodiversity Offset Management Plan</b>					
28.	<p>The Proponent shall prepare and implement a Biodiversity Management Plan for the project to the satisfaction of the Secretary. This plan must:</p> <p>(a) be prepared in consultation with OEH, and submitted to the Secretary for approval by the end of December 2012;</p> <p>(b) describe how the implementation of the biodiversity offset strategy would be integrated with the overall rehabilitation of the site;</p> <p>(c) describe the short, medium, and long term measures that would be implemented to:</p> <ul style="list-style-type: none"> <li>• manage the remnant vegetation and habitat on the site and in the offset area/s (if and when applicable); and</li> <li>• implement the biodiversity offset strategy (if and when applicable), including detailed performance and completion criteria;</li> </ul> <p>(d) include detailed performance and completion criteria for evaluating the performance of the biodiversity offset strategy, and triggering remedial action (if necessary);</p> <p>(e) include a detailed description of the measures that would be implemented over the next 3 years, including the procedures to be implemented for:</p> <ul style="list-style-type: none"> <li>• enhancing the quality of existing vegetation and fauna habitat;</li> <li>• restoring native vegetation and fauna habitat on the biodiversity areas and rehabilitation area through focusing on assisted natural regeneration, targeted vegetation establishment and the introduction of naturally scarce fauna habitat features (where necessary);</li> <li>• landscaping the land on site that faces public roads to minimise the visual and lighting impacts of the project;</li> <li>• maximising the salvage of resources within the approved disturbance area - including vegetative, soil and cultural heritage resources – for beneficial reuse in the enhancement of the biodiversity areas or rehabilitation area;</li> <li>• collecting and propagating seed;</li> <li>• minimising the impacts on fauna on site, including undertaking pre-clearance surveys;</li> <li>• managing any potential conflicts between the proposed restoration works in the biodiversity areas and any Aboriginal heritage values (both cultural and archaeological);</li> <li>• managing salinity;</li> <li>• controlling weeds and feral pests;</li> <li>• controlling erosion;</li> <li>• managing grazing and agriculture on site;</li> <li>• controlling access; and</li> </ul>	<p>Biodiversity and Offset Management Plan 2013</p> <p>Biodiversity and Offset Management Plan 2016 (Submitted to but unapproved by DPE, OEH, DoEE)</p> <p>WCC-EPBC Compliance Report 2017</p> <p>WCC-EPBC Compliance Report 2018</p> <p>WCC-EPBC Compliance Report 2019</p> <p>Annual Review 2017</p> <p>Annual Review 2018</p> <p>Annual Review 2019</p>	<p>The current approved Biodiversity Offset Management Plan (BOMP) is dated August 2013. The most recent Biodiversity Offset Management Plan (submitted to WHC Submission to DPE, OEH and DoEE in September 2016) has not been approved by the regulators to date. Compliance with each part of this condition of consent is described below:</p> <p>a) Original submission December 2012.</p> <p>b) Described in Section 8.3 of the BOMP (2013) and Section 4.6 of the BOMP (2016). The MOP incorporates the requirements of a Rehabilitation Management Plan (RMP). The MOP outlines the objectives, domains, completion criteria, methodology, targets, contingency management and conceptual decommissioning relating to rehabilitation management. The rehabilitation objectives in the MOP are consistent with the BOMP and focus on the restoration of native woodland vegetation, specifically the endangered ecological community Grassy White Box Woodland.</p> <p>c) Described in Section 8.0, 8.5 and 7.1 of the BOMP (2013). Described in Section 6 of the BOMP (2016).</p> <p>d) Inspections undertaken quarterly. Section 7.1 of the BOMP (2013) and Sections 6.14, 6.15 and 6.16 of the BOMP (2016).</p> <p>e) Described in Section 8.0 of the BOMP (2013), Section 4 of the BOMP (2016) and Section 6.4 of the Annual Review.</p> <p>f) Described in Section 9.0 of the BOMP (2013) and Sections 6.14, 6.15 and 6.16 of the BOMP (2016). Section 6.4 of the Annual Review also discusses monitoring and EPBC Compliance Reports are published annually.</p>	C	



No	Assessment Requirement	Reference/ Evidence	Comments	Compliance Status	Recommendations
	<ul style="list-style-type: none"> <li>• bushfire management;</li> <li>(f) include a seasonally-based program to monitor and report on the effectiveness of these measures, and progress against the detailed performance and completion criteria;</li> <li>(g) identify the potential risks to the successful implementation of the biodiversity offset strategy, and include a description of the contingency measures that would be implemented to mitigate against these risks; and</li> <li>(h) include details of who would be responsible for monitoring, reviewing, and implementing the plan.</li> </ul>		<p>g) Discussed in Section 6.0 of the BOMP (2013) and Section 6.16 on the BOMP (2016).</p> <p>h) Section 2 of the Plan. include details of who would be responsible for monitoring, reviewing, and implementing the plan.</p> <p>Annual Reviews detail the progressive implementation of the BOMP.</p>		
<b>Conservation Bond</b>					
29.	<p>Within 6 months of the approval of the biodiversity offset strategy, the Proponent shall lodge a conservation bond with the Department to ensure that the biodiversity offset strategy is implemented in accordance with the performance and completion criteria of the Biodiversity Management Plan.</p> <p>The sum of the bond shall be determined by:</p> <ul style="list-style-type: none"> <li>(a) calculating the full cost of implementing the offset strategy (other than land acquisition costs); and</li> <li>(b) employing a suitably qualified quantity surveyor to verify the calculated costs,</li> </ul> <p>to the satisfaction of the Secretary.</p> <p>If the offset strategy is completed generally in accordance with the completion criteria in the Biodiversity Management Plan to the satisfaction of the Secretary, the Secretary will release the bond.</p> <p>If the offset strategy is not completed generally in accordance with the completion criteria in the Biodiversity Management Plan, the Secretary will call in all or part of the conservation bond, and arrange for the satisfactory completion of the relevant works.</p> <p>With the agreement of the Secretary, this bond may be combined with rehabilitation security deposit administered by DRE.</p>	Not Verified by ERM in this Audit Period	The bond was lodged outside of the current Audit period. A letter from DPI was sighted in the previous 2017 IEA which confirmed that the Bond had been lodged in January 2014 and agreed on 4/2/14.	C	
<b>HERITAGE</b>					
<b>Historic Heritage</b>					
30.	<p>By the end of April 2012, the Proponent shall:</p> <ul style="list-style-type: none"> <li>(a) undertake primary historical investigations and provide a report prepared by an experienced heritage consultant approved by the Secretary on the archaeological potential of the former Werris Creek Colliery site, remaining buildings and surrounds;</li> <li>(b) provide recommendations for the management, salvage or recording of any archaeological features on the site and a timetable for the implementation of these recommendations;</li> <li>(c) include in this report detailed archival recording, including photographic recording and location plans of any structures relating to the former Werris Creek Colliery; and</li> <li>(d) provide a copy of this report to the Department, Heritage Council of NSW and Council,</li> </ul> <p>to the satisfaction of the Secretary.</p>		<p>This condition of consent was triggered outside of the current audit period.</p> <p>A Report was prepared by Advitech Environmental Archaeological Investigation and Heritage. The report covered the key requirements of this condition including consultation.</p> <p>Recommendations for the management, salvage or recording of any archaeological features on the site and a timetable for the implementation of these recommendations are addressed in Heritage Management Plan.</p>	NT	
<b>Human Remains</b>					
31.	This approval does not allow the Proponent to disturb any human remains found on the site.	Not Triggered	This requirement is considered in the heritage management plan, but has not been triggered during this Audit period.	NT	
<b>Heritage Management Plan</b>					
32.	<p>The Proponent shall prepare and implement a Heritage Management Plan for the project to the satisfaction of the Secretary. This plan must:</p> <ul style="list-style-type: none"> <li>(a) be prepared by suitably qualified and experienced persons whose appointment has been endorsed by the Secretary;</li> <li>(b) be prepared in consultation with OEH and the Aboriginal stakeholders (in relation to the management of Aboriginal heritage values);</li> <li>(c) be submitted to the Secretary for approval by the end of June 2012, unless the Secretary agrees otherwise;</li> </ul>	Heritage Management Plan 2014	<p>The original Heritage Management Plan was sent to the DPE in October 2012 for approval. The Heritage Management Plan disclosed on the WHC website is dated July 2014.</p> <ul style="list-style-type: none"> <li>a) Appendix A - endorsement of Advitech on December 2011 to prepare the Heritage MP.</li> <li>b) Appendix A - Consultation records from 2012.</li> </ul>	C	

No	Assessment Requirement	Reference/ Evidence	Comments	Compliance Status	Recommendations
	<p>(d) include the following for the management of Aboriginal Heritage:</p> <ul style="list-style-type: none"> <li>• a description of the measures that would be implemented for: <ul style="list-style-type: none"> <li>○ protecting, relocating, monitoring and/or managing the axe-grinding grooves known as the “Narrawolga site”;</li> <li>○ managing the discovery of any human remains or previously unidentified Aboriginal objects on site;</li> <li>○ maintaining and managing reasonable access for Aboriginal stakeholders to heritage items on site and within any Aboriginal heritage conservation areas;</li> <li>○ ongoing consultation with the Aboriginal stakeholders in the conservation and management of Aboriginal cultural heritage both on site and within any Aboriginal heritage conservation areas; and</li> <li>○ ensuring any workers on site receive suitable heritage inductions and that suitable records are kept of these inductions;</li> </ul> </li> <li>• a strategy for the storage of any heritage items salvaged on site, both during the project and in the long-term;</li> </ul> <p>(e) include the following for the management of historic heritage:</p> <ul style="list-style-type: none"> <li>• a detailed plan for the implementation of any measures resulting from the further investigations into the former Werris Creek Colliery site and buildings;</li> <li>• a description of the measures that would be implemented for: <ul style="list-style-type: none"> <li>○ managing the discovery of human remains or previously unidentified heritage items on site; and</li> <li>○ ensuring any workers on site receive suitable heritage inductions and that suitable records are kept of these inductions.</li> </ul> </li> </ul> <p><i>Note: It is accepted that the detailed plan for the implementation of any measures resulting from further investigations into the former Werris Creek Colliery site will not be submitted with the initial Heritage Management Plan. They should be progressively added to the plan once they are completed.</i></p>		<p>c) Original Heritage Management Plan sent to the DPE in October 2012.</p> <p>d) Management measures described in Section 8 and 10.</p> <p>e) Section 8 and Section 10.</p> <p>The only significant amendment to the heritage management plan between the version issued in 2012 and the current plan relate to the relocation of the Narrawolga Axe Grinding Groove Rocks to the Willow Tree Visitor Information Centre on 15th April 2015.</p> <p>The project involved detailed consultation with the Liverpool Plains Shire Council and Nungaroo Local Aboriginal Lands Council, with assistance provided by a geotechnical engineer and archaeologists to minimise the risk of damage to the Groove Rocks and meet regulatory and documentation requirements</p>		

## TRANSPORT

### Roadworks

33.	<p>Prior to the use of the Northern Site Access Road, the Proponent shall:</p> <ul style="list-style-type: none"> <li>(a) construct the intersection of the Northern Site Access Road (see the figure in Appendix 2) to the satisfaction of Council;</li> <li>(b) tar seal Escott Road from Werris Creek Road to the coal haul road to the satisfaction of Council;</li> <li>(c) upgrade the intersection of Escott Road and Werris Creek Road to a CHR type intersection to the satisfaction of RMS and Council;</li> <li>(d) install appropriate rail crossings at the rail loop on Escott Road; and</li> <li>(e) install appropriate advance warning signs and lighting on Escott Road and at the intersection of the Northern Site Access Road to the satisfaction of Council.</li> </ul>	Not Triggered.	Not Triggered.	NT	
34.	<p>Within 3 months of the commencement of coal transport from the Northern Site Access Road, the Proponent shall close the existing mine entrance on Werris Creek Road (see Figure 1 of Appendix 2) to coal transport (unless required in an emergency).</p>	Not Triggered.	Not Triggered	NT	

### Road Maintenance

35.	<p>For the life of the project, the Proponent shall continue to provide funding towards the maintenance of Taylors Lane, in accordance with the existing road maintenance contributions agreement with Council.</p>	Not Triggered.	Not Triggered.		
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### Monitoring of Coal Transport

36.	<p>The Proponent shall:</p> <ul style="list-style-type: none"> <li>(a) keep accurate records of the amount of coal transported from the site (on a monthly basis); and</li> <li>(b) make these records available on its website at the end of each calendar year.</li> </ul>	Werris Creek Coal Mine Rail and Truck Movements 2011 to 2019	ERM sighted the basis of the coal movement records disclosed on the Werris Creek WHC website.	C	
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## VISUAL

### Visual Amenity

37.	<p>The Proponent shall:</p> <ul style="list-style-type: none"> <li>(a) implement all reasonable and feasible measures to minimise the visual and off-site lighting impacts of the project, including:</li> </ul>	Lighting Management Procedure Complaints Register	(a) and (b) The MOP indicates that the rehabilitation of the mine and revegetation is progressing in accordance with this CoC. A > 15 metre high visual/amenity bund	C	
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No	Assessment Requirement	Reference/ Evidence	Comments	Compliance Status	Recommendations
	<ul style="list-style-type: none"> <li>progressively rehabilitating overburden emplacement areas (particularly the outer batters), including partial rehabilitation of temporarily inactive areas and proposed topsoil storage stockpiles;</li> <li>constructing a 15 metre high visual/amenity bund along the northeastern perimeter of the northern extent of the open-cut pit, and</li> <li>planting trees at the foot of the overburden emplacement area along the eastern boundary of the site, in front of the visual/amenity bund, and to the north and east of the product coal stockpile and rail load-out facility;</li> </ul> <p>(b) establish and maintain an effective vegetative screen along the boundary of the site adjoining public roads;</p> <p>(c) ensure no outdoor lights shine above the horizontal; and</p> <p>(d) ensure that all external lighting associated with the development complies with <i>Australian Standard AS4282 (INT) 1995 – Control of Obtrusive Effects of Outdoor Lighting</i>, to the satisfaction of the Secretary.</p>	<p>Audit of external lighting associated with the development against the <i>Australian Standard AS4282 (INT) 1995 – Control of Obtrusive Effects of Outdoor Lighting</i></p>	<p>was observed along the northeastern perimeter of the northern extent of the open-cut pit.</p> <p>(c) A magnetic lighting management procedure was observed attached to lights across the facility.</p> <p>One complaint has been received regarding light emissions at nearby premise. Investigation of the complaint indicated that a light had been moved not in accordance with the Light Management Procedure. – due to movement of light. NCO noise monitors monitor lighting on visible light from the mine daily and record results.</p> <p>(d) An audit against <i>Australian Standard AS4282 (INT) 1995 – Control of Obtrusive Effects of Outdoor Lighting</i> was sighted during the site visit. No non-compliances were observed in the audit results.</p>		
<b>Additional Visual Impact Mitigation</b>					
38.	<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 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 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"> <li>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;</li> <li>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).</li> </ul>	Not triggered.	Not triggered.	NT	
<b>WASTE</b>					
39.	<p>The Proponent shall:</p> <p>(a) implement all reasonable and feasible measures to minimise the waste generated by the project;</p> <p>(b) ensure that the waste generated by the project is appropriately stored, handled and disposed of; and</p> <p>(c) monitor and report on effectiveness of the waste minimisation and management measures in the annual review.</p>	<p>Annual Reviews 2017 to 2019 MOP 2015</p>	<p>The mine implemented recycling programmes in 2016 the efficacy of which are reported upon during each Annual Review. The overall trend of waste production is downward since the recycling programmes were implemented.</p> <p>Section 2.4.11 of the MOP discusses waste management confirming that all wastes are removed by suitably licenced waste contractors. Hydrocarbon impacted soils are 'land farmed' on an on-site until they can be disposed of as general solid waste.</p> <p>No evidence of inappropriately stored wastes was observed during the site visit.</p>	C	
<b>BUSHFIRE MANAGEMENT</b>					
40.	<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 and emergency services as much as possible if there is a fire in the surrounding area.</p>	<p>Annual Reviews 2017 to 2019 BOMP 2013 and 2016</p>	<p>(a) Bushfire management across the site includes:</p> <ul style="list-style-type: none"> <li>Four water carts;</li> <li>Hydrants around the site;</li> <li>Biodiversity offset lands have fire breaks.</li> <li>Fire management is incorporated into the offset strategy.</li> <li>Emergency Response Team is trained in fire response.</li> </ul>	C	

No	Assessment Requirement	Reference/ Evidence	Comments	Compliance Status	Recommendations
			Fuel load management and maintenance of fire breaks are discussed as performance metrics in Environmental Performance Sections of the Annual reviews  (b) Not triggered		

**REHABILITATION**

**Rehabilitation Objectives**

41.	<p>The Proponent shall rehabilitate the site to the satisfaction of DRE. This rehabilitation must be generally consistent with the proposed rehabilitation strategy described in the EA (and shown conceptually in the figure in Appendix 5), and comply with the objectives in Table 13.</p> <p><i>Table 13: Rehabilitation objectives</i></p> <table border="1"> <thead> <tr> <th>Feature</th> <th>Objective</th> </tr> </thead> <tbody> <tr> <td>Mine Site (as a whole)</td> <td> <ul style="list-style-type: none"> <li>• Safe, stable and non-polluting;</li> <li>• Constructed landforms sympathetic to natural landforms (including landform micro-relief) as far as practicable;</li> <li>• Final land uses compatible with surrounding land uses; and</li> <li>• Minimise visual impact of final landforms as far as reasonable and feasible.</li> </ul> </td> </tr> <tr> <td>Woodland areas and other vegetated land</td> <td> <ul style="list-style-type: none"> <li>• Establishment of at least 280 hectares of White Box-Yellow Box-Blakely's Red Gum Woodland EEC; and</li> <li>• Restore ecosystem function, including maintaining or establishing self-sustaining ecosystems that is comprised of:                             <ul style="list-style-type: none"> <li>- local native plant species; and</li> <li>- at least 180 hectares of shrubby woodland.</li> </ul> </li> </ul> </td> </tr> <tr> <td>Amenity Bunds and Overburden Emplacements</td> <td> <ul style="list-style-type: none"> <li>• Early revegetation and planting with local native woodland species; and                             <ul style="list-style-type: none"> <li>• Free draining.</li> </ul> </li> </ul> </td> </tr> <tr> <td>Final Void</td> <td> <ul style="list-style-type: none"> <li>• Minimise the size and depth of the final void as far as is reasonable and feasible, with its floor a minimum of 5 metres above the predicted long-term groundwater level.</li> </ul> </td> </tr> <tr> <td>Project infrastructure</td> <td> <ul style="list-style-type: none"> <li>• To be decommissioned and removed, unless the Executive Director, DRE agrees otherwise.</li> </ul> </td> </tr> <tr> <td>Community</td> <td> <ul style="list-style-type: none"> <li>• Minimise the adverse socio-economic effects associated with mine closure.</li> </ul> </td> </tr> </tbody> </table>	Feature	Objective	Mine Site (as a whole)	<ul style="list-style-type: none"> <li>• Safe, stable and non-polluting;</li> <li>• Constructed landforms sympathetic to natural landforms (including landform micro-relief) as far as practicable;</li> <li>• Final land uses compatible with surrounding land uses; and</li> <li>• Minimise visual impact of final landforms as far as reasonable and feasible.</li> </ul>	Woodland areas and other vegetated land	<ul style="list-style-type: none"> <li>• Establishment of at least 280 hectares of White Box-Yellow Box-Blakely's Red Gum Woodland EEC; and</li> <li>• Restore ecosystem function, including maintaining or establishing self-sustaining ecosystems that is comprised of:                             <ul style="list-style-type: none"> <li>- local native plant species; and</li> <li>- at least 180 hectares of shrubby woodland.</li> </ul> </li> </ul>	Amenity Bunds and Overburden Emplacements	<ul style="list-style-type: none"> <li>• Early revegetation and planting with local native woodland species; and                             <ul style="list-style-type: none"> <li>• Free draining.</li> </ul> </li> </ul>	Final Void	<ul style="list-style-type: none"> <li>• Minimise the size and depth of the final void as far as is reasonable and feasible, with its floor a minimum of 5 metres above the predicted long-term groundwater level.</li> </ul>	Project infrastructure	<ul style="list-style-type: none"> <li>• To be decommissioned and removed, unless the Executive Director, DRE agrees otherwise.</li> </ul>	Community	<ul style="list-style-type: none"> <li>• Minimise the adverse socio-economic effects associated with mine closure.</li> </ul>	Annual Reviews 2017 to 2019 MOP 2015	The rehabilitation at the mine is an ongoing process, which based on ERM's observations and a review of relevant Annual Reviews from the audit period appears to be being undertaken generally in accordance with EA rehabilitation strategy; the EA Mod and the MOP.	C	
Feature	Objective																		
Mine Site (as a whole)	<ul style="list-style-type: none"> <li>• Safe, stable and non-polluting;</li> <li>• Constructed landforms sympathetic to natural landforms (including landform micro-relief) as far as practicable;</li> <li>• Final land uses compatible with surrounding land uses; and</li> <li>• Minimise visual impact of final landforms as far as reasonable and feasible.</li> </ul>																		
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**Progressive Rehabilitation**

No	Assessment Requirement	Reference/ Evidence	Comments	Compliance Status	Recommendations
42.	The Proponent shall rehabilitate the site progressively, that is, as soon as reasonably practicable following disturbance.	MOP 2015 Site observations and management disclosures	Progressive rehabilitation is undertaken as soon as landform has met design. The site is within 3 Ha of MOP targets. Observations made during the site walkover indicated that several areas were under active rehabilitation. No materially failing sections of rehabilitation were observed during the site visit, with the exception of some drought affected trees.	C	
<b>Rehabilitation Management Plan</b>					
43.	The Proponent shall prepare and implement a Rehabilitation Management Plan for the project to the satisfaction of DRE. This plan must: (a) be prepared in consultation with the Department, DPI Water, OEH, Council and the CCC; (b) be submitted to DRE by the end of April 2012 (c) be prepared in accordance with any relevant DRE guideline; (d) describe how the rehabilitation of the site would be integrated with the implementation of the biodiversity offset strategy; (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 conditions of this approval, and address all aspect of rehabilitation including mine closure, final landform, and final land use; (g) include a program to monitor and report on the effectiveness of the measures, and progress against the detailed performance and completion criteria; and (h) build to the maximum extent practicable on the other management plans required under this approval.	MOP 2015 Annual Reviews 2017 to 2019 WCC-EPBC Compliance Report 2017 WCC-EPBC Compliance Report 2018 WCC-EPBC Compliance Report 2019	The MOP has not been updated during the Audit period. a) Consultation for most recent MOP/Rehabilitation Management Plan outlined within Section 1.5.2. b) The last MOP was submitted in December 2015 and is valid for seven years. c) The MOP was prepared in accordance with the MOP Guideline. d) Table 4.2 covers this in sufficient detail. e) Criteria outlined in Section 6. f) Section 7 of the MOP outlines Rehabilitation Implementation. Covered within multiple sections of the MOP. g) Criteria outlined in Section 6 and 8. Reporting is within the 'Rehabilitation Monitoring Reports' and there is a basic summary within the Annual Reviews. The monitoring program for rehabilitation and offset areas reviews some of the key criteria which are outlined in the MOP. h) Section 1.3 references management plans at WCC.	C	

## SCHEDULE 4 – ADDITIONAL PROCEDURES

### NOTIFICATION OF LANDOWNERS

1.	By the end of December 2011, the Proponent shall: (a) notify in writing the owners of: • any residence on the land listed in Table 3 of schedule 3 that they are entitled to ask the Proponent to install additional noise mitigation measures at their residence at any stage during the project; and • any privately-owned land within 2 kilometres of the approved open cut mining pit that they are entitled to ask the proponent for a property inspection to establish the baseline condition of any buildings or structures on their land, or to have a previous property inspection report updated; and (b) 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 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 applicable.	This condition falls outside of the Audit period. Previous IEAs have reported this condition as compliant. ERM has not independently verified this condition.	NT	
2.	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 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) to the affected landowners.	Email to affected land holder relating to blast exceedance dated 9 <sup>th</sup> May 2018	a) One blast exceedance impacted a landholder during the audit period. ERM viewed evidence that the affected landholder had been communicated with within 5 days of the exceedance occurring. The minor delay related to the time taken for the Site to confirm that an exceedance had occurred. b) Not triggered.	C	

### INDEPENDENT REVIEW

No	Assessment Requirement	Reference/ Evidence	Comments	Compliance Status	Recommendations
3.	<p>If an owner of privately-owned land considers the project to be exceeding the relevant criteria in schedule 3, then he/she may ask the Secretary in writing for an independent review of the impacts of the project on his/her land.</p> <p>If the Secretary is satisfied that an independent review is warranted, then within 2 months of the Secretary's decision the Proponent shall:</p> <p>(a) commission a suitably qualified, experienced and independent person, whose appointment has been approved by the Secretary, to:</p> <ul style="list-style-type: none"> <li>• consult with the landowner to determine his/her concerns; • conduct monitoring to determine whether the project is complying with the relevant criteria in schedule 3; and</li> <li>• if the project is not complying with these criteria, then identify the measures that could be implemented to ensure compliance with the relevant criteria; and</li> </ul> <p>(b) give the Secretary and landowner a copy of the independent review.</p>	Not applicable.	Not Triggered	NT	
4.	<p>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.</p> <p>If the independent review determines that the project is not complying with the relevant criteria in schedule 3, then the Proponent shall:</p> <p>(a) implement all reasonable and feasible mitigation measures, in consultation with the landowner and appointed independent person, and conduct further monitoring until the project complies with the relevant criteria; and</p> <p>(b) secure a written agreement with the landowner to allow exceedances of the relevant criteria;</p> <p>to the satisfaction of the Secretary.</p> <p>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 5-6 below.</p>	Not applicable.	Not Triggered	NT	
<b>LAND ACQUISITION</b>					
5.	<p>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:</p> <p>(a) the current market value of the landowner's interest in the land at the date of this written request, as if the land was unaffected by the project, having regard to the:</p> <ul style="list-style-type: none"> <li>• existing and permissible use of the land, in accordance with the applicable planning instruments at the date of the written request; and</li> <li>• presence of improvements on the land and/or any approved building or structure which has been physically commenced at the date of the landowner's written request, and is due to be completed subsequent to that date, but excluding any improvements that have resulted from the implementation of 'additional noise mitigation measures' in condition 4 of schedule 3;</li> </ul> <p>(b) the reasonable costs associated with:</p> <ul style="list-style-type: none"> <li>• relocating within the Liverpool Plains Shire local government area, or to any other local government area agreed to by the Secretary;</li> <li>• obtaining legal advice and expert advice for determining the acquisition price of the land, and the terms upon which it is to be acquired; and</li> </ul> <p>(c) reasonable compensation for any disturbance caused by the land acquisition process.</p> <p>However, if at the end of this period, the 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.</p> <p>Upon receiving such a request, the Secretary will request the President of the NSW Division of the Australian Property Institute to appoint a qualified independent valuer to:</p> <ul style="list-style-type: none"> <li>• consider submissions from both parties;</li> <li>• determine a fair and reasonable acquisition price for the land and/or the terms upon which the land is to be acquired, having regard to the matters referred to in paragraphs (a)-(c) above;</li> <li>• prepare a detailed report setting out the reasons for any determination; and</li> <li>• provide a copy of the report to both parties.</li> </ul> <p>Within 14 days of receiving the independent valuer's report, the 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.</p> <p>However, if either party disputes the independent valuer's determination, then within 14 days of receiving the independent valuer's report, they may refer the matter to the Secretary for review. Any request for a review must be accompanied by a detailed report setting out the reasons why the party disputes the independent valuer's determination. Following</p>	Not applicable.	Not Triggered	NT	

No	Assessment Requirement	Reference/ Evidence	Comments	Compliance Status	Recommendations
	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 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.				
6.	The Proponent shall pay all reasonable costs associated with the land acquisition process described in condition 4 above, including the costs associated with obtaining Council approval for any plan of subdivision (where permissible), and registration of the plan at the Office of the Registrar-General.	Not applicable.	Not Triggered.	NT	

## SCHEDULE 5 – ENVIRONMENTAL MANAGEMENT, REPORTING AND AUDITING

### ENVIRONMENTAL MANAGEMENT

#### Environmental Management Strategy

1.	The Proponent shall prepare and implement an Environmental Management Strategy for the project to the satisfaction of the Secretary. This strategy must: (a) be submitted to the Secretary for approval by the end of April 2012; (b) provide the strategic framework for the 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; (e) describe the procedures that would be implemented to: • keep the local community and relevant agencies informed about the operation and environmental performance of the project; • receive, handle, respond to, and record complaints; • resolve any disputes that may arise during the course of the project; • respond to any non-compliance; • respond to emergencies; and (f) include: • copies of any strategies, plans and programs approved under the conditions of this approval; and • a clear plan depicting all the monitoring required to be carried out under the conditions of this approval.	Not applicable.	This condition was triggered outside of the audit period. The previous IEA stated that: a) Environmental Management Strategy document has been submitted but has not been approved. First sent 30 April 2012. b) Section 8; c) Section 3; d) Section 2 e) Section 12; f) Section 8 and 9. ERM has not independently verified this information.	NT	
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#### Management Plan Requirements

2.	The Proponent shall ensure that the management plans required under this approval are prepared in accordance with any relevant guidelines, and include: (a) detailed baseline data; (b) a description of: • the relevant statutory requirements (including any relevant approval, licence or lease conditions); • any relevant limits or performance measures/criteria; • the specific performance indicators that are proposed to be used to judge the performance of, or guide the implementation of, the project or any management measures; (c) a description of the measures that would be implemented to comply with the relevant statutory requirements, limits, or performance measures/criteria; (d) a program to monitor and report on the: • impacts and environmental performance of the project; • effectiveness of any management measures (see (c) above); (e) a contingency plan to manage any unpredicted impacts and their consequences; (f) a protocol for managing and reporting any: • incidents; • complaints; • non-compliances with statutory requirements; and • exceedances of the impact assessment criteria and/or performance criteria; and (g) a protocol for periodic review of the plan.	Selected management plans, strategies etc. reviewed as part of the audit scope	Management plans were originally developed using data collected during the EIA and to comply with conditions of approval. ERM's review of management plans indicate that they have generally been developed in accordance with these criteria.	C	
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No	Assessment Requirement	Reference/ Evidence	Comments	Compliance Status	Recommendations
<b>Annual Review</b>					
3.	By the end of March each year, the Proponent shall review the environmental performance of the project to the satisfaction of the Secretary. This review must: (a) describe the development (including any rehabilitation) that was carried out in the past year, and the development that is proposed to be carried out over the next 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: • 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 past 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.	Emails submitted to the Department with Annual Reviews attached dated 29/03/18, 29/03/19 and 29/04/20.	2017 – Submitted to the Department 29/03/18; 2018 – Submitted to the Department 29/03/19; 2019 - Submitted to the Department 29/04/20. It is noted that Werris Creek Coal were granted a 30 day extension for submission of the 2019 Annual Review. ERM sighted email correspondence confirming this. Criteria a to f are covered in the scope of the Annual Reviews.	C	
<b>Revision of Strategies, Plans and Programs</b>					
4.	Within 3 months of: (a) the submission of an annual review under condition 3 above; (b) the submission of an incident report under condition 6 below; (c) the submission of an audit under condition 8 below; or (d) any modification to the conditions of this approval (unless the conditions require otherwise), the Proponent shall review, and if necessary revise, the strategies, plans, and programs required under this approval to the satisfaction of the Secretary. Where this review leads to revisions of any plan then within four weeks of the review the revised document must be submitted to the Secretary and any other relevant agencies for approval. <i>Note: This is to ensure the strategies, plans and programs are updated on a regular basis, and incorporate any recommended measures to improve the environmental performance of the project.</i>	Review of a selection of plans, strategies etc. Annual Reviews 2017 to 2019	All relevant strategies, plans etc. contain a trigger to review and update if required following these criteria. Each Annual Review contains an action to “Completion of review and, if necessary, revision of Environmental Management Plans”. Evidence of updated plans following non-compliances, changes to operations etc. were observed for the water management plan (2017); and PIMRP (2019) and Blast Management Plan (2019 and 2020).	C	
<b>Community Consultative Committee</b>					
5.	The Proponent shall operate a Community Consultative Committee (CCC) for the Werris Creek Coal Mine for the life of the project, in general accordance with the <i>Guidelines for Establishing and Operating Community Consultative Committees for Mining Projects</i> (Department of Planning, 2007, or its latest version), and to the satisfaction of the Secretary. <i>Notes:</i> • <i>The CCC is an advisory committee. The Department and other relevant agencies are responsible for ensuring that the Proponent complies with this approval; and</i> • <i>In accordance with the guideline, the Committee should be comprised of an independent chair and appropriate representation from the Proponent, Council, recognised environmental groups and the local community.</i>	Quarterly CCC minutes 2017 to 2020	CCC minutes are available for review on the Whitehaven Coal website. The CCC has been set up to operate generally in accordance with the <i>Guidelines for Establishing and Operating Community Consultative Committees for Mining Projects</i> . The CCC has met approximately every four months during the audit period. The original approval of the CCC occurred outside of the audit period.	C	
<b>REPORTING</b>					
<b>Incident Reporting</b>					
6.	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.	Various emails	ERM sighted correspondence to the relevant regulators relating to the dam overflow event with pH non-compliances (9/02/20) and non-compliant overpressure event (04/05/19) which occurred during the audit period. In both cases the department was notified as soon as the non-compliances were confirmed.	C	
<b>Regular Reporting</b>					
7.	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.	Annual Reviews 2017 - 2019 Coal movement records 2017 - 2019 Monthly EPL monitoring reports 2017 - 2019 EPBC Compliance reports 2017 - 2019 Independent Environmental Audits 2017 - 2019	The following monitoring reports are published on the Whitehaven Coal Website: • Annual Reviews; • Coal movement records; • Monthly EPL monitoring reports; • EPBC Compliance reports; • Independent Environmental Audits; and • Specialist consultant studies.	C	



No	Assessment Requirement	Reference/ Evidence	Comments	Compliance Status	Recommendations
		Specialist consultant studies 2017 - 2019			
<b>INDEPENDENT ENVIRONMENTAL AUDIT</b>					
8.	<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:</p> <ul style="list-style-type: none"> <li>• environmental performance of the project; and</li> <li>• whether it is complying with the requirements in this approval, any relevant EPL or Mining Lease (including any assessment, plan or program required under these approvals); and</li> <li>(d) recommend appropriate measures or actions to improve the environmental performance and rehabilitation of the project.</li> </ul> <p><i>Note: This audit team must be led by a suitably qualified auditor and include experts in any fields specified by the Secretary.</i></p>	Independent Environmental Audit, SLR, 2017	SLR completed an Independent Environmental Audit in 2017 with the site visit component occurring on 14 and 15 June 2017. The auditors were approved by the Department and the scope of the IEA aligned with the requirements of this condition.	C	
9.	<p>Within 6 weeks of the completion of 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.</p>	<p>Letter from DPE to Whitehaven Coal re: extension to IEA submission date 27/7/17</p> <p>Email from Whitehaven Coal to EPA and DPE 29/09/17</p>	<p>The site obtained a letter approving the request to extend the timing for submission of the IEA report and RAR to 31 August 2017, then another extension to submit the report until the 30<sup>th</sup> September 2017.</p> <p>The final versions of the IEA report and RAR were submitted on 29 September 2017.</p>	C	
<b>ACCESS TO INFORMATION</b>					
10.	<p>The Proponent shall:</p> <p>(a) make copies of the following publicly available on its website:</p> <ul style="list-style-type: none"> <li>• the EA;</li> <li>• current statutory approvals for the project;</li> <li>• approved strategies, plans and programs required under the conditions of this approval;</li> <li>• a comprehensive summary of the monitoring results of the project, which have been reported in accordance with the conditions of this approval or any approved plans or programs;</li> <li>• a complaints register, which is to be updated on a monthly basis;</li> <li>• minutes of any CCC meetings;</li> <li>• the last five annual reviews;</li> <li>• any independent environmental audit of the project, and the Proponent's response to the recommendations in any audit;</li> <li>• any other matter required by the Secretary; and</li> </ul> <p>(b) keep this information up-to-date, to the satisfaction of the Secretary.</p>	<p>EA</p> <p>Current statutory approvals for the project</p> <p>Approved strategies, plans and programs</p> <p>Monitoring reports</p> <p>Complaints register</p> <p>Minutes of any CCC meetings</p> <p>Annual reviews</p> <p>IEAs</p>	All required documentation is disclosed on the website.	C	

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**APPENDIX A3 - EPL**

Compliance with Environment Protection Licence (EPL) 12290

<b>Document details</b>	
Document title	Appendix A3 - EPL
Document subtitle	Compliance with Environment Protection Licence (EPL) 12290
Project No.	0552611
Date	22 July 2020
Version	1.0
Author	Robert Smith, Aaron McKenzie
Client Name	Whitehaven Coal

Item	Assessment Requirement	Reference/ Evidence	Comments	Compliance	Recommendations									
<b>1 ADMINISTRATIVE CONDITIONS</b>														
<b>A1 What the licence authorises and regulates</b>														
A1.1	This licence authorises the carrying out of the scheduled activities listed below at the premises specified in A2. The activities are listed according to their scheduled activity classification, fee-based activity classification and the scale of the operation. Construct mine entrance/ access/ rail load out roads; site preparation; (clearing/ soil removal) including mining activities, earthworks for processing plant, coal loading & office facility installation; install water management controls.	Site observations MOP 2015 Annual Returns 2017 to 2019	The Site is not undertaking any scheduled activities other than those permitted by its EPL.	C										
A1.2	This licence authorises the carrying out of the scheduled activities listed below at the premises specified in A2. The activities are listed according to their scheduled activity classification, fee-based activity classification and the scale of the operation. Unless otherwise further restricted by a condition of this licence, the scale at which the activity is carried out must not exceed the maximum scale specified in this condition.	Annual Coal Movements 2017 to 2019	The site's production capacity has remained within the scheduled limits.	C										
	<table border="1"> <thead> <tr> <th>Scheduled Activity</th> <th>Fee Based Activity</th> <th>Scale</th> </tr> </thead> <tbody> <tr> <td>Coal works</td> <td>Coal works</td> <td>&gt; 2,000,000 – 5,000,000 T annual handing capacity</td> </tr> <tr> <td>Mining for coal</td> <td>Mining for coal</td> <td>&gt; 2,000,000 T – 3,500,000 of annual production capacity</td> </tr> </tbody> </table>	Scheduled Activity	Fee Based Activity	Scale	Coal works	Coal works	> 2,000,000 – 5,000,000 T annual handing capacity	Mining for coal	Mining for coal	> 2,000,000 T – 3,500,000 of annual production capacity				
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Mining for coal	Mining for coal	> 2,000,000 T – 3,500,000 of annual production capacity												
A1.3	The licensee must not carry on any scheduled activities until the scheduled development works are completed, except as elsewhere provided in this licence.	Site observations	No evidence to suggest this condition is not being complied with was observed.	C										
<b>A2 Premises or plant to which this licence applies</b>														
A2.1	The licence applies to the following premises: <b>Premises Details</b> <b>WERRIS CREEK COAL</b> <b>1435 WERRIS CREEK ROAD</b> <b>WERRIS CREEK</b> <b>NSW 2341</b>  <b>THE LAND BOUND WITHIN THE "PROJECT SITE BOUNDARY" IDENTIFIED IN THE MAP TITLED "FIGURE 1: SCHEDULE OF LAND" OF APPENDIX 1 SCHEDULE OF LAND OF PROJECT APPROVAL 10_0059, DATED 25 OCTOBER 2011 (DOC16/11179).</b>	Mine licence plans Site observations	Mining operations are completed within the approved site boundary.	C										
<b>A3 Information supplied to the EPA</b>														
A3.1	Works and activities must be carried out in accordance with the proposal contained in the licence application, except as expressly provided by a condition of this licence.  In this condition the reference to "the licence application" includes a reference to: (a) the applications for any licences (including former pollution control approvals) which this licence replaces under the Protection of the Environment Operations (Savings and Transitional) Regulation 1998; and (b) the licence information form provided by the licensee to the EPA to assist the EPA in connection with the issuing of this licence.	Site observations	No evidence to suggest this condition is not being complied with was observed.	C										

Item	Assessment Requirement	Reference/ Evidence	Comments	Compliance	Recommendations																								
<b>2 DISCHARGES TO AIR AND WATER AND APPLICATIONS TO LAND</b>																													
<b>P1 Location of monitoring/discharge points and areas</b>																													
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> <p style="text-align: center;"><i>Air</i></p> <table border="1"> <thead> <tr> <th>EPA ID no.</th> <th>Type of monitoring point</th> <th>Type of discharge point</th> <th>Location description</th> </tr> </thead> <tbody> <tr> <td>9</td> <td>Ambient Weather Monitoring</td> <td></td> <td>Weather station located on the top level of the overburden emplacement at RL 445m and identified as "EPL9" on the figure titled "EPL 12290 Licenced Monitoring Points", received by the EPA via email on 17 December 2015 (DOC16/111380).</td> </tr> <tr> <td>28</td> <td>Ambient Air Monitoring/ Air Discharge Quality</td> <td>Ambient Air Monitoring/ Air Discharge Quality</td> <td>Within 100m of the residence "Kyooma" identified as "EPL 28" on the figure titled "EPL 12290 Licenced Monitoring Points", received by the EPA via email on 17 December 2015 (DOC16/111380).</td> </tr> <tr> <td>29</td> <td>Ambient Air Monitoring/ Air Discharge Quality</td> <td>Ambient Air Monitoring/ Air Discharge Quality</td> <td>Within 100 metres of the residence "Glenara" identified as "EPL29" on the figure titled "EPL 12290 Licenced Monitoring Points", received by the EPA via email on 17 December 2015 (DOC16/111380).</td> </tr> <tr> <td>30</td> <td>Ambient Air Monitoring/ Air Discharge Quality</td> <td>Ambient Air Monitoring/ Air Discharge Quality</td> <td>Within 100m of the location known as property number 92 identified as "EPL30" on the figure titled "EPL 12290 Licenced Monitoring Points", received by the EPA via email on 17 December 2015 (DOC16/111380).</td> </tr> <tr> <td>31</td> <td>Ambient Weather Monitoring</td> <td></td> <td>Lower level temp. sensor at the toe of the SE rehabilitation area at RL 373.5m AHO and identified as "EPL31" on the figure titled "EPL 12290 Licenced Monitoring Points", received by the EPA via email on 17 December 2015 (DOC16/111380).</td> </tr> </tbody> </table>	EPA ID no.	Type of monitoring point	Type of discharge point	Location description	9	Ambient Weather Monitoring		Weather station located on the top level of the overburden emplacement at RL 445m and identified as "EPL9" on the figure titled "EPL 12290 Licenced Monitoring Points", received by the EPA via email on 17 December 2015 (DOC16/111380).	28	Ambient Air Monitoring/ Air Discharge Quality	Ambient Air Monitoring/ Air Discharge Quality	Within 100m of the residence "Kyooma" identified as "EPL 28" on the figure titled "EPL 12290 Licenced Monitoring Points", received by the EPA via email on 17 December 2015 (DOC16/111380).	29	Ambient Air Monitoring/ Air Discharge Quality	Ambient Air Monitoring/ Air Discharge Quality	Within 100 metres of the residence "Glenara" identified as "EPL29" on the figure titled "EPL 12290 Licenced Monitoring Points", received by the EPA via email on 17 December 2015 (DOC16/111380).	30	Ambient Air Monitoring/ Air Discharge Quality	Ambient Air Monitoring/ Air Discharge Quality	Within 100m of the location known as property number 92 identified as "EPL30" on the figure titled "EPL 12290 Licenced Monitoring Points", received by the EPA via email on 17 December 2015 (DOC16/111380).	31	Ambient Weather Monitoring		Lower level temp. sensor at the toe of the SE rehabilitation area at RL 373.5m AHO and identified as "EPL31" on the figure titled "EPL 12290 Licenced Monitoring Points", received by the EPA via email on 17 December 2015 (DOC16/111380).	<p>Email from Whitehaven Coal to EPA dated 21/04/20 Site observations</p>	<p>Evidence viewed of monitoring locations being provided to the EPA in email dated 21/04/20 with shapefiles confirming the spatial location of the discharge points. All monitoring locations were present and are sign posted on-site. No monitoring locations have moved since the EPL was granted.</p>	C	
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P1.2	<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> <p style="text-align: center;"><i>Water and land</i></p> <table border="1"> <thead> <tr> <th>EPA ID no.</th> <th>Type of monitoring point</th> <th>Type of discharge point</th> <th>Location description</th> </tr> </thead> <tbody> </tbody> </table>	EPA ID no.	Type of monitoring point	Type of discharge point	Location description	<p>Email from Whitehaven Coal to EPA dated 21/04/20 Site observations</p>	<p>Evidence viewed of monitoring locations being provided to the EPA in email dated 21/04/20 with shapefiles confirming the spatial location of the discharge points. All monitoring locations were present and are sign posted on-site. No monitoring locations have moved since the EPL was granted.</p>	C																					
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Item	Assessment Requirement			Reference/ Evidence	Comments	Compliance	Recommendations
10	Wet Weather Discharge / Discharge Water Quality Monitoring	Wet Weather Discharge / Discharge Water Quality Monitoring	Point known as "SB2" and identified as "EPL10" on the figure titled "EPL 12290 Licensed Monitoring Points", received by the EPA via email on 17 December 2015 (DOC16/111380).				
12	Wet Weather Discharge / Discharge Water Quality Monitoring	Wet Weather Discharge / Discharge Water Quality Monitoring	Point known as "SB9" and identified as "EPL12" on the figure titled "EPL 12290 Licensed Monitoring Points", received by the EPA via email on 17 December 2015 (DOC16/111380).				
14	Wet Weather Discharge / Discharge Water Quality Monitoring	Wet Weather Discharge / Discharge Water Quality Monitoring	Point known as "SB10" and identified as "EPL14" on the figure titled "EPL 12290 Licensed Monitoring Points", received by the EPA via email on 17 December 2015 (DOC16/111380).				
16	Water Quality Monitoring		Point known as "VWD1" and identified as "EPL16" on the figure titled "EPL 12290 Licensed Monitoring Points", received by the EPA via email on 17 December 2015 (DOC16/111380).				
17	Groundwater Quality Monitoring		Point known as "GW966036/MW1" and identified as "EPL17" on the figure titled "EPL 12290 Licensed Monitoring Points", received by the EPA via email on 17 December 2015 (DOC16/111380).				
18	Groundwater Quality Monitoring		Point known as "GW966127/MW2" and identified as "EPL18" on the figure titled "EPL 12290 Licensed Monitoring Points", received by the EPA via email on 17 December 2015 (DOC16/111380).				
19	Groundwater Quality Monitoring		Point known as "GW965729/MW3" and identified as "EPL19" on the figure titled "EPL 12290 Licensed Monitoring Points", received by the EPA via email on 17 December 17 December 2015 (DOC16/111380).				
20	Groundwater Quality Monitoring		Point known as "MW4b" and identified as "EPL20" on the figure titled "EPL 12290 Licensed Monitoring Points", received by the EPA via email on 17 December 2015 (DOC16/111380).				
21	Groundwater Quality Monitoring		Point known as "GW968728/MW5" and identified as "EPL21" on the figure titled "EPL 12290 Licensed Monitoring Points", received by the EPA via email on 17 December 2015 (DOC16/111380).				
22	Groundwater Quality Monitoring		Point known as "MW6" and identified as "EPL22" on the				

Item	Assessment Requirement			Reference/ Evidence	Comments	Compliance	Recommendations
				figure titled "EPL 12290 Licensed Monitoring Points", received by the EPA via email on 17 December 2015 (DOC16/111380).			
23	Ambient / Discharge Water Quality Monitoring			Point known as WC-U on Werris Creek and identified as "EPL23" on the figure titled "EPL 12290 Licensed Monitoring Points", received by the EPA via email on 17 December 2015 (DOC16/111380).			
24	Ambient / Discharge Water Quality Monitoring			Point known as WC-D on Werris Creek and identified as "EPL24" on the figure titled "EPL 12290 Licensed Monitoring Points", received by the EPA via email on 17 December 2015 (DOC16/111380).			
25	Ambient / Discharge Water Quality Monitoring			Point known as QC-U on Quipolly " Creek and identified as "EPL25" on the figure titled "EPL 12290 Licensed Monitoring Points", received by the EPA via email on 17 December 2015 (DOC16/111380).			
26	Ambient / Discharge Water Quality Monitoring			Point known as QC-D on Quipolly Creek and identified as "EPL26" on the figure titled "EPL 12290 Licensed Monitoring Points", received by the EPA via email on 17 December 2015 (DOC16/111380).			
27	Water Quality Monitoring			Point known as "VWD2" and identified as "EPL27" on the figure titled "EPL 12290 Licensed Monitoring Points", received by the EPA via email on 17 December 2015 (DOC16/111380).			
32	Wet Weather Discharge / Discharge Water Quality Monitoring	Wet Weather Discharge / Discharge Water Quality Monitoring		Point known as "S818" and identified as "EPL32" on the figure titled "EPL 12290 Licensed Monitoring Points", received by the EPA via email on 17 December 2015 (DOC16/111380).			
33	Discharge Water Quality Monitoring Discharge for off-site agricultural use	Discharge Water Quality Monitoring Discharge for off-site agricultural use		Point known as "VWD1" and identified as "EPL33" on the figure titled "EPL 12290 Licensed Monitoring Points", received by the EPA via email on 17 December 2015 (DOC16/111380).			
34	Discharge Water Quality Monitoring Discharge for off-site agricultural use	Discharge Water Quality Monitoring Discharge for off-site agricultural use		Point known as "VWD3" and identified as "EPL34" on the figure titled "EPL 12290 Licensed Monitoring Points", received by the EPA via email on 17 December 2015 (DOC16/111380).			
35	Discharge Water Quality Monitoring	Discharge Water Quality Monitoring		Point known as "VWD4" and identified as "EPL35" on the figure titled "EPL 12290			

Item	Assessment Requirement			Reference/ Evidence	Comments	Compliance	Recommendations
	Discharge for off-site agricultural use	Discharge for off-site agricultural use	Licensed Monitoring Points", received by the EPA via email on 17 December 2015 (DOC16/111380).				

**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.	Monitoring and lab report Email from Whitehaven Coal to EPA confirming non-compliance	An uncontrolled discharge occurred from dams titled EPA10 and EPA14 that commenced on 9 February 2020. The discharge events were 'Special Frequency' events as rainfall exceeded 39.2mm, therefore the discharges themselves were not non-compliances. One exceedance reported low pH 5.5 for discharge point EPL14 uncontrolled discharge, sampled on 18 <sup>th</sup> February 2020.  Event which was reported to the EPA and included in annual returns as required. Investigation of this event did not identify a source of the exceedance and no subsequent monitoring has identified similar results.	NC	Investigation indicates that the exceedance appears to be anomalous. No further action required.  Continue to monitor water quality during discharge events.
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**L2 Concentration Limits**

L2.1	For each monitoring/discharge point or utilisation area specified in the table\ 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.	Not applicable.	Not Triggered.	NT																									
L2.2	Where a pH quality limit is specified in the table, the specified percentage of samples must be within the specified ranges.	Annual reviews 2017 and 2018. Monitoring and lab reports	Lab reports provided - One exceedance reported low pH 5.5 for discharge point EPL14 uncontrolled discharge, sampled on 18 <sup>th</sup> February 2020. Other results indicated exceedances up /down stream during storm events (off site locations, results not correlated to discharge point results).	NC	As above.																								
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.	Not applicable.	Not Triggered.	NT																									
L2.4	Water and/or Land Concentration Limits <b>Point 10, 12, 14, 32</b>	EPL Monitoring reports 2017 to 2020.	Monitoring data is compliant with the water and land concentration limits during the reported audit period, with the exception of a low pH 5.5 at the point 14 in February 2020.	C	WCC should continue monitoring with special attention to pH at point 14.																								
	<table border="1"> <thead> <tr> <th>Pollutant</th> <th>Unit 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>20</td> <td>35</td> <td>-</td> <td>50</td> </tr> </tbody> </table>	Pollutant	Unit 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	20	35	-	50				
Pollutant	Unit 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	20	35	-	50																								

Item	Assessment Requirement						Reference/ Evidence	Comments	Compliance	Recommendations
	<b>Point 33, 34, 35</b>									
	<b>Pollutant</b>	<b>Unit of measure</b>	<b>50 percentile concentration limit</b>	<b>90 percentile concentration limit</b>	<b>3DGM concentration limit</b>	<b>100 percentile concentration limit</b>				
	Electrical conductivity	Microsiemens per centimetre	-	-	-	2000				
	Oil and grease	Milligrams per litre	-	-	-	10				
	pH	pH	6.5 - 8.5		-	9				
L2.5	<p>The Total Suspended Solids concentration limits specified for Points 10, 12, 14 and 32 may be exceeded for water discharged from the sediment basins provided that:</p> <p>(a) the discharge occurs solely as a result of rainfall measured at the premises that exceeds 39.2 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 39.2 millimetre, 5 day rainfall event.</p>						<p>EPL Monitoring reports 2017 to 2020.</p> <p>Correspondence between Whitehaven Coal and EPA regarding discharge events</p> <p>Pre- and Post-rain inspections on dams</p>	<p>(a) No discharges occurred unless the 39.2mm of rain limit had been exceeded.</p> <p>(b) Management plan requires that basins are flocked when rain events are coming.</p> <p>ERM observed dewatering of SP2 during the field works as a result of predicted rain event due to occur on Saturday.</p> <p>Site retains records of pre-rain inspections on their server. Post rain photographs are also taken showing post management actions.</p> <p>Examples of photos of post rain maintenance works were also observed.</p> <p>ERM tracked uncontrolled discharge photos to lab reports to confirm that testing had occurred. An exceedance of TSS was noted in the report and evidence was sighted of an email from Whitehaven Coal to the EPA with relevant lab reports attached. There had been 54mm of rain in the previous 5 days, therefore this was not recorded as a non-compliance. .</p>	C	
<b>L3 Waste</b>										
L3.1	The licensee must not cause, permit or allow any waste generated outside the premises to be received at the premises for storage, treatment, processing, reprocessing or disposal or any waste generated at the premises to be disposed of at the premises, except as expressly permitted by the licence.						Not applicable	Not Triggered.	NT	
L3.2	This condition only applies to the storage, treatment, processing, reprocessing or disposal of waste at the premises if those activities require an environment protection licence.						Not applicable	Not Triggered.	NT	
<b>L4 Noise Limits</b>										
L4.1	Noise generated from the premises must not exceed the noise limits in the table below.						Annual reviews 2017 and 2018. EPL Monitoring reports 2017 to 2020.	No exceedances of noise criteria limits occurred during the reported audit period.	C	
	Locality and location	Day LAeq (15 minute)	Evening LAeq (15 minute)	Night LAeq (15 minute)	Night LA1 (1 minute) -					
	The residence on the property "Talavera" marked as location "R96 Talavera" on the figure titled "EPL 12290 Licensed Monitoring Points", received by the EPA via	38	38	38	45					



Item	Assessment Requirement					Reference/ Evidence	Comments	Compliance	Recommendations
	email on 17 December 2015 (DOC16/111380).								
	The residence known as Quipolly Railway Cottage" marked as location "R12 Quipolly Railway Cottage" on the figure titled "EPL 12290 Licensed Monitoring Points", received by the EPA via email on 17 December 2015 (DOC16/111380).	38	38	38	45				
	The residence on the property "Hazeldene" marked as location "R24 Hazeldene" on the figure titled "EPL 12290 Licensed Monitoring Points", received by the EPA via email on 17 December 2015 (DOC16/111380).	37	37	37	45				
	'The residence on the property "Kyooma" marked as location "R98 Kyooma" on the figure titled "EPL 12290 Licensed Monitoring points", received by the EPA via email on 17 December 2015 (DOC16/111380).	36	38	38	45				
	Any other affected residence not owned by the licensee or its related companies.	35	35	35	45				
L4.2	<p>For the purpose of the condition above;</p> <ul style="list-style-type: none"> <li>a) Day is defined as the period from 7am to 6pm on any day.</li> <li>b) Evening is defined as the period 6pm to 10pm on any day.</li> <li>c) Night is defined as the period from 10pm to 7am on any day.</li> </ul> <p>Note: For the purpose of the noise criteria for this condition, 5dBA must be added to the measurement level if the noise is substantially tonal or impulsive in character.</p>					Annual reviews 2017 and 2018. EPL Monitoring reports 2017 to 2020.	Not triggered	C	

Item	Assessment Requirement	Reference/ Evidence	Comments	Compliance	Recommendations
L4.3	<p>The noise limits set out in the Noise Limits table apply under all meteorological conditions except for the following:</p> <ul style="list-style-type: none"> <li>a) Wind speeds greater than 3 metres/second at 10 metres above ground level; or</li> <li>b) Temperature inversion conditions up to 12°C/100m and wind speeds greater than 2 metres/second at 10 metres above ground level; or</li> <li>c) Temperature inversion conditions greater than 12°C/100m.</li> </ul> <p>Note: For the purposes of this condition, data recorded by the meteorological station identified as EPA Identification Point No. 9 and the lower level temperature sensor identified as EPA Identification Point No. 31 must be used to determine meteorological conditions.</p> <p>Note: Temperature inversion conditions (vertical temperature gradient in degrees C/100m) are to be determined as <math>[(TM2 - TM3 - 0.7) * 1.25]</math>, where TM2 is the temperature from sensor M2 (10m weather station at top of rehabilitated overburden emplacement) and TM3 is the temperature from sensor M3 (lower weather station at base of rehabilitated overburden emplacement). Reference: Spectrum Acoustics letter report Ref: 04035/4580 of 7 November 2012 to Werris Creek Coal.</p>	Annual reviews 2017 and 2018.	Not triggered	C	
L4.4	<p>Noise impacts where wind speed exceeds 3 metres per second at 10 metres above the ground must be addressed by:</p> <ul style="list-style-type: none"> <li>a) documenting noise complaints received to identify any higher level of impacts or wind patterns;</li> <li>b) 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 must be developed and implemented.</li> </ul>	Annual reviews 2017 and 2018.	Not triggered	C	
L4.5	<p>The noise limits set by condition L4.1 of the licence do not apply where a current legally binding agreement exists between the proponent and the occupant of a residential property that:</p> <ul style="list-style-type: none"> <li>a) agrees to an alternative noise limit for that property; or</li> <li>b) provides an alternative means of compensation to address noise impacts from the premises.</li> </ul> <p>A copy of any agreement must be provided to the EPA before the proponent can take advantage of the agreement.</p>	Annual reviews 2017 and 2018.	Not triggered	C	
L4.6	<p><b>Determining Compliance</b></p> <p>To determine compliance:</p> <ul style="list-style-type: none"> <li>a) with the Leq (15 minute) noise limits in the Noise Limits table, the noise measurement equipment must be located: <ul style="list-style-type: none"> <li>i) approximately on the property boundary, where any dwelling is situated 30 metres or less from the property boundary closest to the premises; or</li> <li>ii) within 30 metres of a dwelling facade, 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, where applicable</li> <li>iii) within approximately 50 metres of the boundary of a National Park or a Nature Reserve.</li> </ul> </li> <li>b) with the LA 1(1 minute) noise limits in the Noise Limits table, the noise measurement equipment must be located within 1 metre of a dwelling facade.</li> <li>c) With the noise limits in the Noise Limits table, the noise measurement equipment must be located: <ul style="list-style-type: none"> <li>i) At the most affected point at a location where there is no dwelling at the location; or</li> <li>ii) at the most affected point within an area at a location prescribed by part (a) or part (b) of this condition.</li> </ul> </li> </ul> <p>Note: A non-compliance of the Noise Limits table will still occur where noise generated from the premises in excess of the appropriate limits measured:</p> <ul style="list-style-type: none"> <li>i) at a location other than an area prescribed in part (a) and part (b); and/or</li> <li>ii) at a point other than the most affected point at a location.</li> </ul>	Noise Management Plan. EPL Monitoring reports 2017 to 2020.	A summary of the attended noise monitoring program has been provided. All locations are monitored on a monthly basis.	C	

## L5 Blasting

Item	Assessment Requirement	Reference/ Evidence	Comments	Compliance	Recommendations
L5.1	The overpressure level from blasting operations at the premises must not exceed 120dB (Lin Peak) at any time. Error margins associated with any monitoring equipment used to measure this are not to be taken into account in determining whether or not the limit has been exceeded.	Annual reviews 2017 and 2018. EPL Monitoring reports 2017 to 2020.	An exceedance of Condition 6 Schedule 3 of PA 10_0059 occurred with a blast undertaken on 4th May 2018, recording an overpressure greater than 120 dBL at two monitoring locations: 120.4dBL at Glenara (R11) and 120.2dBL at Kyooma (R98).  WCC undertook an investigation into the incident, with appropriate notifications to the EPA and DPIE.  Upon completion of the investigation, control measures have been implemented to prevent or mitigate against a similar exceedance in the future.	C	WCC should continue undertaking the control measures to make sure the exceedance occurred in May 2018 is not repeated in future years. Revision of plan to minimise risk of future exceedance.
L5.2	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.	Annual reviews 2017 and 2018. EPL Monitoring reports 2017 to 2020.	Same as L5.1 comments.	C	Same as L5.1 recommendations.
L5.3	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.	Annual reviews 2017 and 2018. EPL Monitoring reports 2017 to 2020.	No exceedances of ground vibration limits occurred during the reported audit period.	C	
L5.4	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.	Annual reviews 2017 and 2018. EPL Monitoring reports 2017 to 2020.	Same as L5.3 comments.	C	
L5.5	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.	Annual reviews 2017 and 2018.	WCC fires all blasts in the middle of the day generally between 12:00pm and 2:00pm, when atmospheric mixing is generally highest. Blasting records are included in data pack.	C	
L5.6	The hours during which blasting is permitted may be varied by the EPA upon consideration of the impact any variation may have on the amenity of the residents in the locality.	Blast Management Plan.	Not triggered	C	
L5.7	Blasting at the premises is limited to 1 blast on each day on which blasting is permitted. Note: Additional blasts are permitted where the EPA and neighbours have been notified of the intended blast prior to the additional blast being fired; and - it is demonstrated to be necessary for safety reasons; or - the previous blast generated ground vibration levels of less than 0.5 mm per second at all non-project related residences.	Annual reviews 2017 and 2018. EPL Monitoring reports 2017 to 2020.	Not triggered	C	
L5.8	To determine compliance with condition(s) LS.1, LS.2, LS.3 and LS.4 a) Airblast overpressure and ground vibration levels must be measured and electronically recorded at any point within 30 metres of any non-project related residential building or other sensitive locations such as schools or hospitals for all blasts carried out in or on the premises; and b) Instrumentation used to measure the airblast overpressure and ground vibration must meet the requirements of Australian Standard AS 2187.2-2006.  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 this licence at any "noise sensitive locations" other than the locations identified in the above condition.	Annual reviews 2017 and 2018. EPL Monitoring reports 2017 to 2020.	All the monitoring locations are at least 3 km distant from the properties. 7.2.1 Monitoring Locations (BMP): Four privately owned properties have been selected to monitor potential blasting impacts against compliance criteria and are representative of the most affected community locations in proximity to WCCM. 7.2.3 Blast Monitoring Equipment (BMP): The permanent blast monitors are fixed units installed at each community location and are installed in compliance with Australian Standard AS2187.2-2006. Monitoring is recorded via a website interface which enables blast results to be reported (by SMS and email), with the	C	

Item	Assessment Requirement	Reference/ Evidence	Comments	Compliance	Recommendations
			complete waveform/trace available via the website for detailed analysis) in near real time.		
<b>L6 Hours of operation</b>					
L6.1	Activities at the premises, other than blasting (which is subject to the limits applied by condition LS.5), may be carried out 24 hours a day, 7 days per week.	Noted.	Noted.	C	None.
<b>L7 Potentially offensive odour</b>					
L7.1	<p>No condition in this licence identifies a potentially offensive odour for the purposes of section 129 of the Protection of the Environment Operations Act 1997.</p> <p>Note: Section 129 of the Protection of the Environment Operations Act 1997 provides that the licensee must not cause or permit the emission of any Offensive odour from the premises but provides a defence if the emission is identified in the relevant environment protection licence as a potentially offensive odour and the odour was emitted in accordance with the conditions of a licence directed at minimising odour.</p>	Complaints registers 2017 to 2019	<p>The Site has received 15 odour related complaints during the audit period, primarily relating to a 'burning' smell attributed to spontaneous combustion odours:</p> <ul style="list-style-type: none"> <li>June 2017 to June 2018 – 10 complaints;</li> <li>June 2018 to June 2019 – 5 complaints; and</li> <li>June 2019 to June 2020 – No complaints.</li> </ul> <p>The mine has implemented procedures to minimise emissions of odour from spontaneous combustion through the use of water curtains or sprinklers to suppress hot areas; and uncovering and mining the higher risk workings quickly and soaking any hot coal immediately.</p> <p>Workers utilise personal gas monitors at the boundary of the site in the direction of complaints when they occur to identify whether detectable hydrogen sulphide is present. ERM sighted photographs of multi-gas monitoring units on days when spontaneous combustions complaints had been received. No elevated gas readings were detected at the boundary.</p> <p>It is noted that the higher risk of spontaneous combustion areas of the mine (the former underground workings) have now been mined, reducing the future odour emission risk profile of the mine.</p>	NC	<p>No actions required.</p> <p>The site has robust odour management process to mitigate odours from spontaneous combustion.</p>
<b>4 Operating conditions</b>					
<b>O1 Activities must be carried out in a competent manner</b>					
O1.1	Licensed activities must be carried out in a competent manner. This includes: <ul style="list-style-type: none"> <li>a) the processing, handling, movement and storage of materials and substances used to carry out the activity; and</li> <li>b) the treatment, storage, processing, reprocessing, transport and disposal of waste generated by the activity.</li> </ul>	<p>Site observations</p> <p>General review of management systems</p>	No evidence to suggest that activities on-site are not being undertaken in a competent manner were observed during this assessment.	C	
<b>O2 Activities must be carried out in a competent manner</b>					
O2.1	<b>Maintenance of plant and equipment</b>				

Item	Assessment Requirement	Reference/ Evidence	Comments	Compliance	Recommendations
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.	Pulse preventative maintenance records	The preventative maintenance system utilised by the Site is called 'Pulse'. The system records all preventative maintenance tasks and creates electronic work orders for the maintenance team as required.  ERM reviewed Pulse records for a randomly selected dozer and pump system (pump 410). ERM also reviewed a sample of calibration records for blast monitors.  The work orders were detailed (including environmental noise control systems on the dozer) and included evidence that the required preventative maintenance had been completed on time.  No inspections by regulatory bodies raised preventative maintenance as a concern. ERM did not observe any examples of poorly maintained plant during the site inspection.	C	
<b>O3 Dust</b>					
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.	Air Quality and Greenhouse Gas Management Plan	According to: 8.1 Air Quality Management:  In order to mitigate any potential air quality impacts from the WCC LOM Project, a number of air quality management controls will be implemented throughout the life of the operation. Particulate emission controls are detailed in Table 22.	C	
O3.2	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.	Air Quality and Greenhouse Gas Management Plan	According to: 8.1.13 Off-site Coal Transport:  Coal is transported offsite to domestic and export markets by rail and road. The majority of coal is transported by trains (greater than 98%) at the Rail Load Out Facility.  Coal is generally moist which mitigates dust generation. In addition, the rail load out bin is enclosed and each loaded train wagons is sprayed with water to create surface crust to minimise dust generation. In addition, the new generation wagons are designed to be taller and concave which reduces the coal surface area, thereby reducing wind erosion during rail transport.	C	
O4	<b>Effluent application to land Irrigation of Mine Void Water from Void Water Dam 1</b>				
O4.1	Prior to the Licensee providing Irrigation water from Void Water dam 1, all necessary state and local government approvals must be obtained.	Water Management Plan (WMP).	Approval is as per WMP.  On 27 <sup>th</sup> June 2016 a water use approval was rejected to WCC from the DPI Water (photo taken). In the response from DPIE Water the letter said " <i>The application will not be required if the amendment to the current Water Management Plan is approved</i> "	C	

Item	Assessment Requirement	Reference/ Evidence	Comments	Compliance	Recommendations
O4.2	Pollution events associated with any aspect of the recipient's and or Licensees void water reuse program for irrigation, must be reported to the EPA in accordance with section 148 of the Act as soon as is practicable after the Licensee becomes aware of an incident.	Water Management Plan. EPL Monitoring reports 2017 to 2020.	Not Triggered	C	
O4.3	The licensee must cease the supply of void water for irrigation as soon as the licensee becomes aware of a misuse of effluent or failure to implement any aspect of the irrigation management plan.	Water Management Plan.	Not triggered. Irrigation system is managed in a way that if water applicator is bogged it will stop. WCC has control of the discharge via inspection of discharge during pre and post irrigation.	C	
O4.4	The Licensee must review, with an annual inspection, the recipients use of the void water on an annual basis, to identify any corrective actions required to comply with or update the irrigation management plan. The supplier must keep records of sites visits, observations and corrective actions for at least four years.	Annual reviews 2017 and 2018. Water Management Plan.	Annual Reports provided on request.	C	
O4.5	The licensee must engage a suitably qualified person to make an annual assessment of the irrigation scheme and this report must be submitted to the EPA with the annual return.	Annual reviews 2017 and 2018. Water Management Plan.	Same as O4.4.	C	
<b>O5 Other operating conditions</b>					
O5.1	Reversing beepers fitted to vehicles on the premises must be a low frequency broadband type, unless it can be demonstrated that operations will not contribute to off-site noise impacts.	Observations on-site.	Observed on-site (audible broadband reversing).	C	
O5.2	<b>Blast Fume</b> 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.	Audit site visit (photo) Complaints registers 2017 to 2020.	Blast videos of all blasts, and "blast hazard analysis" undertaken for each blast (taken photo of the form). 1 complaint 2017, 2 complaints 2018 raised regarding blast dust/fume	C	
O5.3	<b>Pollution Incident Response Management Plan</b> 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.	PIRMP	The scope and content of the PIRMP complies with the requirements of this condition. It was observed that the previous Operations Manager's contact details were in the PIRMP (the change in roles has only occurred within the last few months).	C (Obs)	The operations manager's contact details should be updated in the PIRMP and amended copies issued where relevant.
O5.4	The licensee must keep the PIRMP on the premises at all times.	PIMRP Site Observations	Copies of the PIRMP were available for review with the Environment Manager and at the Admin office (sighted by ERM). Further copies are held at the Open Cut Examiner's office.	C	
<b>5 Monitoring and Recording Conditions</b>					
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.	Annual reviews 2017 and 2018. EPL Monitoring reports 2017 to 2020.	WCC retains its records.	C	None.
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 authorise officer of the EPA who asks to see them.	Annual reviews 2017 and 2018. EPL Monitoring reports 2017 to 2020.	Air: March 2016 to May 2020 in summary HCAS & TEOM Monitoring xls. Data is legible.	C	

Item	Assessment Requirement	Reference/ Evidence	Comments	Compliance	Recommendations																																																																																								
			Noise: Monthly EPL Reports contain summary of noise results. Blasting: Blast Databased 2016 -2019_May20 Water: 2016-2020_May20 Surface Water Monitoring Results. Data is legible. Irrigation: Irrigation monitoring 2017-20 (started 2017)																																																																																										
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.	Annual reviews 2017 and 2018. EPL Monitoring reports 2017 to 2020.	ERM reviewed a sample of CoC for water, air, groundwater in emails retained on record. Samples were compliance.	C																																																																																									
<b>M2 Requirement to monitor concentration of pollutants discharged</b>																																																																																													
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:	EPL Monitoring reports 2017 to 2020.	WCC has undertaken the sampling of all the monitoring points during the reported audit period.	C																																																																																									
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<p>Note: For the purposes of this condition, Special Frequency 1 means as soon as practicable after overflow commences and in any case not more than 12 hours after any overflow commencing.</p> <p>For the purposes of this condition, Special Frequency 2 means within 12 hours after any overflow from a storage dam(s) on the premises occurring.</p> <p>For the purposes of this condition, Special Frequency 3 means every three months. If no mine void water is planned to be provided for agricultural purposes within the three months following scheduled sampling, then sampling is not required.</p> <p>For the purposes of this condition, Special Frequency 4 mean prior to, but not more than 24 hours prior to providing mine void water for agricultural purposes and then weekly thereafter, until the provision of water ceases. Samples are only required to be taken from the void water dam that is supplying water for agricultural purposes.</p> <p>For the purposes of this condition, Special Method 1 means that grab samples must be taken from those ambient/discharge water quality monitoring points (i.e. points 23-26) located in same drainage catchment (Werris Creek and/or Quipolly Creek) as those wet weather discharge points (i.e. points 10, 12, 14 and/or 32) overflowing in any individual discharge event.</p> <p>Note: The frequency of monitoring and the pollutant/s to be monitored may be varied by the EPA once the variability of the water quality and ground water quality is established.</p>																																																																																																																																												



Item	Assessment Requirement	Reference/ Evidence	Comments	Compliance	Recommendations
M2.4	For the purposes of the table(s) above, monitoring at points 16 and 27 is not required in the three month period if the monitoring site is dry or inadequate water is available to collect a sample.	EPL Monitoring reports 2017 to 2020. Annual reviews 2017 and 2018.	Not triggered	C	
M2.5	For the purposes of the table(s) above, monitoring at points 17, 18, 19, 20, 21 and 22 is not required in the six month period if the monitoring site is dry or inadequate water is available to collect a sample.	EPL Monitoring reports 2017 to 2020. Annual reviews 2017 and 2018.	Not triggered	C	

**M3 Testing methods – concentration limits**

M3.1	<p>Monitoring for the concentration of a pollutant emitted to the air required to be conducted by this licence must be done in accordance with:</p> <ul style="list-style-type: none"> <li>a) any methodology which is required by or under the Act to be used for the testing of the concentration of the pollutant; or</li> <li>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</li> <li>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.</li> </ul> <p>Note: The Protection of the <i>Environment Operations (Clean Air) Regulation 2010</i> 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".</p>	Air Quality and Greenhouse Gas Management Plan (AQGHGMP).	<p>According to the AQGHGMP:</p> <p><b>9. Monitoring</b></p> <p>Monitoring is undertaken in accordance with WCC's EPL 12290 and PA 10_0059 conditions, which specify required methods of sampling, analysis and frequency of monitoring.</p> <p>Air quality monitoring locations will be reviewed, and if necessary, modified in consultation with DoP and EPA over the life of the project, in response to monitoring results and changes in the mining operations.</p>	C	
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.	Water Management Plan	WMP references approved methods.	C	

**M4 Weather monitoring**

M4.1	<p>Weather Monitoring Requirements</p> <p><b>POINT 9:</b></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>Rainfall</td> <td>Millimetres per hour</td> <td>Continuous</td> <td>1 hour</td> <td>AM-4</td> </tr> <tr> <td>Wind speed @ 10 metres</td> <td>Metres per second</td> <td>Continuous</td> <td>15 minute</td> <td>AM-2 &amp; AM-4</td> </tr> <tr> <td>Wind direction @ 10 metres</td> <td>Degrees clockwise from true north</td> <td>Continuous</td> <td>15 minute</td> <td>AM-2 &amp; AM-4</td> </tr> <tr> <td>Temperature @ 2 metres</td> <td>Degrees Celsius</td> <td>Continuous</td> <td>15 minute</td> <td>AM-4</td> </tr> <tr> <td>Temperature @ 10 metres</td> <td>Degrees Celsius</td> <td>Continuous</td> <td>15 minute</td> <td>AM-4</td> </tr> <tr> <td>Sigma theta @ 10 metres</td> <td>Degrees clockwise from true north</td> <td>Continuous</td> <td>15 minute</td> <td>AM-2 &amp; AM-4</td> </tr> <tr> <td>Solar radiation</td> <td>Watts per square metre</td> <td>Continuous</td> <td>15 minute</td> <td>AM-4</td> </tr> <tr> <td>Additional requirements – siting</td> <td>-</td> <td>-</td> <td>-</td> <td>AM-1, AM-4 &amp; special method 2</td> </tr> <tr> <td>Additional requirements - measurement</td> <td>-</td> <td>-</td> <td>-</td> <td>AM-1, AM-4 &amp; special method 2</td> </tr> </tbody> </table>	Parameter	Units of Measure	Frequency	Averaging Period	Sampling method	Rainfall	Millimetres per hour	Continuous	1 hour	AM-4	Wind speed @ 10 metres	Metres per second	Continuous	15 minute	AM-2 & AM-4	Wind direction @ 10 metres	Degrees clockwise from true north	Continuous	15 minute	AM-2 & AM-4	Temperature @ 2 metres	Degrees Celsius	Continuous	15 minute	AM-4	Temperature @ 10 metres	Degrees Celsius	Continuous	15 minute	AM-4	Sigma theta @ 10 metres	Degrees clockwise from true north	Continuous	15 minute	AM-2 & AM-4	Solar radiation	Watts per square metre	Continuous	15 minute	AM-4	Additional requirements – siting	-	-	-	AM-1, AM-4 & special method 2	Additional requirements - measurement	-	-	-	AM-1, AM-4 & special method 2	Air Quality and Greenhouse Gas Management Plan (AQGHGMP).	<p>According to the AQGHGMP:</p> <p><b>9.5 Meteorology</b></p> <p>WCC maintains an on-site weather station identified as "M2" (EPL 12290 EPA ID #9) located on the top level of the overburden emplacement (at final rehabilitated landform surface RL445.5m) as well as "M3" (EPL 12290 EPA ID #31) lower level temperature sensor (base of overburden emplacement area at RL373.5m).</p> <p>Table 27: WCC "M2" Weather Station meteorological parameters.</p> <p>This table shows all the parameters that the weather monitoring station requires.</p>	C	
Parameter	Units of Measure	Frequency	Averaging Period	Sampling method																																																			
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Item	Assessment Requirement	Reference/ Evidence	Comments	Compliance	Recommendations										
M4.2	<p><b>POINT 31</b></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>Degrees celcius</td> <td>Continuous</td> <td>15 minute</td> <td>AM-4 &amp; special method 2</td> </tr> </tbody> </table> <p>Note: For the purposes of conditions M4.1 &amp; M4.2, Special Method 2 means that the location of the meteorological monitoring equipment and details of that equipment, the equipment operation and maintenance/service procedures and schedules must be submitted in writing and approved in writing by the EPA before any sampling or analysis is carried out. The meteorological monitoring equipment must be calibrated at least once every 12 months. Any proposed changes to the meteorological monitoring equipment location, operating and maintenance/service procedures and schedules, or to the monitoring hardware itself must also be submitted in writing and approved in writing by the EPA. The EPA is to be provided with the monitoring data on request in a Microsoft® Office software compatible format.</p>	Parameter	Units of Measure	Frequency	Averaging Period	Sampling method	Temperature @ 2 metres	Degrees celcius	Continuous	15 minute	AM-4 & special method 2	Air Quality and Greenhouse Gas Management Plan (AQGHGMP).	Same as M4.1.	C	
Parameter	Units of Measure	Frequency	Averaging Period	Sampling method											
Temperature @ 2 metres	Degrees celcius	Continuous	15 minute	AM-4 & special method 2											
<b>M5 Recording of pollution complaints</b>															
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.	Internal and external complaints registers 2017 to 2019	ERM sighted complaints records retained from 2005 to the present.	C											
M5.2	The record must include details of the following: <ul style="list-style-type: none"> <li>a) the date and time of the complaint;</li> <li>b) the method by which the complaint was made;</li> <li>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;</li> <li>d) the nature of the complaint;</li> <li>e) the action taken by the licensee in relation to the complaint, including any follow-up contact with the complainant; and</li> <li>f) if no action was taken by the licensee, the reasons why no action was taken.</li> </ul>	Internal and external complaints registers 2017 to 2019	The internal complaints register included all the fields required by this condition.	C											
M5.3	The record of a complaint must be kept for at least 4 years after the complaint was made.	Complaints registers 2005 to 2020	ERM sighted complaints records retained from 2005 to the present.	C											
M5.4	The record must be produced to any authorised officer of the EPA who asks to see them.	Not applicable	Not triggered.	NT											
<b>M6 Telephone complaints line</b>															
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.	Website Signage	The site has a 24 hour complaints line in place to receive complaints from members of the public.	C											
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.	Website Signage	ERM tested the complaints number published on the Werris Creek Mine Whitehaven Coal website. The complaints number was not functional. It is noted that the complaints number on the sign at the entrance to the mine was correct.	NC	Update the website complaints line number to reflect the correct phone number.										
M6.3	The preceding two conditions do not apply until 3 months after: the date of the issue of this licence.	Not applicable.	Noted.	Noted											
<b>M7 Requirement to monitor volume or mass</b>															
M7.1	For each discharge point or utilisation area specified below, the licensee must monitor: <ul style="list-style-type: none"> <li>a) the volume of liquids discharged to water or applied to the area;</li> <li>b) the mass of solids applied to the area;</li> <li>c) the mass of pollutants emitted to the air;</li> </ul> at the frequency and using the method and units of measure, specified below.	EPL Monitoring reports 2017 to 2020. Annual reviews 2017 and 2018.	Meters sighted. WCC monitors points 33, 34 and 35 in volume (mg/L) at special frequencies (3 and 4).	C											

Item	Assessment Requirement	Reference/ Evidence	Comments	Compliance	Recommendations												
	<p><b>POINT 33, 34, 35</b></p> <table border="1"> <thead> <tr> <th>Frequency</th> <th>Units of Measure</th> <th>Sampling method</th> </tr> </thead> <tbody> <tr> <td>Daily during any discharge</td> <td>Kilolitres per day</td> <td>By Calculation (volume flow rate or pump capacity multiplied by operating time)</td> </tr> </tbody> </table>	Frequency	Units of Measure	Sampling method	Daily during any discharge	Kilolitres per day	By Calculation (volume flow rate or pump capacity multiplied by operating time)										
Frequency	Units of Measure	Sampling method															
Daily during any discharge	Kilolitres per day	By Calculation (volume flow rate or pump capacity multiplied by operating time)															
<b>M8 Blasting</b>																	
M8.1	<p>To assess compliance with the blast limits presented at L5, blast monitoring must be undertaken in accordance with L5 at the following locations: Within 30 metres of the residences at the locations marked as "R98 Kyooma", "R11 Glenara" and "R62 43 Kurrara St, Werris Ck", and within 30 metres of the location marked as "R92 Werris Creek Middle" on the figure titled "EPL 12290 Licensed Monitoring Points", received by the EPA via email on 17 December 2015 (DOC16/111380).</p> <table border="1"> <thead> <tr> <th>Parameter</th> <th>Units of Measure</th> <th>Frequency</th> <th>Sampling method</th> </tr> </thead> <tbody> <tr> <td>Blast noise</td> <td>dB (Lin Peak)</td> <td>Every blast</td> <td>Type 1 Noise/Blast</td> </tr> <tr> <td>Blast vibration</td> <td>Mm/s</td> <td>Every blast</td> <td>Geophone logger or similar</td> </tr> </tbody> </table>	Parameter	Units of Measure	Frequency	Sampling method	Blast noise	dB (Lin Peak)	Every blast	Type 1 Noise/Blast	Blast vibration	Mm/s	Every blast	Geophone logger or similar	<p>EPL Monitoring reports 2017 to 2020. Blast Management Plan (BMP).</p>	<p>WCC undertakes blast monitoring at those receptors with those descriptors.</p>	C	
Parameter	Units of Measure	Frequency	Sampling method														
Blast noise	dB (Lin Peak)	Every blast	Type 1 Noise/Blast														
Blast vibration	Mm/s	Every blast	Geophone logger or similar														
<b>M9 Other monitoring and recording conditions</b>																	
<b>Noise monitoring</b>																	
M9.1	<p>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:</p> <ol style="list-style-type: none"> <li>a) at the locations labelled "R24 Hazeldene", "R12 Quipolly Railway Cottage", "R96 Talavera", "R98 Kyooma" and "R57 33 Kurrara St, Werris Ck" (non project related residence number 57) on the figure titled "EPL 12290 Licensed Monitoring Points", received by the EPA via email on 17 December 2015 (DOC16/111380);</li> <li>b) occur monthly in a reporting period; <ol style="list-style-type: none"> <li>i) occur during each day, evening and night period as defined in the NSW Industrial Noise Policy for a minimum of: <ol style="list-style-type: none"> <li>ii) 1 hour during the day; and</li> <li>iii) 1 hour during the evening or night.</li> </ol> </li> </ol> </li> </ol> <p>Note: The frequency of monitoring may be varied by the EPA once the variability of the noise impact is established.</p>	<p>Noise Management Plan. EPL Monitoring reports 2017 to 2020.</p>	<p>Data for Location R57 missing from EPL monitoring reports presented on project website, data was collected (based on review of compliance reports) Data missing for June to December 2017 and January and March 2018. Data was collected for those receptors but it was not uploaded to the website. Data should be provided on the website during the EPL reporting according to 66 (6) of POEO: Requirements for publishing pollution monitoring data (EPA 2013) General Requirements for Publishing Monitoring Data.</p>	C (Obs)	<p>Ensure all data is uploaded on the website.</p>												
<b>6 Reporting Conditions</b>																	
<b>R1</b>	<b>Annual return documents</b>																
R.1.1	<p>The licensee must complete and supply to the EPA an Annual Return in the approved form comprising:</p> <ol style="list-style-type: none"> <li>1. a Statement of Compliance,</li> <li>2. a Monitoring and Complaints Summary,</li> <li>3. a Statement of Compliance - Licence Conditions,</li> <li>4. a Statement of Compliance - Load based Fee,</li> <li>5. a Statement of Compliance - Requirement to Prepare Pollution Incident Response Management Plan,</li> <li>6. a Statement of Compliance - Requirement to Publish Pollution Monitoring Data; and</li> <li>7. a Statement of Compliance - Environmental Management Systems and Practices.</li> </ol> <p>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.</p>	<p>Annual Returns 2017 to 2020</p>	<p>Annual returns were completed in full in the approved forms during each year of the audit period.</p>	C													

Item	Assessment Requirement	Reference/ Evidence	Comments	Compliance	Recommendations
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.	Emails confirming Annual Return Submission 2018 to 2020 Annual Returns 2017 to 2020	Annual returns were prepared and submitted in each year within the audit period.	C	
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 applicable	Not Triggered	NT	
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 applicable	Not Triggered	NT	
R1.5	The Annual Return for the reporting period must be supplied to the EPA via eConnect EPA or by registered post not later than 60 days after the end of each reporting period or in the case of a transferring licence not later than 60 days after the date the transfer was granted (the 'due date').	Emails confirming Annual Return Submission 2018 to 2020	The submission times for Annual Returns are summarised below: <ul style="list-style-type: none"> <li>2020 – on 29<sup>th</sup> May 2020 (due date 30<sup>th</sup> May 2020);</li> <li>2019 – on; 30<sup>th</sup> May 2019 (due date 30<sup>th</sup> May 2019); and</li> <li>2018 – on 31<sup>st</sup> May 2018 (due date 30<sup>th</sup> May 2018).</li> </ul> The late submission of an Annual Return in 2018 related to a misunderstanding at executive level with regard to electronic signoff by Executive general Manager . Management reported that they have historically worked to an 'end of May' deadline, when the statutory submission date is on 30 <sup>th</sup> May each year.	NC	Communicate with Environmental Team at Whitehaven confirming Annual Return submission date is 30 <sup>th</sup> May each year. Update calendars accordingly.
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.	Annual returns	Copies of annual returns are maintained as required.	C	
R1.7	Within the Annual Return, the Statements of Compliance must be certified and the Monitoring and Complaints Summary must be signed by: a) the licence holder; or b) by a person approved in writing by the EPA to sign on behalf of the licence holder.	Annual Returns 2017 to 2020	ERM sighted copies of Annual Returns for 2017 to 2020.	C	
<b>R2 Notification of environmental harm</b>					
R2.1	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.	Annual Returns 2017 to 2020 Correspondence between Whitehaven Coal and the EPA across late February 2020	One exceedance of pH criteria occurred during an overflow event at a stormwater retention dam on 18 <sup>th</sup> February 2020 following 54mm of rain in the preceding five days. This is the only event considered to have caused environmental during the audit period. ERM sighted evidence that the Site	C	

Item	Assessment Requirement	Reference/ Evidence	Comments	Compliance	Recommendations
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.	Correspondence between Whitehaven Coal and the EPA across late February 2020	ERM sighted correspondence dated 19 <sup>th</sup> February informing the EPA of the pH exceedance described in Condition R2.1. The incident occurred on 18 <sup>th</sup> and Whitehaven Coal became aware of the exceedance on the 19 <sup>th</sup> following laboratory analysis. The EPA was informed of the incident on the same day.	C	
<b>R3 Written Report</b>					
R3.1	Where an authorised officer of the EPA suspects on reasonable grounds that: <ul style="list-style-type: none"> <li>a) where this licence applies to premises, an event has occurred at the premises; or</li> <li>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,</li> <li>c) 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.</li> </ul>	Not applicable	Not Triggered	NT	
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.	Not applicable	Not Triggered	NT	
R3.3	The request may require a report which includes any or all of the following information: <ul style="list-style-type: none"> <li>a) the cause, time and duration of the event;</li> <li>b) the type, volume and concentration of every pollutant discharged as a result of the event;</li> <li>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;</li> <li>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;</li> <li>e) action taken by the licensee in relation to the event, including any follow-up contact with any complainants;</li> <li>f) details of any measure taken or proposed to be taken to prevent or mitigate against a recurrence of such an event; and</li> <li>g) any other relevant matters.</li> </ul>	Not applicable	Not Triggered	NT	
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.	Not applicable	Not Triggered	NT	
R4.1	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: <ul style="list-style-type: none"> <li>a) an assessment of compliance with noise limits presented in the Noise Limits table; and</li> <li>b) an outline of any management actions taken within the monitoring period to address any exceedances of the limits contained in the Noise Limits table.</li> </ul>	Noted	Consultants are taking more than 30 days to create report.	NC	WCC should review noise monitoring supplier contract to require reporting completed within 30 days.

Item	Assessment Requirement	Reference/ Evidence	Comments	Compliance	Recommendations
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.	Noted	An exceedance of Condition 6 Schedule 3 of PA 10_0059 occurred with a blast undertaken on 4th May 2018, recording an overpressure greater than 120 dBL at two monitoring locations: 120.4dBL at Glenara (R11) and 120.2dBL at Kyooma (R98).  WCC undertook an investigation into the incident, with appropriate notifications to the EPA and DPIE.	C	

**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.	EPL 12290	Copy of licence sighted with Environment Officer.	C	
G1.2	The licence must be produced to any authorised officer of the EPA who asks to see it.	Not applicable	Not triggered.	NT	
G1.3	The licence must be available for inspection by any employee or agent of the licensee working at the premises.	Not applicable	Not triggered.	NT	

**G2 Other general conditions**

G2.1	<b>Completed programs</b>	Not applicable.	Noted.	NT																						
	<table border="1"> <thead> <tr> <th>Program</th> <th>Description</th> <th>Completed Date</th> </tr> </thead> <tbody> <tr> <td>PRP 1: Noise Monitoring and Assessment Program</td> <td>This PRP requires the licensee to undertake a noise monitoring and assessment of the impacts of typical construction and mining activities on the premises.</td> <td>15-May-2008</td> </tr> <tr> <td>PRP 2: Coal Mine Particulate Matter Control Best Practice</td> <td>Requires licensee to conduct a site specific best management practice (BMP) determination to identify ways to reduce particulate emissions.</td> <td>27-June-2012</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>13-August-2014</td> </tr> <tr> <td>Particulate Matter Control Best Practice Implementation - Disturbing and Handling Overburden under Adverse Weather Conditions</td> <td>Implementation of particulate matter best management practices to address the handling of overburden during adverse weather.</td> <td>13-August-2014</td> </tr> <tr> <td>Particulate Matter Control Best Practice Implementation - Trial of Best Practice Measures for Disturbing and Handling Overburden</td> <td>Investigation to establish best practice measures for the handling of overburden. Investigation to establish best practice measures for the handling of overburden.</td> <td>14-April-2014</td> </tr> <tr> <td>Coal Mine Wind Erosion of Exposed Land Assessment</td> <td>Calculate the stabilised and disturbed surface areas (in</td> <td>28-August-2015</td> </tr> </tbody> </table>	Program	Description	Completed Date	PRP 1: Noise Monitoring and Assessment Program	This PRP requires the licensee to undertake a noise monitoring and assessment of the impacts of typical construction and mining activities on the premises.	15-May-2008	PRP 2: Coal Mine Particulate Matter Control Best Practice	Requires licensee to conduct a site specific best management practice (BMP) determination to identify ways to reduce particulate emissions.	27-June-2012	Particulate Matter Control Best Practice Implementation - Wheel Generated Dust	Implementation of particulate matter best management practices to address wheel-generated dust.	13-August-2014	Particulate Matter Control Best Practice Implementation - Disturbing and Handling Overburden under Adverse Weather Conditions	Implementation of particulate matter best management practices to address the handling of overburden during adverse weather.	13-August-2014	Particulate Matter Control Best Practice Implementation - Trial of Best Practice Measures for Disturbing and Handling Overburden	Investigation to establish best practice measures for the handling of overburden. Investigation to establish best practice measures for the handling of overburden.	14-April-2014	Coal Mine Wind Erosion of Exposed Land Assessment	Calculate the stabilised and disturbed surface areas (in	28-August-2015				
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Item	Assessment Requirement	Reference/ Evidence	Comments	Compliance	Recommendations
	hectares) within the premises as of 30 June 2014, against the predictions within the licensee's Environmental Assessment or Environmental Impact Statement for the premises.				
<b>8</b>	<b>Pollution Studies and Reduction Programs</b>				
U1.1	<p>U1 Void Water Dam 1</p> <p>The Licencee must complete the following repairs and clean-up to void water dam 1:</p> <p>Action 1: The dam walls at VWD 1, where heavy erosion has occurred due to a blowout of high pressure hoses, is to be repaired to ensure that dam wall stability is maintained and further erosion is prevented from occurring.</p> <p>Action 2: All hydrocarbon/chemical spills on the soil, under and around the pumps and generators must be cleaned-up and remediated. The waste generated from this clean-up/remediation must be classified prior to disposal off-site and then disposed of at a lawful waste facility. Action 1 and 2 must be completed by 5pm on 21 February 2020.</p>	<p>Audit site visit (taken photos).</p> <p>EPL Monitoring reports 2017 to 2020.</p>	<p>Action 1: Photographic evidence of re-instated bank 10/12/19</p> <p>Action 2: Lab reports observed dated 17/12/2019 with validation sample reports showing no remaining hydrocarbons.</p> <p>Land farmed on-site and disposed of as GSW 11/05/20 report shows below criteria. Waste classification completed. 9.6T transported to Narrabri tip</p>	C	
U2	<p>Oil Water Separator U2.1</p> <p>The current inground oil water separator must be decommissioned and replaced with an above ground system that;</p> <ol style="list-style-type: none"> <li>1. Is roofed and bunded (roof can be mobile)</li> <li>2. Provides for stormwater Bypass if required.</li> <li>3. The type of separator selected is based volume generation needs (Coalescing plate separator or Hydrocyclone oil separator) and the best possible treatment for that volume generation available</li> <li>4. Is capable of pre-treating oil, grease, silt, detergents, NFR (Suspended solids), COD (chemical oxygen demand) and pH prior to collection for disposal.</li> </ol> <p>These works must be completed by 5pm on 31 July 2020. The Decommissioned inground unit must be removed and lawfully disposed of, at a lawful waste facility by 5pm on the 31 July 2020.</p>	N/A	Outside audit period	NT	
<b>9</b>	<b>Special Conditions</b>				
	<b>E1 Three Yearly Independent Noise Audit</b>				
E.1.1	<p>The licensee must provide the EPA with a copy of any Noise Audit and Independent Environmental Audit Report required by condition 4 of Schedule 3 and conditions 8 and 9 of Schedule 5 of the Werris Creek Mine Extension Project Approval (No. 10_0059). If the Noise Audit and Independent Environmental Audit Report do not incorporate the following information or assessments, then the licensee must also provide a separate report to the EPA that incorporates the following:</p> <ol style="list-style-type: none"> <li>(a) An assessment of noise emissions from the premises against the noise limits established by the Project Approval (No. 10_0059), as well as against the long term noise goal and noise acquisition criteria established within Project Approval No. 10_0059 that has been completed in accordance with the procedures defined in the <i>NSW Industrial Noise Policy</i> and any relevant Application Notes published by the EPA;</li> <li>(b) An evaluation of current mine noise impacts at all non-project related receptors and the noise mitigation practices that have been implemented at the premises against the best available economically achievable technology and current best practice principles for minimising noise emissions; and</li> <li>(c) Where noise impacts at any affected non-project related receptor</li> </ol>	N/A	<p>Noise audit reports have been submitted with the IEA as required.</p> <p>Part c negotiated agreements have not been triggered.</p>	C	

Item	Assessment Requirement	Reference/ Evidence	Comments	Compliance	Recommendations
	<p>exceeds the long term noise goal established by condition 4 of Schedule 3 of Project Approval 10_0059, the licensee must provide documented evidence that demonstrates that reasonable attempts have been made to reach a negotiated agreement with all relevant affected receptors within the last 3 years.</p> <p>The reports required by this condition must be submitted to the EPA's Armidale office <b>within 6 weeks of the 30 June 2014, and every three years thereafter.</b></p> <p>Note: For the purposes of this condition, a privately owned property that is subject to a current and legally binding negotiated agreement between the licensee and the relevant property owner, is considered project related, as is any property or residence held in the ownership of the licensee or its associated companies.</p>				
E1.2	<p>If the reports required by E1.1 above indicate that non-project related receptors continue to receive impacts that exceed the long term noise goal established by condition 4 of Schedule 3 of Project Approval 10_0059, then the licensee must provide the EPA with a report detailing the actions it will take during the next three year period, to further reduce noise impacts from the mine. The report must:</p> <ul style="list-style-type: none"> <li>a) Provide details of any trials, tests or research that it will commission in an attempt to develop new or innovative noise mitigation technologies or management practices;</li> <li>b) Detail the nature of any works that will be carried out at the premises or at the relevant receptor locations to further reduce noise impacts;</li> <li>c) Provide timelines and provisional costings for the proposed actions or works;</li> <li>d) Provide an analysis where possible of the potential noise reductions that the proposed actions are likely to achieve; and</li> <li>e) Define any additional noise monitoring programs that might be required to measure/validate the performance of the proposed mitigation actions.</li> </ul> <p>The report required by this condition must be submitted to the EPA by 31 August 2014 and every three years thereafter until noise emissions from the premises meet the long term noise goal established by condition 4 of Schedule 3 of Project Approval 10_0059.</p>	N/A	Completed outside of audit period.	NT	



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**APPENDIX A2 STATEMENT OF COMMITMENTS**

Compliance with Project Approval 10\_0059

<b>Document details</b>	
Document title	Appendix A2 Statement of Commitments
Document subtitle	Compliance with Project Approval 10_0059
Project No.	0552611
Date	22 July 2020
Version	1.0
Author	Robert Smith, Aaron McKenzie
Client Name	Whitehaven Coal Limited

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Table A.2: Statement of Commitments

Action No	Action	Timing	Reference/Evidence	Comments	Compliance Status	Recommendations
<b>1. Environmental Management System</b>						
Desired Outcome: A systematic set of documents are in place to guide the planning and implementation of all environmental management strategies.						
1.1	Incorporate the environmental procedures in an on-site management system.	As required.	Various management systems, plans and strategies which make up the Whitehaven Coal Environmental Management System	ERM sighted evidence that Whitehaven has developed and implemented an environmental management system that manages the key environmental aspects of the mine.	C	
1.2	Implement the following management plans; <ul style="list-style-type: none"> <li>• Mining Operations Plan (Rehabilitation Management Plan)</li> <li>• Heritage Management Plan</li> <li>• Site Water Management Plan</li> <li>• Noise Management Plan</li> <li>• Blast Management Plan</li> <li>• Air Quality and Greenhouse Gas Management Plan</li> <li>• Biodiversity and Offset Management Plan</li> <li>• Waste and Hydrocarbon Management Plan</li> </ul>	Ongoing	Mining Operations Plan (Rehabilitation Management Plan) Heritage Management Plan Site Water Management Plan Noise Management Plan Blast Management Plan Air Quality and Greenhouse Gas Management Plan Biodiversity and Offset Management Plan Waste and Hydrocarbon Management Plan	ERM sighted all of the plans detailed in this condition and evidence of their implementation during the site walkover.	C	
<b>2. Groundwater</b>						
Desired Outcome: Effective management of the potential contamination and/or reduction in availability of groundwater resources.						
2.1	Implement impact mitigation measures in accordance with an approved Site Water Management Plan.	As defined by the Site Water Management Plan.	Water Management Plan (WMP).	According to the WMP: 6.3.4 Former Underground Workings Water Management Active dewatering of the former underground workings ceased in July 2013 as mining advanced through the former dewatering bore. Dewatering of the former underground workings continues passively as seepage into the open cut pit and is managed as part of pit dewatering activities. WCC must balance dewatering of the underground to minimise the risk of inrush into the pit and boggy working conditions while maintaining water in the underground to prevent spontaneous combustion developing into underground fires. WCC actively uses water curtains and sprinklers to saturate the ground above the former underground workings to exclude oxygen and cool the ground temperature to below that which the coal seam would spontaneously combust.	C	

APPENDIX A2 STATEMENT OF COMMITMENTS

Compliance with Project Approval 10\_0059

Action No	Action	Timing	Reference/Evidence	Comments	Compliance Status	Recommendations
				Pit misting system utilised to manage void water volume via evaporation, observed operational during site visit.		
2.2	Undertake groundwater monitoring in accordance an approved Site Water Management Plan.	As defined by the Site Water Management Plan.	Water Management Plan.	According to the WMP: 7.4 Groundwater Monitoring Program WCC has established the groundwater-monitoring network.	C	
2.3	Implement additional assessment, land owner notification and contingency or compensatory measures in accordance with an approved Site Water Management Plan.	As defined by the Site Water Management Plan.	Not applicable.	Not Triggered	NT	

Desired Outcome: Prevent Accumulation of void water within the final landform which may impact on final land form and land use.

2.4	Backfill overburden into the final void above the equilibrium water level.	Following the cessation of mining.	Not applicable.	There is not a final void in place at the moment. Not triggered.	NT	
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### 3. Surface Water

Desired Outcome: Effective management of the potential contamination and/or reduction in availability of surface water resources.

3.1	Construct and maintain surface water management infrastructure of the Mine in accordance with an approved <i>Site Water Management Plan</i> .	Ongoing.	Water Management Plan.	According to WMP: 6 Management Strategies and Measures. 6.2 Surface Water Management WCC undertakes several controls and infrastructures to manage the surface water.	C	
3.2	Implement impact mitigation measures in accordance with an approved <i>Site Water Management Plan</i> .	As defined by the Site Water Management Plan.	Water Management Plan.	According to WMP: 6 Management Strategies and Measures. In order to mitigate any potential water impacts from the WCC LOM Project, a number of surface water and groundwater management controls will be implemented throughout the life of the operation. WCC details all the management controls in section 6.	C	
3.3	Undertake surface water monitoring in accordance an approved Site Water Management Plan.	As defined by the Site Water Management Plan.	Water Management Plan.	According to WMP: 7.1 Surface Water Management Plan. Surface water monitoring at WCC is structured for discharge monitoring (dirty water controlled or wet weather), and routine (quarterly) monitoring of clean, dirty and void water dams and offsite streams. Non-routine monitoring also occurs on an ad hoc basis to determine immediate water quality of dams onsite.	C	

Desired Outcome: Prevention of void water discharge off site.

3.4	Operate void water dams with sufficient freeboard to prevent discharge during high rainfall events.	Ongoing.	Water Management Plan.	According to WMP: 6.3.6 Void Water Dam Storage Management 6.3.8 High Water Level Alarms WCC currently uses four dedicated void water dams, an additional temporary storage and a former council gravel quarry pit for surface storage of void water. There is also high water level alarms in three of the void water dams.	C	
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Action No	Action	Timing	Reference/Evidence	Comments	Compliance Status	Recommendations
3.5	Complete an irrigation assessment for specific irrigation campaigns in accordance with EPA requirements.	Prior to commencement of off-site irrigation.	Water Management Plan. Audit site visit (taken photos)	A letter from SLR on 7 <sup>th</sup> May 2020 shows there was a final irrigation application on 18 <sup>th</sup> March 2019.	C	
3.6	Provide each irrigation assessment to the EPA for review and approval.	Prior to commencement of off-site irrigation.	Water Management Plan. Audit site visit (taken photos)	ERM sighted the irrigation assessments and EPA approval.	C	

#### 4. Rehabilitation

Desired Outcome: Avoid, minimise, mitigate or offset impacts (in that hierarchical order) on native vegetation (including the two identified EECs), native fauna (including threatened species) and their habitat.

4.1	Implement the impact avoidance, minimisation, mitigation and offset measures of an approved Biodiversity Offset Strategy and Biodiversity and Offset Management Plan (BOMP) for the Mine in consultation with the OEH, DPE and DoE.	Ongoing.	Biodiversity and Offset Management Plan 2013 Biodiversity and Offset Management Plan 2016 (Submitted to but unapproved by DPE, OEH, DoEE) EPBC Compliance Reports 2017 to 2019	Whitehaven Coal sent a letter to DP&I on 22/6/2012 seeking approval for BOMP. The BOMP was approved by the DP&I on 30/8/2013. Section 6.4 of the Werris Creek Coal Mine Annual Reviews discusses the management of the offset areas. EPBC Compliance report discuss the implantation of the Off-set strategy.	C	
4.2	Include detail on the following activities in the BOMP. <ul style="list-style-type: none"> <li>• Identification and demarcation of areas to be cleared.</li> <li>• Retention of felled trees for subsequent use during rehabilitation activities</li> <li>• Identification of biological resources within the disturbance area including habitat resources such as hollows, stag trees and coarse woody debris, and the availability of endemic seed.</li> <li>• Seed collection.</li> <li>• Monitoring and inspection programs.</li> <li>• Noxious weed management.</li> </ul>	As defined within the BOMP.	Biodiversity and Offset Management Plan 2013 Biodiversity and Offset Management Plan 2016 (Submitted to but unapproved by DPE, OEH, DoEE)	All items in this condition were included in the scope of the BOMP.	C	

Desired outcome: The creation of a stable final landform on the Pit Top Area (and surrounding long-term disturbance areas, ie, ventilation shaft areas, Reject Emplacement Area and brine storage ponds), available for the proposed future uses(s) of agriculture, and/or nature conservation.

4.3	Complete rehabilitation in accordance with an approved Rehabilitation Management Plan (RMP) or Mining Operations Plan (MOP).	Ongoing.	MOP 2015	Observations made during the site visit and the content of the MOP indicate that the Site is being progressively rehabilitated. The site is currently within 3 hectares of the MOP targets.	C	
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#### 5. Heritage

Desired Outcome: Maintain Aboriginal heritage values on site.

5.1	Implement the Heritage Management Plan for the Mine in consultation with OEH and DPE.	Ongoing.	Heritage Management Plan 2014	The original Heritage Management Plan was sent to the DPE in October 2012 for approval. The Heritage Management Plan disclosed on the WHC website is dated July 2014. The only significant amendment to the heritage management plan between the version issued in 2012 and the current plan relate to the relocation of the Narrawolga Axe Grinding Groove Rocks to the Willow Tree Visitor Information Centre on 15th April 2015. The project involved detailed consultation with the Liverpool Plains Shire Council and Nungaroo	C	
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Action No	Action	Timing	Reference/ Evidence	Comments	Compliance Status	Recommendations
				Local Aboriginal Lands Council, with assistance provided by ageotechnical engineer and archaeologists to minimise the risk of damage to the Groove Rocks and meet regulatory and documentation requirements		
5.2	Relocate the Narrawolga Axe Grinding Grooves to the Willow Tree Visitor Information Centre (at Willow Tree), as nominated in the Mine Heritage Management Plan, and in accordance with a care agreement transferring the responsibility from Werris Creek Coal to Nungaroo LALC.	Completed 15 April 2015.	Heritage Management Plan 2014	The Narrawolga Axe Grinding Groove Rocks were relocated to the Willow Tree Visitor Information Centre on 15th April 2015.  The project involved detailed consultation with the Liverpool Plains Shire Council and Nungaroo Local Aboriginal Lands Council, with assistance provided by ageotechnical engineer and archaeologists to minimise the risk of damage to the Groove Rocks and meet regulatory and documentation requirements	C	

### 6. Transport Aspects

Desired Outcome: Product haulage by public road is conducted in an appropriate and safe manner.

6.1	Adhere to the restricted hours of operation.	Ongoing.	-	Less than 1000T of coal has left the site by road per year during the audit period. No evidence to suggest that shipments have occurred outside of restricted hours was noted during this assessment.	C	
6.2	Prevent spillage from the trucks through the continuation of a 'covered load' policy.	Ongoing.	Driver Induction	Drivers who transport coal off-site are required to cover their loads. No coal loads left the site during this assessment.	C	
6.3	Consult with DPE prior to undertaking any haulage of coal to the Gunnedah CHPP (to confirm compliance with PA 10_0059).	Prior to commencement of haulage to the Gunnedah CHPP.	Not applicable	Not triggered.	NT	

### 7. Noise

Desired Outcome: Attenuate mining noise sources to ensure compliance with Project Specific Noise Criteria.

7.1	Construct an Acoustic and Visual Amenity Bund at the northern extent of mining operations.	Prior to mining through the "Old Colliery" Hill	Noise Management Plan	Bund on northern extent of Pit observed during site inspection	C	
7.2	Implement noise mitigation and management measures in accordance with an approved Noise Management Plan (NMP).	Ongoing.	Noise Management Plan	There was no need to implement noise mitigation during the reported audit period, as there were no noise criteria exceedances.	C	
7.3	Employ a dedicated Noise Control Operator (NCO) to continually monitor real time noise levels and inform the Open Cut Examiner (OCE) if the dominant noise source is mining.	Ongoing.	Noise Management Plan (NMP). WCC Noise Control Operation Procedure (sighted on-site) (taken photos)	According to the NMP a NCO commenced in March 2012.  The WCC Noise Control Operation Procedure indicates a continuous noise monitoring proforma on 29 <sup>th</sup> April 2016.	C	
7.4	Modify or partially suspend mining operations to achieve the nominated noise criteria when elevated noise levels a result of mining noise.	On advice from NCO of elevated mining noise.	Not Applicable	There were no noise criteria exceedances.	C	

Desired outcome: Monitor and manage noise generated by the LOM Project.

7.5	Implement noise monitoring in accordance with an approved NMP for the Mine.	As defined within the NMP.	Noise Management Plan	WCC has implemented noise monitoring in accordance to the NMP.	C	
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Action No	Action	Timing	Reference/Evidence	Comments	Compliance Status	Recommendations
<b>8. Blasting</b>						
Desired Outcome: Minimise impacts from blasting on surrounding receptors and infrastructure.						
8.1	Undertake blasting in accordance with an approved Blast Management Plan (BMP).	Ongoing.	Blast Management Plan.	WCC has implemented noise monitoring in accordance to the BMP.	C	
8.2	Continue to monitor blasting impacts in accordance with BMP.	All blasts.	Blast Management Plan.	WCC continues monitoring blasting impacts in accordance to the BMP.	C	
<b>9. Air Quality</b>						
Desired Outcome: Minimise impacts to air quality relating to the Project.						
9.1	Undertake all surface disturbance, mining, processing, transportation and other air emissions activities in accordance with an approved Air Quality and Greenhouse Gas Management Plan (AQGHGMP) for the Mine.	Ongoing.	Air Quality and Greenhouse Gas Management Plan (AQGHGMP).	WCC has undertaken all surface disturbance, mining, processing, transportation and other air emissions activities in accordance to the AQGHGMP.	C	
Desired Outcome: Monitor and manage dust emissions generated by the LOM Project.						
9.2	Undertake air quality monitoring in accordance with an approved AQGHGMP for the Mine.	As defined within the AQGHGMP.	Air Quality and Greenhouse Gas Management Plan (AQGHGMP).	WCC has undertaken air quality monitoring in accordance to the AQGHGMP.	C	
<b>10. Visibility</b>						
Desired Outcome: Screen the operation visually from the surrounding local area.						
10.1	Construct an Acoustic and Visual Amenity Bund at the northern extent of mining operations.	Prior to mining through the 'Old Colliery' Hill	Observations made during the site visit	A > 15 metre high visual/amenity bund was observed along the northeastern perimeter of the northern extent of the open-cut pit.	C	
10.2	Maintain screening vegetation and constructed landforms in accordance with an approved RMP (or MOP).	Ongoing.	Observations made during the site visit MOP 2015	Maintenance of vegetation is ongoing. No evidence of non-compliance was observed.	C	
10.3	Continue to position and direct floodlights visible offsite to not shine above horizontal and generally orientated in a westerly direction away from Werris Creek Road and adjacent communities.	During night-time operations.	Lighting Management Procedure Complaints Register	A magnetic lighting management procedure was observed attached to lights across the facility. One complaint has been received regarding light emissions at nearby premise. Investigation of the complaint indicated that a light had been moved not in accordance with the Light Management Procedure. – due to movement of light. NCO noise monitors monitor visible light from the mine daily and record results.	C	
10.4	Ensure fixed lights visible from offsite locations will comply with Australian Standard AS4282 (INT) 1995 – Control of Obtrusive Effects of Outdoor Lighting.	During night-time operations.	Audit of external lighting associated with the development against the Australian Standard AS4282 (INT) 1995 – Control of Obtrusive Effects of Outdoor Lighting	An audit against Australian Standard AS4282 (INT) 1995 – Control of Obtrusive Effects of Outdoor Lighting was sighted during the site visit. No non-compliances were observed in the audit results.	C	
10.5	Maintain a lighting camera located adjacent to R62 on southern edge of Werris Creek orientated towards the Mine.	Ongoing (or until advised by resident)	Observations made during the site visit	ERM sighted the lighting camera during the audit.	C	

Action No	Action	Timing	Reference/ Evidence	Comments	Compliance Status	Recommendations
10.6	Maintain the Mine Site in a clean and tidy condition at all times.	Ongoing.	Observations made during the site visit	Housekeeping at the mine was excellent.	C	None.
<b>11. Soils, Land Capability and Agricultural Suitability</b>						
Desired outcome: Create a final landform that is safe, stable and is amenable to a combination of agricultural and native flora/fauna conservation activities.						
11.1	Undertake final landform construction and rehabilitation in accordance with an approved RMP or MOP.	Ongoing.	Observations made during the site visit MOP 2015	Final landform has not yet been achieved. Rehabilitation observed was of good quality (despite drought conditions through the last two years prior to the current).	C	None.
<b>12. Waste</b>						
Desired outcome: Manage waste appropriately on site.						
12.1	Prepare and implement waste management activities in accordance with an approved Waste and Hydrocarbon Management Plan (WHMP).	Ongoing.	Waste and Hydrocarbon Management Plan	Waste and Hydrocarbon Management Plan sighted.	C	None.
<b>13. Hazards</b>						
Desired Outcome: Manage bushfire hazards appropriately.						
13.1	Prepare and implement fire prevention, management and suppression measures in accordance with a Fire Management Strategy which forms part of an approved BOMP.	Ongoing.	Annual Reviews 2017 to 2019 BOMP 2013 and 2016	<p>Bushfire management across the site includes:</p> <ul style="list-style-type: none"> <li>• Four water carts;</li> <li>• Hydrants around the site;</li> <li>• Biodiversity offset lands have fire breaks.</li> <li>• Fire management is incorporated into the offset strategy.</li> <li>• Emergency Response Team is trained in fire response.</li> </ul> <p>Fuel load management and maintenance of fire breaks are discussed as performance metrics in Environmental Performance Sections of the Annual reviews.</p>	C	None.
Desired Outcome: The storage and handling of hazardous materials is appropriately managed.						
13.2	Prepare and implement hydrocarbon management activities in accordance with an approved WHMP.	Ongoing.[AS1]	Waste and Hydrocarbon Management Plan	Waste and Hydrocarbon Management Plan appeared to be implemented during the audit.	C	None.
<b>14. Community Contributions</b>						
Desired Outcome: Provide for ongoing support to the Werris Creek local community and Liverpool Plains Shire Council.						
14.1	Maintain the Community Consultative Committee or similar and include local community representatives.	Ongoing.	CCC minutes 2017 to present	CCC minutes have been published online throughout the audit period.	C	None.
14.2	Complete and distribute regular newsletters regarding project progress and operations.	Ongoing.	Water Management information flyer	A Water Management information flyer was made publically available during the audit period (2017) and is available for any community member who raises any water related concerns.	C (obs)	None.
14.3	Continue to provide funding towards maintenance of Taylors Lane through Section 94 contributions.	Ongoing.	Not applicable	Coal haulage tonnage has not approached 20kT trigger value. Not Triggered	NT	None.

Action No	Action	Timing	Reference/ Evidence	Comments	Compliance Status	Recommendations
14.4	Implement the Community Enhancement Fund with the Liverpool Plains Shire Council and Community Consultative Committee.	Ongoing.	Werris Creek Coal Mine Annual Review 2017 CCC minutes 2017	<p>Written evidence of the requisite spend via the Community Enhancement Fund was observed during the site visit. The spend occurred during the six calendar years from 2012 to 2017 (overlapping this Audit period by six months). Approximately \$30k was spent at Spring Ridge and \$336,000 was spent in Werris Creek.</p> <p>The local council (Liverpool Plains Shire Council) were the recipients of the funds for community projects and the spend was discussed in relevant CCC meetings.</p> <p>Details of the projects funded were discussed in the Werris Creek Coal Mine Annual Review 2017 which is submitted to the Department.</p>	C	None.



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**APPENDIX A2 - EPL**

Compliance with Environment Protection Licence (EPL) 12290

<b>Document details</b>	
Document title	Appendix A2 - EPL
Document subtitle	Compliance with Environment Protection Licence (EPL) 12290
Project No.	0552611
Date	22 July 2020
Version	1.0
Author	Robert Smith, Aaron McKenzie
Client Name	Whitehaven Coal

Item	Assessment Requirement	Reference/ Evidence	Comments	Compliance	Recommendations									
<b>1 ADMINISTRATIVE CONDITIONS</b>														
<b>A1 What the licence authorises and regulates</b>														
A1.1	This licence authorises the carrying out of the scheduled activities listed below at the premises specified in A2. The activities are listed according to their scheduled activity classification, fee-based activity classification and the scale of the operation. Construct mine entrance/ access/ rail load out roads; site preparation; (clearing/ soil removal) including mining activities, earthworks for processing plant, coal loading & office facility installation; install water management controls.	Site observations MOP 2015 Annual Returns 2017 to 2019	The Site is not undertaking any scheduled activities other than those permitted by its EPL.	C										
A1.2	This licence authorises the carrying out of the scheduled activities listed below at the premises specified in A2. The activities are listed according to their scheduled activity classification, fee-based activity classification and the scale of the operation. Unless otherwise further restricted by a condition of this licence, the scale at which the activity is carried out must not exceed the maximum scale specified in this condition.	Annual Coal Movements 2017 to 2019	The site's production capacity has remained within the scheduled limits.	C										
	<table border="1"> <thead> <tr> <th>Scheduled Activity</th> <th>Fee Based Activity</th> <th>Scale</th> </tr> </thead> <tbody> <tr> <td>Coal works</td> <td>Coal works</td> <td>&gt; 2,000,000 – 5,000,000 T annual handing capacity</td> </tr> <tr> <td>Mining for coal</td> <td>Mining for coal</td> <td>&gt; 2,000,000 T – 3,500,000 of annual production capacity</td> </tr> </tbody> </table>	Scheduled Activity	Fee Based Activity	Scale	Coal works	Coal works	> 2,000,000 – 5,000,000 T annual handing capacity	Mining for coal	Mining for coal	> 2,000,000 T – 3,500,000 of annual production capacity				
Scheduled Activity	Fee Based Activity	Scale												
Coal works	Coal works	> 2,000,000 – 5,000,000 T annual handing capacity												
Mining for coal	Mining for coal	> 2,000,000 T – 3,500,000 of annual production capacity												
A1.3	The licensee must not carry on any scheduled activities until the scheduled development works are completed, except as elsewhere provided in this licence.	Site observations	No evidence to suggest this condition is not being complied with was observed.	C										
<b>A2 Premises or plant to which this licence applies</b>														
A2.1	The licence applies to the following premises: <b>Premises Details</b> <b>WERRIS CREEK COAL</b> <b>1435 WERRIS CREEK ROAD</b> <b>WERRIS CREEK</b> <b>NSW 2341</b>  <b>THE LAND BOUND WITHIN THE "PROJECT SITE BOUNDARY" IDENTIFIED IN THE MAP TITLED "FIGURE 1: SCHEDULE OF LAND" OF APPENDIX 1 SCHEDULE OF LAND OF PROJECT APPROVAL 10_0059, DATED 25 OCTOBER 2011 (DOC16/11179).</b>	Mine licence plans Site observations	Mining operations are completed within the approved site boundary.	C										
<b>A3 Information supplied to the EPA</b>														
A3.1	Works and activities must be carried out in accordance with the proposal contained in the licence application, except as expressly provided by a condition of this licence.  In this condition the reference to "the licence application" includes a reference to: (a) the applications for any licences (including former pollution control approvals) which this licence replaces under the Protection of the Environment Operations (Savings and Transitional) Regulation 1998; and (b) the licence information form provided by the licensee to the EPA to assist the EPA in connection with the issuing of this licence.	Site observations	No evidence to suggest this condition is not being complied with was observed.	C										

Item	Assessment Requirement	Reference/ Evidence	Comments	Compliance	Recommendations																								
<b>2 DISCHARGES TO AIR AND WATER AND APPLICATIONS TO LAND</b>																													
<b>P1 Location of monitoring/discharge points and areas</b>																													
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P1.2	<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> <p style="text-align: center;"><i>Water and land</i></p> <table border="1"> <thead> <tr> <th>EPA ID no.</th> <th>Type of monitoring point</th> <th>Type of discharge point</th> <th>Location description</th> </tr> </thead> <tbody> </tbody> </table>	EPA ID no.	Type of monitoring point	Type of discharge point	Location description	<p>Email from Whitehaven Coal to EPA dated 21/04/20 Site observations</p>	<p>Evidence viewed of monitoring locations being provided to the EPA in email dated 21/04/20 with shapefiles confirming the spatial location of the discharge points. All monitoring locations were present and are sign posted on-site. No monitoring locations have moved since the EPL was granted.</p>	C																					
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Item	Assessment Requirement			Reference/ Evidence	Comments	Compliance	Recommendations
10	Wet Weather Discharge / Discharge Water Quality Monitoring	Wet Weather Discharge / Discharge Water Quality Monitoring	Point known as "SB2" and identified as "EPL10" on the figure titled "EPL 12290 Licensed Monitoring Points", received by the EPA via email on 17 December 2015 (DOC16/111380).				
12	Wet Weather Discharge / Discharge Water Quality Monitoring	Wet Weather Discharge / Discharge Water Quality Monitoring	Point known as "SB9" and identified as "EPL12" on the figure titled "EPL 12290 Licensed Monitoring Points", received by the EPA via email on 17 December 2015 (DOC16/111380).				
14	Wet Weather Discharge / Discharge Water Quality Monitoring	Wet Weather Discharge / Discharge Water Quality Monitoring	Point known as "SB10" and identified as "EPL14" on the figure titled "EPL 12290 Licensed Monitoring Points", received by the EPA via email on 17 December 2015 (DOC16/111380).				
16	Water Quality Monitoring		Point known as "VWD1" and identified as "EPL16" on the figure titled "EPL 12290 Licensed Monitoring Points", received by the EPA via email on 17 December 2015 (DOC16/111380).				
17	Groundwater Quality Monitoring		Point known as "GW966036/MW1" and identified as "EPL17" on the figure titled "EPL 12290 Licensed Monitoring Points", received by the EPA via email on 17 December 2015 (DOC16/111380).				
18	Groundwater Quality Monitoring		Point known as "GW966127/MW2" and identified as "EPL18" on the figure titled "EPL 12290 Licensed Monitoring Points", received by the EPA via email on 17 December 2015 (DOC16/111380).				
19	Groundwater Quality Monitoring		Point known as "GW965729/MW3" and identified as "EPL19" on the figure titled "EPL 12290 Licensed Monitoring Points", received by the EPA via email on 17 December 17 December 2015 (DOC16/111380).				
20	Groundwater Quality Monitoring		Point known as "MW4b" and identified as "EPL20" on the figure titled "EPL 12290 Licensed Monitoring Points", received by the EPA via email on 17 December 2015 (DOC16/111380).				
21	Groundwater Quality Monitoring		Point known as "GW968728/MW5" and identified as "EPL21" on the figure titled "EPL 12290 Licensed Monitoring Points", received by the EPA via email on 17 December 2015 (DOC16/111380).				
22	Groundwater Quality Monitoring		Point known as "MW6" and identified as "EPL22" on the				

Item	Assessment Requirement		Reference/ Evidence	Comments	Compliance	Recommendations
			figure titled "EPL 12290 Licensed Monitoring Points", received by the EPA via email on 17 December 2015 (DOC16/111380).			
23	Ambient / Discharge Water Quality Monitoring		Point known as WC-U on Werris Creek and identified as "EPL23" on the figure titled "EPL 12290 Licensed Monitoring Points", received by the EPA via email on 17 December 2015 (DOC16/111380).			
24	Ambient / Discharge Water Quality Monitoring		Point known as WC-D on Werris Creek and identified as "EPL24" on the figure titled "EPL 12290 Licensed Monitoring Points", received by the EPA via email on 17 December 2015 (DOC16/111380).			
25	Ambient / Discharge Water Quality Monitoring		Point known as QC-U on Quipolly " Creek and identified as "EPL25" on the figure titled "EPL 12290 Licensed Monitoring Points", received by the EPA via email on 17 December 2015 (DOC16/111380).			
26	Ambient / Discharge Water Quality Monitoring		Point known as QC-D on Quipolly Creek and identified as "EPL26" on the figure titled "EPL 12290 Licensed Monitoring Points", received by the EPA via email on 17 December 2015 (DOC16/111380).			
27	Water Quality Monitoring		Point known as "VWD2" and identified as "EPL27" on the figure titled "EPL 12290 Licensed Monitoring Points", received by the EPA via email on 17 December 2015 (DOC16/111380).			
32	Wet Weather Discharge / Discharge Water Quality Monitoring	Wet Weather Discharge / Discharge Water Quality Monitoring	Point known as "S818" and identified as "EPL32" on the figure titled "EPL 12290 Licensed Monitoring Points", received by the EPA via email on 17 December 2015 (DOC16/111380).			
33	Discharge Water Quality Monitoring Discharge for off-site agricultural use	Discharge Water Quality Monitoring Discharge for off-site agricultural use	Point known as "VWD1" and identified as "EPL33" on the figure titled "EPL 12290 Licensed Monitoring Points", received by the EPA via email on 17 December 2015 (DOC16/111380).			
34	Discharge Water Quality Monitoring Discharge for off-site agricultural use	Discharge Water Quality Monitoring Discharge for off-site agricultural use	Point known as "VWD3" and identified as "EPL34" on the figure titled "EPL 12290 Licensed Monitoring Points", received by the EPA via email on 17 December 2015 (DOC16/111380).			
35	Discharge Water Quality Monitoring	Discharge Water Quality Monitoring	Point known as "VWD4" and identified as "EPL35" on the figure titled "EPL 12290			

Item	Assessment Requirement			Reference/ Evidence	Comments	Compliance	Recommendations
	Discharge for off-site agricultural use	Discharge for off-site agricultural use	Licensed Monitoring Points", received by the EPA via email on 17 December 2015 (DOC16/111380).				

**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.	Monitoring and lab report Email from Whitehaven Coal to EPA confirming non-compliance	An uncontrolled discharge occurred from dams titled EPA10 and EPA14 that commenced on 9 February 2020. The discharge events were 'Special Frequency' events as rainfall exceeded 39.2mm, therefore the discharges themselves were not non-compliances. One exceedance reported low pH 5.5 for discharge point EPL14 uncontrolled discharge, sampled on 18 <sup>th</sup> February 2020.  Event which was reported to the EPA and included in annual returns as required. Investigation of this event did not identify a source of the exceedance and no subsequent monitoring has identified similar results.	NC	Investigation indicates that the exceedance appears to be anomalous. No further action required.  Continue to monitor water quality during discharge events.
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**L2 Concentration Limits**

L2.1	For each monitoring/discharge point or utilisation area specified in the table\ 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.	Not applicable.	Not Triggered.	NT																									
L2.2	Where a pH quality limit is specified in the table, the specified percentage of samples must be within the specified ranges.	Annual reviews 2017 and 2018. Monitoring and lab reports	Lab reports provided - One exceedance reported low pH 5.5 for discharge point EPL14 uncontrolled discharge, sampled on 18 <sup>th</sup> February 2020. Other results indicated exceedances up /down stream during storm events (off site locations, results not correlated to discharge point results).	NC	As above.																								
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.	Not applicable.	Not Triggered.	NT																									
L2.4	Water and/or Land Concentration Limits <b>Point 10, 12, 14, 32</b>	EPL Monitoring reports 2017 to 2020.	Monitoring data is compliant with the water and land concentration limits during the reported audit period, with the exception of a low pH 5.5 at the point 14 in February 2020.	C	WCC should continue monitoring with special attention to pH at point 14.																								
	<table border="1"> <thead> <tr> <th>Pollutant</th> <th>Unit 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>20</td> <td>35</td> <td>-</td> <td>50</td> </tr> </tbody> </table>	Pollutant	Unit 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	20	35	-	50				
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	Electrical conductivity	Microsiemens per centimetre	-	-	-	2000				
	Oil and grease	Milligrams per litre	-	-	-	10				
	pH	pH	6.5 - 8.5		-	9				
L2.5	<p>The Total Suspended Solids concentration limits specified for Points 10, 12, 14 and 32 may be exceeded for water discharged from the sediment basins provided that:</p> <p>(a) the discharge occurs solely as a result of rainfall measured at the premises that exceeds 39.2 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 39.2 millimetre, 5 day rainfall event.</p>						<p>EPL Monitoring reports 2017 to 2020.</p> <p>Correspondence between Whitehaven Coal and EPA regarding discharge events</p> <p>Pre- and Post-rain inspections on dams</p>	<p>(a) No discharges occurred unless the 39.2mm of rain limit had been exceeded.</p> <p>(b) Management plan requires that basins are flocked when rain events are coming.</p> <p>ERM observed dewatering of SP2 during the field works as a result of predicted rain event due to occur on Saturday.</p> <p>Site retains records of pre-rain inspections on their server. Post rain photographs are also taken showing post management actions.</p> <p>Examples of photos of post rain maintenance works were also observed.</p> <p>ERM tracked uncontrolled discharge photos to lab reports to confirm that testing had occurred. An exceedance of TSS was noted in the report and evidence was sighted of an email from Whitehaven Coal to the EPA with relevant lab reports attached. There had been 54mm of rain in the previous 5 days, therefore this was not recorded as a non-compliance. .</p>	C	
<b>L3 Waste</b>										
L3.1	The licensee must not cause, permit or allow any waste generated outside the premises to be received at the premises for storage, treatment, processing, reprocessing or disposal or any waste generated at the premises to be disposed of at the premises, except as expressly permitted by the licence.						Not applicable	Not Triggered.	NT	
L3.2	This condition only applies to the storage, treatment, processing, reprocessing or disposal of waste at the premises if those activities require an environment protection licence.						Not applicable	Not Triggered.	NT	
<b>L4 Noise Limits</b>										
L4.1	Noise generated from the premises must not exceed the noise limits in the table below.						Annual reviews 2017 and 2018. EPL Monitoring reports 2017 to 2020.	No exceedances of noise criteria limits occurred during the reported audit period.	C	
	Locality and location	Day LAeq (15 minute)	Evening LAeq (15 minute)	Night LAeq (15 minute)	Night LA1 (1 minute) -					
	The residence on the property "Talavera" marked as location "R96 Talavera" on the figure titled "EPL 12290 Licensed Monitoring Points", received by the EPA via	38	38	38	45					

Item	Assessment Requirement					Reference/ Evidence	Comments	Compliance	Recommendations
	email on 17 December 2015 (DOC16/111380).								
	The residence known as Quipolly Railway Cottage" marked as location "R12 Quipolly Railway Cottage" on the figure titled "EPL 12290 Licensed Monitoring Points", received by the EPA via email on 17 December 2015 (DOC16/111380).	38	38	38	45				
	The residence on the property "Hazeldene" marked as location "R24 Hazeldene" on the figure titled "EPL 12290 Licensed Monitoring Points", received by the EPA via email on 17 December 2015 (DOC16/111380).	37	37	37	45				
	'The residence on the property "Kyooma" marked as location "R98 Kyooma" on the figure titled "EPL 12290 Licensed Monitoring points", received by the EPA via email on 17 December 2015 (DOC16/111380).	36	38	38	45				
	Any other affected residence not owned by the licensee or its related companies.	35	35	35	45				
L4.2	<p>For the purpose of the condition above;</p> <p>a) Day is defined as the period from 7am to 6pm on any day.</p> <p>b) Evening is defined as the period 6pm to 10pm on any day.</p> <p>c) Night is defined as the period from 10pm to 7am on any day.</p> <p>Note: For the purpose of the noise criteria for this condition, 5dBA must be added to the measurement level if the noise is substantially tonal or impulsive in character.</p>					Annual reviews 2017 and 2018. EPL Monitoring reports 2017 to 2020.	Not triggered	C	



Item	Assessment Requirement	Reference/ Evidence	Comments	Compliance	Recommendations
L4.3	<p>The noise limits set out in the Noise Limits table apply under all meteorological conditions except for the following:</p> <ul style="list-style-type: none"> <li>a) Wind speeds greater than 3 metres/second at 10 metres above ground level; or</li> <li>b) Temperature inversion conditions up to 12°C/100m and wind speeds greater than 2 metres/second at 10 metres above ground level; or</li> <li>c) Temperature inversion conditions greater than 12°C/100m.</li> </ul> <p>Note: For the purposes of this condition, data recorded by the meteorological station identified as EPA Identification Point No. 9 and the lower level temperature sensor identified as EPA Identification Point No. 31 must be used to determine meteorological conditions.</p> <p>Note: Temperature inversion conditions (vertical temperature gradient in degrees C/100m) are to be determined as <math>[(TM2 - TM3 - 0.7) * 1.25]</math>, where TM2 is the temperature from sensor M2 (10m weather station at top of rehabilitated overburden emplacement) and TM3 is the temperature from sensor M3 (lower weather station at base of rehabilitated overburden emplacement). Reference: Spectrum Acoustics letter report Ref: 04035/4580 of 7 November 2012 to Werris Creek Coal.</p>	Annual reviews 2017 and 2018.	Not triggered	C	
L4.4	<p>Noise impacts where wind speed exceeds 3 metres per second at 10 metres above the ground must be addressed by:</p> <ul style="list-style-type: none"> <li>a) documenting noise complaints received to identify any higher level of impacts or wind patterns;</li> <li>b) 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 must be developed and implemented.</li> </ul>	Annual reviews 2017 and 2018.	Not triggered	C	
L4.5	<p>The noise limits set by condition L4.1 of the licence do not apply where a current legally binding agreement exists between the proponent and the occupant of a residential property that:</p> <ul style="list-style-type: none"> <li>a) agrees to an alternative noise limit for that property; or</li> <li>b) provides an alternative means of compensation to address noise impacts from the premises.</li> </ul> <p>A copy of any agreement must be provided to the EPA before the proponent can take advantage of the agreement.</p>	Annual reviews 2017 and 2018.	Not triggered	C	
L4.6	<p><b>Determining Compliance</b></p> <p>To determine compliance:</p> <ul style="list-style-type: none"> <li>a) with the Leq (15 minute) noise limits in the Noise Limits table, the noise measurement equipment must be located: <ul style="list-style-type: none"> <li>i) approximately on the property boundary, where any dwelling is situated 30 metres or less from the property boundary closest to the premises; or</li> <li>ii) within 30 metres of a dwelling facade, 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, where applicable</li> <li>iii) within approximately 50 metres of the boundary of a National Park or a Nature Reserve.</li> </ul> </li> <li>b) with the LA 1(1 minute) noise limits in the Noise Limits table, the noise measurement equipment must be located within 1 metre of a dwelling facade.</li> <li>c) With the noise limits in the Noise Limits table, the noise measurement equipment must be located: <ul style="list-style-type: none"> <li>i) At the most affected point at a location where there is no dwelling at the location; or</li> <li>ii) at the most affected point within an area at a location prescribed by part (a) or part (b) of this condition.</li> </ul> </li> </ul> <p>Note: A non-compliance of the Noise Limits table will still occur where noise generated from the premises in excess of the appropriate limits measured:</p> <ul style="list-style-type: none"> <li>i) at a location other than an area prescribed in part (a) and part (b); and/or</li> <li>ii) at a point other than the most affected point at a location.</li> </ul>	Noise Management Plan. EPL Monitoring reports 2017 to 2020.	A summary of the attended noise monitoring program has been provided. All locations are monitored on a monthly basis.	C	

## L5 Blasting

Item	Assessment Requirement	Reference/ Evidence	Comments	Compliance	Recommendations
L5.1	The overpressure level from blasting operations at the premises must not exceed 120dB (Lin Peak) at any time. Error margins associated with any monitoring equipment used to measure this are not to be taken into account in determining whether or not the limit has been exceeded.	Annual reviews 2017 and 2018. EPL Monitoring reports 2017 to 2020.	An exceedance of Condition 6 Schedule 3 of PA 10_0059 occurred with a blast undertaken on 4th May 2018, recording an overpressure greater than 120 dBL at two monitoring locations: 120.4dBL at Glenara (R11) and 120.2dBL at Kyooma (R98).  WCC undertook an investigation into the incident, with appropriate notifications to the EPA and DPIE.  Upon completion of the investigation, control measures have been implemented to prevent or mitigate against a similar exceedance in the future.	C	WCC should continue undertaking the control measures to make sure the exceedance occurred in May 2018 is not repeated in future years. Revision of plan to minimise risk of future exceedance.
L5.2	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.	Annual reviews 2017 and 2018. EPL Monitoring reports 2017 to 2020.	Same as L5.1 comments.	C	Same as L5.1 recommendations.
L5.3	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.	Annual reviews 2017 and 2018. EPL Monitoring reports 2017 to 2020.	No exceedances of ground vibration limits occurred during the reported audit period.	C	
L5.4	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.	Annual reviews 2017 and 2018. EPL Monitoring reports 2017 to 2020.	Same as L5.3 comments.	C	
L5.5	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.	Annual reviews 2017 and 2018.	WCC fires all blasts in the middle of the day generally between 12:00pm and 2:00pm, when atmospheric mixing is generally highest. Blasting records are included in data pack.	C	
L5.6	The hours during which blasting is permitted may be varied by the EPA upon consideration of the impact any variation may have on the amenity of the residents in the locality.	Blast Management Plan.	Not triggered	C	
L5.7	Blasting at the premises is limited to 1 blast on each day on which blasting is permitted. Note: Additional blasts are permitted where the EPA and neighbours have been notified of the intended blast prior to the additional blast being fired; and - it is demonstrated to be necessary for safety reasons; or - the previous blast generated ground vibration levels of less than 0.5 mm per second at all non-project related residences.	Annual reviews 2017 and 2018. EPL Monitoring reports 2017 to 2020.	Not triggered	C	
L5.8	To determine compliance with condition(s) LS.1, LS.2, LS.3 and LS.4 a) Airblast overpressure and ground vibration levels must be measured and electronically recorded at any point within 30 metres of any non-project related residential building or other sensitive locations such as schools or hospitals for all blasts carried out in or on the premises; and b) Instrumentation used to measure the airblast overpressure and ground vibration must meet the requirements of Australian Standard AS 2187.2-2006.  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 this licence at any "noise sensitive locations" other than the locations identified in the above condition.	Annual reviews 2017 and 2018. EPL Monitoring reports 2017 to 2020.	All the monitoring locations are at least 3 km distant from the properties. 7.2.1 Monitoring Locations (BMP): Four privately owned properties have been selected to monitor potential blasting impacts against compliance criteria and are representative of the most affected community locations in proximity to WCCM. 7.2.3 Blast Monitoring Equipment (BMP): The permanent blast monitors are fixed units installed at each community location and are installed in compliance with Australian Standard AS2187.2-2006. Monitoring is recorded via a website interface which enables blast results to be reported (by SMS and email), with the	C	

Item	Assessment Requirement	Reference/ Evidence	Comments	Compliance	Recommendations
			complete waveform/trace available via the website for detailed analysis) in near real time.		
<b>L6 Hours of operation</b>					
L6.1	Activities at the premises, other than blasting (which is subject to the limits applied by condition LS.5), may be carried out 24 hours a day, 7 days per week.	Noted.	Noted.	C	None.
<b>L7 Potentially offensive odour</b>					
L7.1	No condition in this licence identifies a potentially offensive odour for the purposes of section 129 of the Protection of the Environment Operations Act 1997. Note: Section 129 of the Protection of the Environment Operations Act 1997 provides that the licensee must not cause or permit the emission of any Offensive odour from the premises but provides a defence if the emission is identified in the relevant environment protection licence as a potentially offensive odour and the odour was emitted in accordance with the conditions of a licence directed at minimising odour.	Complaints registers 2017 to 2019	The Site has received 15 odour related complaints during the audit period, primarily relating to a 'burning' smell attributed to spontaneous combustion odours: <ul style="list-style-type: none"> <li>June 2017 to June 2018 – 10 complaints;</li> <li>June 2018 to June 2019 – 5 complaints; and</li> <li>June 2019 to June 2020 – No complaints.</li> </ul> The mine has implemented procedures to minimise emissions of odour from spontaneous combustion through the use of water curtains or sprinklers to suppress hot areas; and uncovering and mining the higher risk workings quickly and soaking any hot coal immediately. Workers utilise personal gas monitors at the boundary of the site in the direction of complaints when they occur to identify whether detectable hydrogen sulphide is present. ERM sighted photographs of multi-gas monitoring units on days when spontaneous combustions complaints had been received. No elevated gas readings were detected at the boundary. It is noted that the higher risk of spontaneous combustion areas of the mine (the former underground workings) have now been mined, reducing the future odour emission risk profile of the mine.	NC	No actions required. The site has robust odour management process to mitigate odours from spontaneous combustion.
<b>4 Operating conditions</b>					
<b>O1 Activities must be carried out in a competent manner</b>					
O1.1	Licensed activities must be carried out in a competent manner. This includes: <ul style="list-style-type: none"> <li>a) the processing, handling, movement and storage of materials and substances used to carry out the activity; and</li> <li>b) the treatment, storage, processing, reprocessing, transport and disposal of waste generated by the activity.</li> </ul>	Site observations General review of management systems	No evidence to suggest that activities on-site are not being undertaken in a competent manner were observed during this assessment.	C	
<b>O2 Activities must be carried out in a competent manner</b>					
O2.1	<b>Maintenance of plant and equipment</b>				

Item	Assessment Requirement	Reference/ Evidence	Comments	Compliance	Recommendations
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.	Pulse preventative maintenance records	The preventative maintenance system utilised by the Site is called 'Pulse'. The system records all preventative maintenance tasks and creates electronic work orders for the maintenance team as required. ERM reviewed Pulse records for a randomly selected dozer and pump system (pump 410). ERM also reviewed a sample of calibration records for blast monitors. The work orders were detailed (including environmental noise control systems on the dozer) and included evidence that the required preventative maintenance had been completed on time. No inspections by regulatory bodies raised preventative maintenance as a concern. ERM did not observe any examples of poorly maintained plant during the site inspection.	C	
<b>O3 Dust</b>					
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.	Air Quality and Greenhouse Gas Management Plan	According to: 8.1 Air Quality Management: In order to mitigate any potential air quality impacts from the WCC LOM Project, a number of air quality management controls will be implemented throughout the life of the operation. Particulate emission controls are detailed in Table 22.	C	
O3.2	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.	Air Quality and Greenhouse Gas Management Plan	According to: 8.1.13 Off-site Coal Transport: Coal is transported offsite to domestic and export markets by rail and road. The majority of coal is transported by trains (greater than 98%) at the Rail Load Out Facility. Coal is generally moist which mitigates dust generation. In addition, the rail load out bin is enclosed and each loaded train wagons is sprayed with water to create surface crust to minimise dust generation. In addition, the new generation wagons are designed to be taller and concave which reduces the coal surface area, thereby reducing wind erosion during rail transport.	C	
O4	<b>Effluent application to land Irrigation of Mine Void Water from Void Water Dam 1</b>				
O4.1	Prior to the Licensee providing Irrigation water from Void Water dam 1, all necessary state and local government approvals must be obtained.	Water Management Plan (WMP).	Approval is as per WMP. On 27 <sup>th</sup> June 2016 a water use approval was rejected to WCC from the DPI Water (photo taken). In the response from DPIE Water the letter said " <i>The application will not be required if the amendment to the current Water Management Plan is approved</i> "	C	

Item	Assessment Requirement	Reference/ Evidence	Comments	Compliance	Recommendations
O4.2	Pollution events associated with any aspect of the recipient's and or Licensees void water reuse program for irrigation, must be reported to the EPA in accordance with section 148 of the Act as soon as is practicable after the Licensee becomes aware of an incident.	Water Management Plan. EPL Monitoring reports 2017 to 2020.	Not Triggered	C	
O4.3	The licensee must cease the supply of void water for irrigation as soon as the licensee becomes aware of a misuse of effluent or failure to implement any aspect of the irrigation management plan.	Water Management Plan.	Not triggered. Irrigation system is managed in a way that if water applicator is bogged it will stop. WCC has control of the discharge via inspection of discharge during pre and post irrigation.	C	
O4.4	The Licensee must review, with an annual inspection, the recipients use of the void water on an annual basis, to identify any corrective actions required to comply with or update the irrigation management plan. The supplier must keep records of sites visits, observations and corrective actions for at least four years.	Annual reviews 2017 and 2018. Water Management Plan.	Annual Reports provided on request.	C	
O4.5	The licensee must engage a suitably qualified person to make an annual assessment of the irrigation scheme and this report must be submitted to the EPA with the annual return.	Annual reviews 2017 and 2018. Water Management Plan.	Same as O4.4.	C	
<b>O5 Other operating conditions</b>					
O5.1	Reversing beepers fitted to vehicles on the premises must be a low frequency broadband type, unless it can be demonstrated that operations will not contribute to off-site noise impacts.	Observations on-site.	Observed on-site (audible broadband reversing).	C	
O5.2	<b>Blast Fume</b> 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.	Audit site visit (photo) Complaints registers 2017 to 2020.	blast videos of all blasts, and "blast hazard analysis" undertaken for each blast (taken photo of the form). 1 complaint 2017, 2 complaints 2018 raised re blast dust/fume	C	
O5.3	<b>Pollution Incident Response Management Plan</b> 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.	PIRMP	The scope and content of the PIRMP complies with the requirements of this condition. It was observed that the previous Operations Manager's contact details were in the PIRMP (the change in roles has only occurred within the last few months).	C (Obs)	The operations manager's contact details should be updated in the PIRMP and amended copies issued where relevant.
O5.4	The licensee must keep the PIRMP on the premises at all times.	PIMRP Site Observations	Copies of the PIRMP were available for review with the Environment Manager and at the Admin office (sighted by ERM). Further copies are held at the Open Cut Examiner's office.	C	
<b>5 Monitoring and Recording Conditions</b>					
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.	Annual reviews 2017 and 2018. EPL Monitoring reports 2017 to 2020.	WCC retains its records.	C	None.
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.	Annual reviews 2017 and 2018. EPL Monitoring reports 2017 to 2020.	Air: March 2016 to May 2020 in summary HCAS & TEOM Monitoring xls. Data is legible.	C	

Item	Assessment Requirement	Reference/ Evidence	Comments	Compliance	Recommendations
			Noise: Monthly EPL Reports contain summary of noise results. Blasting: Blast Databased 2016 -2019_May20 Water: 2016-2020_May20 Surface Water Monitoring Results. Data is legible Irrigation: Irrigation monitoring 2017-20 (started 2017)		
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.	Annual reviews 2017 and 2018. EPL Monitoring reports 2017 to 2020.	ERM reviewed a sample of CoC for water, air, groundwater in emails retained on record. Samples were compliance.	C	
<b>M2 Requirement to monitor concentration of pollutants discharged</b>					
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:	EPL Monitoring reports 2017 to 2020.	WCC has undertaken the sampling of all the monitoring points during the reported audit period.	C	
M2.2	Air Monitoring Requirements <b>POINT 28, 29, 30</b> <b>Pollutant</b> PM10 <b>Units of measure</b> micrograms per cubic metre Solid particles Grams per square metre per month <b>Frequency</b> Every 6 days Continuous <b>Sampling method</b> AM-18 AM-19	EPL Monitoring reports 2017 to 2020.	Same as M2.1.	C	
M2.3	Water and/ or Land Monitoring Requirements <b>POINT 10, 12, 14, 32</b> <b>Pollutant</b> Conductivity Nitrate Nitrogen (total) Oil and Grease pH Phosphorus (total) Reactive phosphorus Total suspended solids <b>Units of measure</b> Microsiemens per litre Milligrams per litre Milligrams per litre Milligrams per litre pH Milligrams per litre Milligrams per litre Milligrams per litre <b>Frequency</b> Special Frequency 1 Special Frequency 1 Special Frequency 1 Special Frequency 1 Special Frequency 1 Special Frequency 1 Special Frequency 1 Special Frequency 1 <b>Sampling method</b> Grab sample Grab sample Grab sample Grab sample Grab sample Grab sample Grab sample Grab sample <b>POINT 16, 27</b> <b>Pollutant</b> Conductivity Nitrate Nitrogen (total) Oil and Grease pH Phosphorus (total) Reactive phosphorus Total suspended solids <b>Units of measure</b> Microsiemens per litre Milligrams per litre Milligrams per litre Milligrams per litre pH Milligrams per litre Milligrams per litre Milligrams per litre <b>Frequency</b> Every 3 months Every 3 months Every 3 months Every 3 months Every 3 months Every 3 months Every 3 months Every 3 months <b>Sampling method</b> Grab sample Grab sample Grab sample Grab sample Grab sample Grab sample Grab sample Grab sample <b>POINT 17, 18, 19, 20, 22, 21</b> <b>Pollutant</b> Conductivity Nitrate Nitrogen (total) <b>Units of measure</b> Microsiemens per litre Milligrams per litre Milligrams per litre <b>Frequency</b> Every 6 months Every 6 months Every 6 months <b>Sampling method</b> Representative sample Representative sample Representative sample	EPL Monitoring reports 2017 to 2020. Annual reviews 2017 and 2018.	<u>POINT 10, 12, 14, 32</u> The sampling has been undertaken in a special frequency (1): <ul style="list-style-type: none"><li>January 2020</li><li>February 2020 (only points 10 and 14)</li></ul> <u>POINT 16, 27</u> The sampling has been undertaken every 3 months approximately: <ul style="list-style-type: none"><li>August 2017</li><li>December 2017</li><li>February 2018</li><li>November 2018</li><li>February 2019</li><li>May 2019</li><li>August 2019</li><li>November 2019</li><li>February 2020</li></ul> <u>POINT 17, 18, 19, 20, 22, 21</u> The sampling has been undertaken every 6 months approximately:	C	

Item	Assessment Requirement				Reference/ Evidence	Comments	Compliance	Recommendations																																																																																																																																				
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	<p>Note: For the purposes of this condition, Special Frequency 1 means as soon as practicable after overflow commences and in any case not more than 12 hours after any overflow commencing.</p> <p>For the purposes of this condition, Special Frequency 2 means within 12 hours after any overflow from a storage dam(s) on the premises occurring.</p> <p>For the purposes of this condition, Special Frequency 3 means every three months. If no mine void water is planned to be provided for agricultural purposes within the three months following scheduled sampling, then sampling is not required.</p> <p>For the purposes of this condition, Special Frequency 4 mean prior to, but not more than 24 hours prior to providing mine void water for agricultural purposes and then weekly thereafter, until the provision of water ceases. Samples are only required to be taken from the void water dam that is supplying water for agricultural purposes.</p> <p>For the purposes of this condition, Special Method 1 means that grab samples must be taken from those ambient/discharge water quality monitoring points (i.e. points 23-26) located in same drainage catchment (Werris Creek and/or Quipolly Creek) as those wet weather discharge points (i.e. points 10, 12, 14 and/or 32) overflowing in any individual discharge event.</p> <p>Note: The frequency of monitoring and the pollutant/s to be monitored may be varied by the EPA once the variability of the water quality and ground water quality is established.</p>																																																																																																																																											

Item	Assessment Requirement	Reference/ Evidence	Comments	Compliance	Recommendations
M2.4	For the purposes of the table(s) above, monitoring at points 16 and 27 is not required in the three month period if the monitoring site is dry or inadequate water is available to collect a sample.	EPL Monitoring reports 2017 to 2020. Annual reviews 2017 and 2018.	Not triggered	C	
M2.5	For the purposes of the table(s) above, monitoring at points 17, 18, 19, 20, 21 and 22 is not required in the six month period if the monitoring site is dry or inadequate water is available to collect a sample.	EPL Monitoring reports 2017 to 2020. Annual reviews 2017 and 2018.	Not triggered	C	

**M3 Testing methods – concentration limits**

M3.1	<p>Monitoring for the concentration of a pollutant emitted to the air required to be conducted by this licence must be done in accordance with:</p> <ul style="list-style-type: none"> <li>a) any methodology which is required by or under the Act to be used for the testing of the concentration of the pollutant; or</li> <li>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</li> <li>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.</li> </ul> <p>Note: The Protection of the <i>Environment Operations (Clean Air) Regulation 2010</i> 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".</p>	Air Quality and Greenhouse Gas Management Plan (AQGHGMP).	<p>According to the AQGHGMP:</p> <p>9. Monitoring</p> <p>Monitoring is undertaken in accordance with WCC's EPL 12290 and PA 10_0059 conditions, which specify required methods of sampling, analysis and frequency of monitoring.</p> <p>Air quality monitoring locations will be reviewed, and if necessary, modified in consultation with DoP and EPA over the life of the project, in response to monitoring results and changes in the mining operations.</p>	C	
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.	Water Management Plan	WMP references approved methods.	C	

**M4 Weather monitoring**

M4.1	<p>Weather Monitoring Requirements</p> <p><b>POINT 9:</b></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>Rainfall</td> <td>Millimetres per hour</td> <td>Continuous</td> <td>1 hour</td> <td>AM-4</td> </tr> <tr> <td>Wind speed @ 10 metres</td> <td>Metres per second</td> <td>Continuous</td> <td>15 minute</td> <td>AM-2 &amp; AM-4</td> </tr> <tr> <td>Wind direction @ 10 metres</td> <td>Degrees clockwise from true north</td> <td>Continuous</td> <td>15 minute</td> <td>AM-2 &amp; AM-4</td> </tr> <tr> <td>Temperature @ 2 metres</td> <td>Degrees Celsius</td> <td>Continuous</td> <td>15 minute</td> <td>AM-4</td> </tr> <tr> <td>Temperature @ 10 metres</td> <td>Degrees Celsius</td> <td>Continuous</td> <td>15 minute</td> <td>AM-4</td> </tr> <tr> <td>Sigma theta @ 10 metres</td> <td>Degrees clockwise from true north</td> <td>Continuous</td> <td>15 minute</td> <td>AM-2 &amp; AM-4</td> </tr> <tr> <td>Solar radiation</td> <td>Watts per square metre</td> <td>Continuous</td> <td>15 minute</td> <td>AM-4</td> </tr> <tr> <td>Additional requirements – siting</td> <td>-</td> <td>-</td> <td>-</td> <td>AM-1, AM-4 &amp; special method 2</td> </tr> <tr> <td>Additional requirements - measurement</td> <td>-</td> <td>-</td> <td>-</td> <td>AM-1, AM-4 &amp; special method 2</td> </tr> </tbody> </table>	Parameter	Units of Measure	Frequency	Averaging Period	Sampling method	Rainfall	Millimetres per hour	Continuous	1 hour	AM-4	Wind speed @ 10 metres	Metres per second	Continuous	15 minute	AM-2 & AM-4	Wind direction @ 10 metres	Degrees clockwise from true north	Continuous	15 minute	AM-2 & AM-4	Temperature @ 2 metres	Degrees Celsius	Continuous	15 minute	AM-4	Temperature @ 10 metres	Degrees Celsius	Continuous	15 minute	AM-4	Sigma theta @ 10 metres	Degrees clockwise from true north	Continuous	15 minute	AM-2 & AM-4	Solar radiation	Watts per square metre	Continuous	15 minute	AM-4	Additional requirements – siting	-	-	-	AM-1, AM-4 & special method 2	Additional requirements - measurement	-	-	-	AM-1, AM-4 & special method 2	Air Quality and Greenhouse Gas Management Plan (AQGHGMP).	<p>According to the AQGHGMP:</p> <p>9.5 Meteorology</p> <p>WCC maintains an on-site weather station identified as "M2" (EPL 12290 EPA ID #9) located on the top level of the overburden emplacement (at final rehabilitated landform surface RL445.5m) as well as "M3" (EPL 12290 EPA ID #31) lower level temperature sensor (base of overburden emplacement area at RL373.5m).</p> <p>Table 27: WCC "M2" Weather Station meteorological parameters</p> <p>This table shows all the parameters that the weather monitoring station requires.</p>	C	
Parameter	Units of Measure	Frequency	Averaging Period	Sampling method																																																			
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Item	Assessment Requirement	Reference/ Evidence	Comments	Compliance	Recommendations										
M4.2	<p><b>POINT 31</b></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>Degrees celcius</td> <td>Continuous</td> <td>15 minute</td> <td>AM-4 &amp; special method 2</td> </tr> </tbody> </table> <p>Note: For the purposes of conditions M4.1 &amp; M4.2, Special Method 2 means that the location of the meteorological monitoring equipment and details of that equipment, the equipment operation and maintenance/service procedures and schedules must be submitted in writing and approved in writing by the EPA before any sampling or analysis is carried out. The meteorological monitoring equipment must be calibrated at least once every 12 months. Any proposed changes to the meteorological monitoring equipment location, operating and maintenance/service procedures and schedules, or to the monitoring hardware itself must also be submitted in writing and approved in writing by the EPA. The EPA is to be provided with the monitoring data on request in a Microsoft® Office software compatible format.</p>	Parameter	Units of Measure	Frequency	Averaging Period	Sampling method	Temperature @ 2 metres	Degrees celcius	Continuous	15 minute	AM-4 & special method 2	Air Quality and Greenhouse Gas Management Plan (AQGHGMP).	Same as M4.1.	C	
Parameter	Units of Measure	Frequency	Averaging Period	Sampling method											
Temperature @ 2 metres	Degrees celcius	Continuous	15 minute	AM-4 & special method 2											
<b>M5 Recording of pollution complaints</b>															
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.	Internal and external complaints registers 2017 to 2019	ERM sighted complaints records retained from 2005 to the present.	C											
M5.2	The record must include details of the following: <ul style="list-style-type: none"> <li>a) the date and time of the complaint;</li> <li>b) the method by which the complaint was made;</li> <li>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;</li> <li>d) the nature of the complaint;</li> <li>e) the action taken by the licensee in relation to the complaint, including any follow-up contact with the complainant; and</li> <li>f) if no action was taken by the licensee, the reasons why no action was taken.</li> </ul>	Internal and external complaints registers 2017 to 2019	The internal complaints register included all the fields required by this condition.	C											
M5.3	The record of a complaint must be kept for at least 4 years after the complaint was made.	Complaints registers 2005 to 2020	ERM sighted complaints records retained from 2005 to the present.	C											
M5.4	The record must be produced to any authorised officer of the EPA who asks to see them.	Not applicable	Not triggered.	NT											
<b>M6 Telephone complaints line</b>															
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.	Website Signage	The site has a 24 hour complaints line in place to receive complaints from members of the public.	C											
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.	Website Signage	ERM tested the complaints number published on the Werris Creek Mine Whitehaven Coal website. The complaints number was not functional. It is noted that the complaints number on the sign at the entrance to the mine was correct.	NC	Update the website complaints line number to reflect the correct phone number.										
M6.3	The preceding two conditions do not apply until 3 months after: the date of the issue of this licence.	Not applicable.	Noted.	Noted											
<b>M7 Requirement to monitor volume or mass</b>															
M7.1	For each discharge point or utilisation area specified below, the licensee must monitor: <ul style="list-style-type: none"> <li>a) the volume of liquids discharged to water or applied to the area;</li> <li>b) the mass of solids applied to the area;</li> <li>c) the mass of pollutants emitted to the air;</li> </ul> at the frequency and using the method and units of measure, specified below.	EPL Monitoring reports 2017 to 2020. Annual reviews 2017 and 2018.	Meters sighted. WCC monitors points 33, 34 and 35 in volume (mg/L) at special frequencies (3 and 4).	C											

Item	Assessment Requirement	Reference/ Evidence	Comments	Compliance	Recommendations												
	<p><b>POINT 33, 34, 35</b></p> <table border="1"> <thead> <tr> <th>Frequency</th> <th>Units of Measure</th> <th>Sampling method</th> </tr> </thead> <tbody> <tr> <td>Daily during any discharge</td> <td>Kilolitres per day</td> <td>By Calculation (volume flow rate or pump capacity multiplied by operating time)</td> </tr> </tbody> </table>	Frequency	Units of Measure	Sampling method	Daily during any discharge	Kilolitres per day	By Calculation (volume flow rate or pump capacity multiplied by operating time)										
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Daily during any discharge	Kilolitres per day	By Calculation (volume flow rate or pump capacity multiplied by operating time)															
<b>M8 Blasting</b>																	
M8.1	<p>To assess compliance with the blast limits presented at L5, blast monitoring must be undertaken in accordance with L5 at the following locations: Within 30 metres of the residences at the locations marked as "R98 Kyooma", "R11 Glenara" and "R62 43 Kurrara St, Werris Ck", and within 30 metres of the location marked as "R92 Werris Creek Middle" on the figure titled "EPL 12290 Licensed Monitoring Points", received by the EPA via email on 17 December 2015 (DOC16/111380).</p> <table border="1"> <thead> <tr> <th>Parameter</th> <th>Units of Measure</th> <th>Frequency</th> <th>Sampling method</th> </tr> </thead> <tbody> <tr> <td>Blast noise</td> <td>dB (Lin Peak)</td> <td>Every blast</td> <td>Type 1 Noise/Blast</td> </tr> <tr> <td>Blast vibration</td> <td>Mm/s</td> <td>Every blast</td> <td>Geophone logger or similar</td> </tr> </tbody> </table>	Parameter	Units of Measure	Frequency	Sampling method	Blast noise	dB (Lin Peak)	Every blast	Type 1 Noise/Blast	Blast vibration	Mm/s	Every blast	Geophone logger or similar	<p>EPL Monitoring reports 2017 to 2020. Blast Management Plan (BMP).</p>	<p>WCC undertakes blast monitoring at those receptors with those descriptors.</p>	C	
Parameter	Units of Measure	Frequency	Sampling method														
Blast noise	dB (Lin Peak)	Every blast	Type 1 Noise/Blast														
Blast vibration	Mm/s	Every blast	Geophone logger or similar														
<b>M9 Other monitoring and recording conditions</b>																	
<b>Noise monitoring</b>																	
M9.1	<p>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:</p> <ol style="list-style-type: none"> <li>at the locations labelled "R24 Hazeldene", "R12 Quipolly Railway Cottage", "R96 Talavera", "R98 Kyooma" and "R57 33 Kurrara St, Werris Ck" (non project related residence number 57) on the figure titled "EPL 12290 Licensed Monitoring Points", received by the EPA via email on 17 December 2015 (DOC16/111380);</li> <li>occur monthly in a reporting period; <ol style="list-style-type: none"> <li>occur during each day, evening and night period as defined in the NSW Industrial Noise Policy for a minimum of: <ol style="list-style-type: none"> <li>1 hour during the day; and</li> <li>1 hour during the evening or night.</li> </ol> </li> </ol> </li> </ol> <p>Note: The frequency of monitoring may be varied by the EPA once the variability of the noise impact is established.</p>	<p>Noise Management Plan. EPL Monitoring reports 2017 to 2020.</p>	<p>Data for Location R57 missing from EPL monitoring reports presented on project website, data was collected (based on review of compliance reports) Data missing for June to December 2017 and January and March 2018.</p>	NC	<p>Ensure all data is reported to the EPA.</p>												
<b>6 Reporting Conditions</b>																	
<b>R1</b>	<b>Annual return documents</b>																
R.1.1	<p>The licensee must complete and supply to the EPA an Annual Return in the approved form comprising:</p> <ol style="list-style-type: none"> <li>a Statement of Compliance,</li> <li>a Monitoring and Complaints Summary,</li> <li>a Statement of Compliance - Licence Conditions,</li> <li>a Statement of Compliance - Load based Fee,</li> <li>a Statement of Compliance - Requirement to Prepare Pollution Incident Response Management Plan,</li> <li>a Statement of Compliance - Requirement to Publish Pollution Monitoring Data; and</li> <li>a Statement of Compliance - Environmental Management Systems and Practices.</li> </ol> <p>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.</p>	<p>Annual Returns 2017 to 2020</p>	<p>Annual returns were completed in full in the approved forms during each year of the audit period.</p>	C													

Item	Assessment Requirement	Reference/ Evidence	Comments	Compliance	Recommendations
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.	Emails confirming Annual Return Submission 2018 to 2020 Annual Returns 2017 to 2020	Annual returns were prepared and submitted in each year within the audit period.	C	
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 applicable	Not Triggered	NT	
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 applicable	Not Triggered	NT	
R1.5	The Annual Return for the reporting period must be supplied to the EPA via eConnect EPA or by registered post not later than 60 days after the end of each reporting period or in the case of a transferring licence not later than 60 days after the date the transfer was granted (the 'due date').	Emails confirming Annual Return Submission 2018 to 2020	The submission times for Annual Returns are summarised below: <ul style="list-style-type: none"> <li>2020 – on 29<sup>th</sup> May 2020 (due date 30<sup>th</sup> May 2020);</li> <li>2019 – on; 30<sup>th</sup> May 2019 (due date 30<sup>th</sup> May 2019); and</li> <li>2018 – on 31<sup>st</sup> May 2018 (due date 30<sup>th</sup> May 2018).</li> </ul> The late submission of an Annual Return in 2018 related to a misunderstanding at Site level regarding the submission date. Management reported that they have historically worked to an 'end of May' deadline, when the statutory submission date is on 30 <sup>th</sup> May each year.	NC	Communicate with Environmental Team at Whitehaven confirming Annual Return submission date is 30 <sup>th</sup> May each year. Update calendars accordingly.
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.	Annual returns	Copies of annual returns are maintained as required.	C	
R1.7	Within the Annual Return, the Statements of Compliance must be certified and the Monitoring and Complaints Summary must be signed by: a) the licence holder; or b) by a person approved in writing by the EPA to sign on behalf of the licence holder.	Annual Returns 2017 to 2020	ERM sighted copies of Annual Returns for 2017 to 2020. Only the Annual Return provided for 2020 was signed by the General Manager	C (Obs)	Ensure a signed copy of the annual return is maintained for records.
<b>R2 Notification of environmental harm</b>					
R2.1	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.	Annual Returns 2017 to 2020 Correspondence between Whitehaven Coal and the EPA across late February 2020	One exceedance of pH criteria occurred during an overflow event at a stormwater retention dam on 18 <sup>th</sup> February 2020 following 54mm of rain in the preceding five days. This is the only event considered to have caused environmental during the audit period. ERM sighted evidence that the Site	C	

Item	Assessment Requirement	Reference/ Evidence	Comments	Compliance	Recommendations
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.	Correspondence between Whitehaven Coal and the EPA across late February 2020	ERM sighted correspondence dated 19 <sup>th</sup> February informing the EPA of the pH exceedance described in Condition R2.1. The incident occurred on 18 <sup>th</sup> and Whitehaven Coal became aware of the exceedance on the 19 <sup>th</sup> following laboratory analysis. The EPA was informed of the incident on the same day.	C	
<b>R3 Written Report</b>					
R3.1	Where an authorised officer of the EPA suspects on reasonable grounds that: <ul style="list-style-type: none"> <li>a) where this licence applies to premises, an event has occurred at the premises; or</li> <li>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,</li> <li>c) 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.</li> </ul>	Not applicable	Not Triggered	NT	
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.	Not applicable	Not Triggered	NT	
R3.3	The request may require a report which includes any or all of the following information: <ul style="list-style-type: none"> <li>a) the cause, time and duration of the event;</li> <li>b) the type, volume and concentration of every pollutant discharged as a result of the event;</li> <li>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;</li> <li>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;</li> <li>e) action taken by the licensee in relation to the event, including any follow-up contact with any complainants;</li> <li>f) details of any measure taken or proposed to be taken to prevent or mitigate against a recurrence of such an event; and</li> <li>g) any other relevant matters.</li> </ul>	Not applicable	Not Triggered	NT	
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.	Not applicable	Not Triggered	NT	
R4.1	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: <ul style="list-style-type: none"> <li>a) an assessment of compliance with noise limits presented in the Noise Limits table; and</li> <li>b) an outline of any management actions taken within the monitoring period to address any exceedances of the limits contained in the Noise Limits table.</li> </ul>	Noted	Consultants are taking more than 30 days to create report.	NC	WCC should review noise monitoring supplier contract to require reporting completed within 30 days.

Item	Assessment Requirement	Reference/ Evidence	Comments	Compliance	Recommendations																					
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.	Noted	An exceedance of Condition 6 Schedule 3 of PA 10_0059 occurred with a blast undertaken on 4th May 2018, recording an overpressure greater than 120 dBL at two monitoring locations: 120.4dBL at Glenara (R11) and 120.2dBL at Kyooma (R98).  WCC undertook an investigation into the incident, with appropriate notifications to the EPA and DPIE.	C																						
<b>7 General Conditions</b>																										
<b>G1 Copy of licence kept at the premises or plant</b>																										
G1.1	A copy of this licence must be kept at the premises to which the licence applies.	EPL 12290	Copy of licence sighted with Environment Officer.	C																						
G1.2	The licence must be produced to any authorised officer of the EPA who asks to see it.	Not applicable	Not triggered.	NT																						
G1.3	The licence must be available for inspection by any employee or agent of the licensee working at the premises.	Not applicable	Not triggered.	NT																						
<b>G2 Other general conditions</b>																										
G2.1	<p><b>Completed programs</b></p> <table border="1"> <thead> <tr> <th>Program</th> <th>Description</th> <th>Completed Date</th> </tr> </thead> <tbody> <tr> <td>PRP 1: Noise Monitoring and Assessment Program</td> <td>This PRP requires the licensee to undertake a noise monitoring and assessment of the impacts of typical construction and mining activities on the premises.</td> <td>15-May-2008</td> </tr> <tr> <td>PRP 2: Coal Mine Particulate Matter Control Best Practice</td> <td>Requires licensee to conduct a site specific best management practice (BMP) determination to identify ways to reduce particulate emissions.</td> <td>27-June-2012</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>13-August-2014</td> </tr> <tr> <td>Particulate Matter Control Best Practice Implementation - Disturbing and Handling Overburden under Adverse Weather Conditions</td> <td>Implementation of particulate matter best management practices to address the handling of overburden during adverse weather.</td> <td>13-August-2014</td> </tr> <tr> <td>Particulate Matter Control Best Practice Implementation - Trial of Best Practice Measures for Disturbing and Handling Overburden</td> <td>Investigation to establish best practice measures for the handling of overburden. Investigation to establish best practice measures for the handling of overburden.</td> <td>14-April-2014</td> </tr> <tr> <td>Coal Mine Wind Erosion of Exposed Land Assessment</td> <td>Calculate the stabilised and disturbed surface areas (in</td> <td>28-August-2015</td> </tr> </tbody> </table>	Program	Description	Completed Date	PRP 1: Noise Monitoring and Assessment Program	This PRP requires the licensee to undertake a noise monitoring and assessment of the impacts of typical construction and mining activities on the premises.	15-May-2008	PRP 2: Coal Mine Particulate Matter Control Best Practice	Requires licensee to conduct a site specific best management practice (BMP) determination to identify ways to reduce particulate emissions.	27-June-2012	Particulate Matter Control Best Practice Implementation - Wheel Generated Dust	Implementation of particulate matter best management practices to address wheel-generated dust.	13-August-2014	Particulate Matter Control Best Practice Implementation - Disturbing and Handling Overburden under Adverse Weather Conditions	Implementation of particulate matter best management practices to address the handling of overburden during adverse weather.	13-August-2014	Particulate Matter Control Best Practice Implementation - Trial of Best Practice Measures for Disturbing and Handling Overburden	Investigation to establish best practice measures for the handling of overburden. Investigation to establish best practice measures for the handling of overburden.	14-April-2014	Coal Mine Wind Erosion of Exposed Land Assessment	Calculate the stabilised and disturbed surface areas (in	28-August-2015	Not applicable.	Noted.	Note	
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Item	Assessment Requirement	Reference/ Evidence	Comments	Compliance	Recommendations
	hectares) within the premises as of 30 June 2014, against the predictions within the licensee's Environmental Assessment or Environmental Impact Statement for the premises.				
<b>8</b>	<b>Pollution Studies and Reduction Programs</b>				
U1.1	<p>U1 Void Water Dam 1</p> <p>The Licencee must complete the following repairs and clean-up to void water dam 1:</p> <p>Action 1: The dam walls at VWD 1, where heavy erosion has occurred due to a blowout of high pressure hoses, is to be repaired to ensure that dam wall stability is maintained and further erosion is prevented from occurring.</p> <p>Action 2: All hydrocarbon/chemical spills on the soil, under and around the pumps and generators must be cleaned-up and remediated. The waste generated from this clean-up/remediation must be classified prior to disposal off-site and then disposed of at a lawful waste facility. Action 1 and 2 must be completed by 5pm on 21 February 2020.</p>	<p>Audit site visit (taken photos).</p> <p>EPL Monitoring reports 2017 to 2020.</p>	<p>Action 1: Photographic evidence of re-instated bank 10/12/19</p> <p>Action 2: Lab reports observed dated 17/12/2019 with validation sample reports showing no remaining hydrocarbons.</p> <p>Land farmed on-site and disposed of as GSW 11/05/20 report shows below criteria. Waste classification completed. 9.6T transported to Narrabri tip</p>	C	
U2	<p>Oil Water Separator U2.1</p> <p>The current inground oil water separator must be decommissioned and replaced with an above ground system that;</p> <ol style="list-style-type: none"> <li>1. Is roofed and bunded (roof can be mobile)</li> <li>2. Provides for stormwater Bypass if required.</li> <li>3. The type of separator selected is based volume generation needs (Coalescing plate separator or Hydrocyclone oil separator) and the best possible treatment for that volume generation available</li> <li>4. Is capable of pre-treating oil, grease, silt, detergents, NFR (Suspended solids), COD (chemical oxygen demand) and pH prior to collection for disposal.</li> </ol> <p>These works must be completed by 5pm on 31 July 2020. The Decommissioned inground unit must be removed and lawfully disposed of, at a lawful waste facility by 5pm on the 31 July 2020.</p>	N/A	Outside audit period	NT	
<b>9</b>	<b>Special Conditions</b>				
	<b>E1 Three Yearly Independent Noise Audit</b>				
E.1.1	<p>The licensee must provide the EPA with a copy of any Noise Audit and Independent Environmental Audit Report required by condition 4 of Schedule 3 and conditions 8 and 9 of Schedule 5 of the Werris Creek Mine Extension Project Approval (No. 10_0059). If the Noise Audit and Independent Environmental Audit Report do not incorporate the following information or assessments, then the licensee must also provide a separate report to the EPA that incorporates the following:</p> <ol style="list-style-type: none"> <li>(a) An assessment of noise emissions from the premises against the noise limits established by the Project Approval (No. 10_0059), as well as against the long term noise goal and noise acquisition criteria established within Project Approval No. 10_0059 that has been completed in accordance with the procedures defined in the <i>NSW Industrial Noise Policy</i> and any relevant Application Notes published by the EPA;</li> <li>(b) An evaluation of current mine noise impacts at all non-project related receptors and the noise mitigation practices that have been implemented at the premises against the best available economically achievable technology and current best practice principles for minimising noise emissions; and</li> <li>(c) Where noise impacts at any affected non-project related receptor</li> </ol>	N/A	<p>Noise audit reports have been submitted with the IEA as required.</p> <p>Part c negotiated agreements have not been triggered.</p>	C	

Item	Assessment Requirement	Reference/ Evidence	Comments	Compliance	Recommendations
	<p>exceeds the long term noise goal established by condition 4 of Schedule 3 of Project Approval 10_0059, the licensee must provide documented evidence that demonstrates that reasonable attempts have been made to reach a negotiated agreement with all relevant affected receptors within the last 3 years.</p> <p>The reports required by this condition must be submitted to the EPA's Armidale office <b>within 6 weeks of the 30 June 2014, and every three years thereafter.</b></p> <p>Note: For the purposes of this condition, a privately owned property that is subject to a current and legally binding negotiated agreement between the licensee and the relevant property owner, is considered project related, as is any property or residence held in the ownership of the licensee or its associated companies.</p>				
E1.2	<p>If the reports required by E1.1 above indicate that non-project related receptors continue to receive impacts that exceed the long term noise goal established by condition 4 of Schedule 3 of Project Approval 10_0059, then the licensee must provide the EPA with a report detailing the actions it will take during the next three year period, to further reduce noise impacts from the mine. The report must:</p> <ul style="list-style-type: none"> <li>a) Provide details of any trials, tests or research that it will commission in an attempt to develop new or innovative noise mitigation technologies or management practices;</li> <li>b) Detail the nature of any works that will be carried out at the premises or at the relevant receptor locations to further reduce noise impacts;</li> <li>c) Provide timelines and provisional costings for the proposed actions or works;</li> <li>d) Provide an analysis where possible of the potential noise reductions that the proposed actions are likely to achieve; and</li> <li>e) Define any additional noise monitoring programs that might be required to measure/validate the performance of the proposed mitigation actions.</li> </ul> <p>The report required by this condition must be submitted to the EPA by 31 August 2014 and every three years thereafter until noise emissions from the premises meet the long term noise goal established by condition 4 of Schedule 3 of Project Approval 10_0059.</p>	N/A	Completed outside of audit period.	NT	

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**APPENDIX A4 – MINING LEASE 1563**

Compliance with Mining Lease 1563

<b>Document details</b>	
Document title	Appendix A4 – Mining Lease 1563
Document subtitle	Compliance with Mining Lease 1563
Project No.	0552611
Date	22 July 2020
Version	1.0
Author	Robert Smith, Aaron McKenzie
Client Name	Whitehaven Coal



No	Assessment Requirement	Reference/ Evidence	Comments	Compliance Status	Recommendations
<b>Mining Lease Conditions 2004</b>					
<b>Notice to Landholders</b>					
1.	<p>Within a period of three months from the date of grant 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 and whether the lease includes the surface. An adequate plan and description of the lease area must accompany the notice.</p> <p>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; state whether the lease includes the surface and must contain an adequate plan and description of the lease area.</p>	Not applicable	Whitehaven Coal owns all land within the mining lease area.	C	
<b>Mining, Rehabilitation, Environmental Management Process (MREMP)</b>					
<b>Mining Operations (MOP)</b>					
2.	<p>(1) Mining operations, including mining purposes, must be conducted in accordance with a Mining Operations Plan (the Plan) satisfactory to the Director- General. The Plan together with environmental conditions of development consent and other approvals will form the basis for:-</p> <p>(a) ongoing mining operations and environmental management; and</p> <p>(b) ongoing monitoring of the project.</p> <p>(2) The Plan must be prepared in accordance with the Director-General's guidelines current at the time of lodgement.</p>	MOP 2015 MOP Approval Letter	<p>(1) An approved MOP (2015 to 2022) has been developed and implemented;</p> <p>(2) The MOP has been developed in accordance with the requirements in this condition as far as those requirements still apply</p> <p>(3) The MOP has not been updated during the Audit period;</p> <p>(4) Noted;</p> <p>(5) Noted;</p>	C	

No	Assessment Requirement	Reference/ Evidence	Comments	Compliance Status	Recommendations
	<p>(3) A Plan must be lodged with the Director-General:-            (a) prior to the commencement of mining operations (including mining purposes);            (b) subsequently as appropriate prior to the expiry of any current Plan; and            (c) in accordance with any direction issued by the Director-General.</p> <p>(4) The Plan must present a schedule of proposed mine development for a period of up to seven (7) years and contain diagrams and documentation which identify:-            (a) area(s) proposed to be disturbed under the Plan;            (b) mining and rehabilitation method(s) to be used and their sequence;            (c) areas to be used for disposal of tailings /waste;            (d) existing and proposed surface infrastructure;            (e) existing flora and fauna on the site;            (f) progressive rehabilitation schedules;            (g) areas of particular environmental, ecological and cultural sensitivity and measures to protect these areas;            (h) water management systems (including erosion and sediment controls);            (i) proposed resource recovery; and            (j) where the mine will cease extraction during the term of the Plan, a closure plan including final rehabilitation objectives/methods and post mining landuse/vegetation.</p> <p>(5) The Plan when lodged will be reviewed by the Department.</p> <p>(6) The Director-General may within two (2) months of the lodgement of a Plan, require modification and</p>		<p>(6) Noted;            (7) Noted;            (8) Noted.</p>		

No	Assessment Requirement	Reference/ Evidence	Comments	Compliance Status	Recommendations
	<p>re-lodgement.</p> <p>(7) If a requirement in accordance with clause (6) is not issued within two (2) months of the lodgement of a Plan, the lease holder may proceed with implementation of the Plan.</p> <p>(8) During the life of the Mining Operations Plan, proposed modifications to the Plan must be lodged with the Director-General and will be subject to the review process outlined in clauses (5) - (7) above.</p>				
<b>Annual Environmental Management Report (AEMR)</b>					
3.	<p>(1) Within 12 months of the commencement of mining operations and thereafter annually or, at such other times as may be allowed by the Director-General, the lease holder must lodge an Annual Environmental Management Report (<b>AEMR</b>) with the Director-General.</p> <p>(2) The AEMR must be prepared in accordance with the Director-General's Guidelines current at the time of reporting and contain a review and forecast of performance for the preceding and ensuing twelve months in terms of:</p> <p>(a) the accepted Mining Operations Plan;</p> <p>(b) development consent requirements and conditions;</p> <p>(c) Department of Environment and Conservation and Department of Infrastructure, Planning and Natural Resources licences and approvals;</p> <p>(d) any other statutory environmental requirements;</p> <p>(e) details of any variations to environmental approvals applicable to the lease area; and</p> <p>(f) where relevant, progress towards final rehabilitation objectives.</p> <p>(3) After considering an AEMR the Director-General may, by notice in writing, direct the lease holder to undertake operations, remedial actions or supplementary studies in the manner and within the period specified in the notice to ensure that operations</p>	Annual Reviews 2017 to 2019	Annual reviews have been submitted to the DPIE each year of the Audit period. The Annual Review scope includes the requirements outlined in this condition.	C	

No	Assessment Requirement	Reference/ Evidence	Comments	Compliance Status	Recommendations
	<p>on the lease area are conducted in accordance with sound mining and environmental practice.</p> <p>(4) The lease holder shall as and when directed by the Minister, co-operate with the Director-General to conduct and facilitate review of the AEMR involving other government agencies and the local council.</p>				
<b>Subsidence Management</b>					
4.	<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 <i>Guideline for Applications for Subsidence Management Approvals</i>.</p> <p>(c) The lease holder must not commence or undertake underground mining operations that will potentially lead to subsidence other than in accordance with a Subsidence Management Plan approved by the Director-General, an approval under the <i>Coal Mines Regulation Act 1982</i>, or the document <i>New Subsidence Management Plan Approval Process - Transitional Provisions</i>.</p> <p>(d) Subsidence Management Plans are to be prepared in accordance with the <i>Guideline for Applications for Subsidence Management Approvals</i>.</p> <p>(e) Subsidence Management Plans as approved shall form part of the Mining Operations Plan</p>	Not applicable	Verified by previous audits.	NT	

No	Assessment Requirement	Reference/ Evidence	Comments	Compliance Status	Recommendations
	required under Condition 2 and will be subject to the Annual Environmental Management Report process as set out under Condition 3. The SMP is also subject to the requirements for subsidence monitoring and reporting set out in the document <i>New Approval Process for Management of Coal Mining Subsidence - Policy</i> .				
<b>Working Requirement</b>					
5.	<p>The lease holder must:</p> <p>(a) ensure that at least <b>28</b> competent people are efficiently employed on the lease area on each week day except Saturday or any week day that is a public holiday,</p> <p>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 <b>\$490,000.00</b> 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>	Instrument of Variation, dated 10 September 2018	As per the Instrument of Variation, dated 10 September 2018, issued by a delegate for the Minister for Resources, this condition is omitted from the conditions of Mining Lease 1563. This variation was effective from 8 October 2018.	C	
<b>Control of Operations</b>					
6.	<p>(a) If an Environmental Officer of the Department believes that the lease holder is not complying with any provision of the Act or any condition of this lease relating to the working of the lease, he may direct the lease holder to:-</p> <p>(i) cease working the lease; or</p> <p>(ii) cease that part of the operation not complying with the Act or conditions; until in the opinion of the</p>	Not applicable	Not triggered	NT	

No	Assessment Requirement	Reference/ Evidence	Comments	Compliance Status	Recommendations
	<p>Environmental Officer the situation is rectified.</p> <p>(b) The lease holder must comply with any direction given. The Director-General may confirm, vary or revoke any such direction.</p> <p>(c) A direction referred to in this condition may be served on the Mine Manager.</p>				

### Reports

7.	<p>The lease holder must provide an exploration report, within a period of twenty-eight days after each anniversary of the date this lease has effect or at such other date as the Director-General may stipulate, of each year. The report must be to the satisfaction of the Director-General and contain the following:</p> <p>(a) Full particulars, including results, interpretation and conclusions, of all exploration conducted during the twelve months period;</p> <p>(b) Details of expenditure incurred in conducting that exploration;</p> <p>(c) A summary of all geological findings acquired through mining or development evaluation activities;</p> <p>(d) Particulars of exploration proposed to be conducted in the next twelve months period;</p> <p>(e) All plans, maps, sections and other data necessary to satisfactorily interpret the report.</p>		Reports are completed as per this condition.	C	
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### Licence to Use Reports

No	Assessment Requirement	Reference/ Evidence	Comments	Compliance Status	Recommendations
8.	<p>(a) The lease holder grants to the Minister, by way of a non-exclusive licence, the right in copyright to publish, print, adapt and reproduce all exploration reports lodged in any form and for the full duration of copyright.</p> <p>(b) The non-exclusive licence will operate as a consent for the purposes of section 365 of the Mining Act 1992.</p>	Note	Noted	Note	
<b>Confidentiality</b>					
9.	<p>(a) All exploration reports submitted in accordance with the conditions of this lease will be kept confidential while the lease is in force, except in cases where:</p> <p>(i) the lease holder has agreed that specified reports may be made non-confidential.</p> <p>(ii) reports deal with exploration conducted exclusively on areas that have ceased to be part of the lease.</p> <p>(b) Confidentiality will be continued beyond the termination of a lease where an application for a flow-on title was lodged during the currency of the lease. The confidentiality will last until that flow-on title or any subsequent flow-on title, has terminated.</p> <p>(c) The Director-General may extend the period of confidentiality.</p>	Note	Noted	Note	
<b>Terms of the non-exclusive licence</b>					
10.	<p>The terms of the non-exclusive copyright licence granted under condition 8 (a) are:</p> <p>(a) the Minister may sub-licence others to publish, print, adapt and reproduce but not on-licence reports.</p>	Not applicable	Noted	Note	

No	Assessment Requirement	Reference/ Evidence	Comments	Compliance Status	Recommendations
	<p>(b) the Minister and any sub-licensee will acknowledge the lease holder's and any identifiable consultant's ownership of copyright in any reproduction of the reports, including storage of reports onto an electronic database.</p> <p>(c) the lease holder does not warrant ownership of all copyright works in any report and, the lease holder will use best endeavours to identify those parts of the report for which the lease holder owns the copyright.</p> <p>(d) there is no royalty payable by the Minister for the licence.</p> <p>(e) if the lease holder has reasonable grounds to believe that the Minister has exercised his rights under the non-exclusive copyright licence in a manner which adversely affects the operations of the lease holder, that licence is revocable on the giving of a period of not less than three months' notice.</p>				
<b>Blasting</b>					
11.	<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 and Conservation.</p>	<p>Annual Reviews 2017 to 2018</p> <p>EPL Monitoring Reports 2017 to 2020</p>	<p>(a) No exceedances of ground vibration limits occurred during the reported audit period</p> <p>(b) An exceedance of Condition 6 Schedule 3 of PA 10_0059 occurred with a blast undertaken on 4th May 2018, recording an overpressure greater than 120 dBL at two monitoring locations:</p>	C	<p>WCC should continue undertaking the control measures to make sure the exceedance occurred in May 2018 is not repeated in future years.</p>



No	Assessment Requirement	Reference/ Evidence	Comments	Compliance Status	Recommendations
	<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 and Conservation.</p>		<p>120.4dB at Glenara (R11) and 120.2dB at Kyooma (R98).</p> <p>WCC undertook an investigation into the incident, with appropriate notifications to the EPA and DPIE.</p> <p>Upon completion of the investigation, control measures have been implemented to prevent or mitigate against a similar exceedance in the future.</p> <p>These included the erection of “dig fences” to prevent over digging, in the event blasts are located alongside excavation areas. In addition, face profiling will be completed after an excavator has left the area and prior to blast loading, to ensure under burden holes have been detected and addressed prior to firing.</p>		

### Safety

12.	<p>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 filled in or otherwise rendered safe to a standard acceptable to the Director-General.</p>	Not applicable	<p>This condition appears to refer to the exploration phase of the mine's life and as such is not applicable to the current audit period.</p> <p>Regardless, Whitehaven Coal has developed and implemented a robust safety management system which considers fall from height etc.</p>	C	
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### Rehabilitation

No	Assessment Requirement	Reference/ Evidence	Comments	Compliance Status	Recommendations
13.	<p>(a) Land disturbed must be rehabilitated to a stable and permanent form suitable for a subsequent land use acceptable to the Director-General and in accordance with the Mining Operations Plan so that:-</p> <ul style="list-style-type: none"> <li>• there is no adverse environmental effect outside the disturbed area and that the land is properly drained and protected from soil erosion.</li> <li>• the state of the land is compatible with the surrounding land and land use requirements.</li> <li>• the landforms, soils, hydrology and flora require no greater maintenance than that in the surrounding land.</li> <li>• in cases where revegetation is required and native vegetation has been removed or damaged, the original species must be re-established with close reference to the flora survey included in the Mining Operations Plan. If the original vegetation was not native, any re-established vegetation must be appropriate to the area and at an acceptable density.</li> <li>• The land does not pose a threat to public safety.</li> </ul> <p>(b) Any topsoil that is removed must be stored and maintained in a manner acceptable to the Director-General.</p>	MOP 2015	<p>(a) MOP 2015 discusses topsoil storage requirements. MOP was approved by the Director.</p> <p>(b) Page 14 of the MOP discusses topsoil storage arrangements</p>	C	
14.	The lease holder must comply with any direction given by the Director-General regarding the stabilisation and revegetation of any mine residues, tailings or overburden dumps situated on the lease area.	Not applicable	Not triggered	NT	

No	Assessment Requirement	Reference/ Evidence	Comments	Compliance Status	Recommendations
<b>Exploratory Drilling</b>					
15.	<p>(1) At least twenty eight days prior to commencement of drilling operations the lease holder must notify the relevant Department of Infrastructure, Planning and Natural Resources regional hydrogeologist of the intention to drill exploratory drill holes together with information on the location of the proposed holes.</p> <p>(2) If the lease holder drills exploratory drill holes he must satisfy the Director- General that:-</p> <ul style="list-style-type: none"> <li>(a) all cored holes are accurately surveyed and permanently marked in accordance with Departmental guidelines so that their location can be easily established;</li> <li>(b) all holes cored or otherwise are sealed to prevent the collapse of the surrounding surface;</li> <li>(c) all drill holes are permanently sealed with cement plugs to prevent surface discharge of groundwaters;</li> <li>(d) if any drill hole meets natural or noxious gases it is plugged or sealed to prevent their escape;</li> <li>(e) if any drill hole meets an artesian or sub-artesian flow it is effectively sealed to prevent contamination of</li> </ul>	Not applicable	This condition appears to refer to the exploration phase of the mine's life and as such is not applicable to the current audit period.	NT	

No	Assessment Requirement	Reference/ Evidence	Comments	Compliance Status	Recommendations
	<p>aquifers.</p> <p>(f) once any drill hole ceases to be used the hole must be sealed in accordance with Departmental guidelines. Alternatively, the hole must be sealed as instructed by the Director-General.</p> <p>(g) once any drill hole ceases to be used the land and its immediate vicinity is left in a clean, tidy and stable condition.</p>				
<b>Prevention of Soil Erosion and Pollution</b>					
16.	<p>Operations must be carried out in a manner that does not cause or aggravate air pollution, water pollution (including sedimentation) or soil contamination or erosion, unless otherwise authorised by a relevant approval, and in accordance with an accepted Mining Operations Plan. For the purpose of this condition, water shall be taken to include any watercourse, waterbody or groundwaters. The lease holder must observe and perform any instructions given by the Director-General in this regard.</p>	<p>MOP 2015 Management Plans and Strategies</p>	<p>The Site has implemented a wide range of measures, monitoring, procedures etc. to minimise the mine's impact on the environment, as per the MOP 2015 and related management plans and strategies.</p> <p>On this basis, the Site is considered to have implemented practicable measures to prevent and/or minimise environmental harm.</p>	<p>C</p>	
<b>Transmission lines, communication lines and pipelines</b>					
17.	<p>Operations must not interfere with or impair the stability or efficiency of any transmission line, communication line, pipeline or any other utility on the lease area without the prior written approval of the Director-General and subject to any conditions he may stipulate.</p>	<p>Not applicable</p>	<p>Not triggered</p>	<p>NT</p>	

No	Assessment Requirement	Reference/ Evidence	Comments	Compliance Status	Recommendations
<b>Fences, Gates</b>					
18.	(a) Activities on the lease must not interfere with or damage fences without the prior written approval of the owner thereof or the Minister and subject to any conditions the Minister may stipulate. (b) Gates within the lease area must be closed or left open in accordance with the requirements of the landholder.	Not applicable	Not triggered	NT	
<b>Roads and Tracks</b>					
19.	(a) Operations must not affect any road unless in accordance with an accepted Mining Operations Plan or with the prior written approval of the Director-General and subject to any conditions he may stipulate.  (b) The lease holder must pay to the designated authority in control of the road (generally the local council or the Roads and Traffic Authority) the cost incurred in fixing any damage to roads caused by operations carried out under the lease, less any amount paid or payable from the Mine Subsidence Compensation Fund.	Not applicable	Not triggered	NT	
20.	Access tracks must be kept to a minimum and be positioned so that they do not cause any unnecessary damage to the land. Temporary access tracks must be ripped, topsoiled and revegetated as soon as possible after they are no longer required for mining operations. The design and construction of access tracks must be in accordance with specifications fixed by the Department of Infrastructure, Planning and Natural Resources.	Not applicable	Not triggered	NT	
<b>Trees and Timber</b>					
21.	(a) The lease holder must not fell trees, strip bark or cut timber on the lease without the consent of the landholder	Not applicable	(a) Not triggered.	NT	

No	Assessment Requirement	Reference/ Evidence	Comments	Compliance Status	Recommendations
	<p>who is entitled to the use of the timber, or if such a landholder refuses consent or attaches unreasonable conditions to the consent, without the approval of a warden.</p> <p>(b) The lease holder must not cut, destroy, ringbark or remove any timber or other vegetative cover on the lease area except such as directly obstructs or prevents the carrying on of operations. Any clearing not authorised under the Mining Act 1992 must comply with the provisions of the Native Vegetation Conservation Act 1997.</p> <p>(c) The lease holder must obtain all necessary approvals or licences before using timber from any Crown land within the lease area.</p>		<p>(b) Clearing is not completed in the non-operational areas of the site.</p> <p>(c) Not triggered</p>		

#### Resource Recovery

23.	<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, he may give notice in writing to the lease holder 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>The lease holder must, when requested by the</p>	Not applicable	Not triggered.	NT	
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No	Assessment Requirement	Reference/ Evidence	Comments	Compliance Status	Recommendations
	<p>Director-General, provide such information as the Director-General may specify about the recovery of the mineral resources of the lease area.</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> <p>(d) The Director-General shall issue no such notice unless the matter has firstly been thoroughly discussed with and a report to the Director-General has incorporated the views of the lease holder.</p> <p>(e) The lease holder may object to the requirements of any notice issued under this condition and on receipt of such an objection the Minister shall refer it to a Warden for inquiry and report under Section 334 of the Mining Act, 1992.</p> <p>(f) After considering the Warden's report the Minister shall decide whether to withdraw, modify or maintain the requirements specified in the original notice and shall give the lease holder written notice of the decision. The lease holder must comply with the requirements of this notice.</p>				
<b>Indemnity</b>					
24.	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	Not applicable	Noted	NT	

No	Assessment Requirement	Reference/ Evidence	Comments	Compliance Status	Recommendations
	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.				
<b>Security</b>					
25.	<p>(a) A security in the sum of \$50,000.00 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. If the lease holder fails to fulfil any one or more of such obligations the said sum may be applied at the discretion of the Minister towards the cost of fulfilling such obligations. For the purpose of this clause the lease holder shall be deemed to have failed to fulfil the obligations of this lease if the lease holder fails to comply with any condition or provision hereof, any provision of the Act or regulations made thereunder or any condition or direction imposed or given pursuant to a condition or provision hereof or of any provision of the Act or regulations made thereunder.</p> <p>(b) The lease holder must provide the security required by sub-clause (a) in one of the following forms:</p> <p>(i) cash;</p> <p>(ii) a security certificate in a form approved by the Minister and issued by an authorised deposit-</p>		Verified by previous audits	C	



No	Assessment Requirement	Reference/ Evidence	Comments	Compliance Status	Recommendations
	taking institution.				
<b>Barriers</b>					
29.	<p>(a) Unless with the consent of the Minister first had and obtained and subject to such further conditions as he may impose, the lease holder shall not mine within a barrier of 50 metres in width against the underground workings of the former Werris Creek Colliery as referred to in the Environmental Impact Statement entitled "Werris Creek Coal Pty Limited - <b>ABN</b> 69 107 169 103 - Environmental Impact Statement for the Proposed Werris Creek Coal Mine" dated August 2004.</p> <p>(b) The lease holder must, prior to seeking the Ministers consent under this condition, complete a risk assessment to determine hazards and develop management controls . This risk assessment is to be subject to any amendments as may be required by the Director General.</p>	MOP 2015	Through MOD2 and the MOP the site has obtained approval.	C	
<b>Special Conditions</b>					
30.	The lease holder shall ensure that operations on the lease area are conducted in a manner consistent with the Environmental Impact Statement, except were no longer applicable due to subsequent approval, conditioning or exemption.	Not applicable	Noted	Note	
31.	The lease holder shall ensure that 53 hectares of the rehabilitated landform is revegetated with species from the White Box Yellow Box Blakley 's Red Gum Endangered Ecological Community, and stock are excluded from the 200 hectares as shown in Figure 4.15 of the Environmental Impact Statement.	Not applicable	Verified in previous audits	C	

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**APPENDIX A4 – MINING LEASE 1672**

Compliance with Mining Lease 1672

<b>Document details</b>	
Document title	Appendix A4 – Mining Lease 1672
Document subtitle	Compliance with Mining Lease 1672
Project No.	0552611
Date	22 July 2020
Version	1.0
Author	Robert Smith, Aaron McKenzie
Client Name	Whitehaven Coal

No	Assessment Requirement	Reference/ Evidence	Comments	Compliance Status	Recommendations
<b>Mining Lease Conditions 2004</b>					
<b>1. Notice to Landholders</b>					
	<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 applicable	Whitehaven Coal owns all land within the mining lease area.	C	
<b>2. Environmental Harm</b>					
	<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</p>	MOP 2015 Management Plans and Strategies	<p>As discussed throughout the EPL and Project Approval sections of this report, the Site has implemented a wide range of measures, monitoring, procedures etc. to minimise the mine's impact on the environment.</p> <p>The Site's management systems have been designed to comply with the requirements of the project</p>	C	

No	Assessment Requirement	Reference/ Evidence	Comments	Compliance Status	Recommendations
	<p>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>		<p>approval, environmental protection licence etc.</p> <p>On this basis, the Site is considered to have implemented practicable measures to prevent and/or minimise environmental harm.</p>		

### 3. Mining Operations Plan

	<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</p>	<p>MOP 2015 MOP Approval Letter</p>	<p>(a) An approved MOP (2015 to 2022) has been developed and implemented;</p> <p>(b) The MOP has been developed in accordance with the requirements in this condition as far as those requirements still apply</p> <p>(c) The MOP has not been updated during the Audit period;</p> <p>(d) Noted;</p>	<p>C</p>	
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No	Assessment Requirement	Reference/ Evidence	Comments	Compliance Status	Recommendations
	<p>the environment;</p> <p>(v) reflect the conditions of approval under:</p> <ul style="list-style-type: none"> <li>• the <i>Environmental Planning and Assessment Act 1979</i></li> <li>• the <i>Protection of the Environment Operations Act 1997</i></li> <li>• and any other approvals relevant to the development including the conditions of this lease; and</li> <li>• have regard to any relevant guidelines adopted by the Director-General.</li> </ul> <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 the <i>Mining Act 1992</i>, the <i>Environmental Planning and Assessment Act 1979</i>, <i>Protection of the Environment Operations Act 1997</i>, <i>Mine Health and Safety Act 2004</i> <i>Coal Mine Health and Safety Act 2002</i> and <i>Mine Health and Safety Regulation 2007</i> <i>Coal Mine Health and Safety Regulation 2006</i> or the <i>Occupational Health and Safety Act 2000</i>; and</p> <p>(ii) the Director-General had been notified in writing of the terms of the order or direction prior to the</p>		(e) Noted.		

No	Assessment Requirement	Reference/ Evidence	Comments	Compliance Status	Recommendations
	<p>operations constituting the breach being carried out.</p> <p>(e) A MOP ceases to have effect 7 years after date of approval or other such period as identified by the Director-General.</p>				
<b>4. Environment Management Report</b>					
	<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> <ul style="list-style-type: none"> <li>(i) report against compliance with the MOP;</li> <li>(ii) report on progress in respect of rehabilitation completion criteria;</li> <li>(iii) report on the extent of compliance with regulatory requirements; and</li> <li>(iv) have regard to any relevant guidelines adopted by the Director-General;</li> </ul>	Annual Reviews 2017 to 2019	Annual reviews have been submitted to the DPIE each year of the Audit period. The Annual Review scope includes the requirements outlined in this condition.	C	
<b>5. Environmental Incident Report</b>					
	<p>(a) The lease holder must report any environmental incidents. The report must:</p> <ul style="list-style-type: none"> <li>(i) be prepared according to any relevant Departmental guidelines;</li> <li>(ii) be submitted within 24 hours of the environmental incident occurring;</li> </ul>	Incident correspondence between Whitehaven Coal and regulatory authorities	(a) Environmental incidents are reported to the relevant government agencies. They are contacted immediately following an incident (taking into account	C	

No	Assessment Requirement	Reference/ Evidence	Comments	Compliance Status	Recommendations
	<p>(b) For the purposes of this condition, environmental incident includes:</p> <ul style="list-style-type: none"> <li>(i) any incident causing or threatening material harm to the environment</li> <li>(ii) any breach of Conditions 1 to 9 and 11 to 24;</li> <li>(iii) any breach of environment protection legislation; or,</li> <li>(iv) a serious complaint from landholders or the public.</li> </ul> <p>(c) For the purposes of this condition, harm to the environment is material if:</p> <ul style="list-style-type: none"> <li>(i) ii involves actual or potential harm to the health or safety of human beings or to ecosystems that is not trivial, or</li> <li>(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.</li> </ul>		<p>laboratory processing time for water exceedances). This is a component of the Pollution Incident Response Management Plan;</p> <p>(b) Noted; (c) Noted.</p>		

#### 6. Additional Environmental Reports

	<p>Additional environmental reports may be required from time to time as directed in writing by the Director-General and must be lodged as instructed.</p>	<p>Not applicable</p>	<p>Noted</p>	<p>NT</p>	
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No	Assessment Requirement	Reference/ Evidence	Comments	Compliance Status	Recommendations
<b>7. Rehabilitation</b>					
	Any disturbance as a result of activities under this lease must be rehabilitated to the satisfaction of the Director-General.	Not applicable	<p>The MOP 2015 and Annual Reviews detail the rehabilitation of the mine on a progressive basis. These documents are sent to the DPIE.</p> <p>No significant issues relating to rehabilitation have been raised by the DPIE or other regulatory bodies during the audit period.</p>	C	
<b>8. Subsidence Management</b>					
	<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</p>	Not applicable	Not triggered	NT	



No	Assessment Requirement	Reference/ Evidence	Comments	Compliance Status	Recommendations
	<p>subsidence other than in accordance with a Subsidence Management Plan approved by the Director-General, an approval under the <i>Coal Mine Health &amp; Safety Act 2002</i>, 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>				
<b>9. Working Requirement</b>					
	<p>The lease holder must:</p> <p>(a) ensure that at least <b>six (6)</b> competent people are efficiently employed in relation to the mining process or mining operations on the lease area</p> <p>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 <b>\$105,000</b> per annum whilst the lease is in force.</p>	Instrument of Variation, dated 10 September 2018	As per the Instrument of Variation, dated 10 September 2018, issued by a delegate for the Minister for Resources, this condition is omitted from the conditions of Mining Lease 1672. This variation was effective from 8 October 2018.	C	

No	Assessment Requirement	Reference/ Evidence	Comments	Compliance Status	Recommendations
	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.				
<b>10. Blasting</b>					
	<p>(a) <u>Ground Vibration</u></p> <p>The lease holder must ensure that the ground vibration peak particle velocity generated by any blasting within the lease area does not exceed 10 mm/second and does not exceed 5 mm/second in more than 5% of the total number of blasts over a period of 12 months at any dwelling or occupied premises as the case may be, unless determined otherwise by the Department of Environment, Climate Change and Water.</p> <p>(b) <u>Blast Overpressure</u></p> <p>The lease holder must ensure that the blast overpressure noise level generated by any blasting within the lease area does not exceed 120 dB (linear) and does not exceed 115 dB (linear) in more than 5% of the total number of blasts over a period of 12 months, at any dwelling or occupied premises, as the case may be, unless determined otherwise by the Department of Environment, Climate Change and Water.</p>	<p>Annual Reviews 2017 to 2018</p> <p>EPL Monitoring Reports 2017 to 2020</p>	<p>(a) No exceedances of ground vibration limits occurred during the reported audit period</p> <p>(b) An exceedance of Condition 6 Schedule 3 of PA 10_0059 occurred with a blast undertaken on 4th May 2018, recording an overpressure greater than 120 dBL at two monitoring locations: 120.4dBL at Glenara (R11) and 120.2dBL at Kyooma (R98).</p> <p>WCC undertook an investigation into the incident, with appropriate notifications to the EPA and DPIE.</p> <p>Upon completion of the investigation, control measures have been implemented to prevent or mitigate against a similar exceedance in the future.</p> <p>These included the erection of “dig fences” to prevent over digging, in the event blasts are located alongside</p>	C	WCC should continue undertaking the control measures to make sure the exceedance occurred in May 2018 is not repeated in future years.

No	Assessment Requirement	Reference/ Evidence	Comments	Compliance Status	Recommendations
			excavation areas. In addition, face profiling will be completed after an excavator has left the area and prior to blast loading, to ensure under burden holes have been detected and addressed prior to firing.		
<b>11. Safety</b>					
	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.	Not applicable	This condition appears to refer to the exploration phase of the mine's life and as such is not applicable to the current audit period.  Regardless, Whitehaven Coal has developed and implemented a robust safety management system which considers fall from height etc.	NT	
<b>12. Prevention of soil erosion and pollution</b>					
	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.	Not applicable	Not triggered (no prospecting during the audit period).	NT	
<b>13. Transmission lines, communication lines and pipelines</b>					

No	Assessment Requirement	Reference/ Evidence	Comments	Compliance Status	Recommendations
	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.	Not applicable	Not triggered (no prospecting during the audit period).	NT	
<b>14. Roads and Tracks</b>					
	<p>(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.</p> <p>(b) During wet weather the use of any road or track must be restricted so as to prevent damage to the road or track.</p> <p>(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.</p> <p>(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.</p>	Not applicable	Whitehaven Coal owns the land that the lease is located upon.	NT	

No	Assessment Requirement	Reference/ Evidence	Comments	Compliance Status	Recommendations
<b>15. Trees and Vegetation</b>					
	<p>(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.</p> <p>(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.</p> <p><i>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.</i></p>	Not applicable	<p>(a) Not triggered.</p> <p>(b) Clearing is not completed in the non-operational areas of the site. Felling of trees is completed in accordance with the pre clearance permit (sighted) and is within the approved disturbance area. Trees are not sold, and are used in rehabilitation.</p>	NT	
<b>17. Resource Recovery</b>					
	<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</p>	Not applicable	Not triggered.	NT	

No	Assessment Requirement	Reference/ Evidence	Comments	Compliance Status	Recommendations
	<p>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>				

### 18. Indemnity

	<p>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</p>	Noted	Noted	NT	
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No	Assessment Requirement	Reference/ Evidence	Comments	Compliance Status	Recommendations
	that any such accident or injury shall arise from any act or thing which the lease holder may be licensed or compelled to do.				
<b>20. Single Security</b>					
	A single security in the sum of <b>\$4,062,000</b> 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 each Mining Lease 1563 (Act 1992) and any lease granted in satisfaction of Mining Lease Applications 407, 408 and 409 (Act 1992).	Correspondence between DPIE and Whitehaven dated 14/02/20 confirming Security bonds.	A security deposit has been completed for the whole of the WCC operation (sighted) and has been completed in accordance with the DRG closure tool.	C	
<b>23. Suspension of Mining Operations</b>					
	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.	Noted	Noted	NT	
<b>24. Cooperation Agreement</b>					
	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: <ul style="list-style-type: none"> <li>• access arrangements</li> <li>• operational interaction procedures</li> </ul>	Not applicable	Not triggered. Whitehaven Coal owns the lease area.	NT	

No	Assessment Requirement	Reference/ Evidence	Comments	Compliance Status	Recommendations
	<ul style="list-style-type: none"> <li>• dispute resolution</li> <li>• information exchange</li> <li>• well location</li> <li>• timing of drilling</li> <li>• potential resource extraction conflicts and</li> <li>• rehabilitation issues.</li> </ul> <p><i>Note: <u>Exploration Reports (Geological and Geophysical)</u></i></p> <p><i>The lease holder must lodge reports to the satisfaction of the Director-General in accordance with section 163C of the Mining Act 1992 and in accordance with clause 57 of the Mining Regulation 2010.</i></p> <p><i>Reports must be prepared in accordance with <u>Exploration Reporting: A guide for reporting on exploration and prospecting in New South Wales</u> (Department of Trade and Investment; Regional Infrastructure and Services 2010).</i></p>				



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**APPENDIX A4 – MINING LEASE 1671**

Compliance with Mining Lease 1671

<b>Document details</b>	
Document title	Appendix A4 – Mining Lease 1671
Document subtitle	Compliance with Mining Lease 1671
Project No.	0552611
Date	22 July 2020
Version	1.0
Author	Robert Smith, Aaron McKenzie
Client Name	Whitehaven Coal

No	Assessment Requirement	Reference/ Evidence	Comments	Compliance Status	Recommendations
<b>Mining Lease Conditions 2004</b>					
<b>1. Notice to Landholders</b>					
	<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 applicable	Whitehaven Coal owns all land within the mining lease area.	C	
<b>2. Environmental Harm</b>					
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>	MOP 2015 Management Plans and Strategies	As discussed throughout the EPL and Project Approval sections of this report, the Site has implemented a wide range of measures, monitoring, procedures etc. to minimise the mine's impact on the environment.	C	

No	Assessment Requirement	Reference/ Evidence	Comments	Compliance Status	Recommendations
	<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>		<p>The Site's management systems have been designed to comply with the requirements of the project approval, environmental protection licence etc.</p> <p>On this basis, the Site is considered to have implemented practicable measures to prevent and/or minimise environmental harm.</p>		
<b>3. Mining Operations Plan</b>					
	<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>MOP 2015 MOP Approval Letter</p>	<p>(a) An approved MOP (2015 to 2022) has been developed and implemented;</p> <p>(b) The MOP has been developed in accordance with the requirements in</p>	<p>C</p>	

No	Assessment Requirement	Reference/ Evidence	Comments	Compliance Status	Recommendations
	<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 mineclosure;</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"> <li>• the <i>Environmental Planning and Assessment Act 1979</i></li> <li>• the <i>Protection of the Environment Operations Act 1997</i></li> <li>• and any other approvals relevant to the development including the conditions of this lease; and</li> <li>• have regard to any relevant guidelines adopted by the Director-General.</li> </ul> <p>(c) The leaseholder may apply to the Director-General to amend an approved MOP at anytime.</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 the <i>Mining Act 1992</i>, the <i>Environmental Planning and Assessment Act 1979</i>, <i>Protection of the Environment Operations Act 1997</i>, <i>Mine Health and Safety Act 2004</i> / <i>Coal Mine Health and Safety Act 2002</i> and <i>Mine Health and Safety Regulation 2007</i> / <i>Coal Mine Health and Safety</i></p>		<p>this condition as far as those requirements still apply</p> <p>(c) The MOP has not been updated during the Audit period;</p> <p>(d) Noted;</p> <p>(e) Noted.</p>		

No	Assessment Requirement	Reference/ Evidence	Comments	Compliance Status	Recommendations
	<p><i>Regulation 2006 or the Occupational Health and Safety Act 2000; and</i></p> <p>(ii) the Director-General had been notified in writing of the terms of the order or direction prior to the operations constituting the breach being carried out.</p> <p>(e) A MOP ceases to have effect 7 years after date of approval or other such period as identified by the Director-General.</p>				
<b>4. Environment Management Report</b>					
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>	Annual Reviews 2017 to 2019	Annual reviews have been submitted to the DPIE each year of the Audit period. The Annual Review scope includes the requirements outlined in this condition.	C	
<b>5. Environmental Incident Report</b>					
	<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>	Incident correspondence between Whitehaven Coal and	(a) Environmental incidents are reported to the relevant government agencies. They are contacted immediately following an	C	

No	Assessment Requirement	Reference/ Evidence	Comments	Compliance Status	Recommendations
	<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>	regulatory authorities	<p>incident (taking into account laboratory processing time for water exceedances). This is a component of the Pollution Incident Response Management Plan;</p> <p>(b) Noted;</p> <p>(c) Noted.</p>		
<b>6. Additional Environmental Reports</b>					
	Additional environmental reports may be required from time to time as directed in writing by the Director-General and must be lodged as instructed.	Not applicable	Noted	C	

No	Assessment Requirement	Reference/ Evidence	Comments	Compliance Status	Recommendations
<b>7. Rehabilitation</b>					
	Any disturbance as a result of activities under this lease must be rehabilitated to the satisfaction of the Director-General.	Not applicable	The MOP 2015 and Annual Reviews detail the rehabilitation of the mine on a progressive basis. These documents are sent to the DPIE.  No significant issues relating to rehabilitation have been raised by the DPIE or other regulatory bodies during the audit period.	C	
<b>10. Blasting</b>					
(a)	<u>Ground Vibration</u>  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.	Annual Reviews 2017 to 2018  EPL Monitoring Reports 2017 to 2020	(a) No exceedances of ground vibration limits occurred during the reported audit period  (b) An exceedance of Condition 6 Schedule 3 of PA 10_0059 occurred with a blast undertaken on 4th May 2018, recording an overpressure greater than 120 dBL at two monitoring locations: 120.4dBL at Glenara (R11) and 120.2dBL at Kyooma (R98).	C	WCC should continue undertaking the control measures to make sure the exceedance occurred in May 2018 is not repeated in future years.
(b)	<u>Blast Overpressure</u>  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		WCC undertook an investigation into the incident, with appropriate notifications to the EPA and DPIE.  Upon completion of the investigation, control measures have been implemented to prevent or mitigate against a		

No	Assessment Requirement	Reference/ Evidence	Comments	Compliance Status	Recommendations
	dwelling or occupied premises, as the case may be, unless determined otherwise by the Department of Environment, Climate Change and Water.		similar exceedance in the future. These included the erection of "dig fences" to prevent over digging, in the event blasts are located alongside excavation areas. In addition, face profiling will be completed after an excavator has left the area and prior to blast loading, to ensure under burden holes have been detected and addressed prior to firing.		

#### 11. Safety

Operations must be carried out in a manner that ensures the safety of persons or stock in the vicinity of the operations. All drill holes shafts and excavations must be appropriately protected, to the satisfaction of the Director-General, to ensure 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.

Not applicable

This condition appears to refer to the exploration phase of the mine's life and as such is not applicable to the current audit period.  
Regardless, Whitehaven Coal has developed and implemented a robust safety management system which considers fall from height etc.

NT

#### 12. Prevention of soil erosion and pollution

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

Not applicable.

Not triggered (no prospecting during the audit period).

NT



No	Assessment Requirement	Reference/ Evidence	Comments	Compliance Status	Recommendations
	authorised by a relevant approval, and in accordance with an accepted Mining Operations Plan.				
<b>13. Transmission lines</b>					
	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.	Not applicable.	Not triggered (no prospecting during the audit period).	NT	
<b>14. Roads and Tracks</b>					
12.	<p>(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.</p> <p>(b) During wet weather the use of any road or track must be restricted so as to prevent damage to the road or track.</p> <p>(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,</p>	Not applicable.	Whitehaven Coal owns the land that the lease is located upon.	NT	

No	Assessment Requirement	Reference/ Evidence	Comments	Compliance Status	Recommendations
	<p>watercourses or vegetation.</p> <p>(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.</p>				
<b>15. Trees and vegetation</b>					
14.	<p>(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.</p> <p>(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.</p>	Not applicable	<p>(a) Not Triggered.</p> <p>(b) Clearing is not completed in the non-operational areas of the site. Felling of trees is completed in accordance with the pre clearance permit (sighted) and is within the approved disturbance area. Trees are not sold, and are used in rehabilitation.</p>	NT	
<b>18. Indemnity</b>					
	<p>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</p>	Noted	Noted	NT	

No	Assessment Requirement	Reference/ Evidence	Comments	Compliance Status	Recommendations
	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.				
<b>20. Single Security</b>					
	A single security in the sum of <b>\$4,062,000</b> 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 each Mining Lease 1563 (Act 1992) and any lease granted in satisfaction of Mining Lease Applications 407,408 and 409 (Act 1992).	Correspondence between DPIE and Whitehaven dated 14/02/20 confirming Security bonds.	A security deposit has been completed for the whole of the WCC operation (sighted) and has been completed in accordance with the DRG closure tool.	C	
<b>24. Cooperation Agreement</b>					
	<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"> <li>• access arrangements</li> <li>• operational interaction procedures</li> <li>• dispute resolution</li> </ul>	Not applicable	Not triggered. Whitehaven Coal owns the lease area.	NT	

No	Assessment Requirement	Reference/ Evidence	Comments	Compliance Status	Recommendations
	<ul style="list-style-type: none"> <li>• information exchange</li> <li>• well location</li> <li>• timing of drilling</li> <li>• potential resource extraction conflicts and</li> <li>• rehabilitation issues.</li> </ul> <p><i>Note: <u>Exploration Reports (Geological and Geophysical)</u></i></p> <p><i>The lease holder must lodge reports to the satisfaction of the Director-General in accordance with section 163G of the Mining Act 1992 and in accordance with clause 57 of the Mining Regulation 2010.</i></p> <p><i>Reports must be prepared in accordance with <u>Exploration Reporting: A guide for reporting on exploration and prospecting in New South Wales</u> (Department of Trade and Investment; Regional Infrastructure and Services 2010).</i></p>				

## **APPENDIX B DEPARTMENTAL CORRESPONDENCE**

**From:** [Donna Ausling](#)  
**To:** [Heather McKay](#)  
**Subject:** RE: Whitehaven Coal Werris Creek Mine - Independent Environmental Audit 2020 > response 04 June 2020  
**Date:** Thursday, 4 June 2020 8:31:57 AM  
**Attachments:** [image008.png](#)  
[image003.jpg](#)  
[image011.png](#)  
[image012.png](#)  
[image013.jpg](#)

---

Good morning Heather

Thank you for your recent email. In response, Council does not have any specific items to raise at this time.

Please be advised that water and air quality management at the site remain an area of sustained and broader community interest. I would envisage, however, that these particular items will be addressed as standard items in your programmed audit.

Happy to provide any additional information as required.

Thank you for the opportunity to provide comment.

Kind regards

**Donna Ausling**

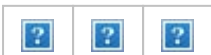
Director of Environmental and Economic Development Services |

[Donna.Ausling@lpsc.nsw.gov.au](mailto:Donna.Ausling@lpsc.nsw.gov.au)

**Liverpool Plains Shire Council**

PO Box 152 | Quirindi | NSW | 2343

T 02 6746 1755 | M 0427 237 874 | F 02 6746 3255



cid:image001.png@01D6068A.968E4CD0



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---

**From:** Heather McKay [mailto:Heather.McKay@erm.com]

**Sent:** Monday, 25 May 2020 8:43 AM  
**To:** Donna Ausling  
**Cc:** Matt Hollis; Lynden Cini (LCini@whitehavencoal.com.au); Robert Smith; Oliver Moore; Aaron Mckenzie  
**Subject:** Whitehaven Coal Werris Creek Mine - Independent Environmental Audit 2020

Dear Donna,

I am currently completing the Independent Environmental Audit (IEA) on the Conditions of Approval issued to Whitehaven Coal Werris Creek mine, PA 10\_0059.

One of the requirements of the audit is that it is to be undertaken in consultation with relevant agencies. To that end, this email invites you to raise any questions or concerns regarding this project from an environmental management aspect.

The attached Terms of Reference outlines the audit process, and also introduces the approved team of suitably qualified, experienced and independent experts who will be undertaking the audit. The site inspection will be completed over the period 11-12 June 2020, therefore it would be appreciated if there are any concerns, areas of focus etc., they are raised by 8 June 2020.

I can be contacted at the details outlined below to discuss further.

Kind regards,  
Heather

Heather McKay  
Senior Environmental and Social Governance Consultant

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**E** Heather.McKay@erm.com; **W** [www.erm.com](http://www.erm.com)

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**From:** [Gae Swain](#)  
**To:** [Heather McKay](#)  
**Subject:** RE: Whitehaven Coal Werris Creek Mine - Independent Environmental Audit 2020  
**Date:** Monday, 1 June 2020 11:57:09 AM  
**Attachments:** [image002.jpg](#)

---

Hi Heather,

Thank you for contacting me re Whitehaven Coal Werris Creek mine and your company's role.

I have chaired the CCC for the mine for several years and at all times have been confident with their environmental reports which are prepared for the Committee.

Any issues or concerns with the mine, raised by members of the Committee have always been quickly and comprehensively discussed at our meetings. I have no concerns or issues with the mine.

Thank you for the opportunity to comment.

Kind regards,  
Gae Swain.

---

**From:** Heather McKay [mailto:Heather.McKay@erm.com]  
**Sent:** Monday, 25 May 2020 8:43 AM  
**To:** gaeswain4@gmail.com  
**Cc:** Matt Hollis <MHollis@whitehavencoal.com.au>; Lynden Cini (LCini@whitehavencoal.com.au) <LCini@whitehavencoal.com.au>; Robert Smith <Robert.Smith@erm.com>; Oliver Moore <Oliver.Moore@erm.com>; Aaron Mckenzie <Aaron.Mckenzie@erm.com>  
**Subject:** Whitehaven Coal Werris Creek Mine - Independent Environmental Audit 2020

Dear Gae,

I am currently completing the Independent Environmental Audit (IEA) on the Conditions of Approval issued to Whitehaven Coal Werris Creek mine, PA 10\_0059.

One of the requirements of the audit is that it is to be undertaken in consultation with relevant agencies. To that end, this email invites you to raise any questions or concerns regarding this project from an environmental management aspect.

The attached Terms of Reference outlines the audit process, and also introduces the approved team of suitably qualified, experienced and independent experts who will be undertaking the audit. The site inspection will be completed over the period 11-12 June 2020, therefore it would be appreciated if there are any concerns, areas of focus etc., they are raised by 8 June 2020.

I can be contacted at the details outlined below to discuss further.

Kind regards,  
Heather



Heather McKay  
Senior Environmental and Social Governance Consultant

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**E** Heather.McKay@erm.com; **W** [www.erm.com](http://www.erm.com)

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**From:** [Ann Hagerthy](#)  
**To:** [Heather McKay](#)  
**Subject:** RE: Whitehaven Coal Werris Creek Mine - Independent Environmental Audit 2020  
**Date:** Monday, 25 May 2020 12:21:47 PM  
**Attachments:** [image001.jpg](#)  
[image002.jpg](#)

---

Hi Heather,

Nothing additional at this time, that hasn't already been communicated to Whitehaven.

Thank you,

**Ann Hagerthy**  
**Senior Compliance Officer**

(Mon-Thu)

Planning & Assessment - Compliance | Department of Planning, Industry and Environment

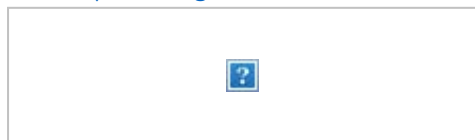
**T** 02 6575 3407 | **M** 0428 976 540 | **E** [ann.hagerthy@planning.nsw.gov.au](mailto:ann.hagerthy@planning.nsw.gov.au)

PO Box 3145 | Singleton NSW 2330

Please direct all email correspondence to [compliance@planning.nsw.gov.au](mailto:compliance@planning.nsw.gov.au)

-

[www.dpie.nsw.gov.au](http://www.dpie.nsw.gov.au)



*The Department of Planning, Industry and Environment acknowledges that it stands on Aboriginal land. We acknowledge the traditional custodians of the land and we show our respect for elders past, present and emerging through thoughtful and collaborative approaches to our work, seeking to demonstrate our ongoing commitment to providing places in which Aboriginal people are included socially, culturally and economically.*

---

**From:** Heather McKay <Heather.McKay@erm.com>

**Sent:** Monday, 25 May 2020 8:43 AM

**To:** Ann Hagerthy <Ann.Hagerthy@planning.nsw.gov.au>

**Cc:** Matt Hollis <MHollis@whitehavencoal.com.au>; Lynden Cini (LCini@whitehavencoal.com.au) <LCini@whitehavencoal.com.au>; Robert Smith <Robert.Smith@erm.com>; Oliver Moore <Oliver.Moore@erm.com>; Aaron Mckenzie <Aaron.Mckenzie@erm.com>

**Subject:** Whitehaven Coal Werris Creek Mine - Independent Environmental Audit 2020

Dear Ann,

I am currently completing the Independent Environmental Audit (IEA) on the Conditions of Approval issued to Whitehaven Coal Werris Creek mine, PA 10\_0059.

One of the requirements of the audit is that it is to be undertaken in consultation with relevant agencies. To that end, this email invites you to raise any questions or concerns regarding this project from an environmental management aspect.

The attached Terms of Reference outlines the audit process, and also introduces the approved

team of suitably qualified, experienced and independent experts who will be undertaking the audit. The site inspection will be completed over the period 11-12 June 2020, therefore it would be appreciated if there are any concerns, areas of focus etc., they are raised by 8 June 2020.

I can be contacted at the details outlined below to discuss further.

Kind regards,  
Heather

Heather McKay  
Senior Environmental and Social Governance Consultant

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**From:** [Timothy Baker](#)  
**To:** [Heather McKay](#)  
**Subject:** RE: Whitehaven Coal Werris Creek Mine - Independent Environmental Audit 2020  
**Date:** Wednesday, 10 June 2020 7:27:27 AM  
**Attachments:** [image001.jpg](#)  
[NRAR Comment 2020 Audit Requirements Werris Creek Coal.pdf](#)

---

Hi Heather,

Please see attached response providing comments to consider as part of your Independent Audit. Should you require further information please let me know.

Regards

Tim

Tim Baker | Senior Water Regulation Officer  
Natural Resources Access Regulator  
Department of Planning, Industry & Environment  
M: 0428 162 097 | E: [Tim.Baker@nrar.nsw.gov.au](mailto:Tim.Baker@nrar.nsw.gov.au)  
W: [www.industry.nsw.gov.au](http://www.industry.nsw.gov.au)

---

**From:** Heather McKay <[Heather.McKay@erm.com](mailto:Heather.McKay@erm.com)>  
**Sent:** Tuesday, 9 June 2020 4:01 PM  
**To:** [tim.baker@dpi.nsw.gov.au](mailto:tim.baker@dpi.nsw.gov.au)  
**Subject:** FW: Whitehaven Coal Werris Creek Mine - Independent Environmental Audit 2020

Hi Tim,

I wanted to provide a reminder of my email below. If you could provide a response by 12 June that would be appreciated.

Kind regards,  
Heather

---

**From:** Heather McKay  
**Sent:** Monday, May 25, 2020 8:43 AM  
**To:** 'tim.baker@dpi.nsw.gov.au' <[tim.baker@dpi.nsw.gov.au](mailto:tim.baker@dpi.nsw.gov.au)>  
**Cc:** Matt Hollis <[MHollis@whitehavencoal.com.au](mailto:MHollis@whitehavencoal.com.au)>; Lynden Cini ([LCini@whitehavencoal.com.au](mailto:LCini@whitehavencoal.com.au)) <[LCini@whitehavencoal.com.au](mailto:LCini@whitehavencoal.com.au)>; Robert Smith <[Robert.Smith@erm.com](mailto:Robert.Smith@erm.com)>; Oliver Moore <[Oliver.Moore@erm.com](mailto:Oliver.Moore@erm.com)>; Aaron McKenzie <[Aaron.Mckenzie@erm.com](mailto:Aaron.Mckenzie@erm.com)>  
**Subject:** Whitehaven Coal Werris Creek Mine - Independent Environmental Audit 2020

Dear Tim,

I am currently completing the Independent Environmental Audit (IEA) on the Conditions of Approval issued to Whitehaven Coal Werris Creek mine, PA 10\_0059.

One of the requirements of the audit is that it is to be undertaken in consultation with relevant

agencies. To that end, this email invites you to raise any questions or concerns regarding this project from an environmental management aspect.

The attached Terms of Reference outlines the audit process, and also introduces the approved team of suitably qualified, experienced and independent experts who will be undertaking the audit. The site inspection will be completed over the period 11-12 June 2020, therefore it would be appreciated if there are any concerns, areas of focus etc., they are raised by 8 June 2020.

I can be contacted at the details outlined below to discuss further.

Kind regards,  
Heather

Heather McKay  
Senior Environmental and Social Governance Consultant

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Mr Lynden Cini  
Group Superintendent - Environment  
Whitehaven Coal Limited

Via Email Only: [LCini@whitehavencoal.com.au](mailto:LCini@whitehavencoal.com.au)

20/04/2020

Dear Mr Cini

**Werris Creek Mine Extension Project (MP 10\_0059)  
2020 Independent Environmental Audit Team**

I refer to your request (reference MP10\_0059-PA-23) seeking endorsement of the proposed audit team for the upcoming Independent Environmental Audit (IEA) required by Schedule 5, Condition 8 of project approval MP 10\_0059 (the approval) for the Werris Creek Mine Extension Project (the site).

The Secretary has considered Werris Creek Coal's request and endorses the following audit team from Environmental Resources Management Australia Pty Ltd (ERM) for the 2020 IEA:

- Ms Heather McKay – Lead auditor;
- Mr Oliver Moore – Technical oversight and reviews;
- Mr Aaron McKenzie – Support and Acoustics Auditor; and
- Mr Wijnand Gemson – Water/groundwater specialist.

The IEA is to be conducted in accordance with the conditions of the approval, and the Department's *Independent Audit Guideline* (October 2015). Further, the Secretary requests that in undertaking the IEA, the Auditor:

- Only use the compliance status descriptors "compliant", "non-compliant" or "not triggered". The terms "partial compliance", "partial non-compliance", "not verified" or other similar terms are not to be used.

The IEA period shall be from 16 June 2017 to the IEA audit inspection date, which shall coincide with the end of the audit period, and be completed no later than 16 June 2020, unless otherwise agreed by the Secretary.

The IEA report together with responses to any recommendations (RAR) contained in the IEA report should be submitted to the Department by 28 July 2020.

If you wish to discuss the matter further, please contact Ann Hagerthy on 02 6575 3407 or email to [compliance@planning.nsw.gov.au](mailto:compliance@planning.nsw.gov.au)

Yours sincerely

Heidi Watters  
Team Leader Northern  
Compliance  
As nominee of the Planning Secretary

Lynden Cini  
Group Superintendent – Environment  
Whitehaven Coal Limited  
231 Conadilly Street  
Gunnedah NSW 2380



22 May 2020

Reference: 0552611

Dear Lynden

Subject: Werris Creek Independent Environmental Audit 2020

With regard to the completion the Independent Environmental Audit (IEA) of the Werris Creek mine, due to the continued travel restrictions imposed in response to the Covid-19 pandemic, ERM is seeking to substitute the approved lead auditor, Heather McKay, with Robert Smith, Principal Consultant, a previously approved lead auditor. The rest of the audit team will remain as approved.

I trust this is acceptable. Should you have any further queries, please do not hesitate to contact me.

Yours sincerely,

Oliver Moore  
Partner



Mr Lynden Cini  
Group Superintendent - Environment  
Whitehaven Coal Limited  
231 Conadilly Street  
GUNNEDAH NSW 2380

Via Email Only: [LCini@whitehavencoal.com.au](mailto:LCini@whitehavencoal.com.au)

10/06/2020

Dear Mr Cini

**Werris Creek Mine Extension Project (MP 10\_0059)  
2020 Independent Environmental Audit Team**

Reference is made to previous correspondence from the Department of Planning, Industry and Environment (the Department) to Whitehaven Coal Limited (Whitehaven) dated 20 April 2020, endorsing the ERM team for the upcoming Independent Environmental Audit (IEA) required by Schedule 5, Condition 8 of project approval MP 10\_0059 (the approval) for the Werris Creek Mine Extension Project (the site).

Reference is also made to correspondence from Whitehaven on 1 June 2020, requesting the Secretary endorse an alternative Lead Auditor, because due to COVID-19 travel restrictions, Ms Heather McKay is no longer available.

The Secretary has considered Whitehaven's request and endorses the following alternative team member from ERM for the 2020 IEA:

- Mr Robert Smith – Lead Auditor

If you wish to discuss the matter further, please contact Ms Ann Hagerthy, Senior Compliance Officer, on 02 6575 3407.

Yours sincerely

A handwritten signature in black ink that reads 'H Watters'.

Heidi Watters  
Team Leader Northern  
Compliance

*As nominee of the Planning Secretary*



---

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